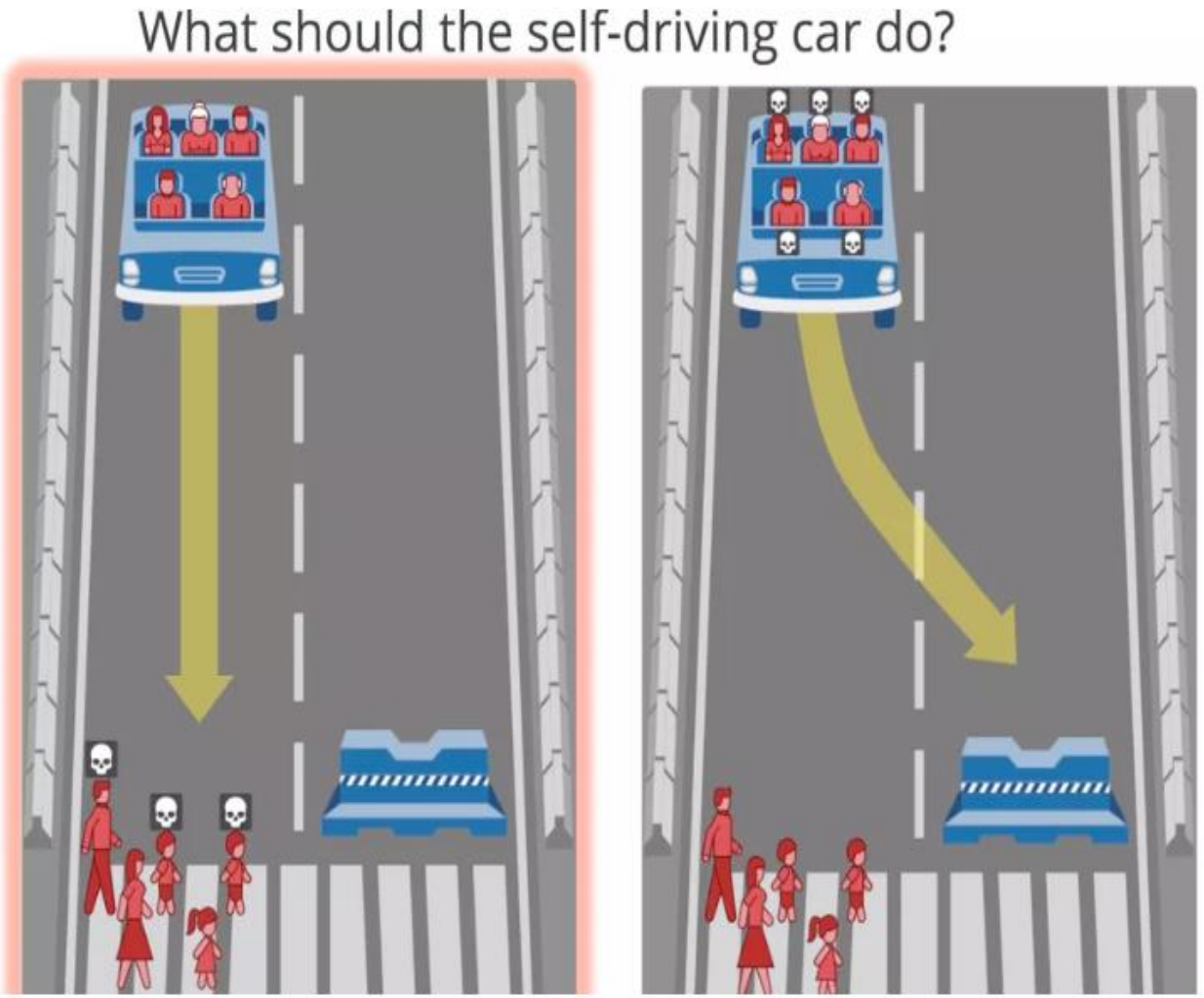
Chris Thibodeau
CEO & President

What Is your Vision of the Future?

Common Autonomous Vehicle Assumptions

- Self driving cars are a long ways off
- Self driving cars will reduce traffic jams
- Self driving cars will produce less air pollution
- Eventually we will all have self driving cars
- **The biggest issue with self driving cars is “SAFETY”**



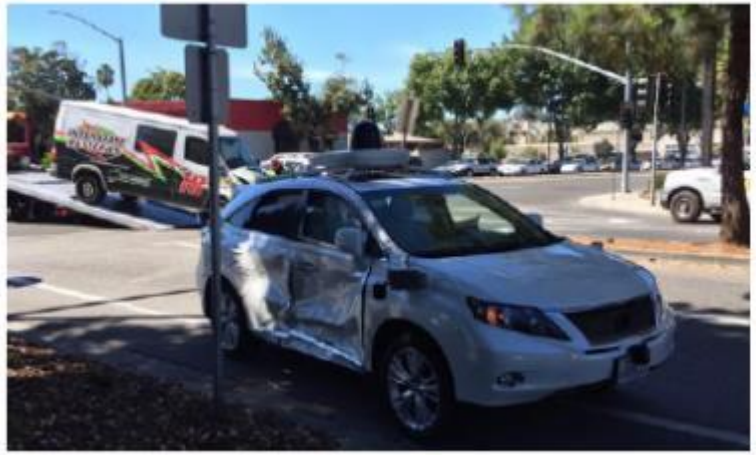
A sample scenario from the Moral Machine: should the user hit the pedestrians or crash into the barrier?

