Infrastructure Facilitating CAV Operations

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Where Next Happens

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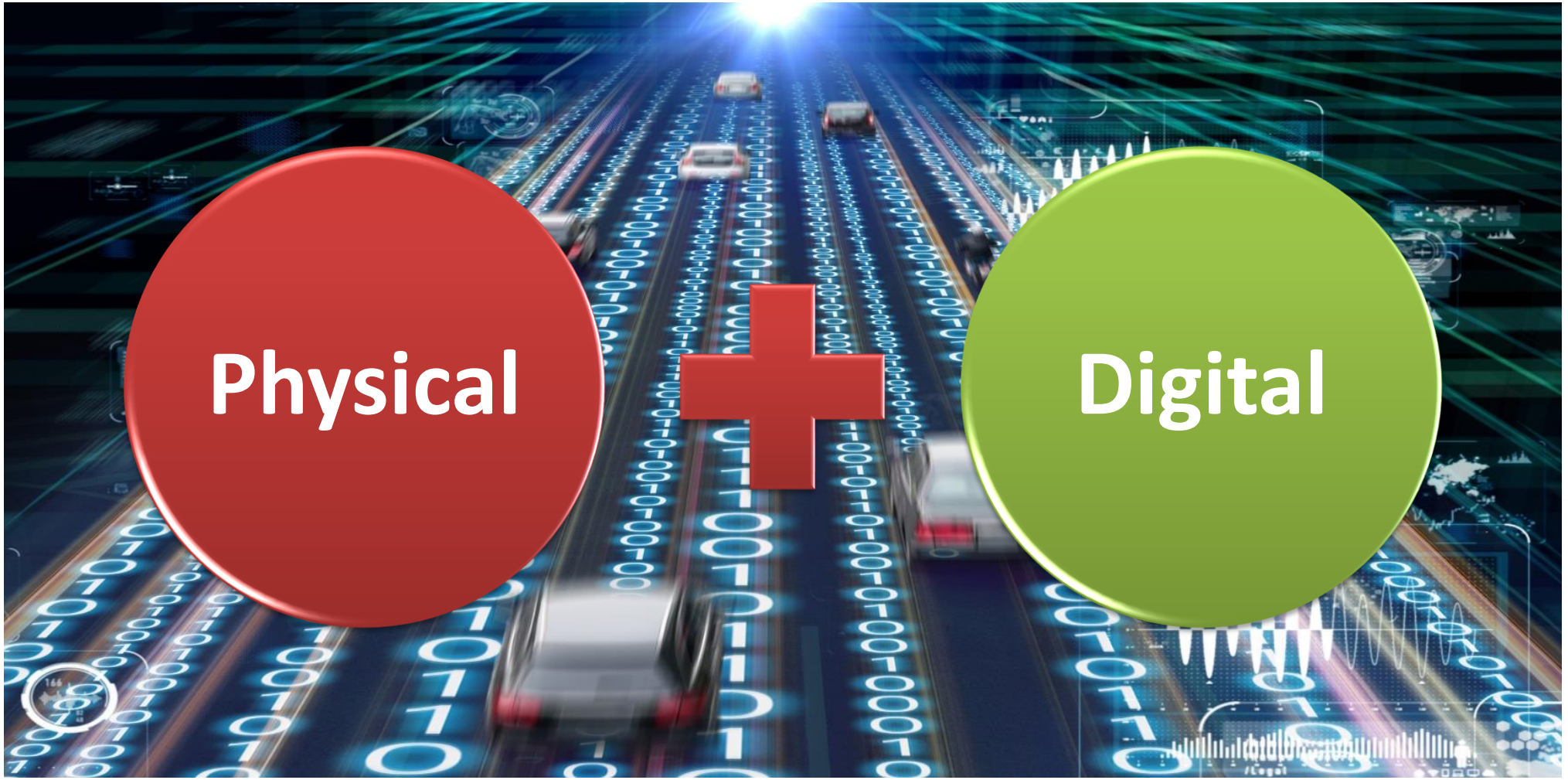
CAV Infrastructure



