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## Efficient Convoy Routing and Bridge Load Optimization User Interface

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# Efficient Convoy Routing and Bridge Load Optimization User Interface

Brandon Lacy, Will Heller, Yonas Kassa, Brian Ricks, and Robin Gandhi

## Overview

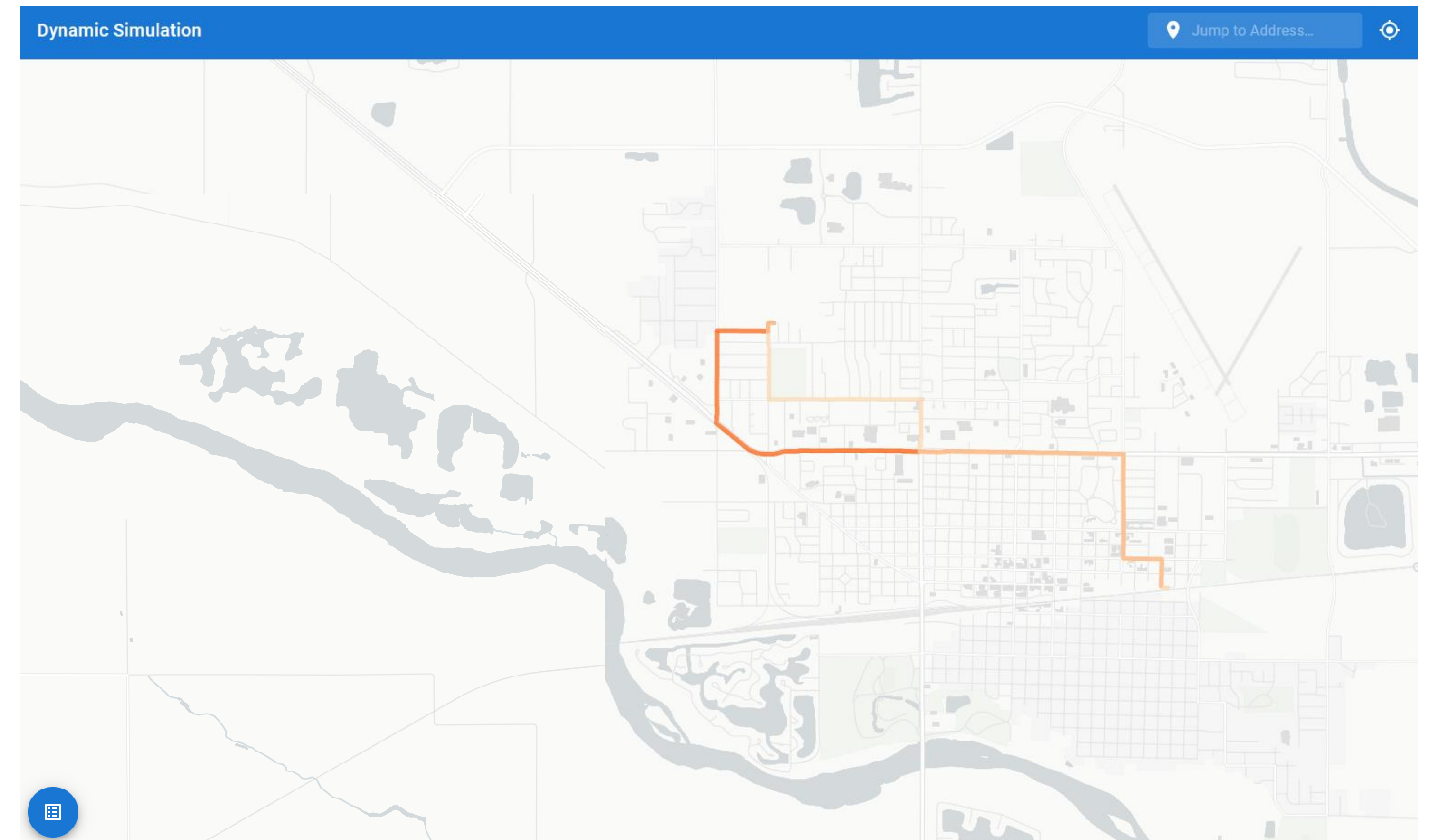
Displays merged OpenStreetMap (OSM) and National Bridge Inventory (NBI) data