Source: The Verge Oct. 24, 2018

What Is your Vision of the Future of Autonomous Driving?

Ushr

What Is your Vision of the Future of Autonomous Driving?

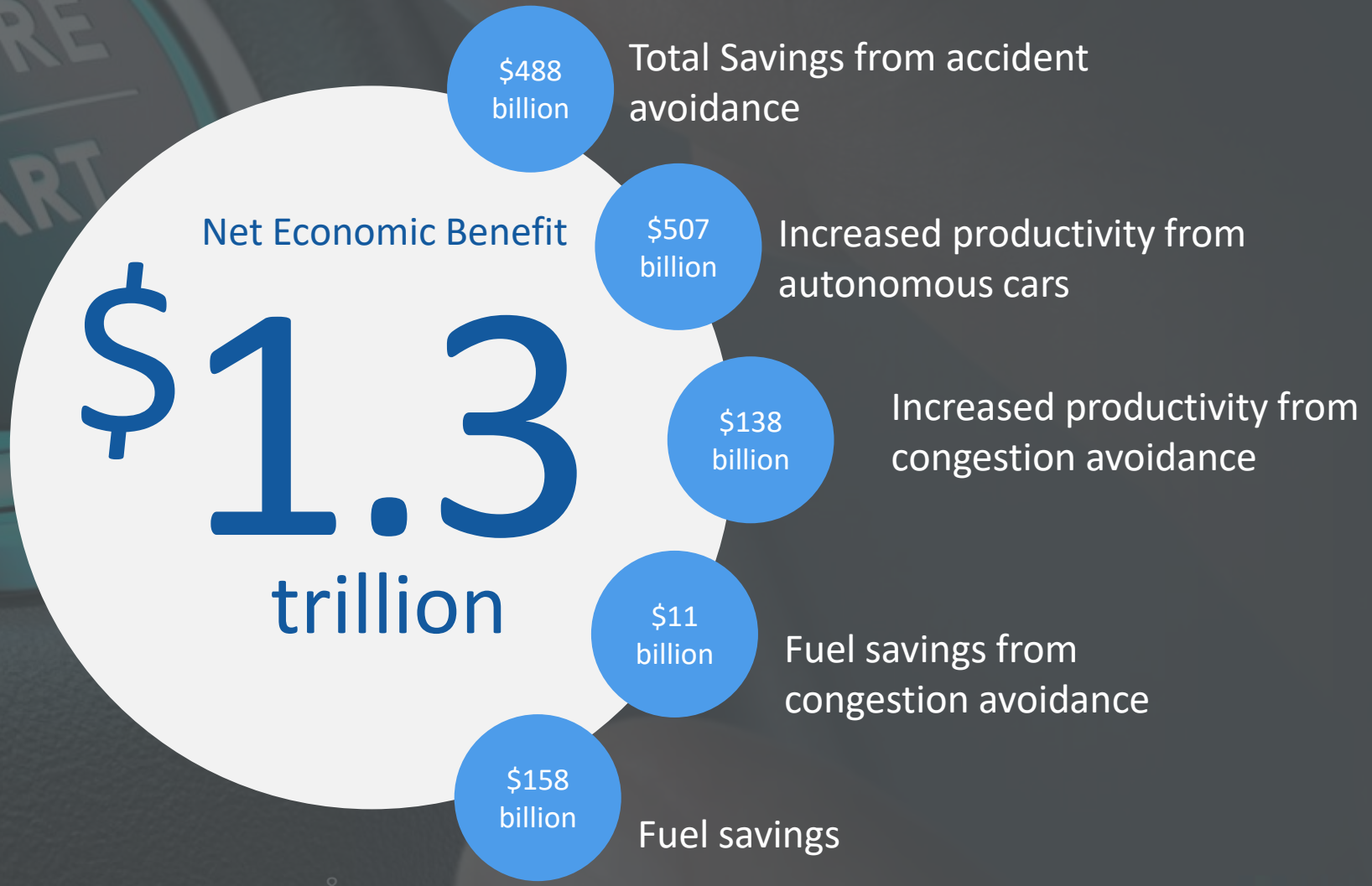


The Future of Autonomous Driving

Autonomous Driving Benefits

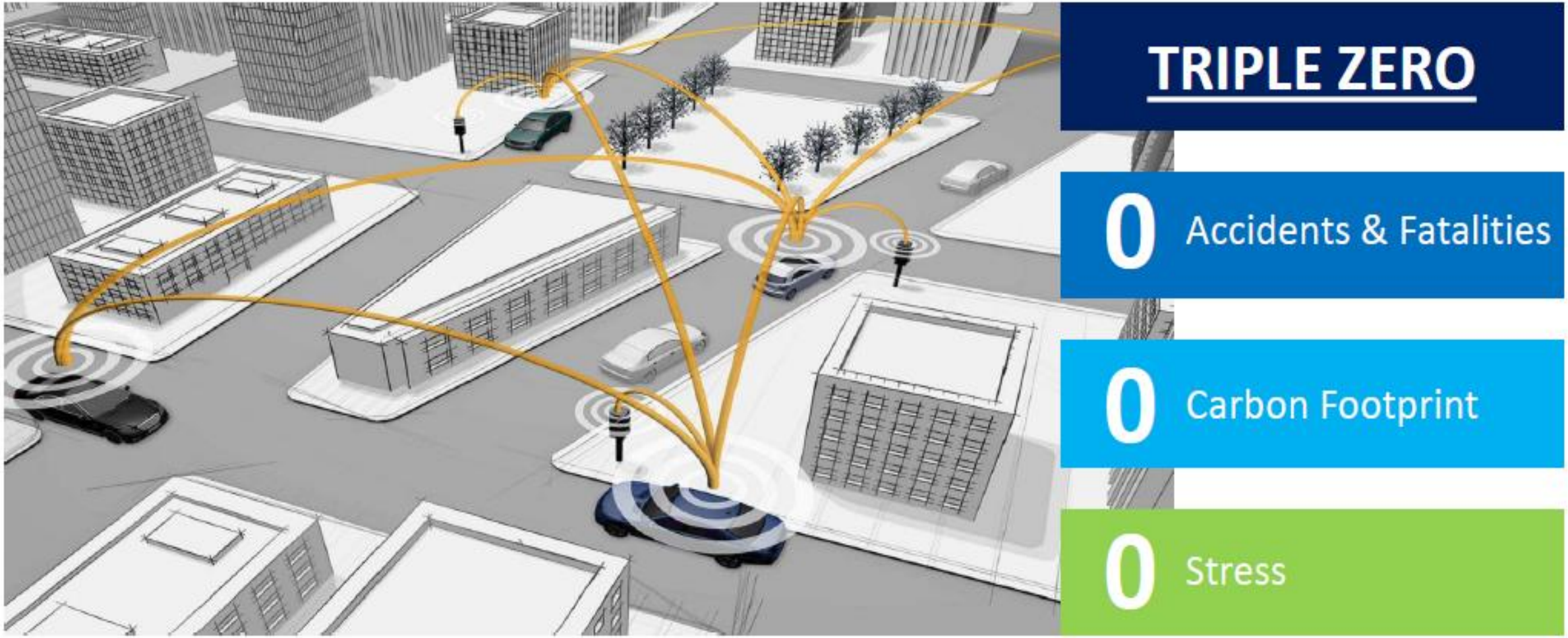
Autonomous Driving Will Create Benefits Beyond Auto Sales

Wide Ranging Benefits Will Support Broad Based Market Acceptance



Source: Predictions for U.S. Market, Morgan Stanley research, 2014

Smart Mobility: The Movement of People and Goods with….



Source: CAR SAE October

Self-driving Vehicles Will Depend On SMART Cities….

…The Deployment Of Technology And Data To Improve People's Lives

- V2V & V2I Communication
- Autonomous Navigation & Collision Avoidance
- Location Based Services
- Smart & Resilient Infrastructure