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Physical Infrastructure

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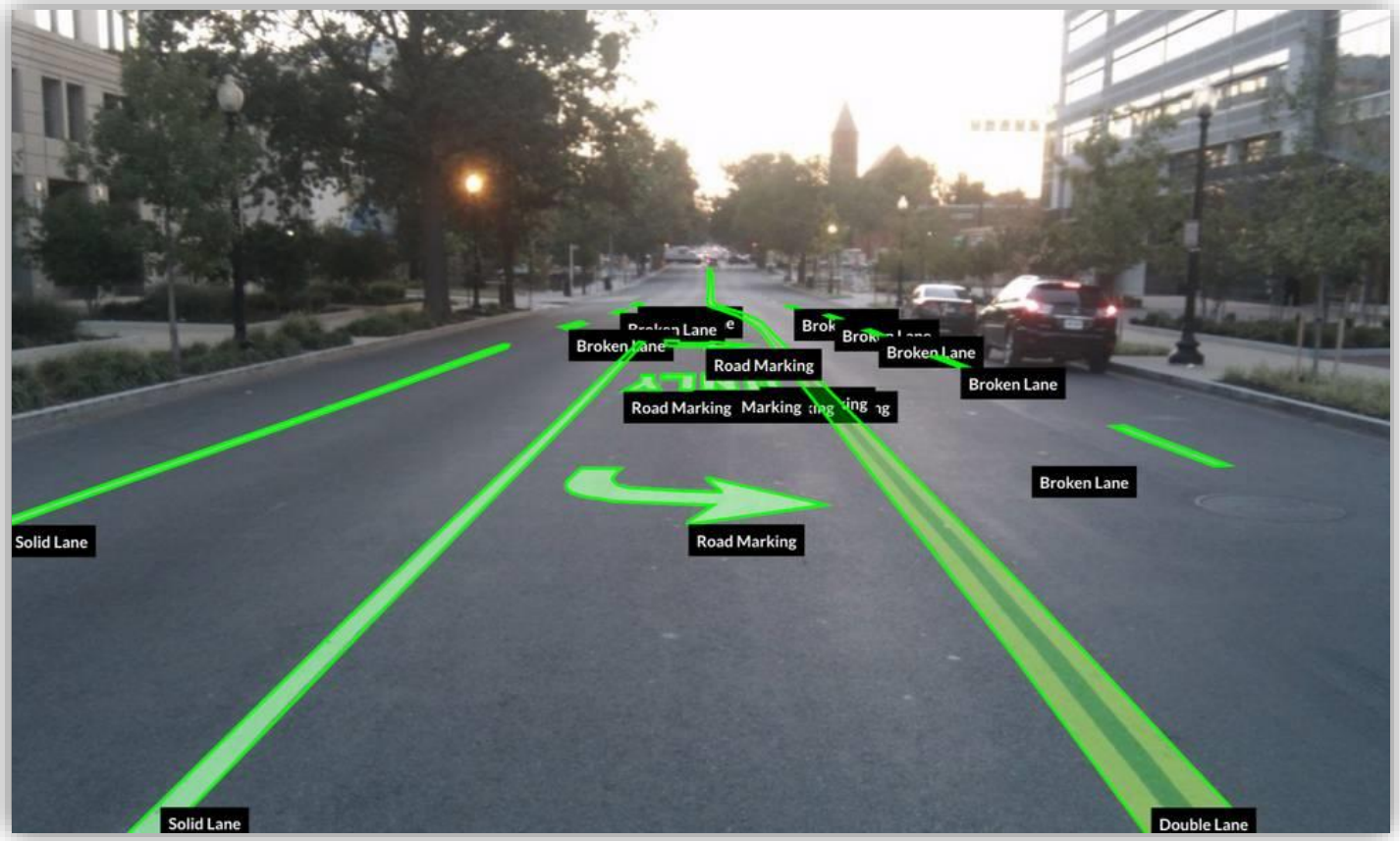
Road Markings



Source: Playment Inc.

