

# ATHENA TELEMATICS VEHICLES ON ROUTES

Education Logistics, Inc.

Training  
Guide

2024



# Athena Telematics Vehicles on Routes Training Guide

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Education Logistics, Inc.

3000 Palmer St.

Missoula, Montana 59808

(406) 728-0893

<https://www.edulog.com/>

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## INTRODUCTION

The Athena Telematics Vehicles on Routes Training Guide will provide you with explanations of the basic tools within Athena Telematics, walk you through the procedures specific to the Vehicles on Routes module within the software. The guide will take you through the basic layout, panels, panes, and tools to help you get started in the Telematics application.

## NAVIGATING THE VEHICLES ON ROUTES MODULE

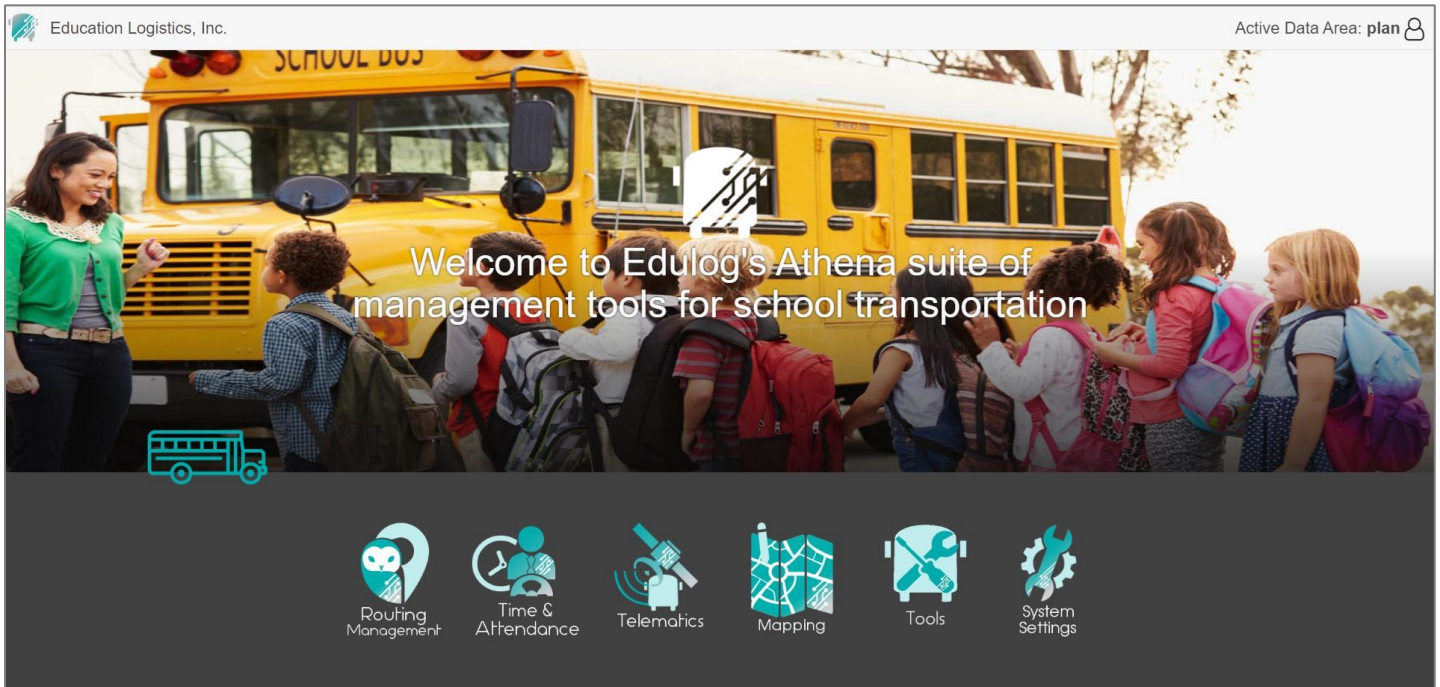
### Login

At the Login page, enter your Username (email) and Password.



### Athena Portal Home Page

Once logged in, you will be taken to the Athena Portal Home Page. At the bottom of this page are the Athena applications.



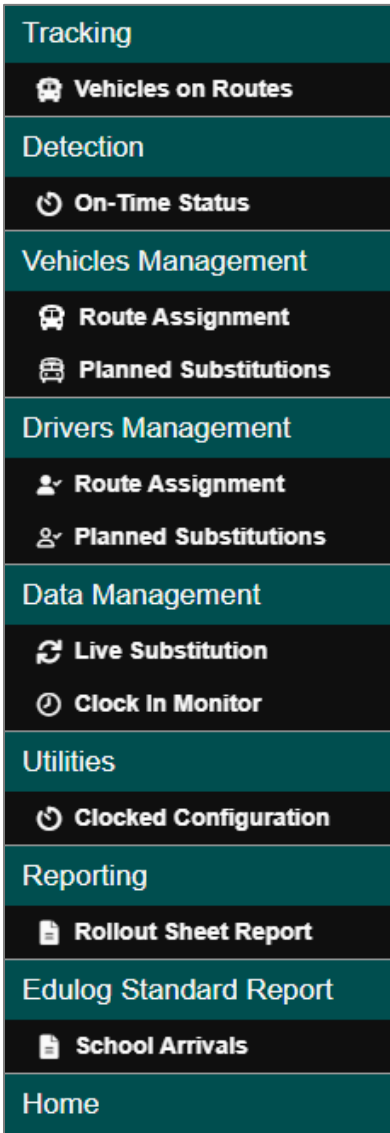
## Telematics Application

Select the satellite icon to enter the Telematics application.



## Action Bar Main Menu

The Telematics Action Bar will open. This is your main menu.



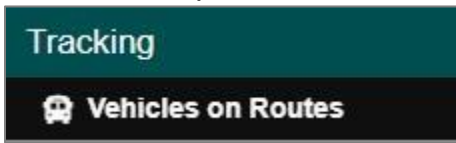
## Hamburger Icon

You can open and close the action bar by selecting the hamburger icon at the top left.



## Telematics Modules

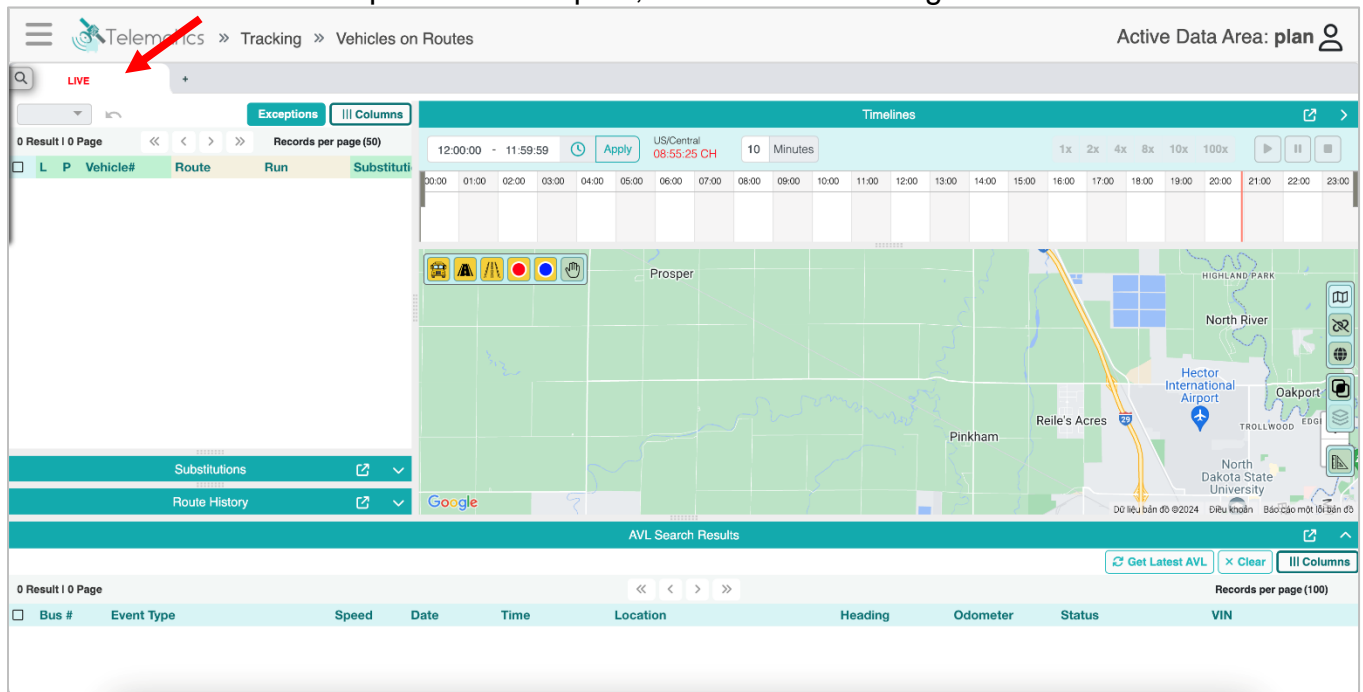
For this example, in the action bar we will select Vehicles on Routes under Tracking.

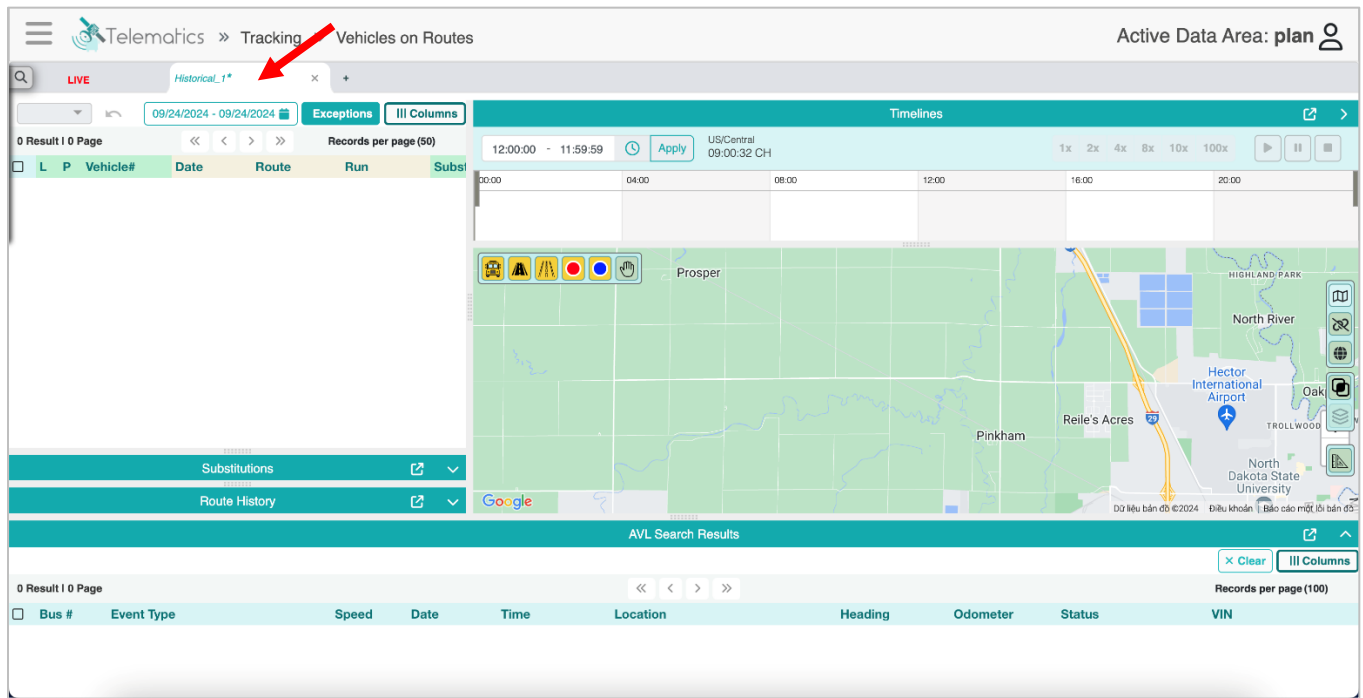


## Vehicles on Routes

The "Vehicle on Routes" system aims to establish the Data Analysis, mainly for school-related purposes. There are 2 modes:

- Live mode: is what operates in the current date.
- Historical mode: is what operated in the past, a selected date range.

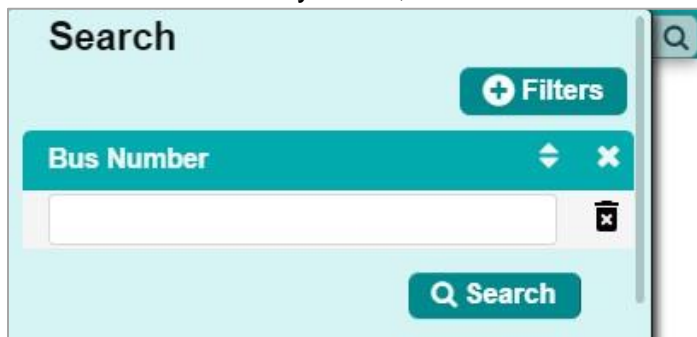
A screenshot of the Telematics 'Vehicles on Routes' interface. The top navigation bar shows 'Telematics >> Tracking >> Vehicles on Routes' and 'Active Data Area: plan'. A red arrow points to the 'LIVE' mode selector. Below the navigation, there are tabs for 'Exceptions' and 'Columns'. A timeline shows a time range from 12:00:00 to 11:59:59. A map displays a route in the Prosper, North River, and Reile's Acres area, with markers for Hector International Airport and North Dakota State University. Below the map is an 'AVL Search Results' table with columns: Bus #, Event Type, Speed, Date, Time, Location, Heading, Odometer, Status, and VIN. The table currently shows 0 results.



## Search Tray

To access details about vehicle on routes, we have two main options (for both live mode and historical mode):

- **Specific Vehicle Search:** This involves entering unique identifiers like the vehicle number, route, or run IDs into the search tray. This method provides focused information on that vehicle.
- **All Vehicles Search:** This allows you to browse through a database or listing of multiple vehicles. Leave the search tray blank, and select Search.



### • Open/Close

To open and close the search tray, select the magnifying glass icon.



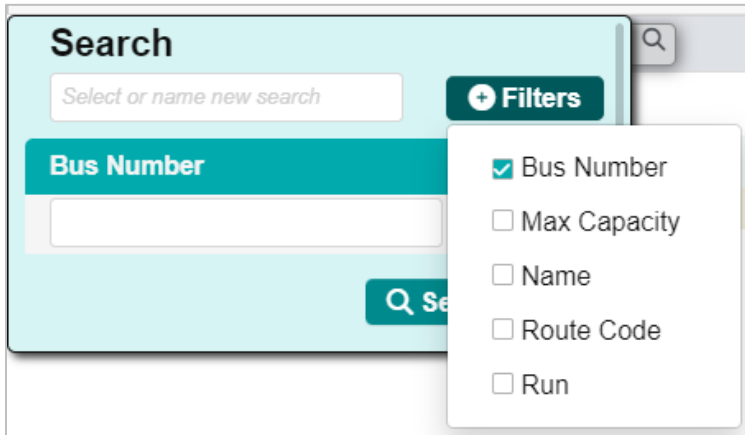
### • Filters

By default, the search tray will display Bus Number search filter. There are 5 selections to filter:

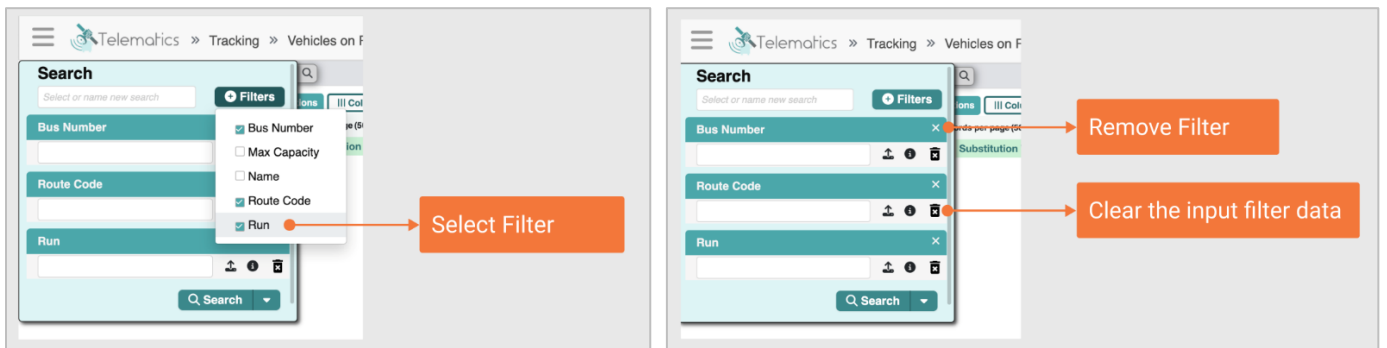
- Bus number (default)



- Max capacity
- Name
- Route Code
- Run



Filters can be selected or removed.