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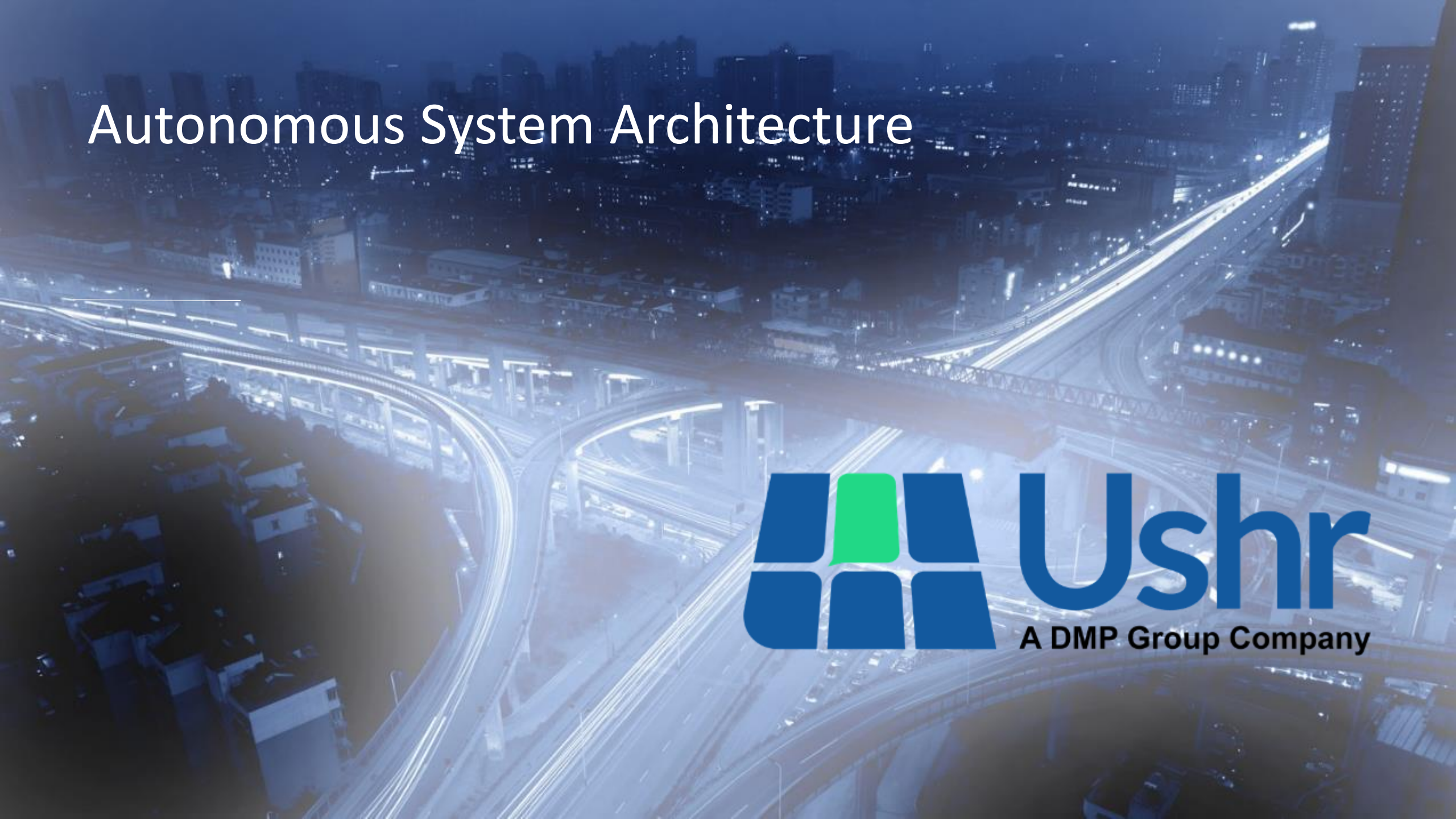