Plans routes around bridge structural data

Save Routes and Convoys for later use

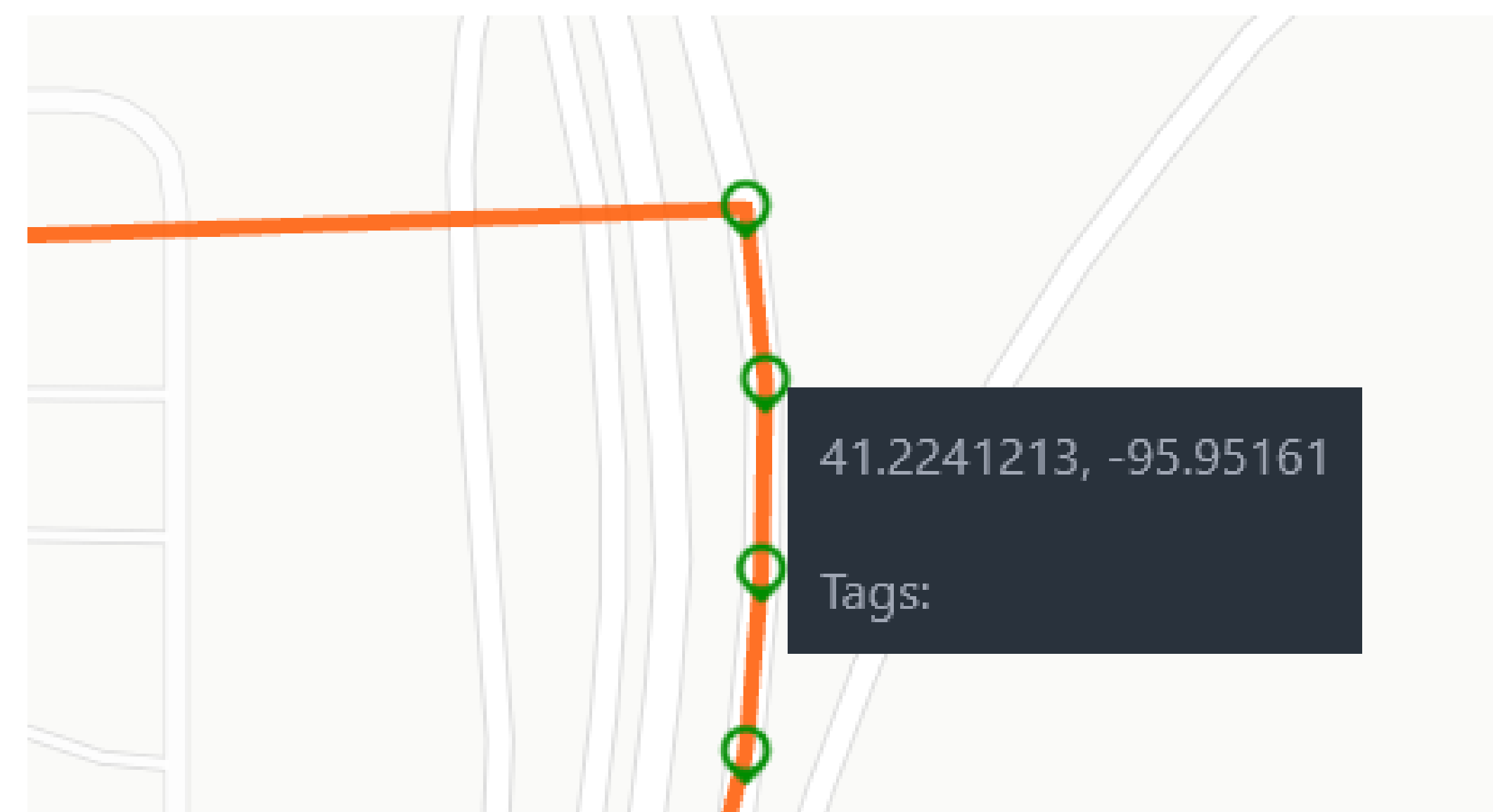
UI written in React and Material UI  
API written in C#