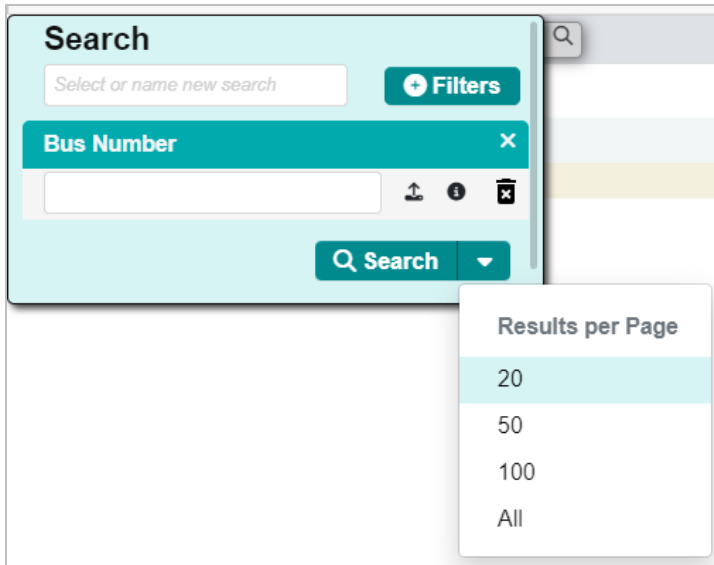


- **Results per Page**

A dropdown menu for selecting the amount of record displayed per page:

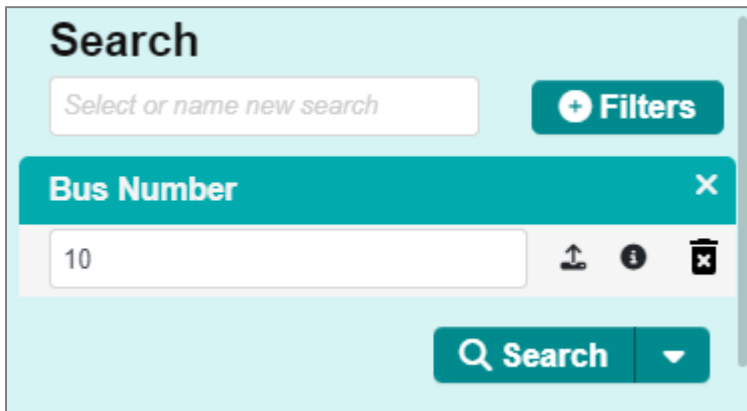
- 20
- 50
- 100
- All

By default, displaying 20 results per page.



- **Search**

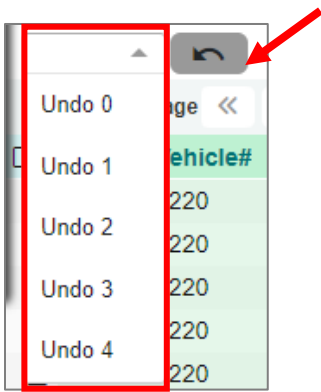
Once you have entered your search criteria, select the search button. To load all vehicles, leave the search field blank and select Search.



**Undo**

If you wish to go back to the previous, broader set of search results, simply click the undo button. This will remove the most recent filter you applied.

For multiple undo, select the dropdown list. This list shows the number of previous filter/search actions you've taken. You can select an item from the list to undo multiple filters at one, returning to an earlier stage in your search.



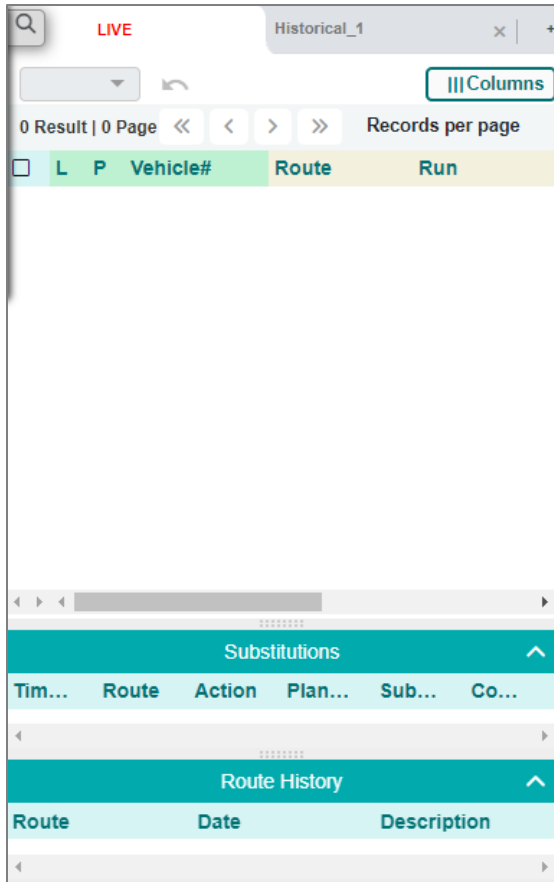
## Tracking Panels

In the Vehicles on Routes module, there are several panels that will populate: the Data Panel, Timelines Panel, Map Panel, and AVL Search Results panel.

The screenshot shows the 'Vehicles on Routes' tracking interface. It features a top navigation bar with 'Telematics >> Tracking >> Vehicles on Routes' and an 'Active Data Area: plan' indicator. Below the navigation is a search bar and a 'LIVE' status indicator. The main area is divided into four panels:

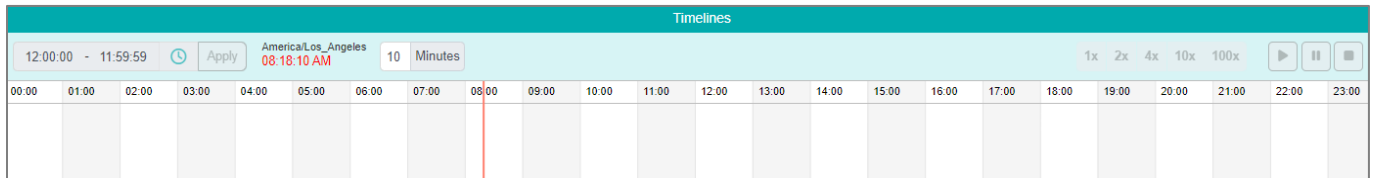
- Data Panel:** Located on the left, it contains a table with columns for 'Vehicle#' and 'Route'. Below the table are sections for 'Substitutions' and 'Route History'.
- Timeline:** Located at the top right, it shows a time range from 12:00:00 to 11:59:59 with a 'Records per page' selector.
- Map Panel:** Located in the center, it displays a map of the Tacoma area with various landmarks and routes.
- AVL Search Results Panel:** Located at the bottom, it shows a table with columns for 'Bus #', 'Event Type', 'Speed', 'Date', 'Time', 'Location', 'Heading', 'Odometer', 'Status', and 'VIN'.

- Data Panel**  
 The Data Panel consists of 3 cards. The Vehicles list at the top and Substitutions and Route History cards below.



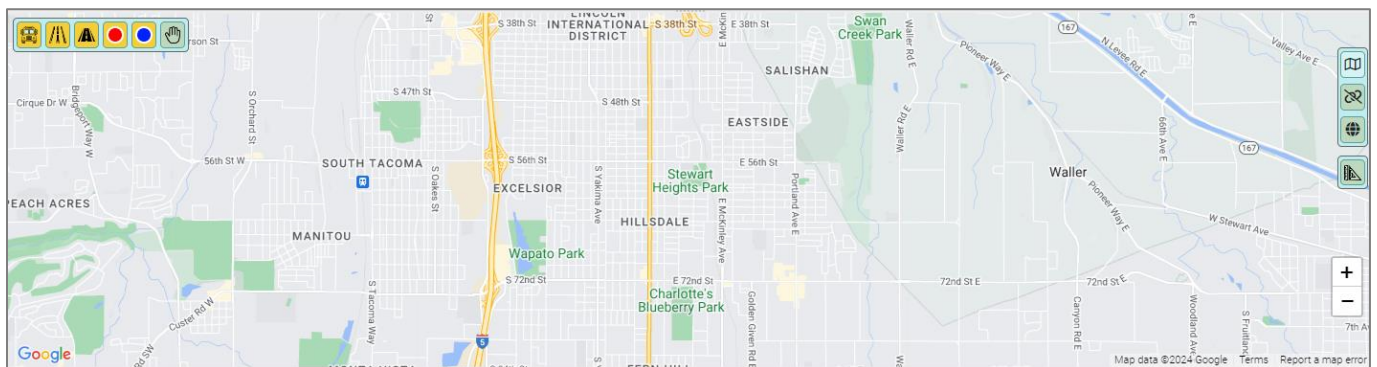
- **Timelines Panel**

The Timeline Panel shows the time, time zone, and time range.



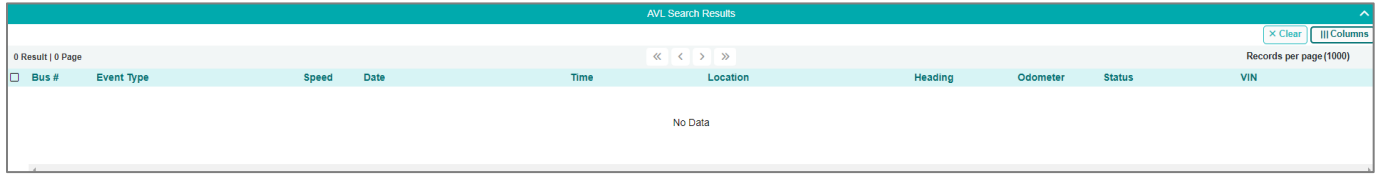
- **Map Panel**

The Map Panel is below the timeline and will display the route and various exceptions when a route is selected.



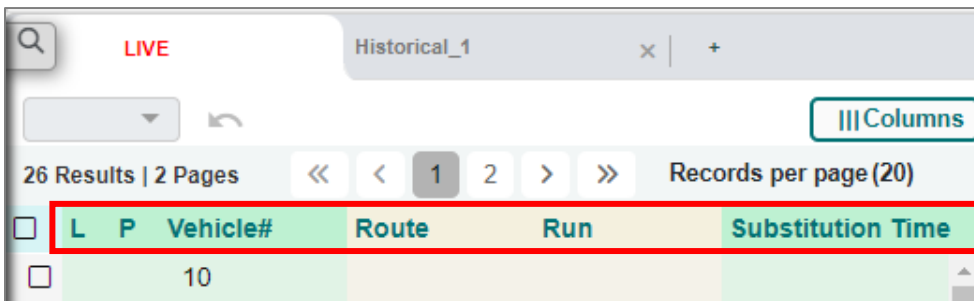
- **AVL Panel**

The AVL Search Results Panel will display the AVL data of the route selected in the data panel.

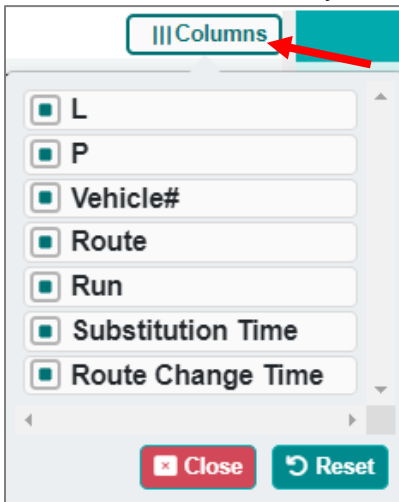


### Columns

In the Data Panel, there are several columns of data shown: L (live), P (planned), Vehicle#, Route, Run, Substitution Time, and Route Change Time.

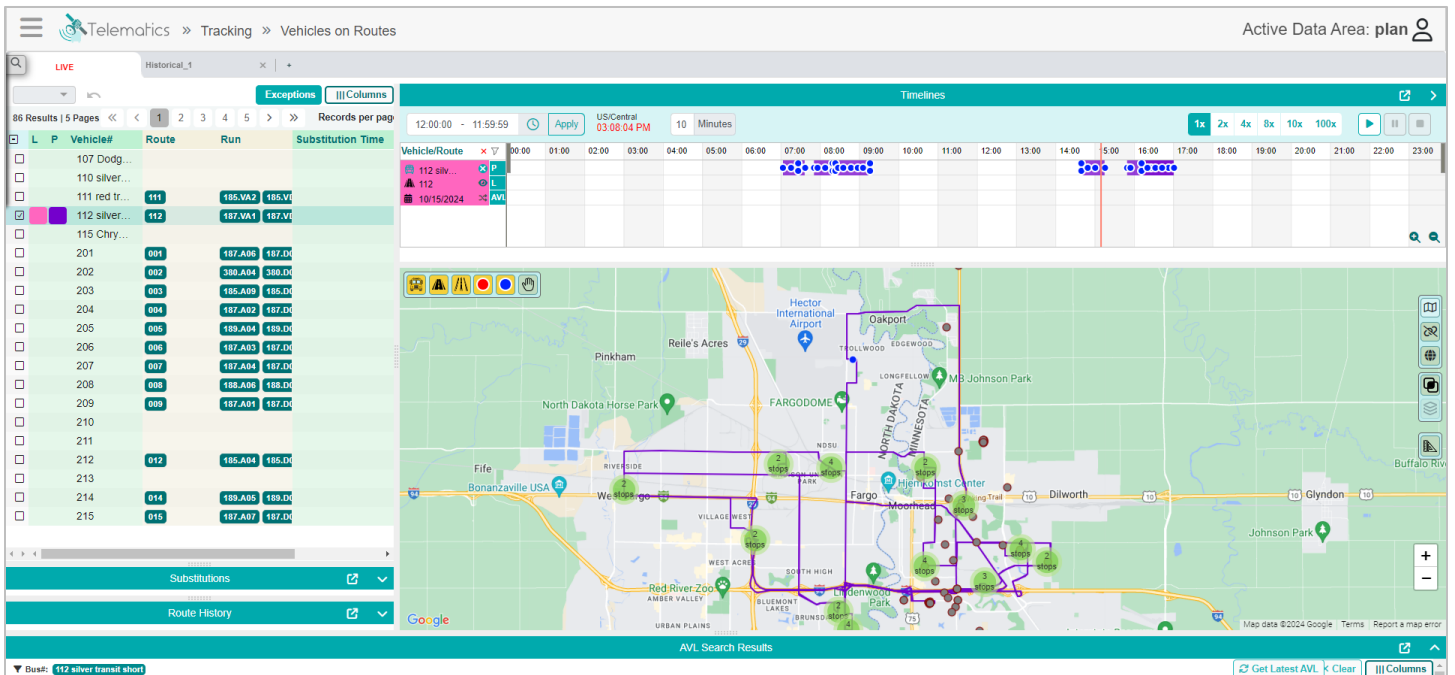


By default, all columns are selected. To choose specific data to display, select the columns button and deselect the ones you do not need.



### Select Vehicle

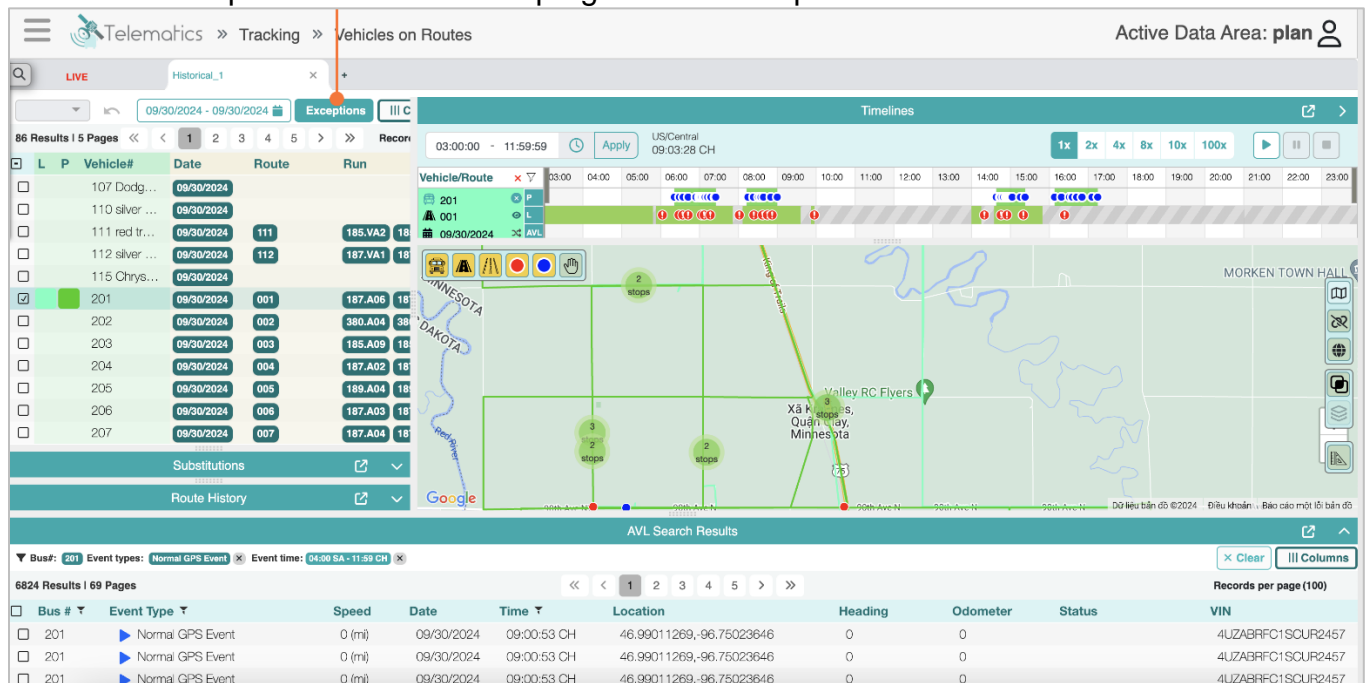
When selecting a vehicle in the data panel, the vehicle will highlight in the data panel, vehicle data will load in the timeline, and the route/runs will display on the map.



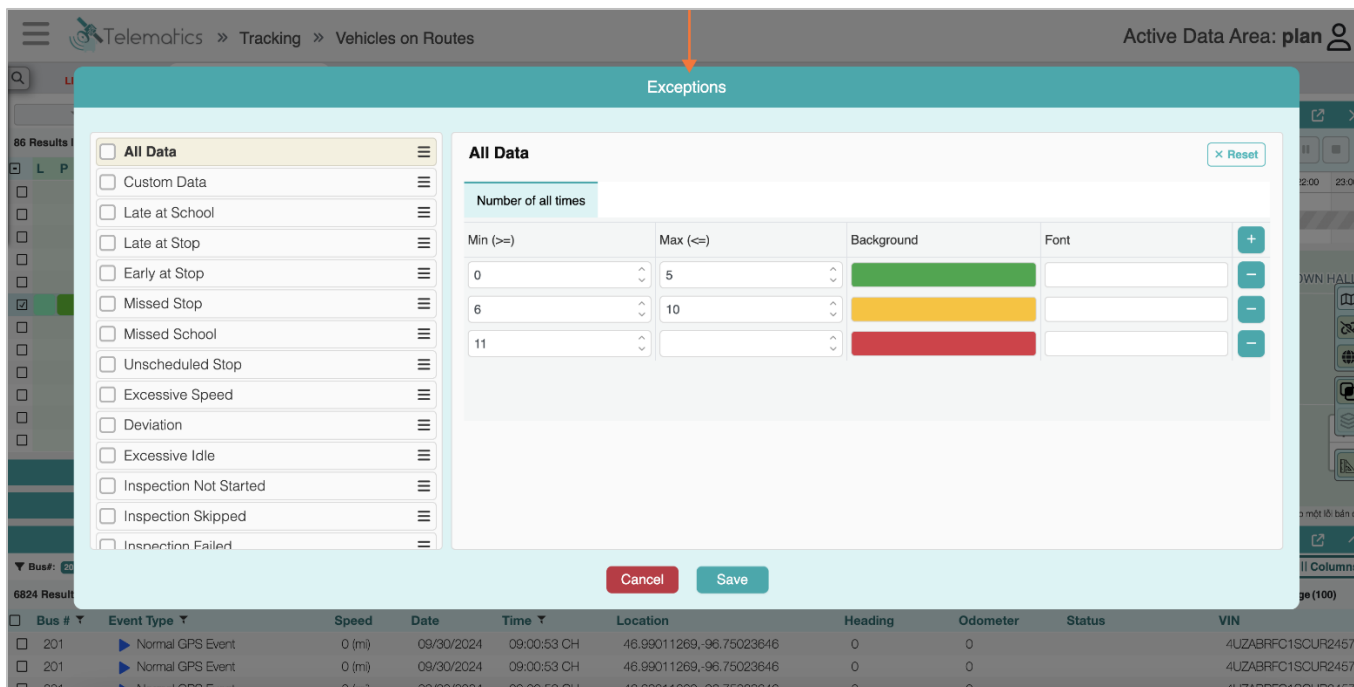
## Exceptions

This feature is designed to help users monitor and manage exceptions (deviations from the expected route or schedule) in a fleet of vehicles.

- Select the Exceptions button at the top right of the data panel.



- Each exception is given a dedicated column in the data panel showing the measure (statistic) of the exception for each vehicle. The user can select which exception columns to appear in the data panel in a similar way to the columns button. Selecting the exceptions button brings up the list of all available exceptions. The user can show and hide each exception at will.



Select an exception and save.



The column will appear in the data panel.




Vehicle#	Date	Late at School	Total late minutes
107 Dodg...	09/30/2024	0	0
110 silver ...	09/30/2024	0	0
111 red tr...	09/30/2024	0	0
112 silver ...	09/30/2024	0	0
115 Chrys...	09/30/2024	0	0

- **Refresh Rate**

The default rate is 5 minutes, but the user can set the rate from 1 to 30 and can also stop the refresh feature. The same rate applies to all exceptions.

For example, "Late at School" Exception: This specific exception tracks how late a vehicle is arriving at a school. This is how the color-coded status might work:

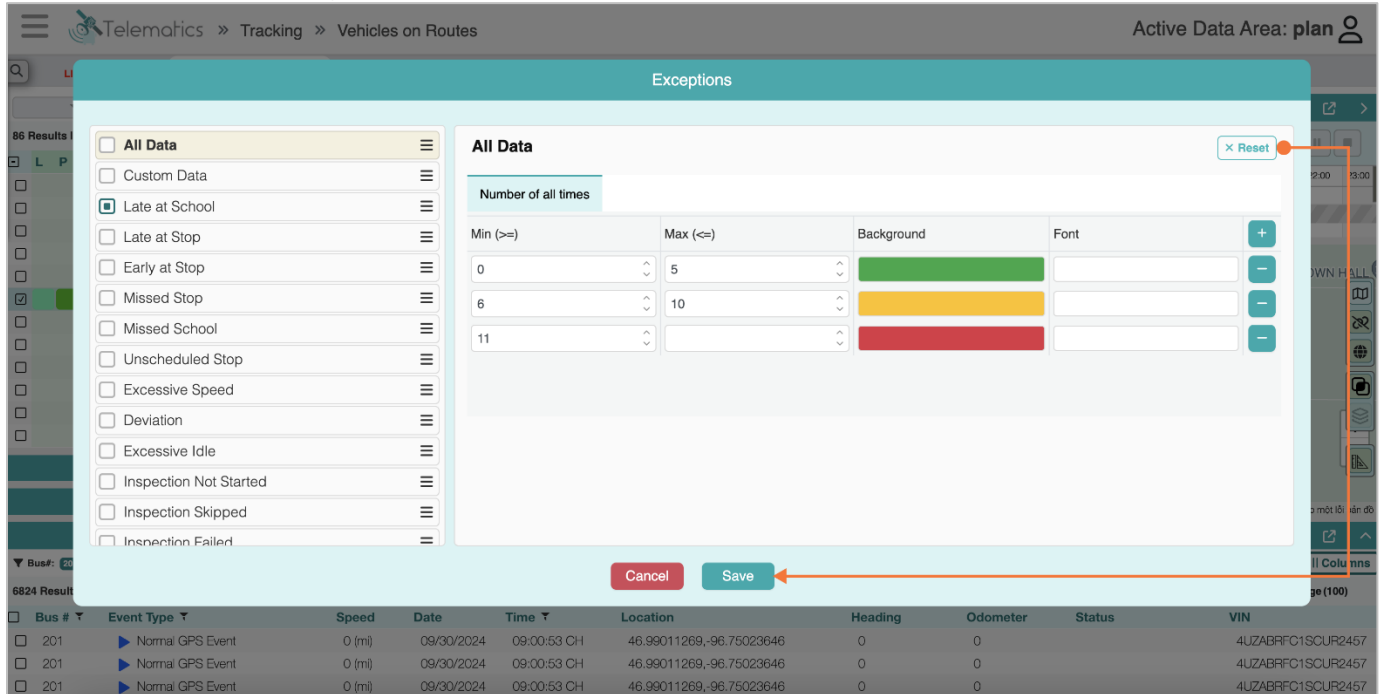
- **Green (0-5 minutes late):** Okay, no significant delay.
- **Yellow (6-10 minutes late):** Warning, the vehicle is moderately late.
- **Red (11+ minutes late):** High risk, the vehicle is significantly late.

Number of all times			
Min (>=)	Max (<=)	Background	Font
0	5		
6	10		
11			

- Reset**

Click "Reset": This will clear all your custom settings.

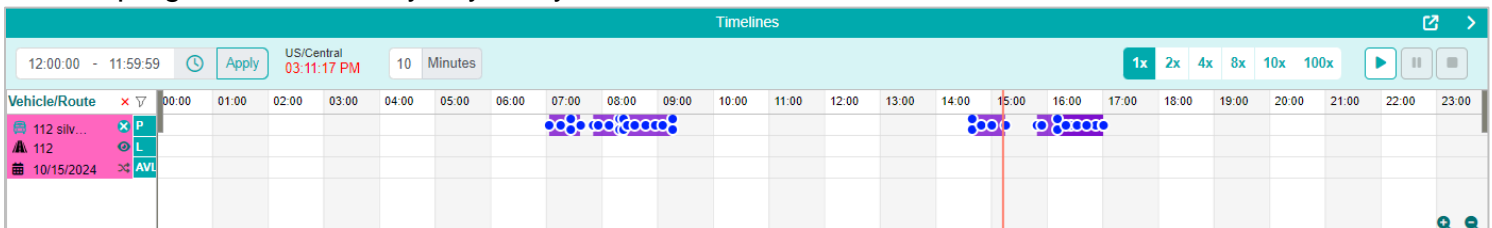
Save Changes: Make sure to save the changes after clicking "Reset" to confirm the reset and apply the default settings.



Note: Resetting will erase all your custom settings. If you want to keep any of your customizations, make sure to note them down before clicking "Reset."

## Routes in Timeline

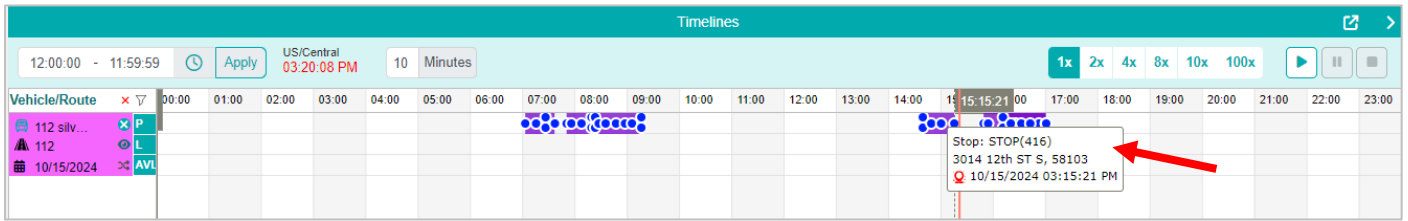
When a vehicle is selected, you will see the route display in the timeline. Timelines feature provides a visual representation of vehicle activity, both past and present. It allows you to track vehicle routes, monitor progress, and identify any delays.





- **Stop Information**

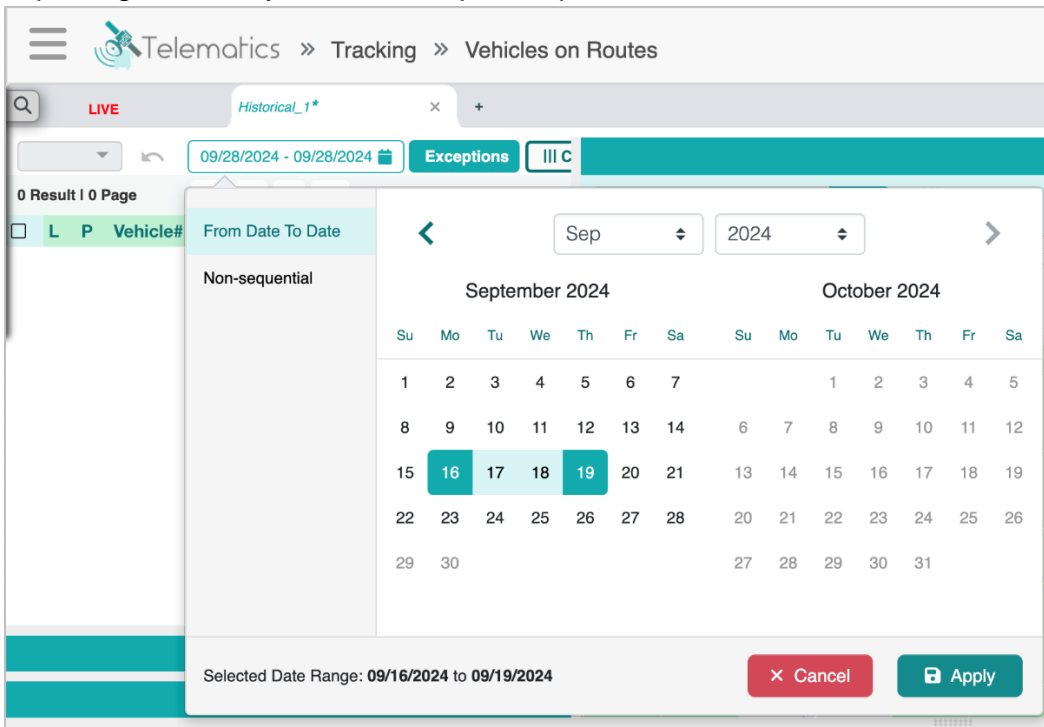
Hover over a stop and the stop information will appear with Stop ID, location, and stop time.



