



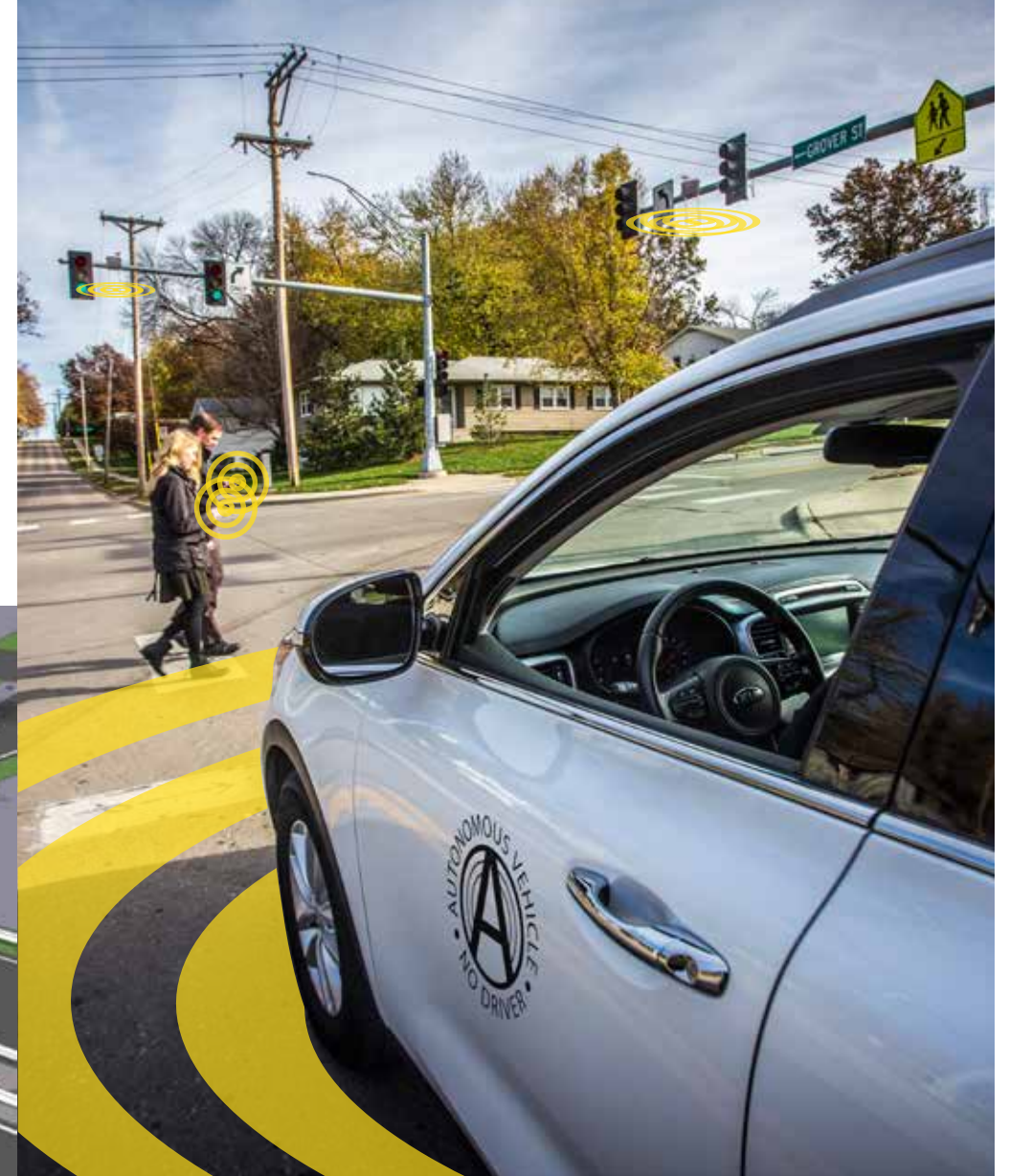
Our Story

We specialize in engineering, architecture, environmental and construction services. While we are most well-known for adding beauty and structure to communities through high performance buildings and smart infrastructure, we provide much more than that. We create an unshakable foundation for progress because our multidisciplinary teams also include scientists, economists, builders, analysts and artists.