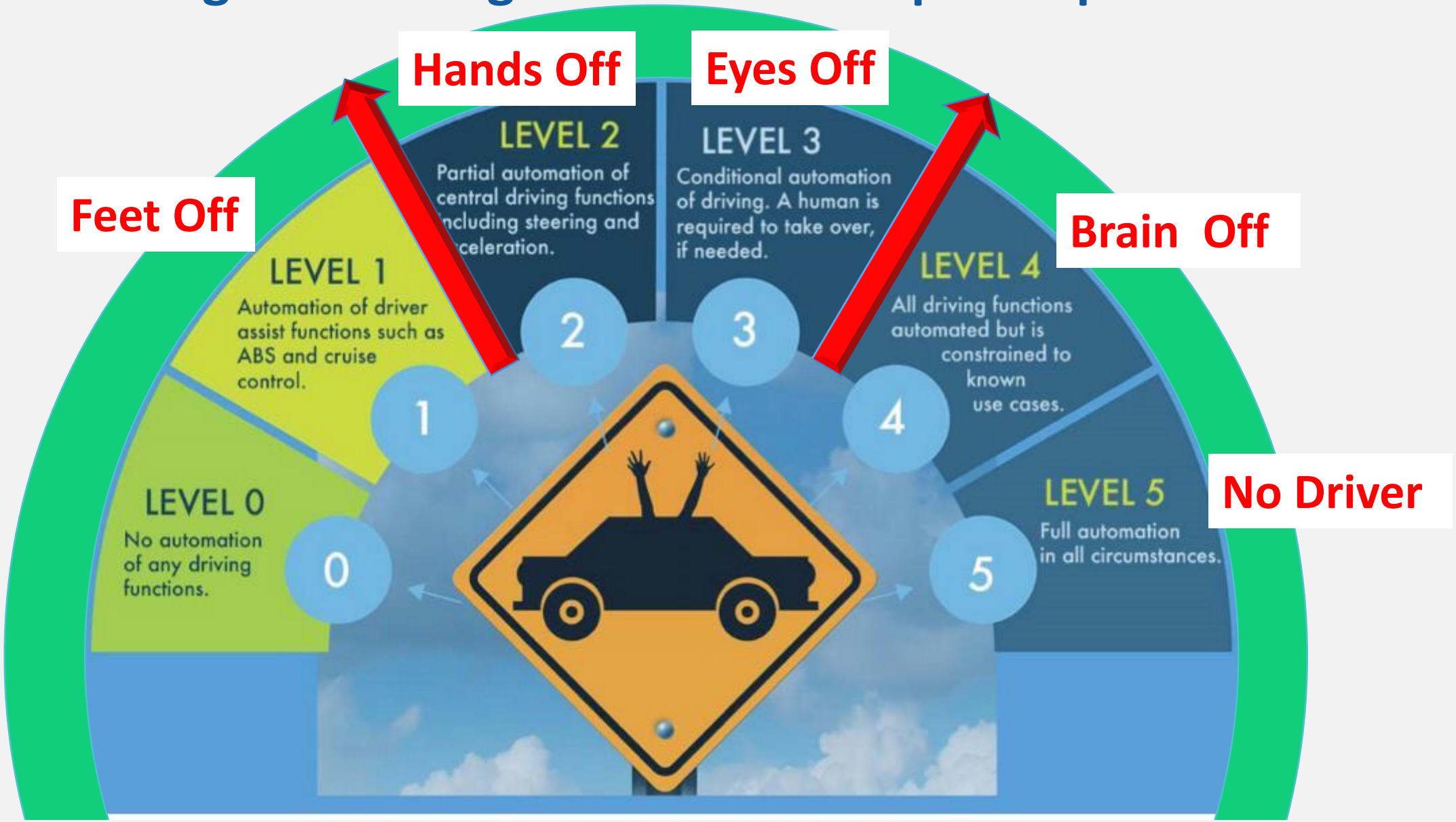
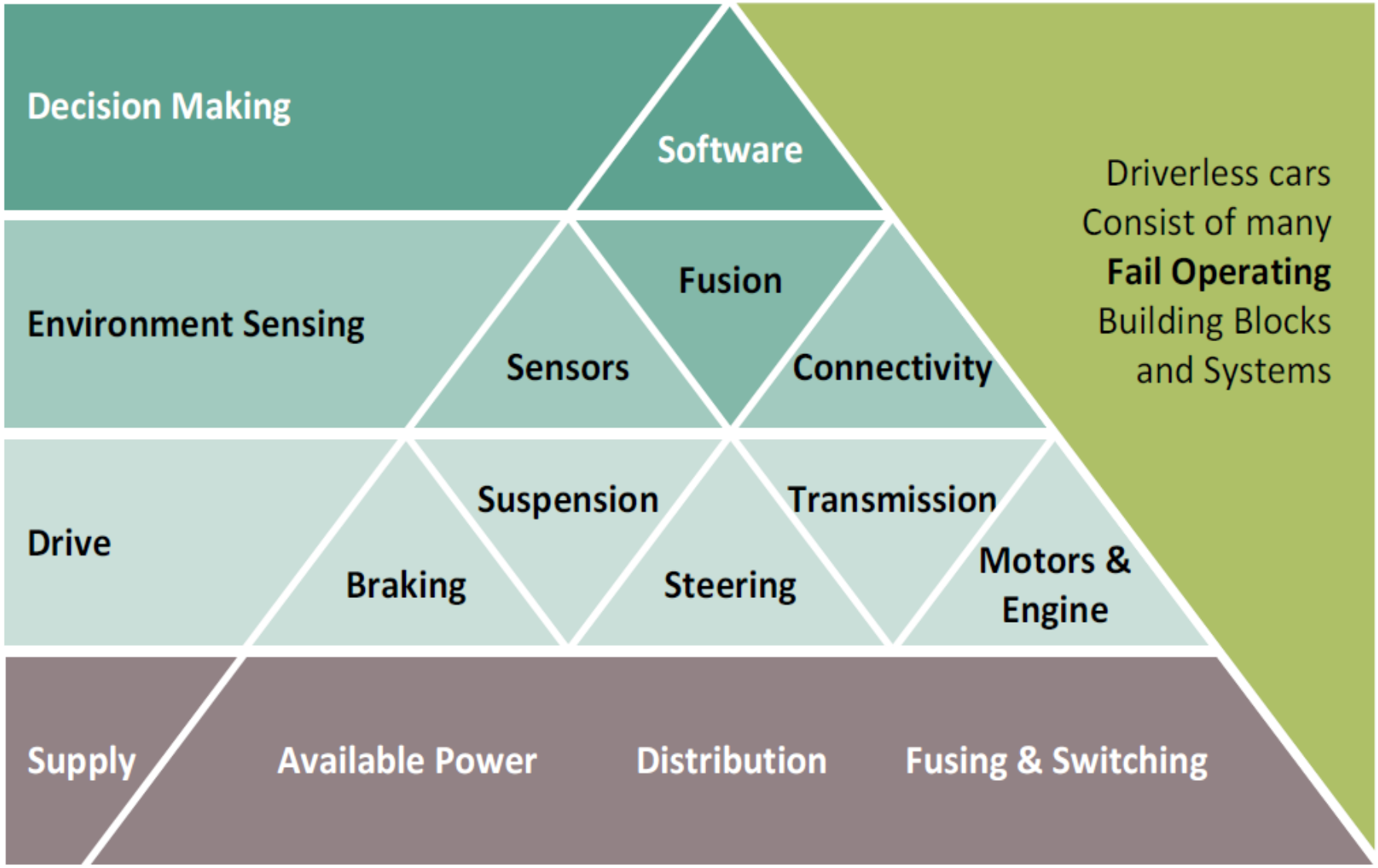
Autonomous System Architecture



