

Transportation Safety and Efficiency

Spatial data now drives every aspect of modern transportation. Efficiency gains from automatic wayfinding apps have a positive impact on our economy while reducing carbon emissions. App-based navigation has changed the traffic safety landscape. Some changes are positive and improve traffic safety as drivers have information such as advance warning of left exits, road hazards, and work zones. On the other hand, app-based navigation in some instances has had a negative safety impact. Examples include drivers routed to roads inappropriate for the vehicle, or trucks following directions into bridges with height restrictions. The image to the right shows a truck carrying propane lodged under a rail bridge with a height restriction while a train passes over. A study of bridge strikes by vehicles taller than the posted clearance showed that roughly eighty percent of drivers were using a GPS device. The data exists to improve traffic safety. The next challenge is to provide the right information to drivers.



As we look ahead to autonomous vehicles, we realize the need for investments in data, primarily for safety. These data include work zones, bridge clearances, and road closures to name a few. Significant improvements are being made to standardize and make the right data available. New York State is publishing a feed of all bridge clearances. It will only reach its full potential when a corridor of surrounding states do the same. Map apps will allow drivers to enter the dimensions of their vehicle and only show routes that work.

USDOT is working on a data management plan looking out 30 to 50 years. This plan moves from mapping suitable for routing to mapping for full navigation. The data investments which will support autonomous vehicles in the future can improve safety today.

We ask you to:

- Support permanent line item funding to USDOT, specifically for the National 911 Program housed within the National Highway Traffic Safety Administration (NHTSA)

About the National States Geographic Information Council (NSGIC)

Since 1991, NSGIC has been the state led hub of national geospatial experts promoting coordinated, impactful, and efficient application of geographic information systems (GIS) to best serve the nation. GIS and the spatial information it serves underpin much of the activities of government and the lives of the people of the nation.