Our employees, working in 225 locations around the world, push open the doors to what's possible each and every day.

With an excellent reputation for Intelligent Transportation System (ITS) solutions, HDR has built an unparalleled group focusing on the next generation of ITS — Autonomous and Connected Vehicles. Our national experts can help you successfully navigate the uncharted waters of transportation technology from concept to deployment and adoption.

Please contact: hdrtransportation@hdrinc.com to learn more.



The Making of a Smart City

Smart cities utilize transportation technologies to create integrated systems that work to reduce congestion, improve mobility, increase travel time reliability and enhance the overall transportation system performance and operation. The signature characteristic of a Smart City is providing connectivity between travelers and system components across the transportation network. The connectivity and the subsequent exchange of information between various transportation elements results in the ability to adapt in real-time which makes the system "Smart."



Are you planning for the future? AV/CV system technology is a disruptive force that will dramatically change the transportation system. **Are you ready?**



hdrinc.com

We practice increased use of sustainable materials and reduction of material use.

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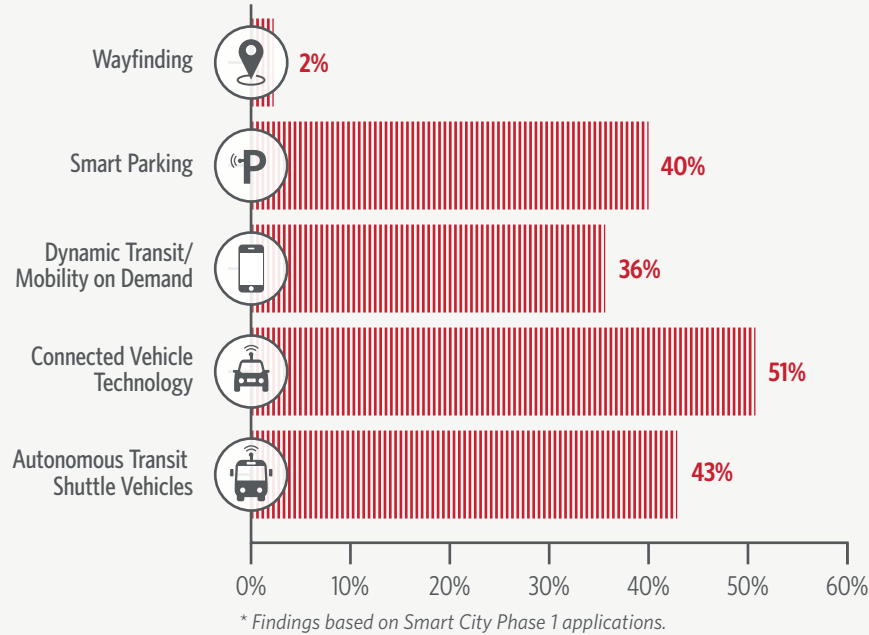
Above: Visualization of Connected Vehicle Technology

Cover: This photo was staged to illustrate the safety benefits of AV/CV technology. This should not be attempted, especially in the absence of this technology.