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Road Markings

Rainy days …

Source: All About Vision

Source: Statewide Traffic Safety and Signs, Inc.

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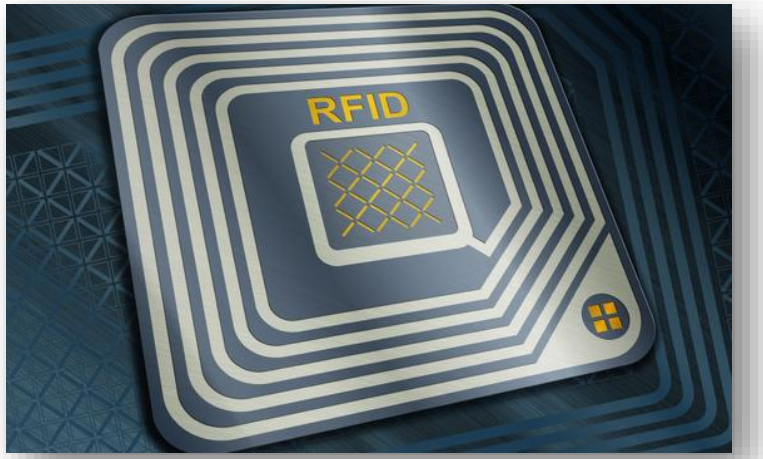
Road Markings

Snowy days …

Source: Top Notch Auto Detailing



Source: Incisive Business Media

Source: USDoT Federal Highway Administration

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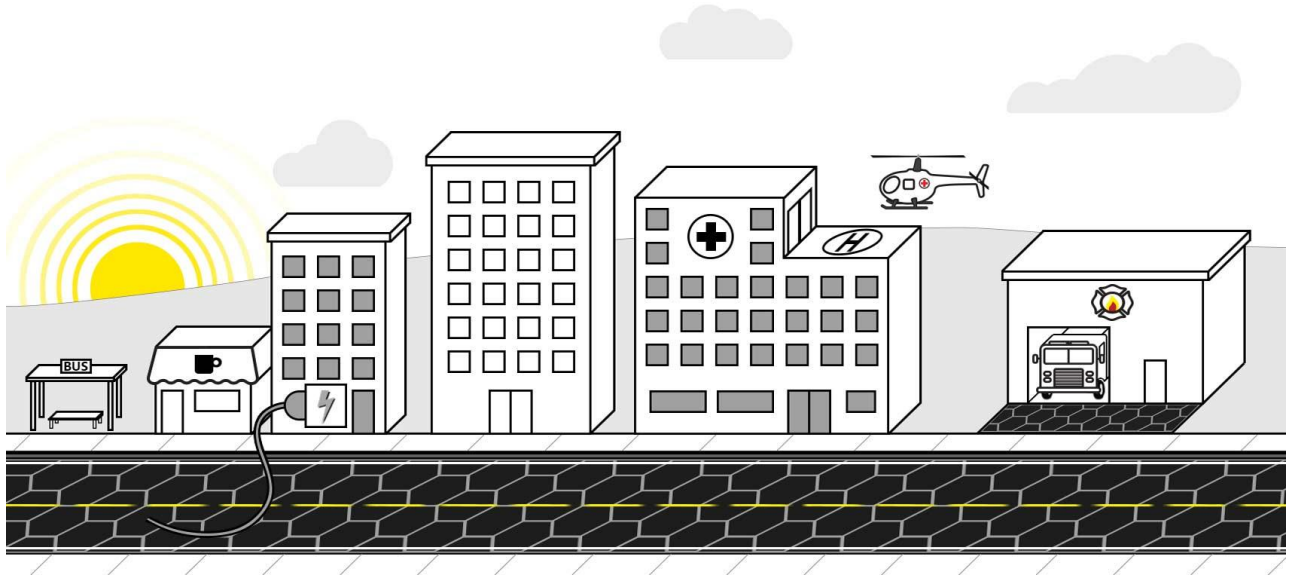
Road Markings

Snowy days …

Solar Roadways

Source: Building Up America



Source: Solar Roadways

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High Definition Maps?

