

# **NavNA Modifiers to NavGE Road Edits Migration**

This document describes the following:

- How road modifiers in NavNA correspond to road edits in NavGE during the migration process
- How routes can differ depending on whether they are generated using road edits in NavGE or modifiers in NavNA

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#### **Overview of Road Edits and Road Modifiers**

Some organizations use both Navigation Global Edition (NavGE) and Navigation North America (NavNA, formerly NaviGo) to meet their navigation requirements. When generating routes in either platform, road edits (in NavGE) and road modifiers (in NavNA) can be used to make temporary changes to the map when the map data is out of date, absent, or otherwise inaccurate. Using road edits and modifiers also helps to support consistent routing behavior and the generation of more efficient routes.

Road edits and modifiers can do the following:

- Enforce physical limits, such as weight, height, width, or length of vehicle
- Close certain roads for repair work or street events
- Indicate preferred or restricted roads for truck travel

If your organization uses both platforms, Verizon Connect engineering staff can assist you in migrating the current NavNA road modifiers into Fleet. If you create any new road edits or modifiers after this initial migration process, you will need to make sure they are added to both platforms.

## **Creating Road Edits and Modifiers**

Road edits are created in Fleet > **Map** > **Road Edits** . For information on how to create road edits, see <u>Road Editor Overview</u>.

Modifiers are created in Navigation Portal > **Road Manager** > **New Modifier**. For information on how to create modifiers, see <u>Creating New Modifiers</u> (Navigation Portal).

## **Mapping Between Road Edits and Modifiers**

In many cases, if the modifier effect is a restriction or limitation, it can be entered as a road edit.

However, not all road modifier categories are supported by road edits in Fleet.

The following table shows how the Road Manager modifiers in Navigo Portal are related to the road edits attributes in Fleet. The modifier categories that do not have a corresponding road edit attribute are indicated in the "Notes" column.

Road Modifier Category	Road Edits Attribute	Notes	
Physical Restrictions			
Height restriction	Height limit		
Length restriction (all types)	Length limit		
Weight restriction	Weight limit		
Width restriction (all types)	Width limit		
Per-axle weight restriction	n/a	Not supported by Road Edits	
Turn restricted	n/a	Not supported by Road Edits	
Data Restrictions			
Data error - no through traffic	Road Status = Closed		
Data error - directionality	Road Status = Closed		
Data error (all other types)	n/a	Not supported by Road Edits	
Legal Restrictions			
Trucks prohibited (all types)	Truck Behavior = Prohibited		
No trucks (all types)	Truck Behavior = Prohibited		
No trailers	Truck Behavior = Prohibited		
Truck network [FAV]	Truck Behavior = Preferred		
Turn restricted	n/a	Not supported by Road Edits	
DOT mandated detour	n/a	Not supported by Road Edits	
Avoid residential area	n/a	Not supported by Road Edits	

Road Modifier Category	Road Edits Attribute	Notes	
Hazmat (all types)	n/a	Not supported by Road Edits	
Temporary Restrictions			
Closed for construction	Road Status = Closed		
Avoid construction	n/a	Not supported by Road Edits	
Detour [FAV]	n/a	Not supported by Road Edits	
Seasonal (all types)	n/a	Not supported by Road Edits	
Weather (all types)	n/a	Not supported by Road Edits	
Preference and Safety Restrictions			
All Types	n/a	Not supported by Road Edits	

## **Overview of Differences Between Routing Behaviors**

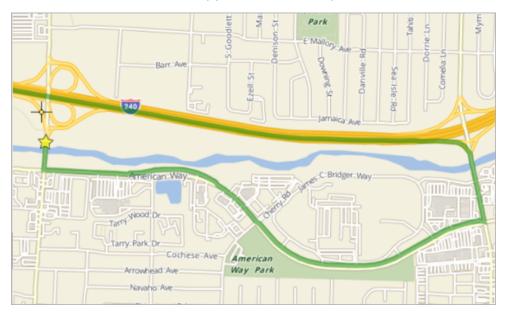
Road edits and road modifiers are applied when creating routes to POIs, and help to customize the route to the POI locations. However, a limited number of modifier categories are supported in road edits, which is Fleet's "modifier" equivalent. After migrating modifiers to road edits, there can be differences in how routing in NavGE behaves, compared to routing in NavNA. We recommend you review the modifiers associated with your POI locations.

Some typical routing behaviors are described in the following section.

# **Examples of Routing Behavior**

#### **Example 1: Not all modifiers have a corresponding road edit**

In this example, the route to the destination in NavNA passes the New Getwell Road exit and takes the next exit with an approach to the depot westbound on American Way.



Originally, the customer route used road modifiers to encourage drivers to use this route, for safety reasons.