Easy conversion between addresses and coordinates with Nominatim



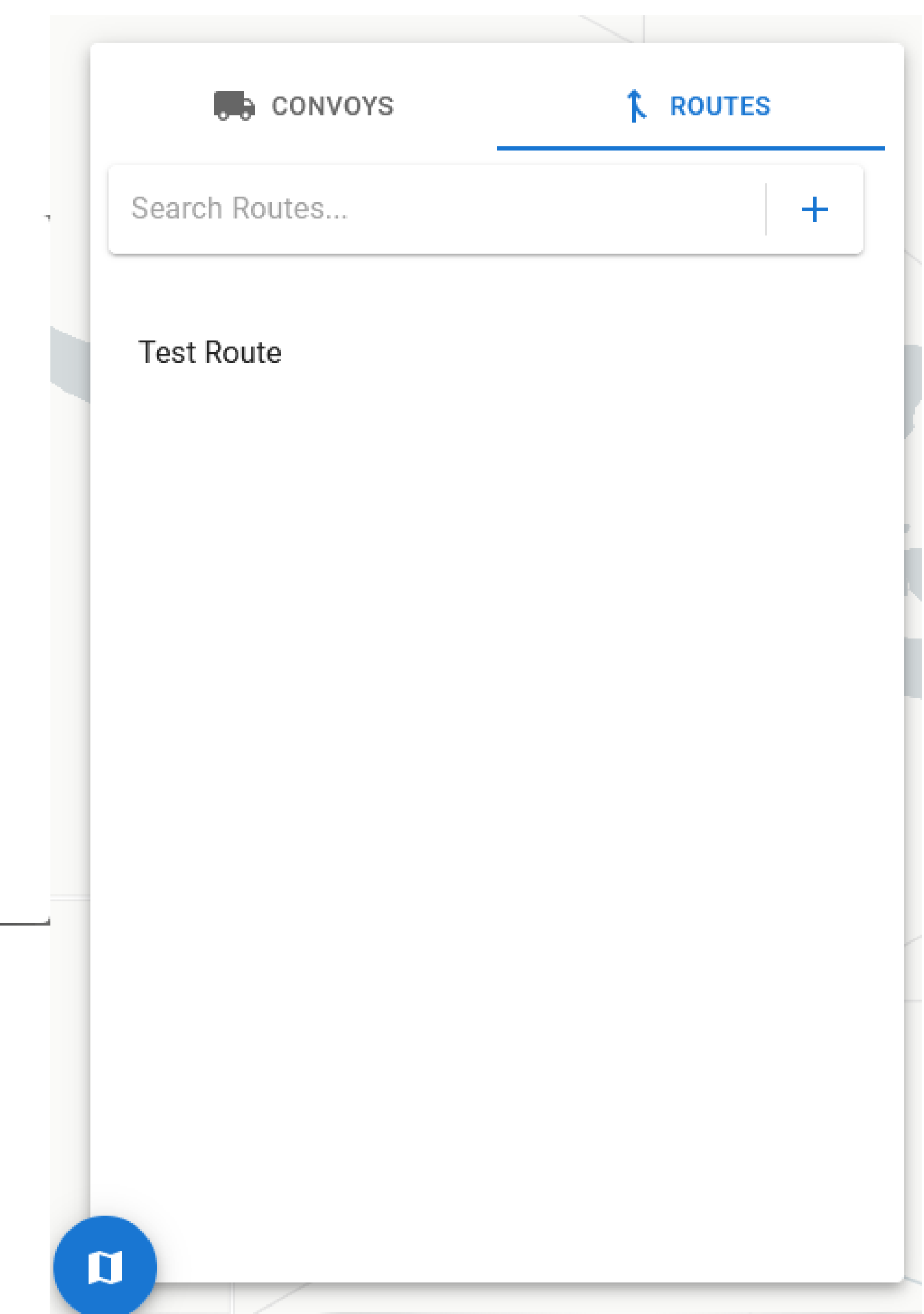
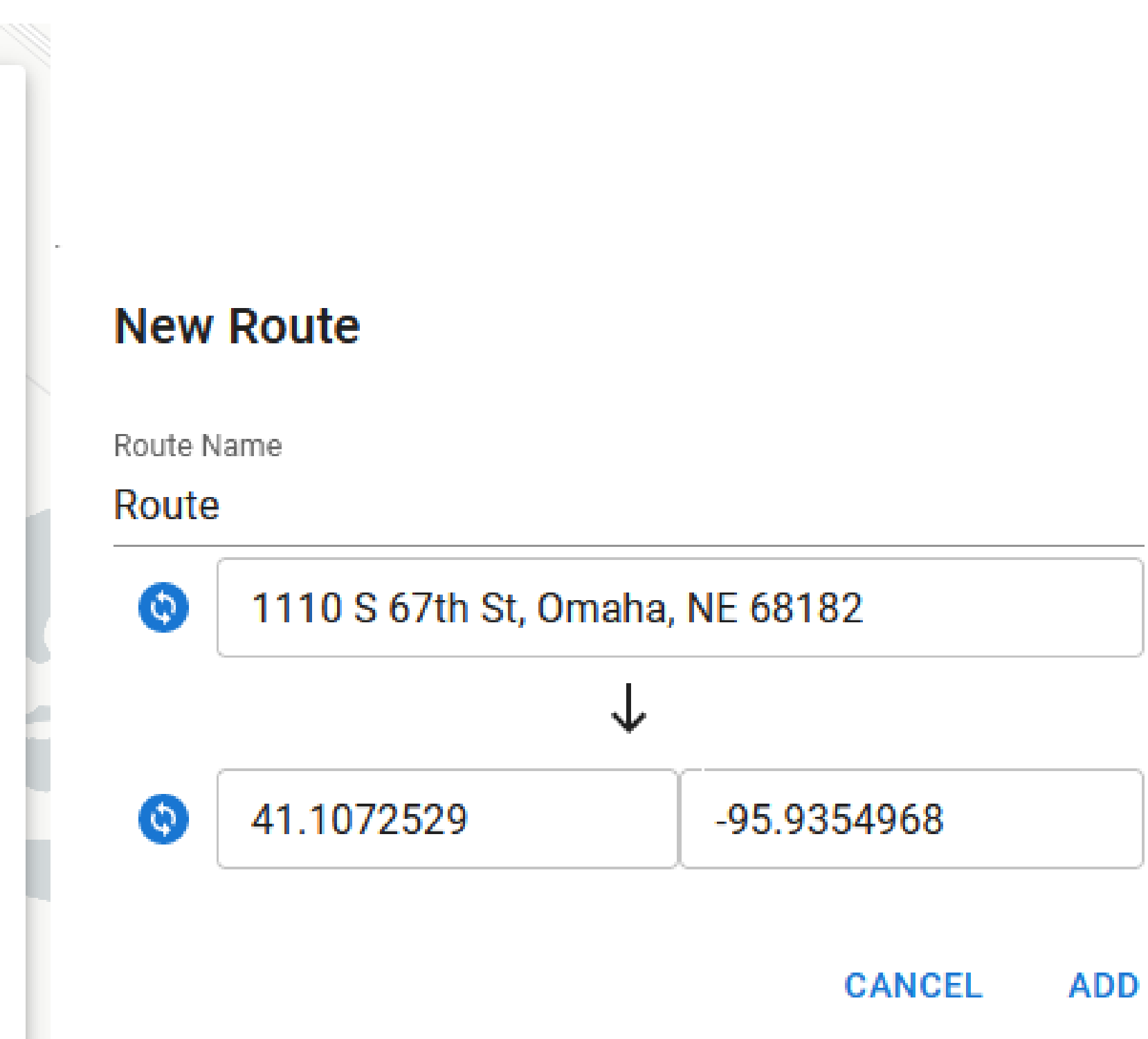