Source: Synced - AI Technology & Industry Review

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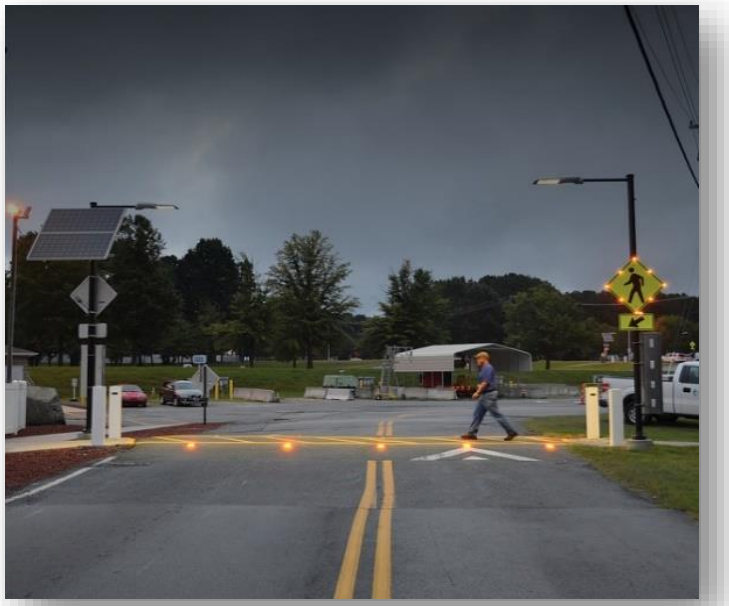
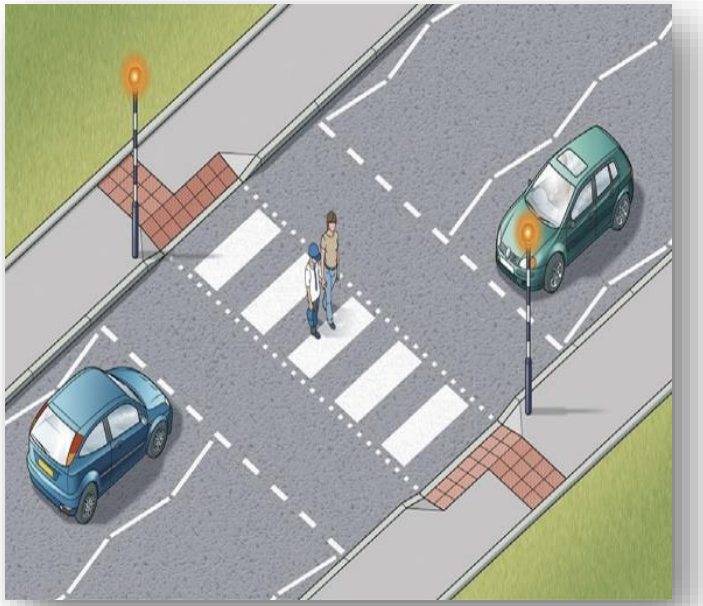
Crossings

AVs should be assisted from the infrastructure at crossings to guarantee detection of crossing pedestrians and cyclists.

Source: Michigan Complete Streets Blog



Source: TAPCO - Traffic & Parking Control Co., Inc.