Self-driving Market Segments Have Unique Requirements



Building Blocks for Autonomous Driving…..

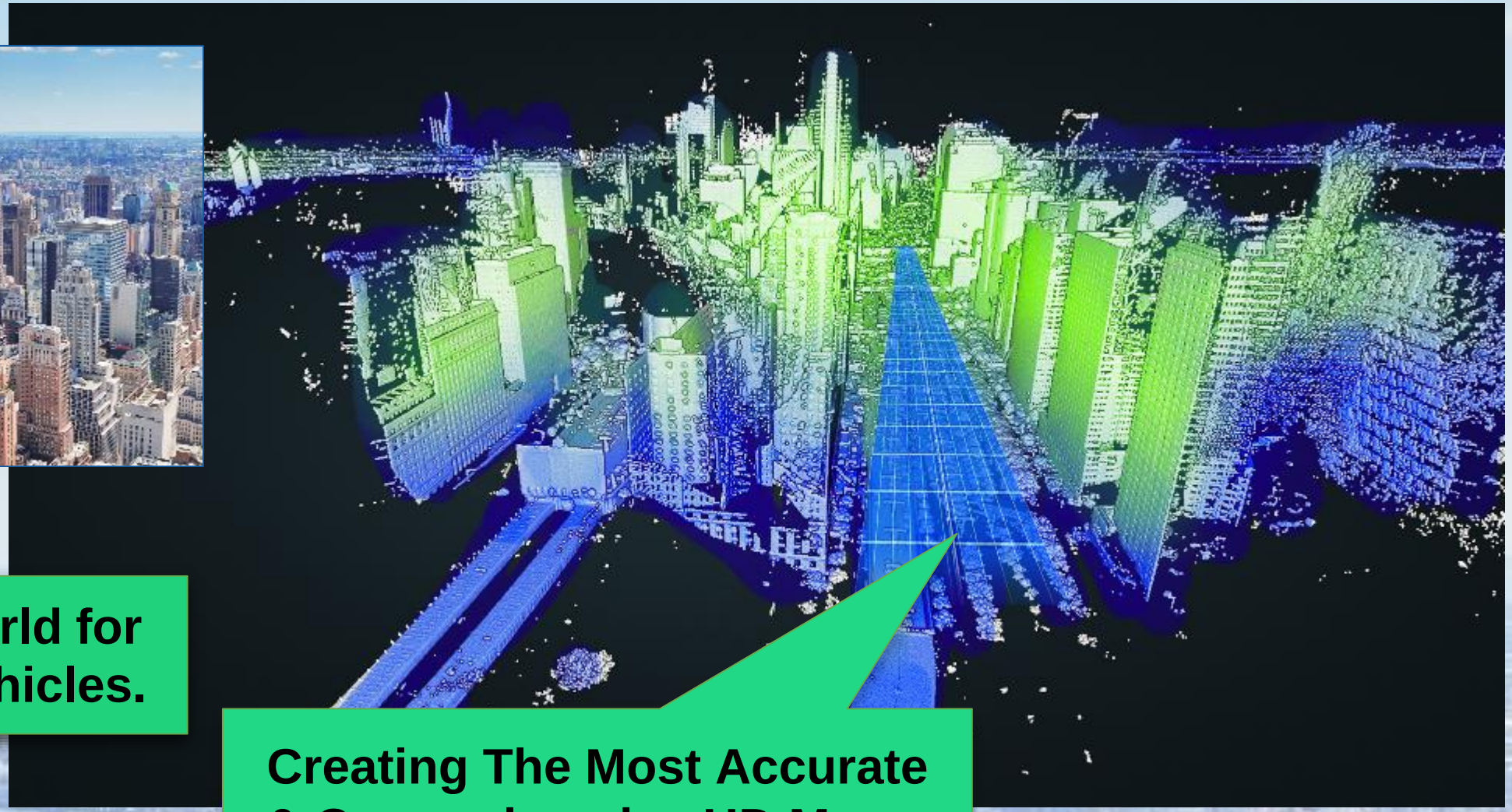


Semiconductors Are The Basis For Enabling Autonomous Control

- Power
- Processing (GPU's)
- Computations (mips)

Source: Infineon Technologies

Ushr – HD Maps Digital Transformation



Mapping the world for autonomous Vehicles.

Creating The Most Accurate & Comprehensive HD Maps.