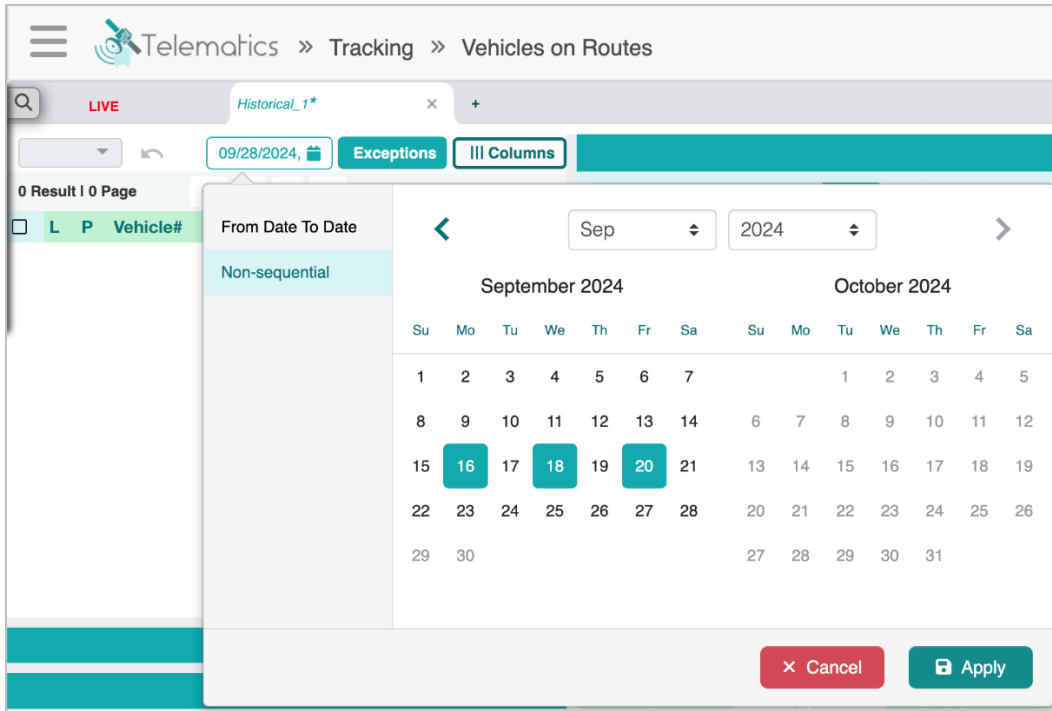
- **Historical Mode**

To view past vehicle activity, use the **Date Range** option to specify the time period you're interested in. There are two ways to select a date range:

- **From Date to Date:** This option allows you to specify a start and end date for your search, capturing all activity within that specific period.



- **Non-Sequential:** This option allows you to select multiple, non-consecutive dates to analyze. This is useful if you want to compare activity on specific days.



## Search with Date Range

Once you've selected a date range, you can search for vehicle activity in two ways:

- **All Vehicles:** This option displays activity for all vehicles within the chosen date range.
- **Specific Vehicle:** This option allows you to narrow your search to a particular vehicle. Simply enter the vehicle number (e.g., 201) to view its activity within the specified dates (e.g., 16/09/2024 to 19/09/2024)

## Searching with Non-Sequential

Following the same logic, just as you would focus on particular dates, simply enter the vehicle number (e.g., 201) to view its activity within the specified dates (e.g., 16/09/2024, 18/09/2024, 20/09/2024).

## Timeline Display

To view detailed activity information on the Timeline, select one or more vehicles from the results of your previous search.

- **Explanation:** After you've searched for vehicle activity within a specific date range (as described in the previous section), a list of results will appear. To see a visual representation of a vehicle's route and activity on the Timeline, simply select it from this list. You can select multiple vehicles to compare their activities and routes simultaneously.
- **Viewing Different Vehicles and Dates:**
  - **Different Vehicles:** To see the Timeline for a different vehicle, simply select it from the search results list.
  - **Different Dates:** To view activity for a different date, you'll need to adjust the date range in your search criteria and perform a new search.

This way, you can easily explore and compare vehicle activity across different vehicles and different days.

Telematics » Tracking » Vehicles on Routes Active Data Area: plan

LIVE Historical\_L1\*

09/16/2024 - 09/19/2024 Exceptions Columns Timelines

4 Results | 1 Page Records per page (20)

L	P	Vehicle#	Date	Route	Run
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	201	09/16/2024	001	187.A06 187.D
<input type="checkbox"/>	<input type="checkbox"/>	201	09/17/2024	001	187.A06 187.D
<input type="checkbox"/>	<input type="checkbox"/>	201	09/18/2024	001	187.A06 187.D
<input type="checkbox"/>	<input type="checkbox"/>	201	09/19/2024	001	187.A06 187.D

Vehicle/Route: 201 001 P L AVL

12:00:00 - 11:59:59 Apply US/Central 12:26:53 CH

1x 2x 4x 8x 10x 100x

Substitutions Route History

AVL Search Results

Bus#: 201 Clear Columns

7500 Results | 75 Pages Records per page (100)

Bus #	Event Type	Speed	Date	Time	Location	Heading	Odometer	Status	VIN
201	Stop Arm open	0 (mi)	09/16/2024	11:57:02 CH	46.99006982,-96.75057382	0	0		4UZABRFC1SCUR2457
201	Stop Arm open	0 (mi)	09/16/2024	11:57:02 CH	46.99006982,-96.75057382	0	0		4UZABRFC1SCUR2457
201	Main Door Closed	0 (mi)	09/16/2024	11:57:02 CH	46.99006982,-96.75057382	0	0		4UZABRFC1SCUR2457

Telematics » Tracking » Vehicles on Routes Active Data Area: plan

LIVE Historical\_L1\*

09/16/2024 - 09/19/2024 Exceptions Columns Timelines

8 Results | 1 Page Records per page (20)

L	P	Vehicle#	Date	Route	Run
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	201	09/16/2024	001	187.A06 187.D
<input type="checkbox"/>	<input type="checkbox"/>	201	09/17/2024	001	187.A06 187.D
<input type="checkbox"/>	<input type="checkbox"/>	201	09/18/2024	001	187.A06 187.D
<input type="checkbox"/>	<input type="checkbox"/>	201	09/19/2024	001	187.A06 187.D
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	202	09/16/2024	002	380.A04 380.D
<input type="checkbox"/>	<input type="checkbox"/>	202	09/17/2024	002	380.A04 380.D
<input type="checkbox"/>	<input type="checkbox"/>	202	09/18/2024	002	380.A04 380.D
<input type="checkbox"/>	<input type="checkbox"/>	202	09/19/2024	002	380.A04 380.D

Vehicle/Route: 201 001 P L AVL

12:00:00 - 11:59:59 Apply US/Central 02:23:11 SA

1x 2x 4x 8x 10x 100x

Substitutions Route History

AVL Search Results

Bus#: 201 Clear Columns

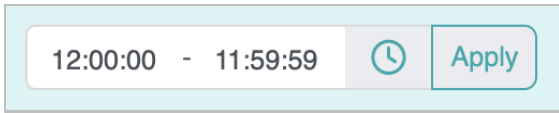
7500 Results | 75 Pages Records per page (100)

Bus #	Event Type	Speed	Date	Time	Location	Heading	Odometer	Status	VIN
201	Stop Arm open	0 (mi)	09/16/2024	11:57:02 CH	46.99006982,-96.75057382	0	0		4UZABRFC1SCUR2457
201	Stop Arm open	0 (mi)	09/16/2024	11:57:02 CH	46.99006982,-96.75057382	0	0		4UZABRFC1SCUR2457
201	Main Door Closed	0 (mi)	09/16/2024	11:57:02 CH	46.99006982,-96.75057382	0	0		4UZABRFC1SCUR2457

## Timeline Key Elements

The Timeline provides a visual representation of vehicle activity. Here's a breakdown of the key elements:

- Time Range:** Use this control to select the specific time period you want to view. This allows you to focus on activity within a certain window, such as the morning or afternoon.

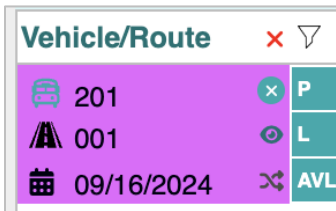


- Playback Speed:** The Play button animates the vehicle's journey along its route. You can adjust the playback speed from 1x (real-time) to 100x (much faster). Since vehicles are constantly in motion, faster speeds help you quickly review longer trips.



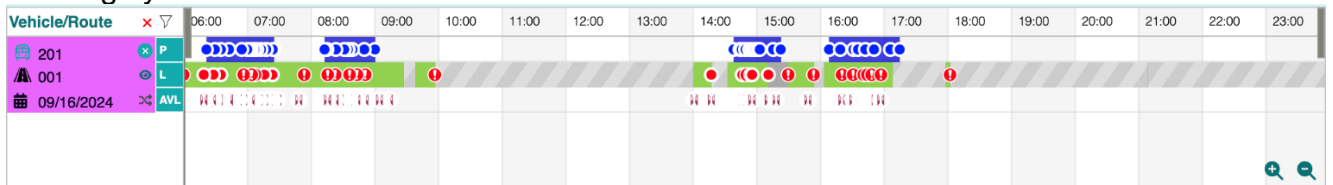
- Vehicle/Route Information:** This section displays key details about the selected vehicle and its route, including:

- Vehicle Number
- Route Name
- Date: The date the activity occurred



- Activity Types:** Timeline displays different types of vehicle activity:

- P (Planned): Scheduled events or stops along the route.
- L (Live): Real-time location updates and activity as it happens.
- AVL (Automatic Vehicle Location): Events automatically captured by the vehicle's location tracking system.



- Visual Indicators:** Different colored dots represent various types of stops:

- **Blue Dot:** A planned stop along the route.

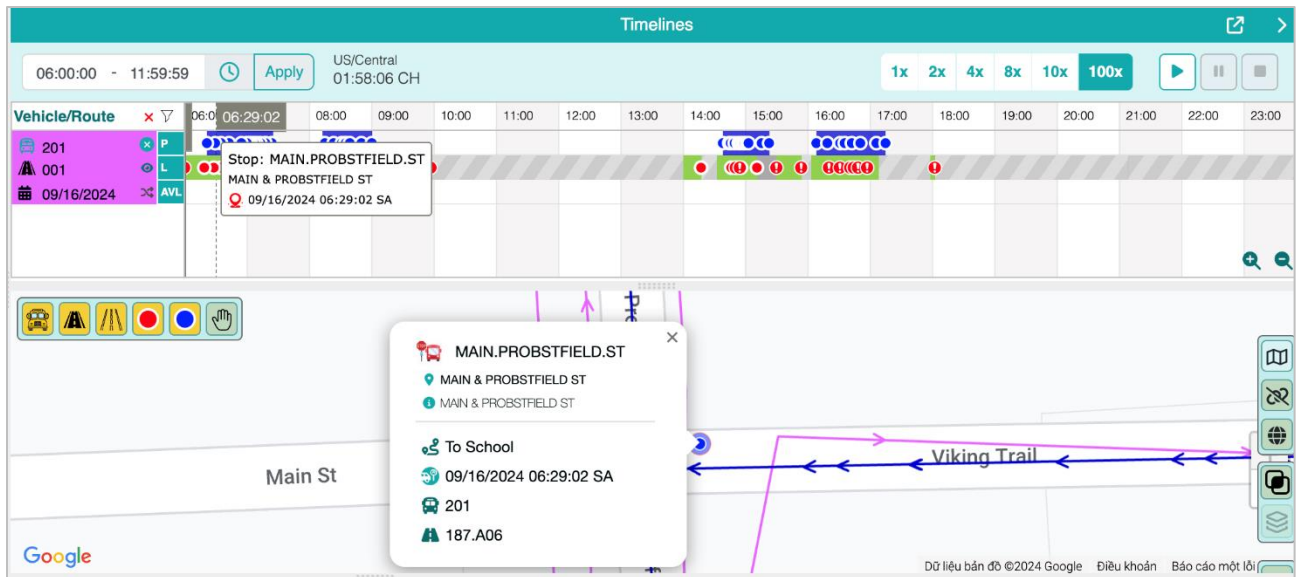


- **Red Dot:** An actual stop made by the vehicle.



- **Exclamation Mark:** An unplanned or unexpected stop.





You can view additional information about each stop by clicking on its corresponding dot on the timelines or the map. This might include the time of the stop, the reason for the stop, and any associated events.

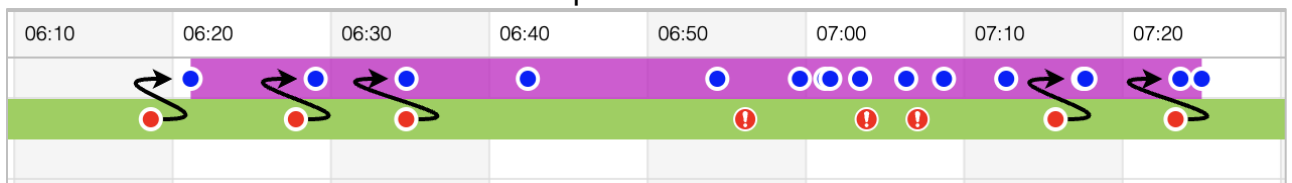
## 6. Connecting Planned and Live Stops

To help you quickly identify if a vehicle is making its stops as planned, the Timeline includes a "Connecting" feature. This feature visually links Planned (P) stops with their corresponding Live (L) stops, when the actual stop is in close proximity to the planned stop.



### How it Works

- **Proximity-based Connection:** If a vehicle makes a Live stop (red dot) near a Planned stop (blue dot), an arrow will connect the two dots on the Timeline. This indicates that the vehicle stopped close to the intended location, even if it wasn't the exact spot.
- **Understanding Minor Deviations:** This visual cue helps you quickly identify minor deviations from the planned route and understand where the vehicle actually stopped in relation to where it was scheduled to stop.



### Benefits

- **Flexibility in Analysis:** The "Connecting" feature acknowledges that stops might not always occur at the precise planned location due to real-world factors like traffic or passenger needs.
- **Clearer Visualization:** By connecting nearby stops, the Timeline provides a clearer picture of the vehicle's adherence to the planned route, even with minor deviations.

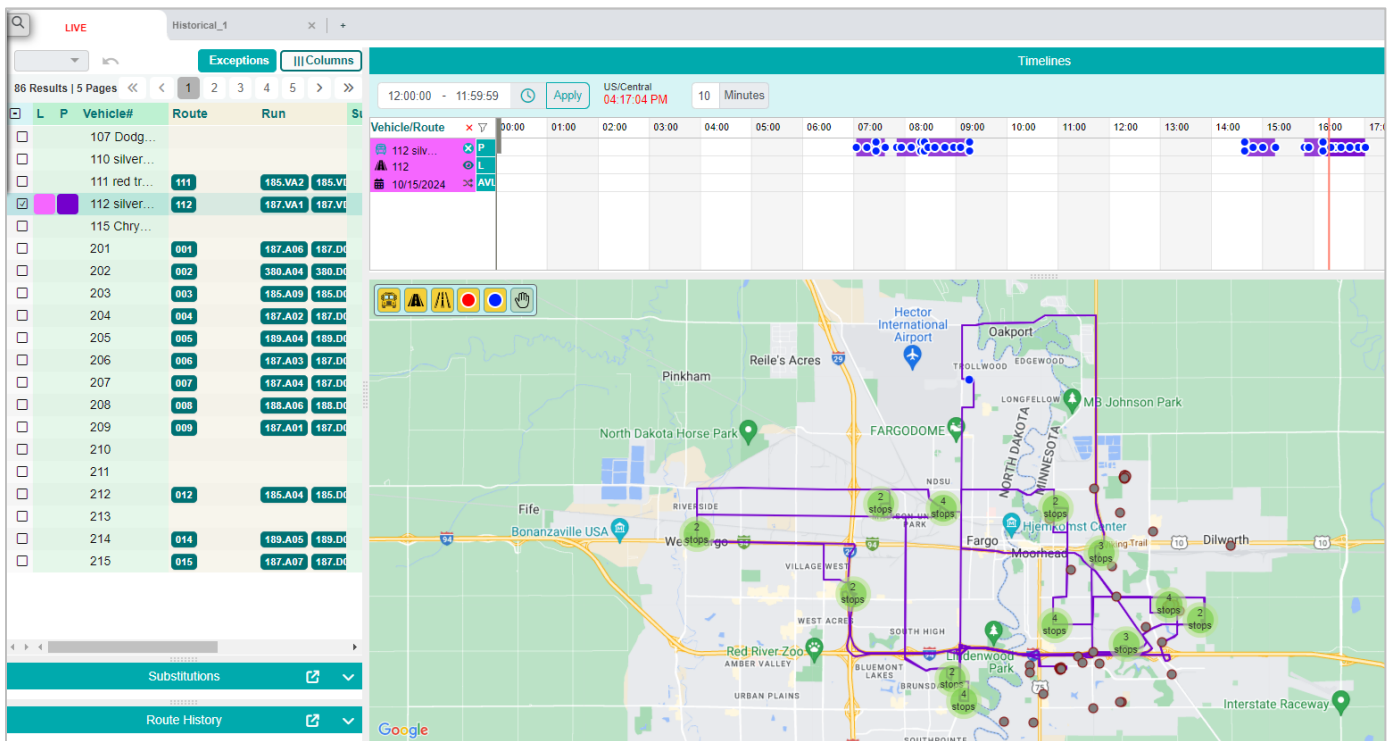
- **Improved Route Monitoring:** This feature helps you monitor route adherence more effectively and identify any significant deviations or potential issues.