Source: THE HIGHWAY CODE UK

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Safe Harbours

Source: Cobra Electronics EMEA

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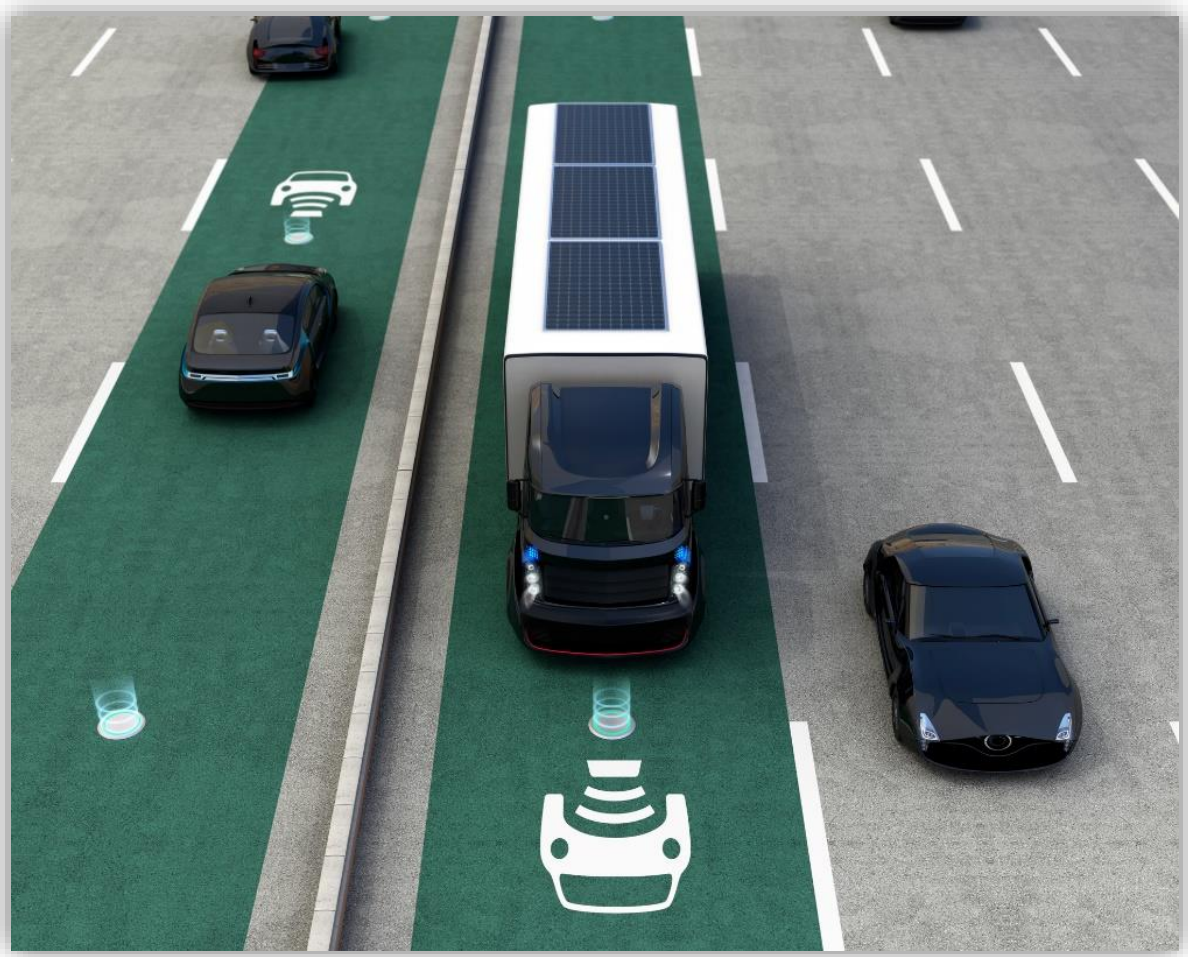
Charging