Ushr

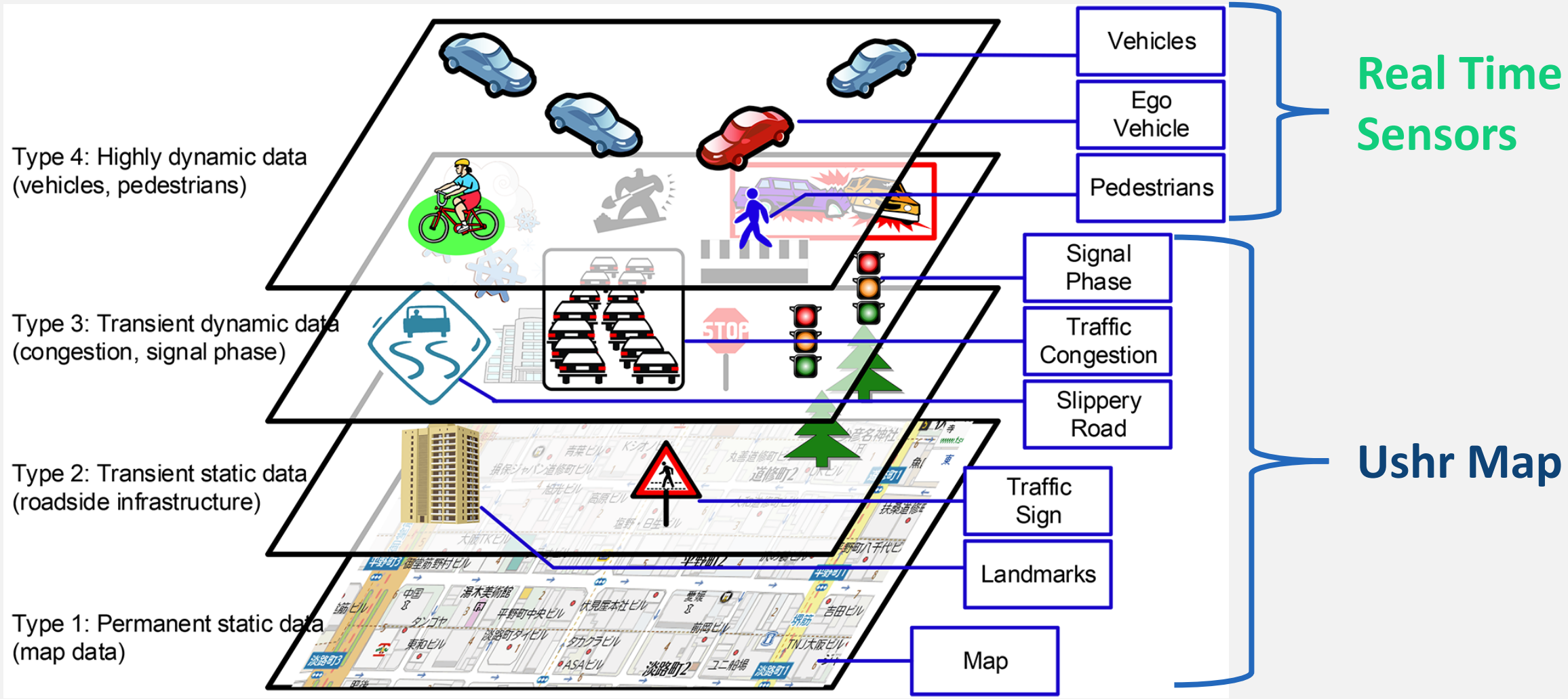
Autonomous Vehicle Value Proposition

- Must Drive Better Than Humans
- Sensor Fusion Is Essential
- Map = Longest Range Sensor
- Allows Vehicles To “See” The Road Ahead
  - Pavement Markings
  - Geometric Data
  - Road Objects
  - Derived Data
- Applies To All Level Of Autonomous Vehicles

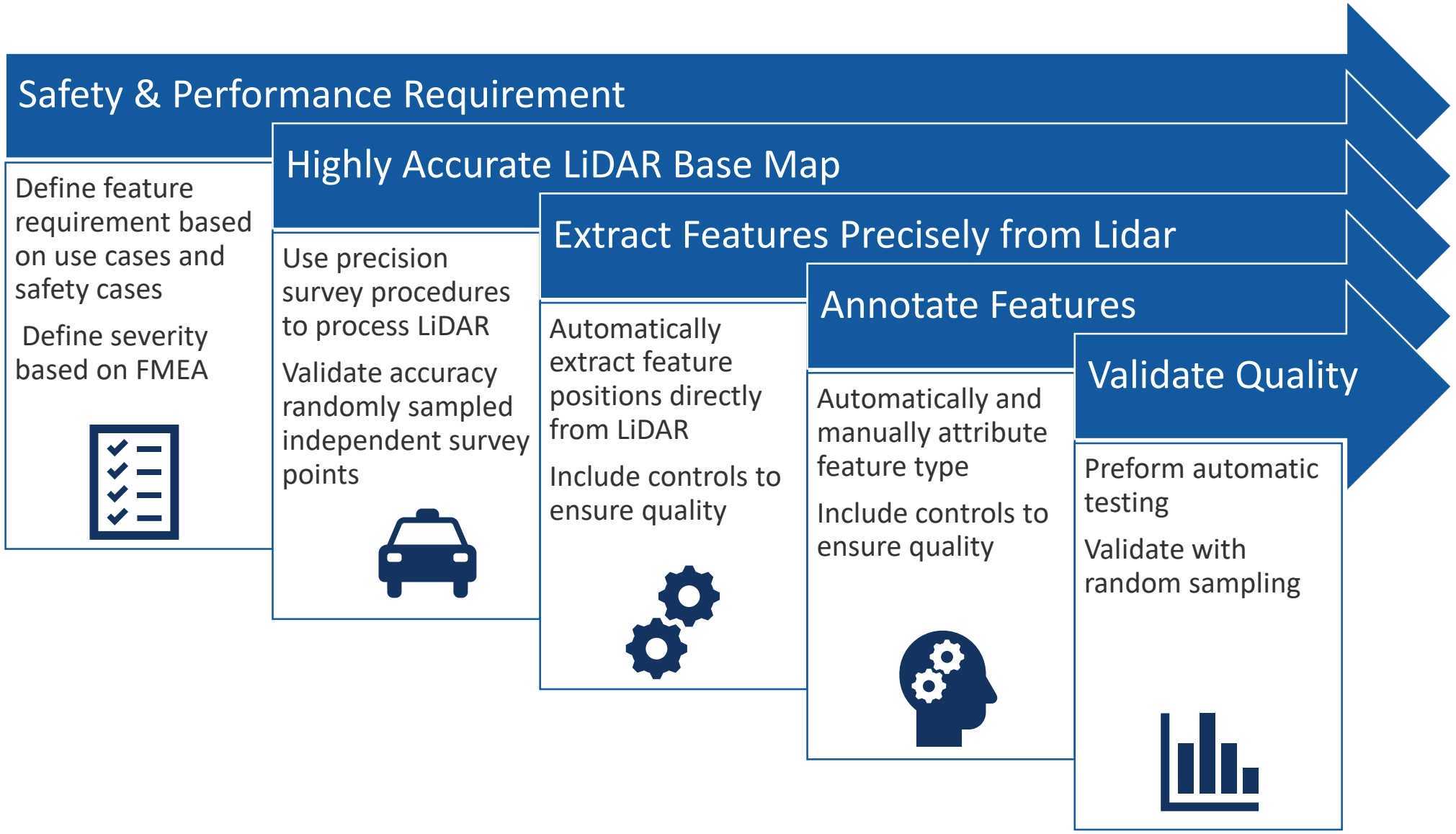
Sensors + Software + Memory (Map) = Knowledge

