Preparing Roads (and Road Authorities) for AVs
Big Questions from the Public Sector

HOW DO I PREPARE FOR AVs?

HOW DO I INTERACT WITH AVs?
Reframing the Challenge

VS.
Matching Use Cases to Goals
Machine Learning
Human Training
AVs Require HD Maps With a Variety of Data Layers

Mapping & self-driving companies have been creating HD maps but some serious gaps exist.

Current Issues Facing AVs & HD Maps:

- HD maps built using computer vision, sensor fusion, machine learning and 3rd party data sets
- Increasingly good at precise localization, recording and predicting behavior
- Not good at establishing ground-truth understanding of local traffic rules and allowable maneuvers set by public sector
- Current data sets are established on confidence interval and corrected manually
- Regulators increasingly requiring operators to outline how they account for and comply with local traffic rules

Level 5 HAVs Rely on Multiple Map Layers
INRIX is Focused on the Semantic Layer, A Critical Map Component

Current HD maps have struggled to establish this data but INRIX is bridging the data gap.

INRIX is working with the public sector to improve the semantic map layer:
INRIX AV Road Rules: A Platform To Remove The Guess Work

INRIX provides a platform to bridge the data gap between HAV operators and road authorities

Rules included at launch:
- Stop Sign
- Road type
- Crosswalk
- Yield
- Speed limit
- Traffic signal
- School Zone
- One-way
- Road closure
- Turn Restriction
- Lane closure
- Lane count
- Merge lanes/fork lanes
- Bike lane present
- HAV access
- HAV/TNC pickup/drop-off
- HOV access
- Bus access
- Bus stop
- Height/length restrictions
- Weight restrictions

Information shared to road authority:
- Pothole
- Worn lane striping
- Inadequate signage
Win-Win Solution

Cities/Road Authorities

• Provides cities/agencies with necessary tool to preserve role of establishing and communicating rules or the road
• Immediate action to prepare for and support safe operation of HAVs
• Addresses key consumer concerns about safe HAV operation
• Makes jurisdiction more attractive market for testing/deployment of HAVs
• Provides new data stream re: road health and infrastructure needs

HAV Operators

• Fills existing data gap for validated, ground-truth traffic rules and restrictions
• Answers questions posed by regulators of how HAVs will understand local rules
• Demonstrates HAV operator commitment to safe operation in accordance with local rules
• Provides valuable action cities/agencies can take to prepare for HAVs
• Promotes HAVs as improving road safety and quality for all road users
INRIX AV Road Rules Status
Education
Lawmakers, Consumers and Industry

PARTNERS FOR AUTOMATED VEHICLE EDUCATION
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