## Customize Route Colors

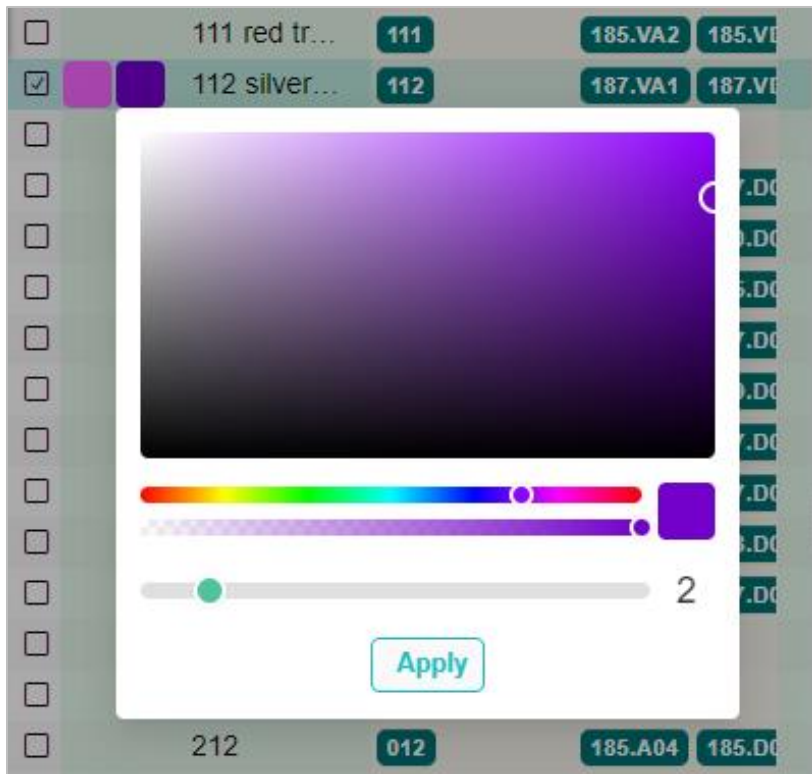
In addition to tracking vehicle activity, you can also customize the colors used to display vehicle routes on the map. This helps you easily distinguish between Planned (P) and Live (L) activity.

- **Default Colors:** When you select a vehicle from the search results list, the system automatically assigns two distinct colors to represent its Planned (P) and Live (L) routes. These colors are displayed as color bars on the map, making it easy to differentiate between the two types of activity.

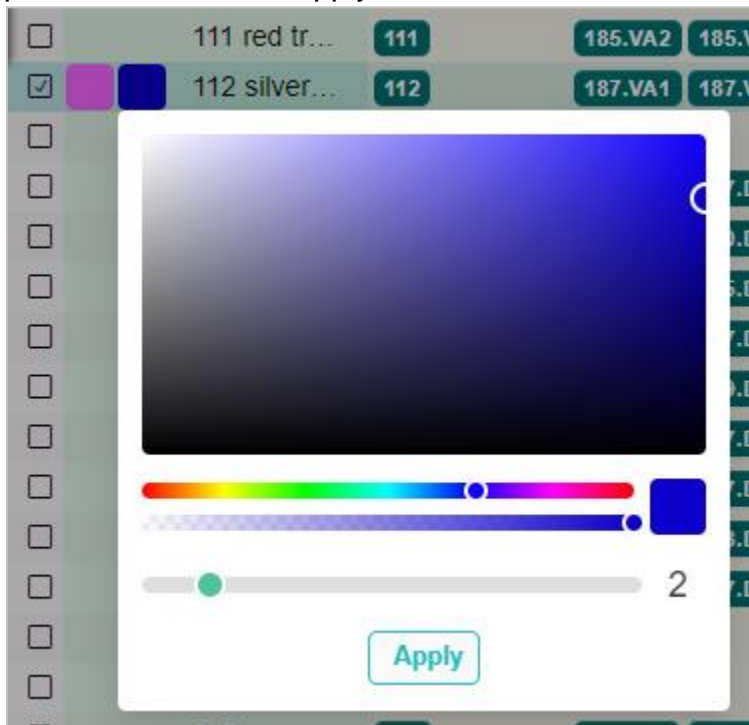
<input type="checkbox"/>	L	P	Vehicle#
<input type="checkbox"/>			107 Dodg...
<input type="checkbox"/>			110 silver...
<input type="checkbox"/>			111 red tr...
<input checked="" type="checkbox"/>	<span style="background-color: #FF00FF; width: 15px; height: 15px; display: inline-block;"></span>	<span style="background-color: #800080; width: 15px; height: 15px; display: inline-block;"></span>	112 silver...
<input type="checkbox"/>			115 Chry...



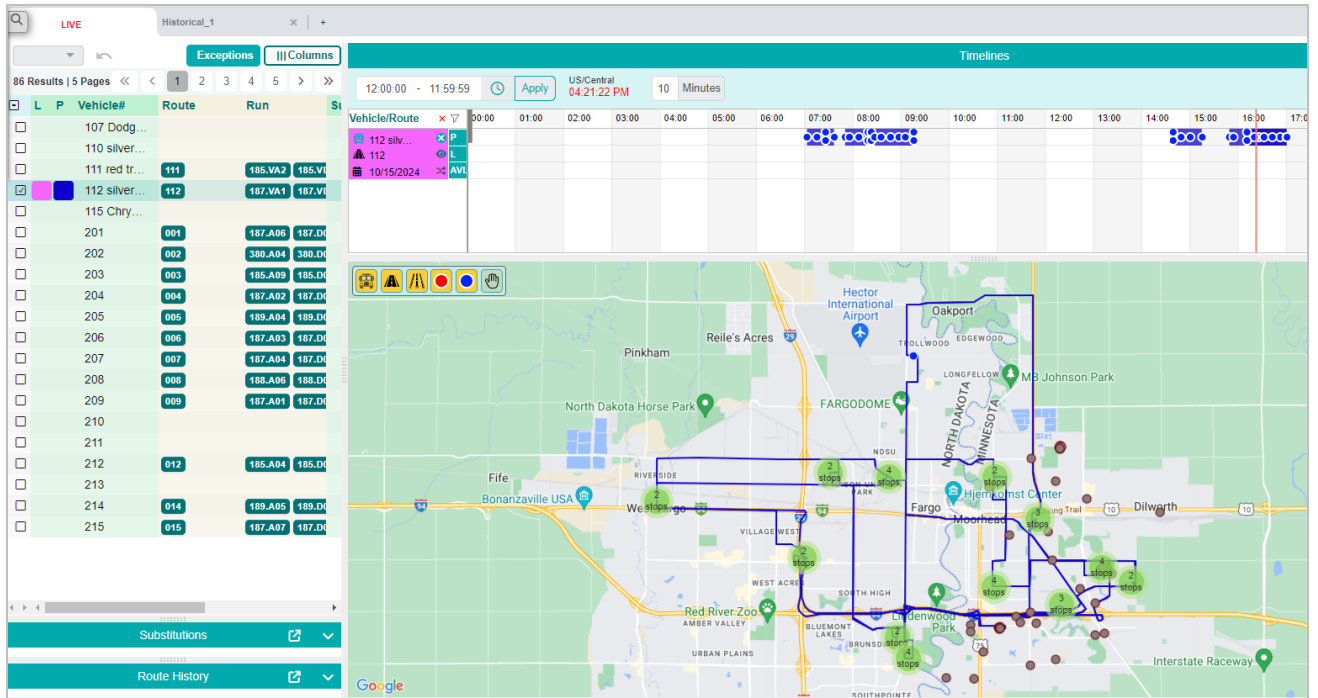
- **Changing Colors:** To change the route display colors, follow these simple steps:
  - **Select a vehicle:** In the search results list, identify the vehicle whose route colors you want to change.
  - **Click the color bar:** Before the vehicle number, you'll see two color bars representing Planned (P) and Live (L) activity. Click on the color bar you want to modify.



- **Choose a new color:** A color palette will appear. Select your desired color from the palette. Then select Apply.



- Your color will change in the data panel, the timeline, and on the map.

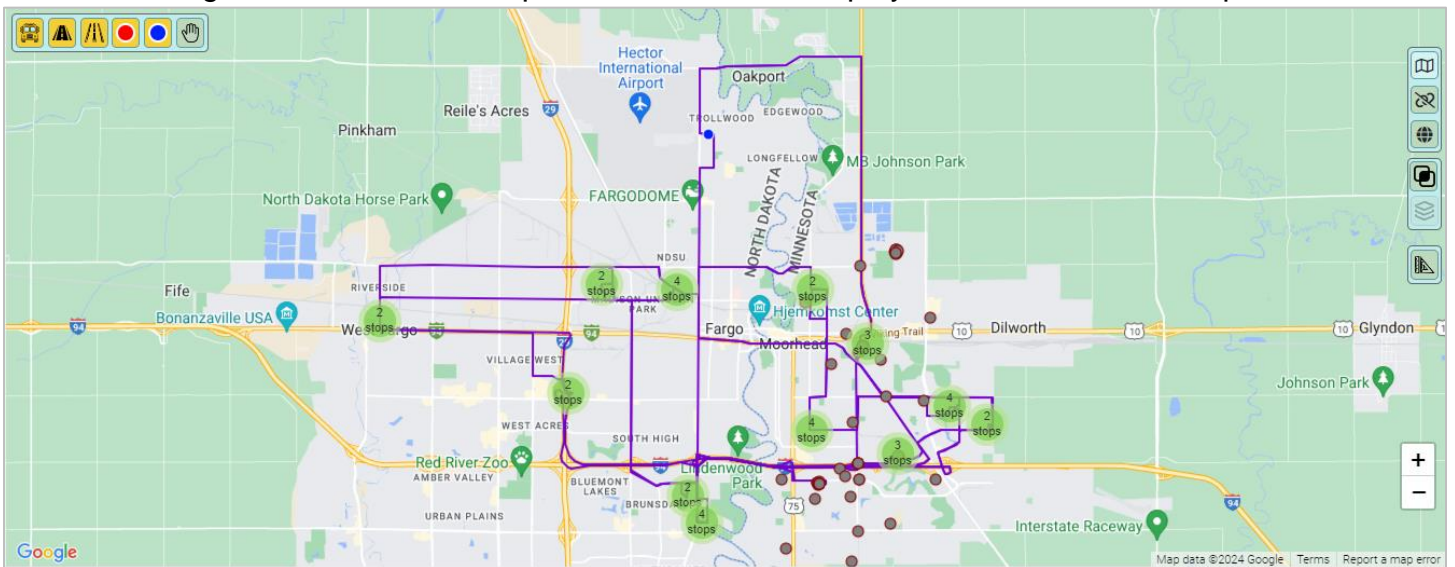


• **Benefits of Using Colors:**

- **Enhanced focus:** Using distinct colors makes it easier to focus on specific vehicle routes, especially when multiple vehicles are active on the map.
- **Clear differentiation:** Colors help clearly distinguish between Planned and Live activity, allowing you to quickly identify any deviations from the planned route.

**Route on Map**

When selecting a vehicle in the data panel, the route will display in real time on the map.



• **Map Tools**

There are map tools located to the upper left and on the right side of the map.



1. Unselected Vehicles



2. Planned Direction



3. Live Direction



4. Live Stops



5. Planned Stops



6. Drag/Search



7. Road Map

This is the default map. When selected, the main map defaults to the Road Map. This is the default map.



8. Hybrid Map

When selected, your map will display a road map and satellite map combined.



9. Satellite Map

When selected, your map will display the satellite map.



10. Map Measurement

When selected, click on the map where you want to measure. Then click and hold to draw a line and the measurement will appear. Let go of your click and the line will stay on the map.



## 11. Zoom Tools

Zoom tools are below. To zoom in on the map, select the + icon. To zoom out on the map, select the – icon.



## Map Overlays

The Map Overlays feature allows you to enrich the standard map view with additional layers of information, providing valuable context and insights for your routing and planning tasks. These overlays are essentially images that are superimposed on the map, enhancing its visual representation, and providing a more comprehensive understanding of your operational environment.



- To view a Map Overlay, select the Map Build Overlays button.

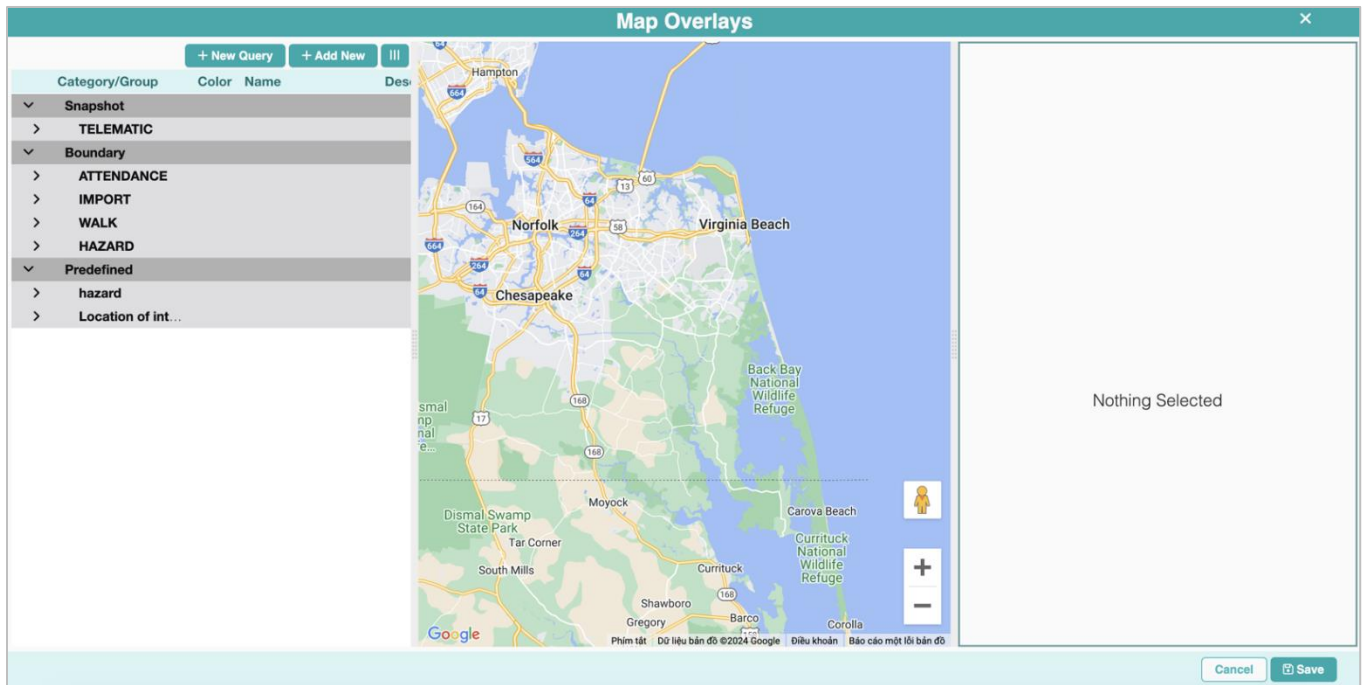
The screenshot shows the Telematics interface with a map of Virginia Beach and a data table. The map displays various locations and routes. The data table below the map shows the following information:

L	P	Vehicle#	Date	Route	Run
<input type="checkbox"/>		AH005	10/14/2024		
<input type="checkbox"/>		AH005	10/15/2024		
<input type="checkbox"/>		AH006	10/14/2024		
<input type="checkbox"/>		AH006	10/15/2024		
<input type="checkbox"/>		AH007	10/14/2024	003	066.A08 06
<input type="checkbox"/>		AH007	10/15/2024	003	066.A08 06
<input type="checkbox"/>		AH008	10/14/2024		
<input type="checkbox"/>		AH008	10/15/2024		
<input type="checkbox"/>		AH009	10/14/2024		
<input type="checkbox"/>		AH009	10/15/2024		
<input type="checkbox"/>		AH010	10/14/2024		
<input type="checkbox"/>		AH010	10/15/2024		