Ushr

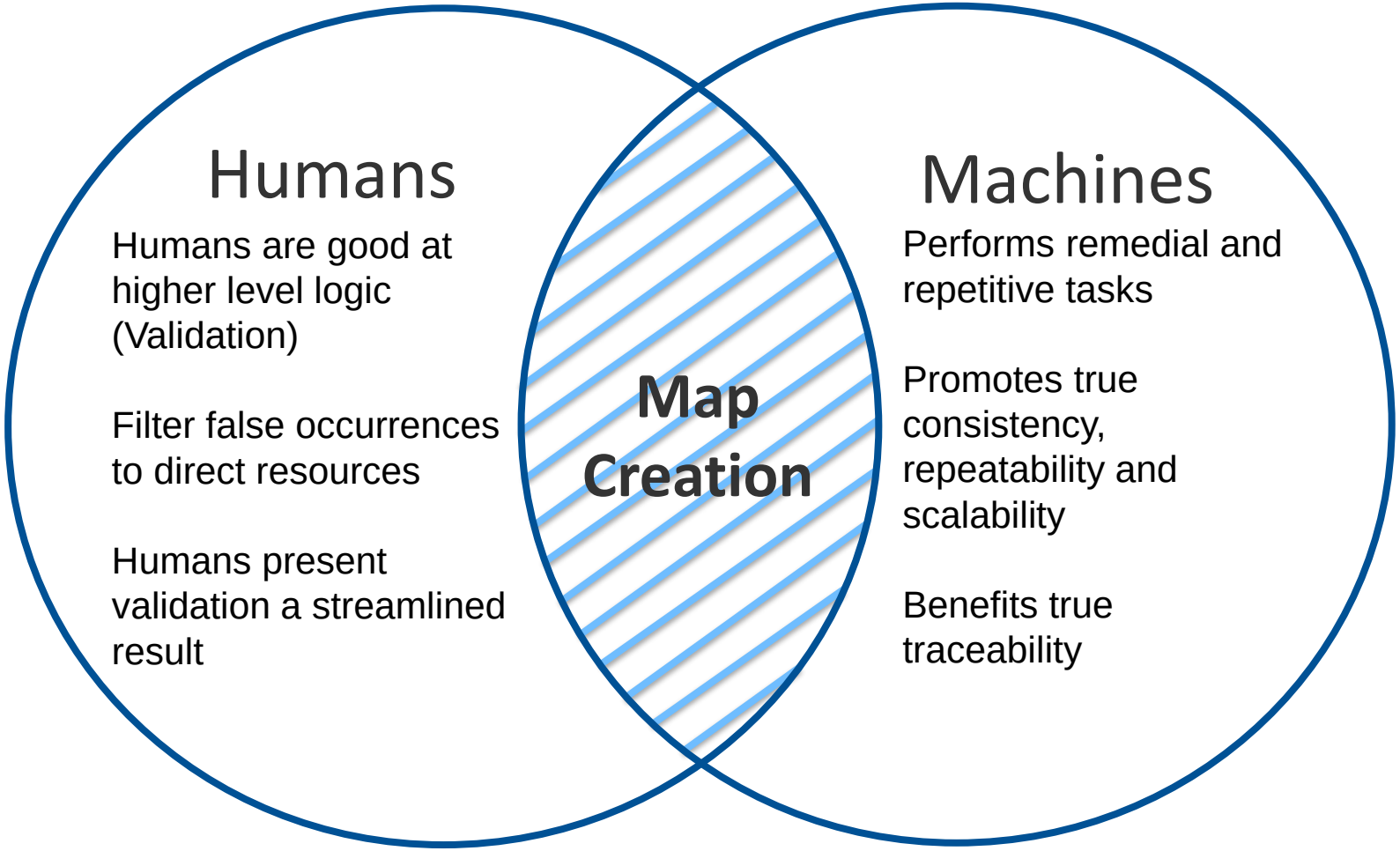
Ushr – HD Maps More Info Than Just Roads



Key Steps to Ensure Quality



Delicate Balance Between Humans And Machines



The Balance for Optimal Map Creation Comes from The Strengths of Humans and Machines Producing A Mixture of Algorithm Sets (infused with Deep Learning)

Ushr Is The Dominant HD Mapping And Software Provider For Autonomous Driving Systems

Large Growing Market

- $77B world wide (2035)
- 25% of total industry
- $1.3 T total economic benefit

Industry Leadership

- First mover, first prover
- 2x-3x more accurate
- Only HD map in production

Market Proven

- GM SuperCruise™
- Innovation Award Winner
- Strong Reviews

Strong Plan and Team

- 10x coverage increase
- 10% of current data costs
- 10x productivity increase
- Veteran Team

"We are what we repeatedly do. Excellence, then, is not an act, but a habit." Aristotle