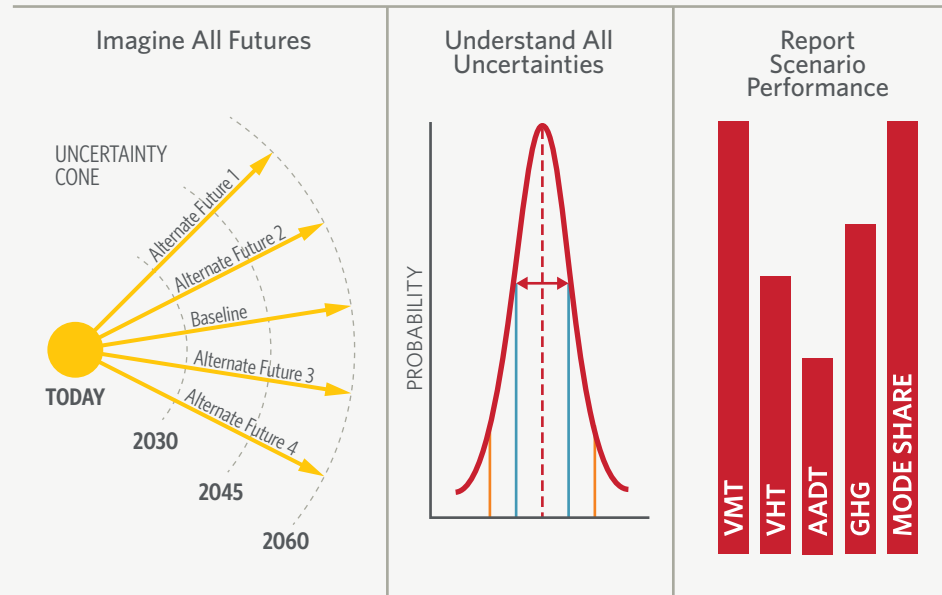
Enhancing Safety and Mobility with Transportation Technology

SMART TECHNOLOGY TRENDS



PLAN FOR THE FUTURE

A new tool is being developed by HDR to aid in decision-making by exploring multiple futures, evaluating uncertainties and considering potential outcomes.



Technology Hype — Sorting Fact from Fiction

Technology adoption is a process. One that can be driven by the ups-and-downs of all the technology hype. As the technology matures, so too does the rhetoric, which can have a major influence on technology insertion. At HDR, we can help you separate fact from fiction. Our detailed understanding of AV/CV technology readiness and capabilities relative to current and future deployments can help you find the optimal adoption point where actual capabilities line up with the hype and give you the best value.

AUTONOMOUS AND CONNECTED VEHICLE (AV/CV) TECHNOLOGY IS DRIVING CHANGE IN TRANSPORTATION

This is a time of pivotal change within the transportation environment. Agencies are being asked to do more with less, while congestion, overdue capital investments and maintenance costs are threatening the mobility of the traveling public. The “information age” that began in the 1970s with the introduction of the personal computer, has led to the rise of the mobile device. The multitude of providers and information sources that leverage mobile, AV/CV technology has greatly expanded beyond the traditional transportation system.

Today, travelers can provide real-time system updates directly to other travelers via mobile and Connected Vehicle applications — bypassing the traditional

data collection and dissemination functions that were once only provided by traffic management centers. Offering near-instant access to traffic data, real-time planning, status of the current network, alternative routing, modes and expected travel times, Connected Vehicles have resulted in the traveler and their vehicle having as much or more real-time information than transportation system operators.

This gives travelers and their autonomous vehicles real choices based on their individually assessed decisions on alternative routes, the current network status, and the relative “price” in terms of time or dollars associated with various travel modes and routes.

FUTURE-PROOF YOUR INVESTMENTS

HDR staff are experts in both traditional Intelligent Transportation System Technology and emerging technologies associated with Autonomous and Connected Vehicles. We recognize that technology options are ever-changing, and we work hard to stay on top of, and help advance, new developments.

Our expertise includes providing capabilities related to:

- Mobility Blueprints and Strategic Planning for Technology
- Technology Assessments and Evaluation
- Cost/Benefit Analysis for AV/CV
- Capacity and Travel Demand Modeling
- AV/CV Technology Design, Planning and Implementation
- Grant Application Support

No matter where you fall in your readiness to adopt Autonomous and Connected Vehicle technologies, HDR can help you achieve your vision.

TECHNOLOGY EXPECTATIONS VS. READINESS CHART