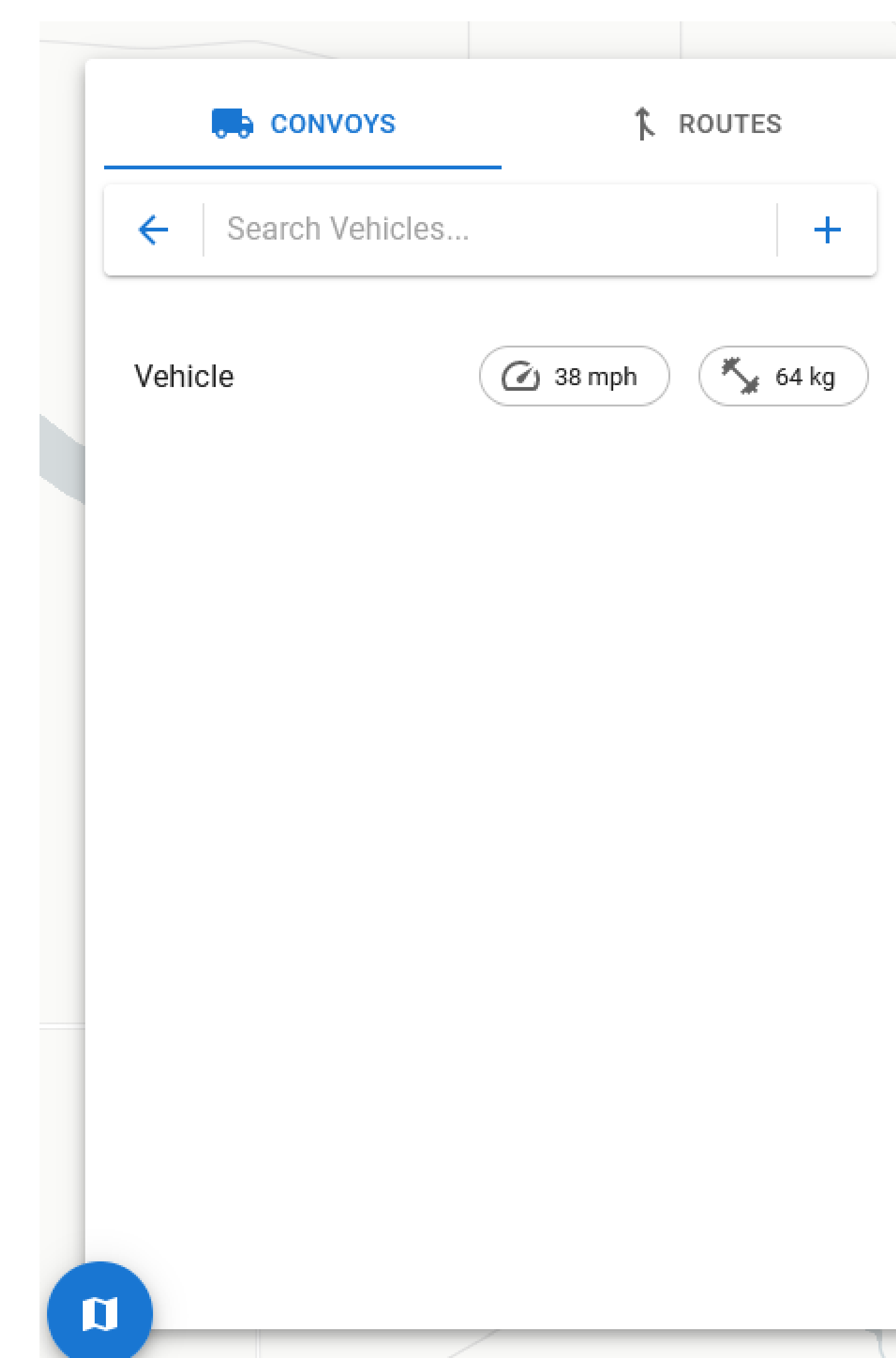
## OSM and NBI Integration

View OSM and NBI data with the help of tags



Upcoming feature to view bridge structural data

Menu Design  
Creation and modification of routes and convoys with little obstruction of the map view



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