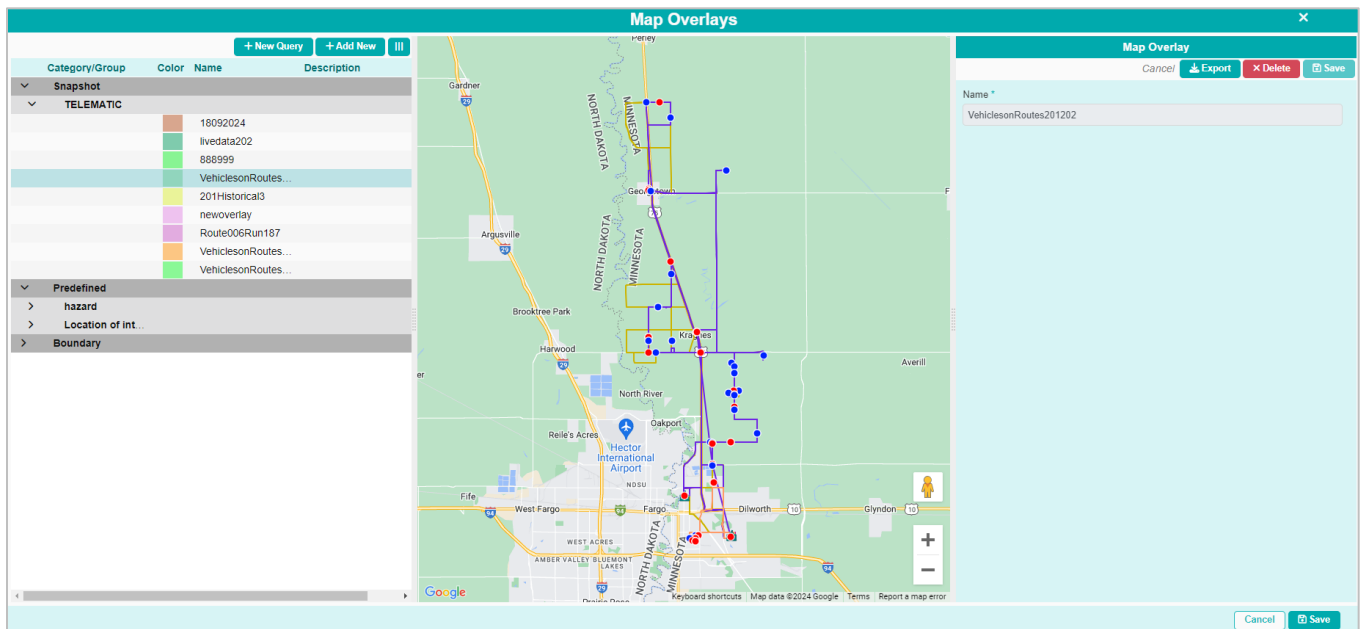
Below the table, there are buttons for "Substitutions" and "Route History". At the bottom of the interface, there is an "AVL Search Results" section with a table header:

Bus #	Event Type	Speed (mi/h)	Date	Time	Location	Heading	Odometer	Status	VIN
-------	------------	--------------	------	------	----------	---------	----------	--------	-----

- The Map Overlays window will appear. You'll find current map overlays in the data panel.



- Choose your overlay.



- The overlay will be displayed on the map, allowing you to visualize the captured vehicle activity in relation to the underlying map data.

## Build Overlays

You can generate custom map overlays based on the specific vehicles and routes you're interested in. This allows you to create visual representations of vehicle activity and save them for later use in planning, analysis, or presentations.

1. **Select Vehicles:** From the search results list on the Timeline, choose one or more vehicles with the activity you want to include in the overlay.
2. **Initiate Overlay Creation:** Click the "Build Overlays" button. This will open a dialog box where you can customize and save your overlay.
3. **Name the Overlay:** Enter a descriptive name for your overlay, making it easy to identify later.
4. **Save the Overlay:** Click the "Save" button to store your custom overlay. It will be added to your private directory of overlays, which you can access and manage as needed

The screenshot displays the Telematics software interface. At the top, the breadcrumb navigation shows 'Telematics >> Tracking >> Vehicles on Routes'. The 'Active Data Area' is set to 'plan'. The main interface is divided into several sections:

- Search and Filters:** Includes a search bar with 'LIVE' and 'Historical\_1\*' tabs, and a date range filter for '09/16/2024 - 09/18/2024'.
- Vehicle/Route List:** A table with columns for 'L', 'P', 'Vehicle#', 'Date', 'Route', and 'Run'. It lists various vehicles and their routes, with checkboxes for selection.
- Timeline:** A horizontal timeline showing activity from 03:00:00 to 23:00:00. It includes a 'Timelines' section with a 'Vehicle/Route' dropdown and a 'Apply' button.
- Map:** A map view showing the current location and routes. A dialog box titled 'Create a Map Overlay from the Current Map State' is open, with a 'Name' field containing 'VehiclesonRoutes\_201\_202' and 'Build Overlay' and 'Save' buttons.
- AVL Search Results:** A table at the bottom showing search results for bus #201. It includes columns for 'Bus #', 'Event Type', 'Speed', 'Date', 'Time', 'Location', 'Heading', 'Odometer', 'Status', and 'VIN'.

## AVL Search Results Panel

The AVL (Automatic Vehicle Location) Search Results feature provides a comprehensive log of all recorded vehicle events and route/run activities. This allows you to closely monitor vehicle performance, identify potential issues, and ensure safer operations.

- **Targeted Results:** The AVL results are directly linked to the vehicle and date you've selected from the search results list on the Timeline. This allows you to focus your analysis on specific vehicles and timeframes.
- **Detailed Information:** The search results provide detailed information about each event, including timestamps, location data, and any associated alerts or notifications.

## Benefits

- **Proactive Issue Identification:** By reviewing event logs, you can proactively identify potential problems before they escalate, such as vehicles consistently exceeding speed limits or drivers exhibiting unsafe driving behavior.
- **Rapid Response:** Real-time event monitoring allows you to respond quickly to critical situations, such as panic button activations or geofence breaches.
- **Improved Safety:** By identifying and addressing safety concerns, you can create a safer environment for students and drivers.
- **Performance Optimization:** Analyzing event data can help you optimize vehicle performance, improve route efficiency, and reduce operational costs.
- **Enhanced Accountability:** Detailed event logs provide valuable documentation for investigations, audits, and performance reviews.

## How it Works

- **Event Recording:** The system automatically captures a wide range of events, such as:
  - Engine starts and stops
  - Speeding alerts
  - Harsh braking or acceleration
  - Geofence entries and exits
  - Door openings and closings

The screenshot displays the Telematics Tracking interface. At the top, it shows 'Tracking » Vehicles on Routes' and 'Active Data Area: plan'. Below this, there's a search bar with 'LIVE' and 'Historical\_1\*'. A table lists 4 results for bus 201 on route 187.A06, with dates from 09/16/2024 to 09/19/2024. A timeline view shows a period from 03:00:00 to 11:59:59. Below the timeline, a map shows the vehicle's location. At the bottom, an 'AVL Search Results' table shows 7246 results for bus 201, listing events like 'Main Door Closed' and 'Stop Arm open' with details on speed, date, time, location, heading, and odometer.

Bus #	T	Event Type	Speed	Date	Time	Location	Heading	Odometer	Status	VIN
201		Main Door Closed	0 (mi)	09/17/2024	11:50:04 CH	46.990107039,-96.75046281	0	0		4UZABRFC1SCUR2457
201		Main Door Closed	0 (mi)	09/17/2024	11:50:04 CH	46.990107039,-96.75046281	0	0		4UZABRFC1SCUR2457
201		Stop Arm open	0 (mi)	09/17/2024	11:50:03 CH	46.990107039,-96.75046281	0	0		4UZABRFC1SCUR2457
201		Stop Arm open	0 (mi)	09/17/2024	11:50:03 CH	46.990107039,-96.75046281	0	0		4UZABRFC1SCUR2457
201		Stop Arm open	0 (mi)	09/17/2024	10:50:02 CH	46.990107039,-96.75046281	0	0		4UZABRFC1SCUR2457
201		Main Door Closed	0 (mi)	09/17/2024	10:50:02 CH	46.990107039,-96.75046281	0	0		4UZABRFC1SCUR2457
201		Stop Arm open	0 (mi)	09/17/2024	10:50:02 CH	46.990107039,-96.75046281	0	0		4UZABRFC1SCUR2457
201		Main Door Closed	0 (mi)	09/17/2024	10:50:02 CH	46.990107039,-96.75046281	0	0		4UZABRFC1SCUR2457
201		Main Door Closed	0 (mi)	09/17/2024	09:50:01 CH	46.990107039,-96.75046281	0	0		4UZABRFC1SCUR2457

**Searchable Database:** You can search through these recorded events by various criteria, including:

- Date and time range
- Vehicle number
- Event type

- Select the dropdown in the column heading to filter your search.

The screenshot shows the 'AVL Search Results' window. A dropdown menu is open over the 'Event Type' column header, listing options: 'Main Door Closed', 'Comms Acquired', and 'Emergency Door Cl...'. The table below displays search results for bus #201, with columns for Time, Location, Heading, Odometer, Status, and VIN. The table shows multiple entries for 'Main Door Closed' and 'Stop Arm open' events.

Bus #	Event Type	Time	Location	Heading	Odometer	Status	VIN
201	Main Door Closed	11:50:04 CH	46.990107039,-96.75046281	0	0		4UZABRFC1SCUR2457
201	Main Door Closed	11:50:04 CH	46.990107039,-96.75046281	0	0		4UZABRFC1SCUR2457
201	Stop Arm open	11:50:03 CH	46.990107039,-96.75046281	0	0		4UZABRFC1SCUR2457
201	Stop Arm open	09/17/2024 11:50:03 CH	46.990107039,-96.75046281	0	0		4UZABRFC1SCUR2457
201	Stop Arm open	09/17/2024 10:50:02 CH	46.990107039,-96.75046281	0	0		4UZABRFC1SCUR2457
201	Main Door Closed	09/17/2024 10:50:02 CH	46.990107039,-96.75046281	0	0		4UZABRFC1SCUR2457
201	Stop Arm open	09/17/2024 10:50:02 CH	46.990107039,-96.75046281	0	0		4UZABRFC1SCUR2457
201	Main Door Closed	09/17/2024 10:50:02 CH	46.990107039,-96.75046281	0	0		4UZABRFC1SCUR2457

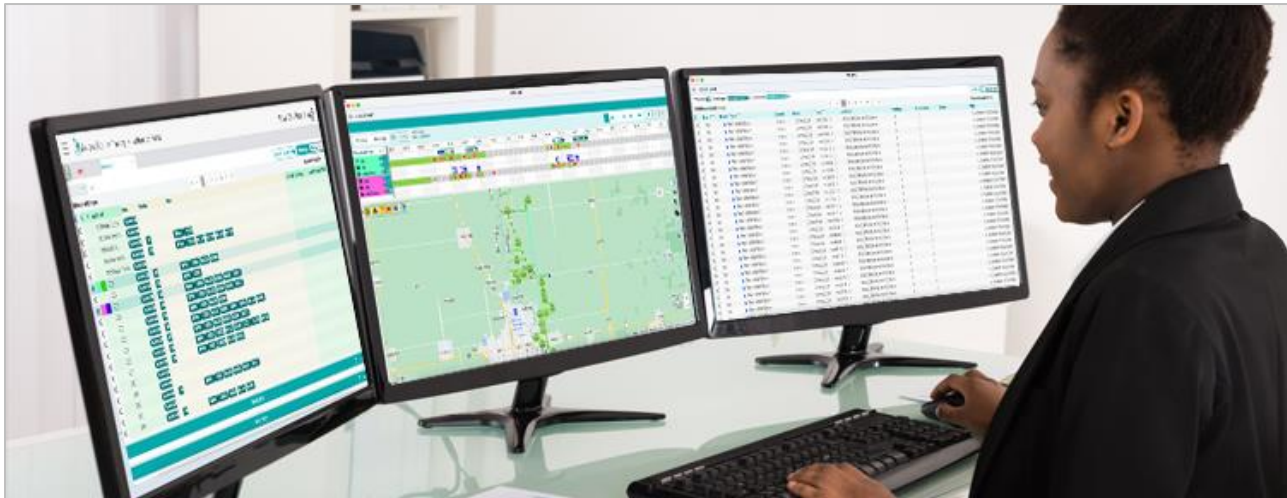
## Break Out Window

The "Break Out Window" feature allows you to detach specific elements of the interface, such as the Timeline or the AVL Search Results, and move them to a separate window. This is particularly useful when working with multiple monitors, as it enables you to create a more customized and efficient workspace.



### Benefits of Using Break Out Window

- **Enhanced Visualization:** By separating key features into dedicated windows, you can view them simultaneously on different screens, providing a more comprehensive overview of your vehicle operations.
- **Improved Workflow:** This feature allows you to tailor your workspace to your specific needs and preferences, optimizing your workflow and increasing productivity.



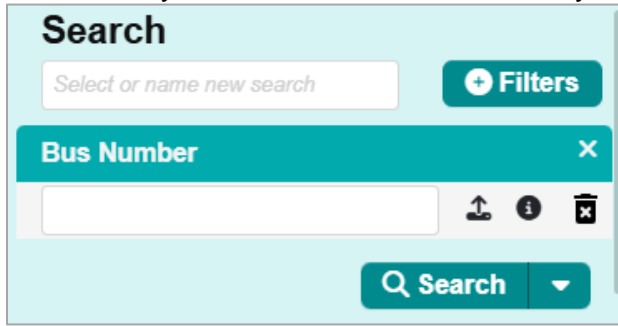
## VEHICLES ON ROUTES USER STORIES

The User Stories section of this guide provides scenarios relevant to the workflows you may encounter in your daily tasks within Athena Telematics.

## Planned Route of a Vehicle

As a user, I would like to see the planned route of a vehicle.

1. Search for your vehicle in the Search tray.



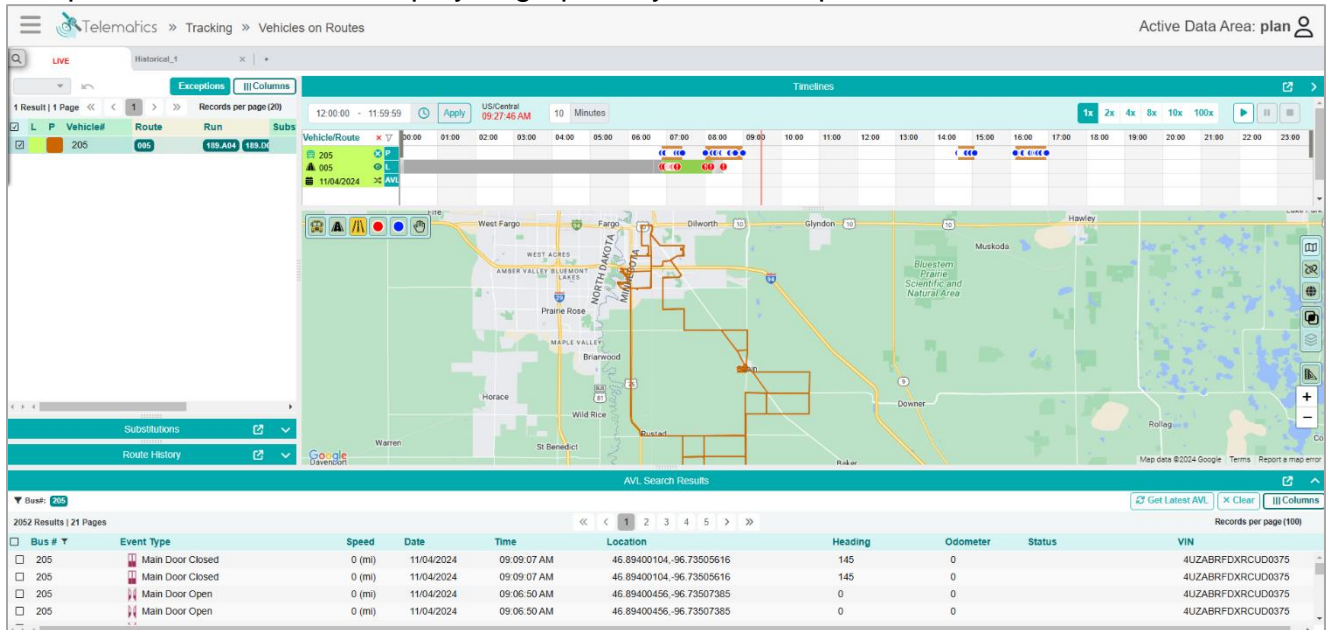
2. Select your vehicle in the data panel.