However, Fleet road edits do not support the modifier categories that favor certain roads for customized routing. Therefore, the route in NavGE would take Exit 20A on New Getwell Road and make the left turn across three lanes of traffic to get to the destination, as shown in the following screenshot:

E Mallory Ave

Barr Ave

Arrowhead Ave

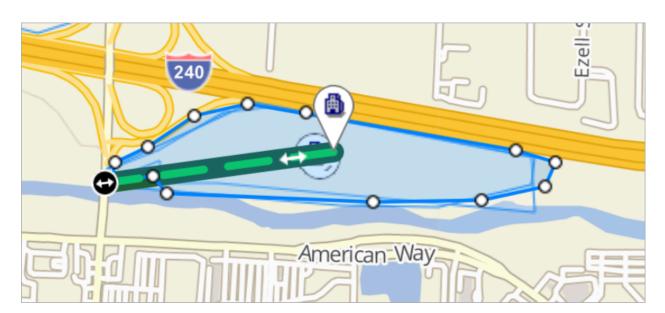
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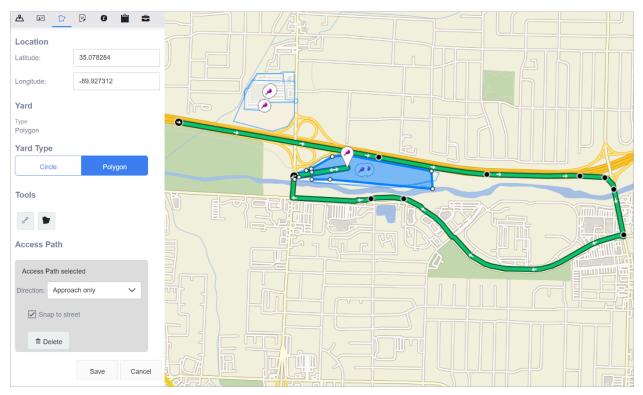
To correct routing in NavGE, we recommend you use access paths to customize entry to the location.

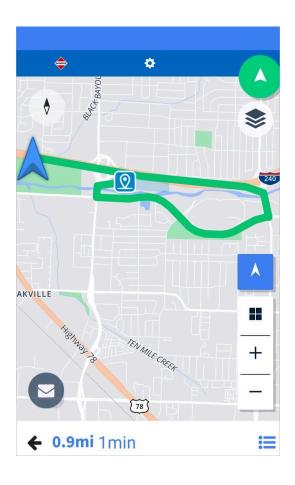
The following screenshot shows the original access path to the marker. The access path was automatically created when the marker and yard shape were migrated from NavNA. The access path is created by default to use the entry point of the yard.



You can move the existing access path or create a new access path that travels eastbound on I-240 and takes Exit 18 to American Way to enter the location from the south. NavGE will use this access path to route correctly to the location.

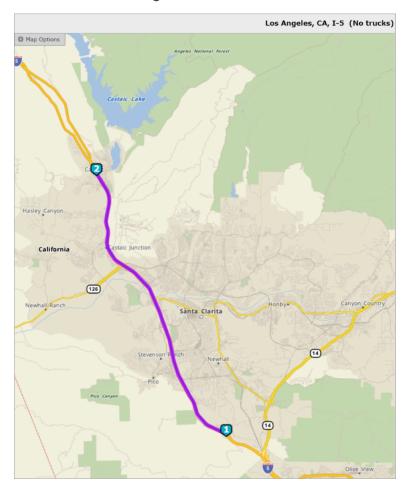
**NOTE:** Access paths to a customer location can be used for arrivals, departures, or both.



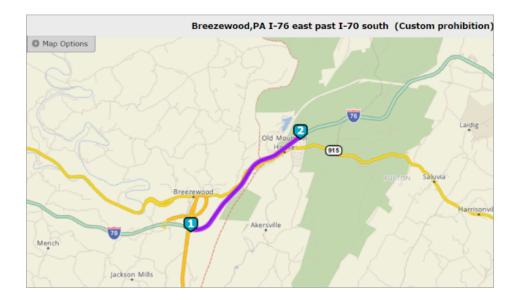


#### **Example 2: Modifiers on Interstates can have negative effects on routing**

The modifier used in the following route helps drivers avoid using I-5 in Santa Clarita, CA for deliveries to a specific POI location in Reno, NV. Fleet road edits do not have the capability to customize routing to a location. If this modifier is migrated as a road edit to use for routing in NavGE, it would apply to all routes navigating out of Los Angeles to other locations and deter all drivers from using I-5.

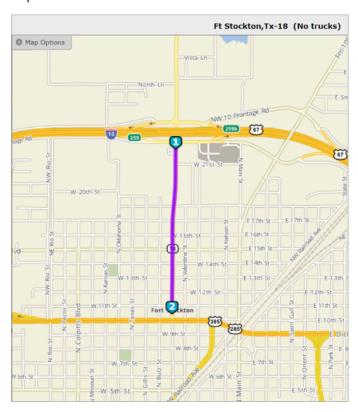


Similarly, the modifier used in the following route was created to encourage drivers to travel on I-76E to I-70 south and prevent them from traveling past I-70 to their POI. This modifier migrated as a road edit for routing in NavGE would cause issues with routing to other locations because the road edit would apply to all routing and would not allow drivers to use I-76 through PA.



#### **Example 3: Modifiers migrated to Fleet can cause unusual routing**

A particular modifier was created in 2009 to prohibit drivers from using TX-18 to travel to a depot in northern Fort Stockton. In NavNA this modifier would only affect drivers routing to this depot.



If this modifier is migrated as a road edit to be used in NavGE routing, routes using the road edit would avoid any other travel through Fort Stockton on TX-18, which is part of the truck network. This is illustrated in the following screenshot:

