



The INRIX AV Road Rules Platform



Attract highly automated vehicle (HAV) operators and demonstrate your city's commitment to safe innovation by making it easy for operators to access and integrate your city's local traffic rules and restrictions



Test in more markets by efficiently accessing the unique ground-truth rules and restrictions for each city



Set the foundation of policies and procedures that will ensure the safety and success of HAVs

While many public-sector stakeholders are eager to introduce autonomous vehicles into their cities to improve safety, mitigate congestion and support innovation, cities and road operators must first lay the ground-work for HAV operation, particularly as it relates to safety and consumer trust. At the same time, HAV operators need ways to ensure safety as well as compliance with local laws. However, currently there is a data gap when it comes to ground-truth local traffic regulations and restrictions that are challenging to assess with onboard sensors and third-party sources.

Traffic rules and restrictions need to be ground-truth, verified data and the INRIX AV Road Rules Platform™ facilitates the exchange of data between cities and HAV operators to safely integrate vehicles into a city's transportation network. The INRIX AV Road Rules Platform™ provides a framework for road authorities to assign and manage rules and restrictions for roads where highly automated vehicles operate and sets a framework for actionable information to be shared by vehicles in operation to improve the efficacy of the network for all road users.



If deployed correctly, highly automated vehicle technology has the potential to dramatically improve how people move around our world, and INRIX is committed to doing its part to help it succeed.



HAVs are currently testing on public roads in fewer than 50 cities around the world, but more cities are interested in seeing this new technology come to their streets. At the same time, operators are eager to get HAVs onto roads to test their abilities and refine their performance. However, before this can happen, there are essential steps that must be taken, including a method for HAVs and their operators to understand the rules and restrictions of a particular jurisdiction.

At present, this process either requires a vehicle operator to identify and classify road signage by “mapping” the streets using the sensors on a vehicle or they must rely on third-party data sets that may be incomplete or incorrect. Both options can result in incorrect or incomplete rules being provided to a vehicle leading to unsafe operation.

INRIX is working with both the private and public sectors to prepare for these new vehicles and to provide a platform that supports safe operation. This will help both sectors overcome a skeptical public by ensuring these new vehicles operate by the designated rules of the road.

How the INRIX AV Road Rules Platform™ Works



Rules of road owned by Road Authority

Road Authority assigns attributes to road segments

INRIX AV Road Rules provides data to vehicle based on position and possible routes

Vehicle gets road info ahead of sensor horizon allowing pre-manuever planning or validation of sensor detected road info

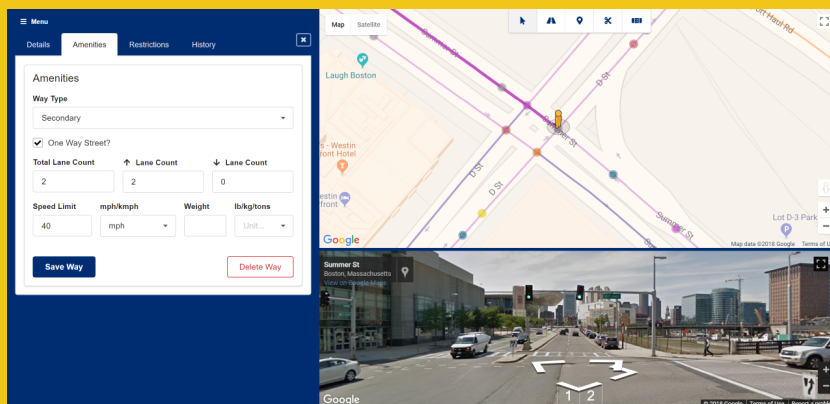
The INRIX AV Road Rules Platform™ enables cities to easily digitize local rules such as speed limits, school zones, stop signs, and more. and by doing so influence the areas where HAVs are deployed and ensure operation in accordance with local rules of the road. Once these rules and restrictions are digitized, vehicle operators can leverage this data to ensure safety and compliance. The system also allows vehicles in operation to report infrastructure needs (potholes, inadequate lane striping or signage) for attention and review by the road authority.

Program Overview At Launch

Provides a framework for road authorities to assign and manage rules/restrictions for road:

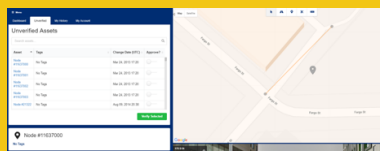
- ▶ **Static Rules**
(e.g. speed limits, turn restrictions, roadwork, traffic directional flow, lane restrictions, geo-fencing)
- ▶ **Variable Rules**
(e.g. Time of day, day of week, holiday dependent)
- ▶ **Initial list of common rules restrictions of value to HAVs**
- ▶ **Infrastructure needs flagged by HAVs**
- ▶ **INRIX to manage data storage and delivery to HAV operators via API**

STREAMLINED INTERFACE FOR EASILY ASSIGNING TRAFFIC RULES & RESTRICTIONS TO ROADS

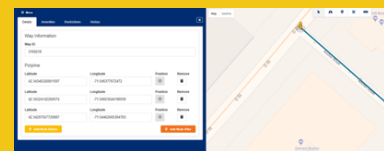


Multi-layer permissioning, authentication and audit trails for rules assignment and update

ABILITY TO SEARCH & SORT RULES WORKFLOW



Sort by rule types, locations, or user & view rules on a map or street



Flag actions needed by user & confirm rules of the road



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