<input checked="" type="checkbox"/>	L	P	Vehicle#	Route	Run
<input checked="" type="checkbox"/>			205	005	189.A04 189.D0

3. Select the planned direction icon on the map.



4. The planned route will be displayed graphically on the map in the P row of the timeline.



Telematics » Tracking » Vehicles on Routes

Active Data Area: plan

1 Result | 1 Page | Records per page (20)

L	P	Vehicle#	Route	Run	Subs
<input checked="" type="checkbox"/>		205	005	189.A04 189.D0	

Vehicle/Route: 205 005

Timeline: 12:00:00 - 11:59:59 | Apply 09:27:45 AM | 10 Minutes

Map: West Fargo, Fargo, Dilworth, Glyndon, Hawley, Muskoda, Bismarck, ND. Includes icons for vehicle, left arrow, right arrow, red circle, blue circle, and hand cursor.

AVL Search Results

Bus #	Event Type	Speed	Date	Time	Location	Heading	Odometer	Status	VIN
205	Main Door Closed	0 (mi)	11/04/2024	09:09:07 AM	46.89400104,-96.73505616	145	0		4UZABRFDXRUCUD0375
205	Main Door Closed	0 (mi)	11/04/2024	09:09:07 AM	46.89400104,-96.73505616	145	0		4UZABRFDXRUCUD0375
205	Main Door Open	0 (mi)	11/04/2024	09:06:50 AM	46.89400456,-96.73507385	0	0		4UZABRFDXRUCUD0375
205	Main Door Open	0 (mi)	11/04/2024	09:06:50 AM	46.89400456,-96.73507385	0	0		4UZABRFDXRUCUD0375

## Live Route of a Vehicle

As a user, I want to see the live route of a vehicle on the map.

1. Search for your vehicle in the Search tray.

### Search

Select or name new search Filters

**Bus Number** X

Q Search

2. Select your vehicle in the data panel.

<input type="checkbox"/>	207	11/12/2024			
<input checked="" type="checkbox"/>	208	11/12/2024	008	188.A06	188.D0
<input type="checkbox"/>	209	11/12/2024	009	187.A01	187.D0

3. Select the live direction icon on the map.



4. The live route will be displayed graphically on the map and the L row in the timeline.

**Vehicle/Route** X Filter

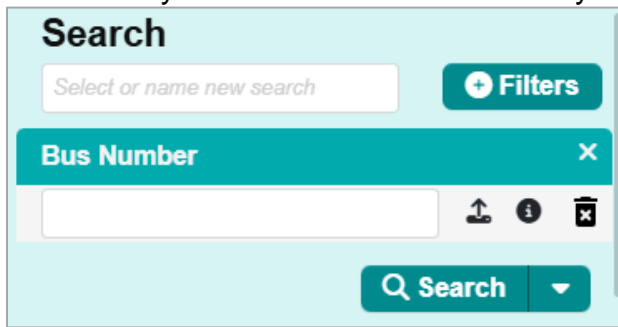
Vehicle/Route	07:00	08:00	09:00
208 <span>X</span> <span>P</span>	<span>●</span> <span>●</span> <span>●</span> <span>●</span> <span>●</span> <span>●</span> <span>●</span> <span>●</span> <span>●</span> <span>●</span>		<span>●</span> <span>●</span> <span>●</span> <span>●</span>
008 <span>X</span> <span>L</span>	<span>●</span> <span>●</span> <span>●</span> <span>●</span> <span>●</span> <span>●</span> <span>●</span> <span>●</span> <span>●</span> <span>●</span>		<span>●</span> <span>●</span> <span>●</span> <span>●</span>
11/12/2024 <span>X</span> <span>AVL</span>			



## Display Planned and Live

As a user, I want to see the planned data and actual data simultaneously.

1. Search for your vehicle in the Search tray.



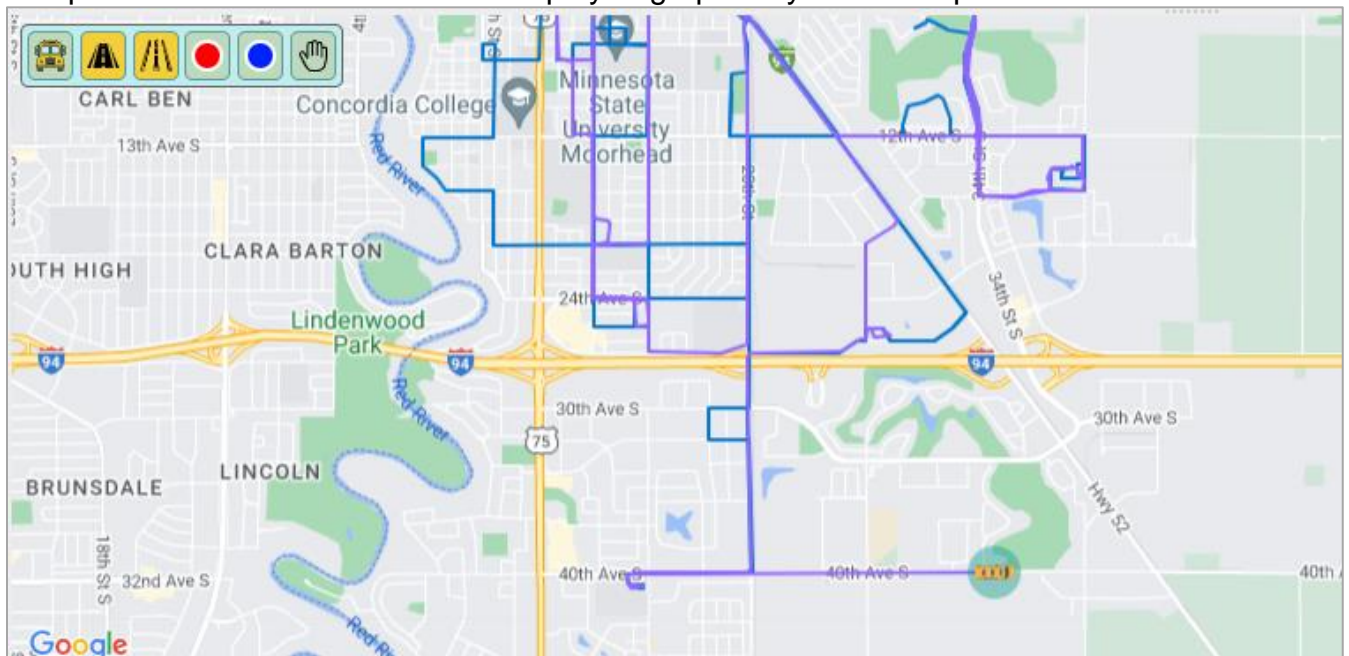
2. Select your vehicle in the data panel.

<input type="checkbox"/>	207	11/12/2024			
<input checked="" type="checkbox"/>	208	11/12/2024	008	188.A06	188.D0
<input type="checkbox"/>	209	11/12/2024	009	187.A01	187.D0

3. Select the planned and direction and live direction icons on the map.



4. The planned and live routes will be displayed graphically on the map.



## Display Multiple Vehicle-Routes

As a user, I want to display multiple vehicle-routes on the timeline and map.

1. Search for your vehicles in the Search tray.

### Search

Select or name new search + Filters

---

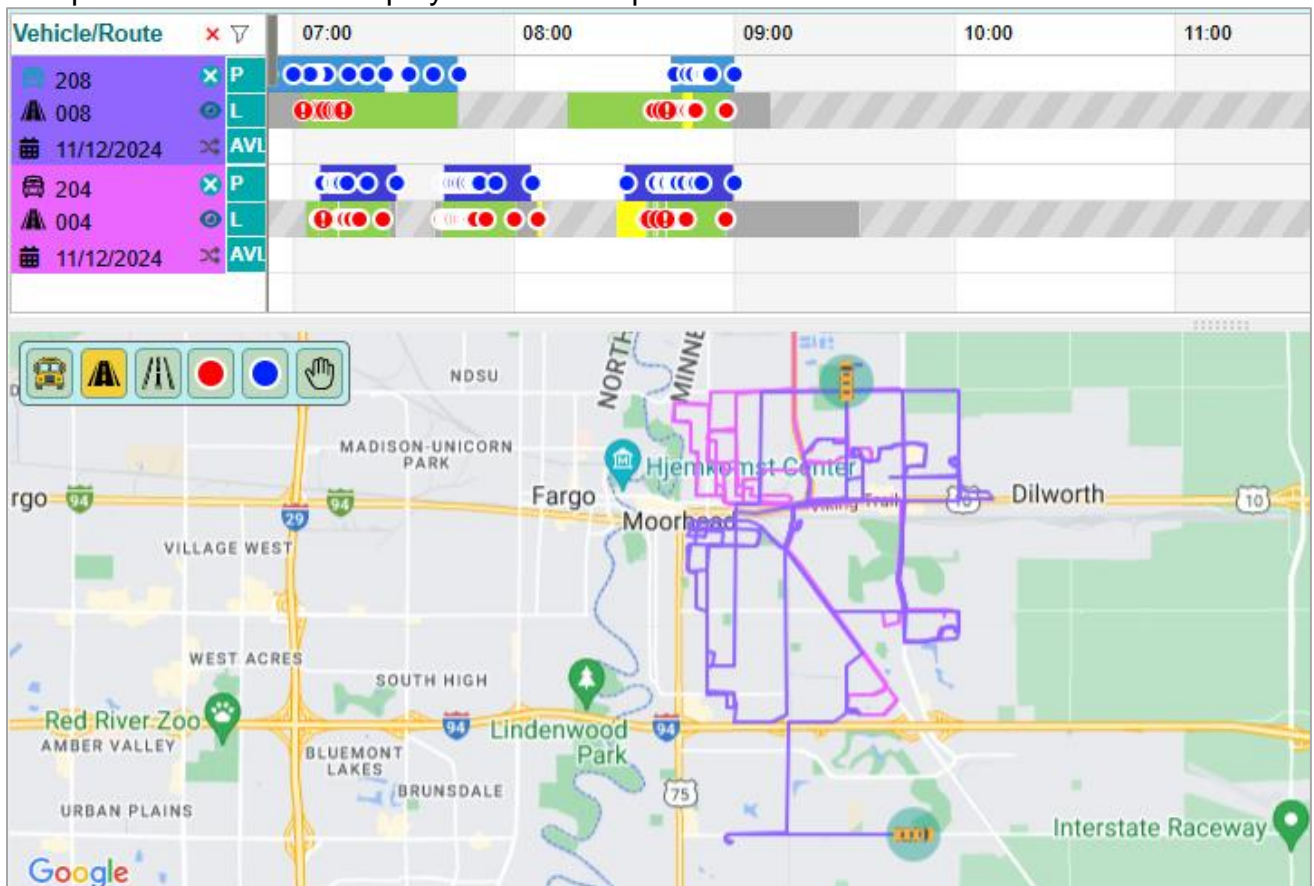
**Bus Number** ×

↑
i
✕

2. Select your vehicles in the data panel.

<input type="checkbox"/>	203	11/12/2024			
<input checked="" type="checkbox"/>	204	11/12/2024	004	187.A02	187.D0
<input type="checkbox"/>	205	11/12/2024	005	189.A04	189.D0
<input type="checkbox"/>	206	11/12/2024			
<input type="checkbox"/>	207	11/12/2024			
<input checked="" type="checkbox"/>	208	11/12/2024	008	188.A06	188.D0
<input type="checkbox"/>	209	11/12/2024	009	187.A01	187.D0

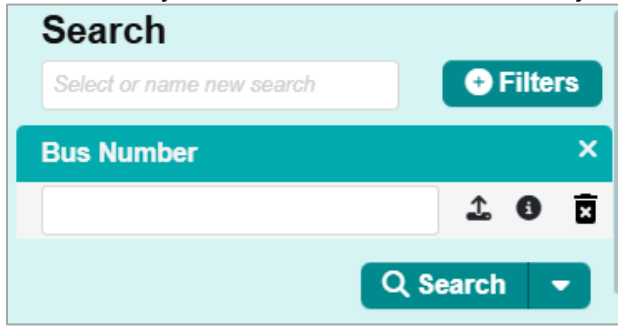
3. Multiple vehicles will be displayed on the map and in the timeline.



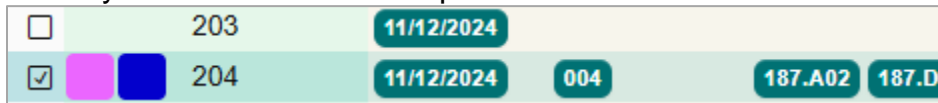
## View Stop Details

As a user, I want to view stop details.

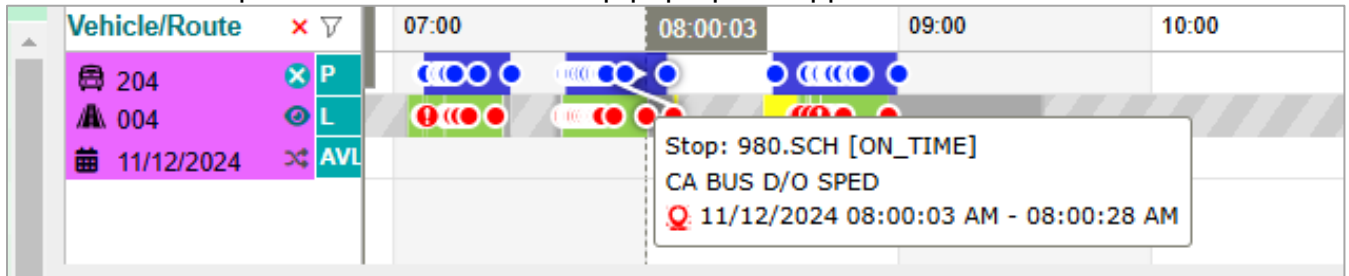
1. Search for your vehicle in the Search tray.



2. Select your vehicle in the data panel.



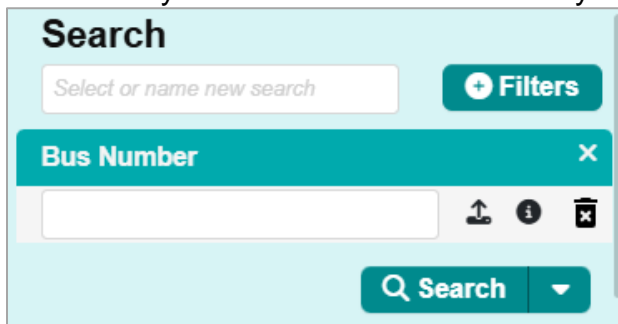
3. Hover over a stop in the timeline and a stop pop-up will appear.



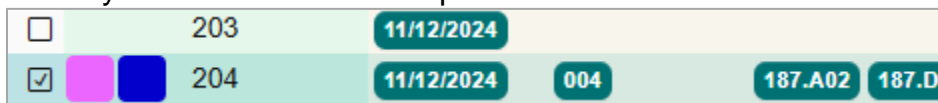
## Events on AVL Table

As a user, I want to select an event on the AVL table.

1. Search for your vehicle in the Search tray.



2. Select your vehicle in the data panel.



3. In the AVL Search Results panel, select the box on the left.

AVL Search Results						
Bus#: 204						
5296 Results   53 Pages						
<span>&lt;&lt;</span> <span>&lt;</span> <b>1</b> <span>2</span> <span>3</span> <span>4</span> <span>5</span> <span>&gt;</span> <span>&gt;&gt;</span>						
<input type="checkbox"/>	Bus #	Event Type	Speed	Date	Time	Location
<input checked="" type="checkbox"/>	204	▶ Normal GPS Event	49 (mi)	11/12/2024	04:59:59 PM	46.891981489,-96.73616496
<input type="checkbox"/>	204	▶ Normal GPS Event	49 (mi)	11/12/2024	04:59:59 PM	46.891981489,-96.73616496

4. A pop-up window will appear with the GPS event details.

The screenshot shows a map interface with a pop-up window titled "Normal GPS Event". The window contains the following details:

- VIN:** 4UZABRFD6LCLL9857
- Event Time:** 11/12/2024 04:59:59 PM
- Heading:** 0
- Location:** 46.891981..., -96.736165...
- Mileage:** 0
- Speed:** 49
- Address:** Find

### Filter Events on AVL Table

As a user, I want to filter the event on the AVL table.

1. Search for your vehicle in the Search tray.

The screenshot shows a search tray with the following elements:

- Search:** Select or name new search
- Filters:** + Filters
- Bus Number:** [Input field]
- Search:** Search

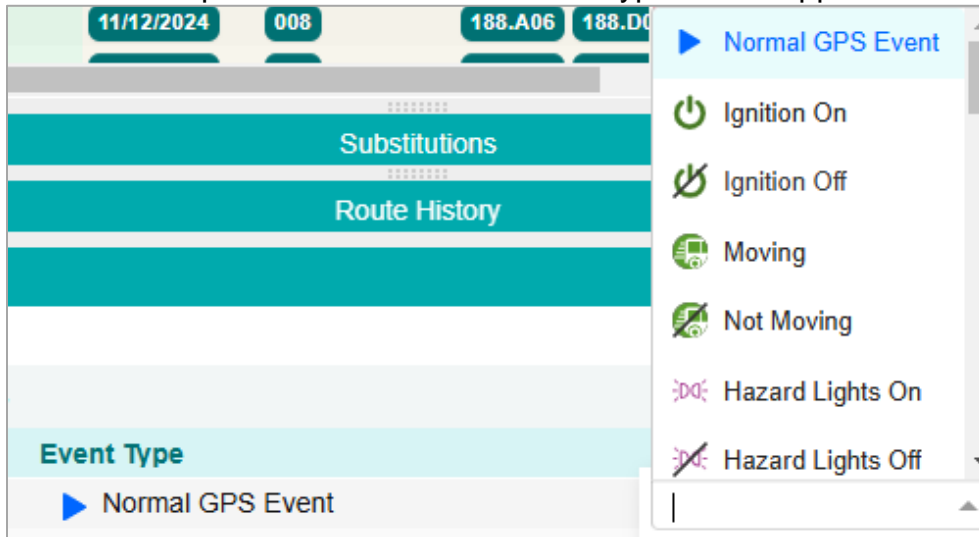
2. Select your vehicle in the data panel.

<input type="checkbox"/>	203	11/12/2024		
<input checked="" type="checkbox"/>	204	11/12/2024	004	187.A02 187.D0

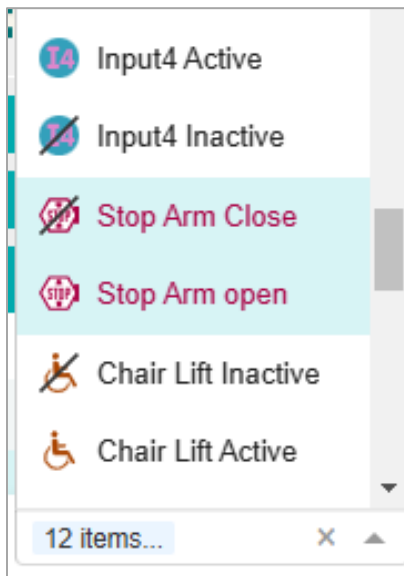
3. In the AVL Search Results panel, select the filters button in the Event Type column.

The screenshot shows a filter dropdown menu for the "Event Type" column, with "Normal GPS Event" selected.

4. Select the dropdown arrow and the Event Type list will appear.



5. Select the event you'd like to view in the AVL Search Results panel. Scroll down to see more events.



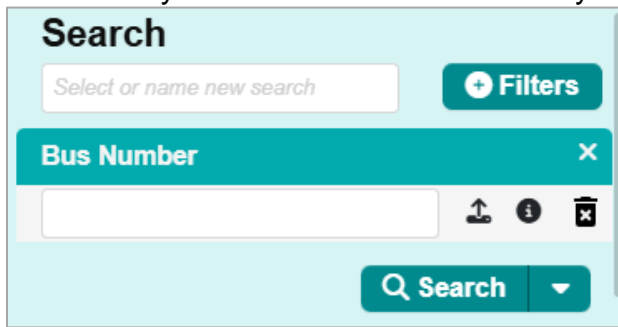
6. Events selected will filter in the AVL Search Results panel.

AVL Search Results										
▼ Bus#: 204 Event types: Hazard Lights On Not Moving 10 items... x										
194 Results   2 Pages										
Bus #	Event Type	Speed	Date	Time	Location	Heading	Odometer	Status	Records per page (100)	
<input type="checkbox"/>	204	Stop Arm Close	0 (mi)	11/12/2024	03:53:20 PM	46.87725185,-96.76479732	175	0		4UZABRFD6LCL...
<input type="checkbox"/>	204	Stop Arm Close	0 (mi)	11/12/2024	03:53:20 PM	46.87725185,-96.76479732	175	0		4UZABRFD6LCL...
<input type="checkbox"/>	204	Stop Arm open	0 (mi)	11/12/2024	03:53:06 PM	46.87727856,-96.76480991	187	0		4UZABRFD6LCL...
<input type="checkbox"/>	204	Stop Arm open	0 (mi)	11/12/2024	03:53:06 PM	46.87727856,-96.76480991	187	0		4UZABRFD6LCL...
<input type="checkbox"/>	204	Stop Arm Close	0 (mi)	11/12/2024	03:52:34 PM	46.8793878,-96.76481685	178	0		4UZABRFD6LCL...
<input type="checkbox"/>	204	Stop Arm Close	0 (mi)	11/12/2024	03:52:34 PM	46.8793878,-96.76481685	178	0		4UZABRFD6LCL...
<input type="checkbox"/>	204	Stop Arm Close	0 (mi)	11/12/2024	03:52:34 PM	46.8793878,-96.76481685	178	0		4UZABRFD6LCL...
<input type="checkbox"/>	204	Stop Arm Close	0 (mi)	11/12/2024	03:52:34 PM	46.8793878,-96.76481685	178	0		4UZABRFD6LCL...
<input type="checkbox"/>	204	Stop Arm open	0 (mi)	11/12/2024	03:52:23 PM	46.879514589,-96.7647666	177	0		4UZABRFD6LCL...
<input type="checkbox"/>	204	Stop Arm open	0 (mi)	11/12/2024	03:52:23 PM	46.879514589,-96.7647666	177	0		4UZABRFD6LCL...

## Time Period on Timeline

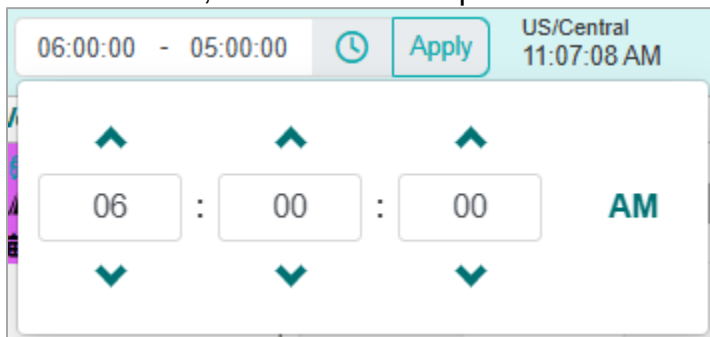
As a user, I want to filter a specific time period on the timeline.

1. Search for your vehicle in the Search tray.



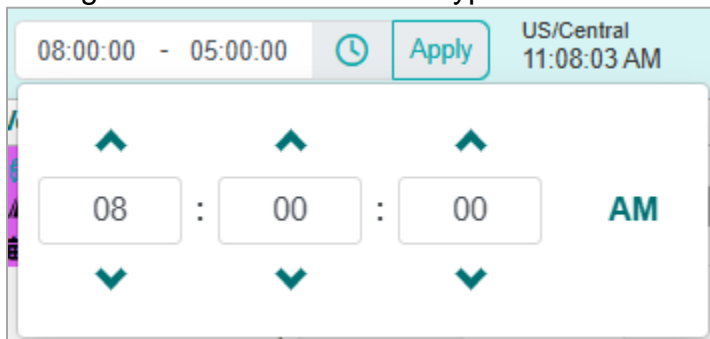
The screenshot shows a search interface with a header "Search". Below the header is a text input field containing the placeholder text "Select or name new search" and a teal button with a plus sign and the text "Filters". Below this is a teal bar with the text "Bus Number" and a close icon "X". Underneath is another text input field, followed by three icons: a share icon, an information icon, and a trash icon. At the bottom of the search tray is a teal button with a magnifying glass icon and the text "Search", and a small downward arrow icon to its right.

2. In the timeline, click on the time period window in the upper left of the timeline.



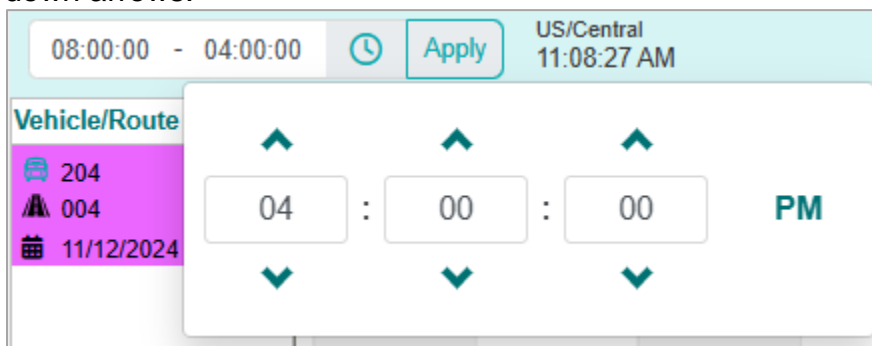
The screenshot shows a time selection window. At the top, it displays the current time range "06:00:00 - 05:00:00", a clock icon, an "Apply" button, and the text "US/Central 11:07:08 AM". Below this is a large white area with three input fields for the time: "06", "00", and "00", followed by "AM". Each input field has up and down arrow icons above and below it.

3. Change the first time. You can type in the time or adjust the time with the up and down arrows.



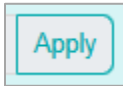
The screenshot shows the time selection window with the first time changed to "08". The rest of the interface is the same as in the previous screenshot, showing "08:00:00 - 05:00:00", "US/Central 11:08:03 AM", and the "Apply" button.

4. Then change the second time. You can type in the time or adjust the time with the up and down arrows.

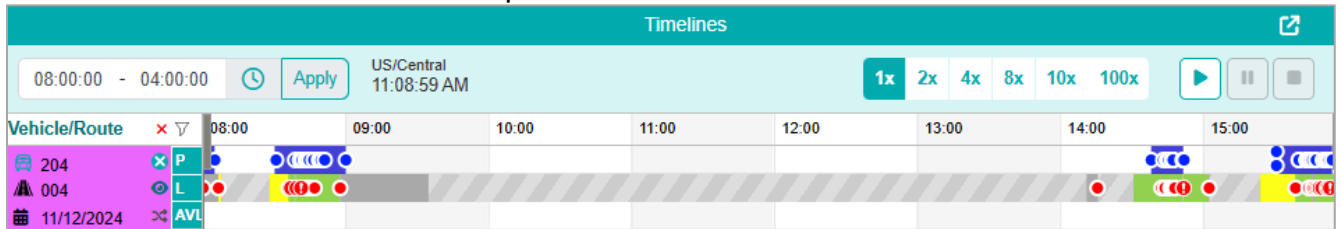


The screenshot shows the time selection window with the second time changed to "04". The rest of the interface is the same as in the previous screenshot, showing "08:00:00 - 04:00:00", "US/Central 11:08:27 AM", and the "Apply" button. On the left side, there is a sidebar with the text "Vehicle/Route" and a list of items: a bus icon with "204", a truck icon with "004", and a calendar icon with "11/12/2024".

- Then select Apply.



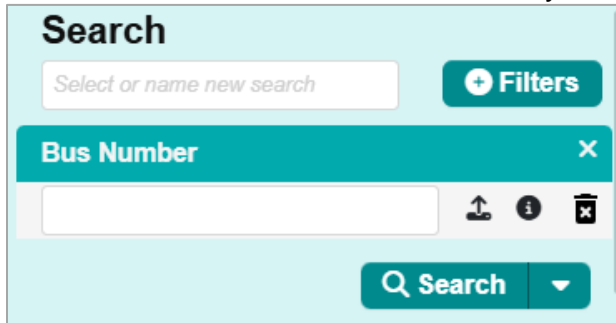
- The timeline will switch to that time period.



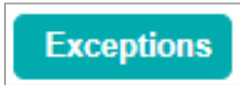
## Vehicle Exceptions

As a user, I want to view the exception, vehicles early to stop.

- Search for all vehicle in the Search tray.



- Then select the Exceptions button.



- The Exceptions window will open.

**Exceptions**

- All Data
- Custom Data
- Late at School
- Late at Stop
- Early at Stop
- Missed Stop
- Missed School
- Unscheduled Stop
- Excessive Speed
- Deviation
- Excessive Idle
- Inspection Not Started
- Inspection Skipped
- Inspection Failed
- Inspection Passed

**All Data** x Reset

Number of all times

Min (>=)	Max (<=)	Background	Font	
0	5			+
6	10			-
11				-

Cancel
Save

4. Select Early at Stop.

- All Data
- Custom Data
- Late at School
- Late at Stop
- Early at Stop
- Missed Stop

5. Then select Save.

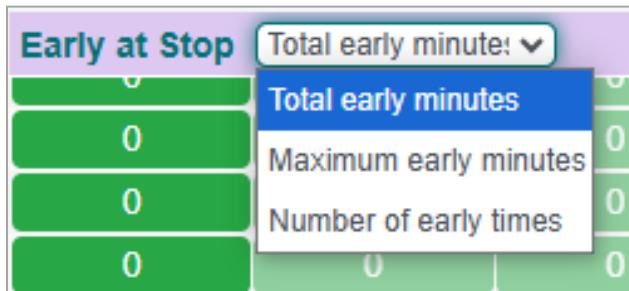
Save

6. All vehicles that are early to stop will display in red under the Early at Stop columns.



<input type="checkbox"/>	L	P	Vehicle#	Date	Route	Run	Early at Stop	Total early minute: ▼	
<input type="checkbox"/>			107 Doug...	11/12/2024			0	0	0
<input type="checkbox"/>			110 silver...	11/12/2024			0	0	0
<input type="checkbox"/>			111 red tr...	11/12/2024	111	185.VA2 185.VI	0	0	0
<input type="checkbox"/>			112 silver...	11/12/2024	112	187.VA1 187.VI	0	0	0
<input type="checkbox"/>			115 Chry...	11/12/2024			0	0	0
<input type="checkbox"/>			201	11/12/2024			0	0	0
<input type="checkbox"/>			202	11/12/2024			0	0	0
<input type="checkbox"/>			203	11/12/2024			0	0	0
<input checked="" type="checkbox"/>			204	11/12/2024	004	187.A02 187.D0	2713	1359	3
<input type="checkbox"/>			205	11/12/2024	005	189.A04 189.D0	0	0	0
<input type="checkbox"/>			206	11/12/2024			0	0	0
<input type="checkbox"/>			207	11/12/2024			0	0	0
<input type="checkbox"/>			208	11/12/2024	008	188.A06 188.D0	139	60	4
<input type="checkbox"/>			209	11/12/2024	009	187.A01 187.D0	0	0	0

7. There are three 'minutes' columns. Click the dropdown menu.



8. When selected, that column will highlight.

Early at Stop			Maximum early mi	☰
0	0	0		
0	0	0		
0	0	0		
0	0	0		
0	0	0		
0	0	0		
0	0	0		
0	0	0		
2713	1359	3		
0	0	0		
0	0	0		
0	0	0		
139	60	4		

### Bus Details

As a user, I want to view the bus details on the map.

1. Search for all vehicle in the Search tray.

### Search

Select or name new search + Filters

---

**Bus Number** ×

↕
ℹ
✕

🔍 Search
▾

2. Select your vehicle in the data panel.

<input type="checkbox"/>	203	11/12/2024		
<input checked="" type="checkbox"/>	204	11/12/2024	004	187.A02 187.D0

3. Hover over the vehicle on the map. A pop-up with the bus details will appear.