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Charging

Source: Delano™

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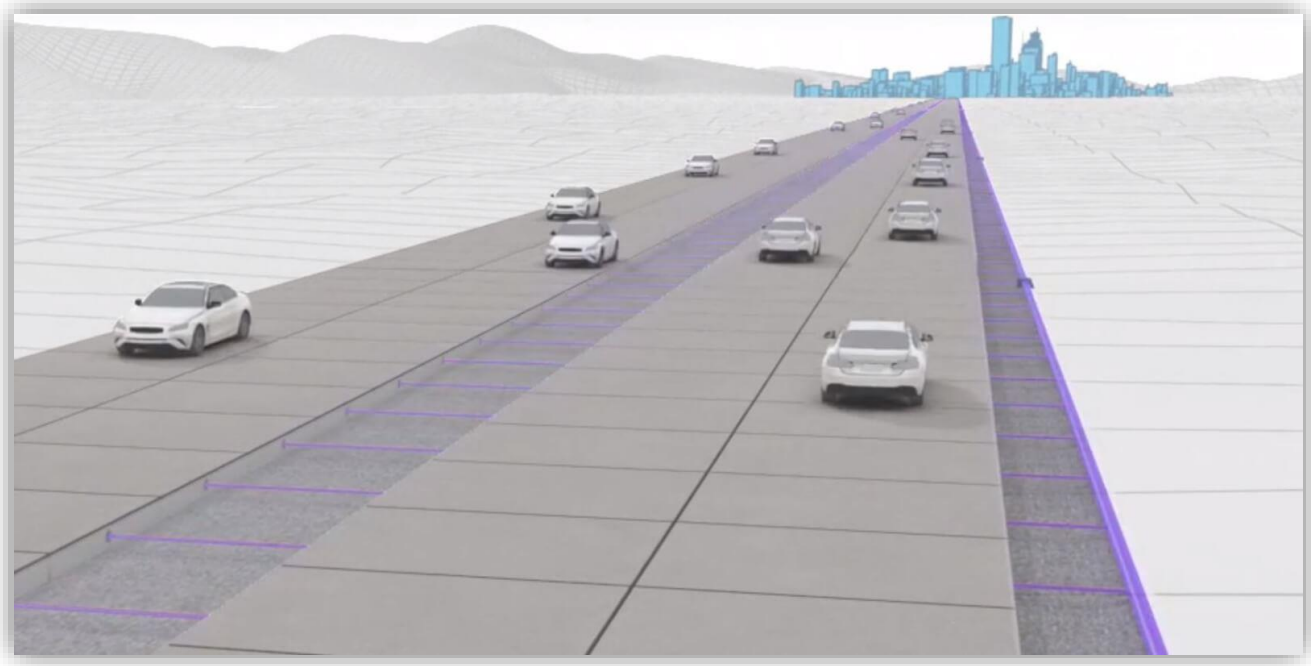
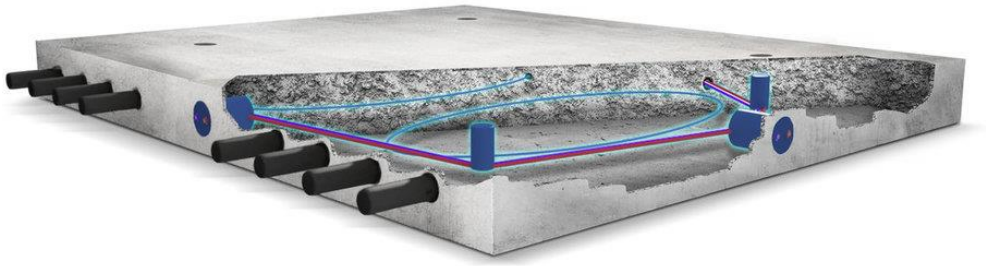
Smart Pavement



Source: Dogtown Media



Source: government technology

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Digital Infrastructure

CAVs

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Connectivity

Source: Ottawa Business Journal

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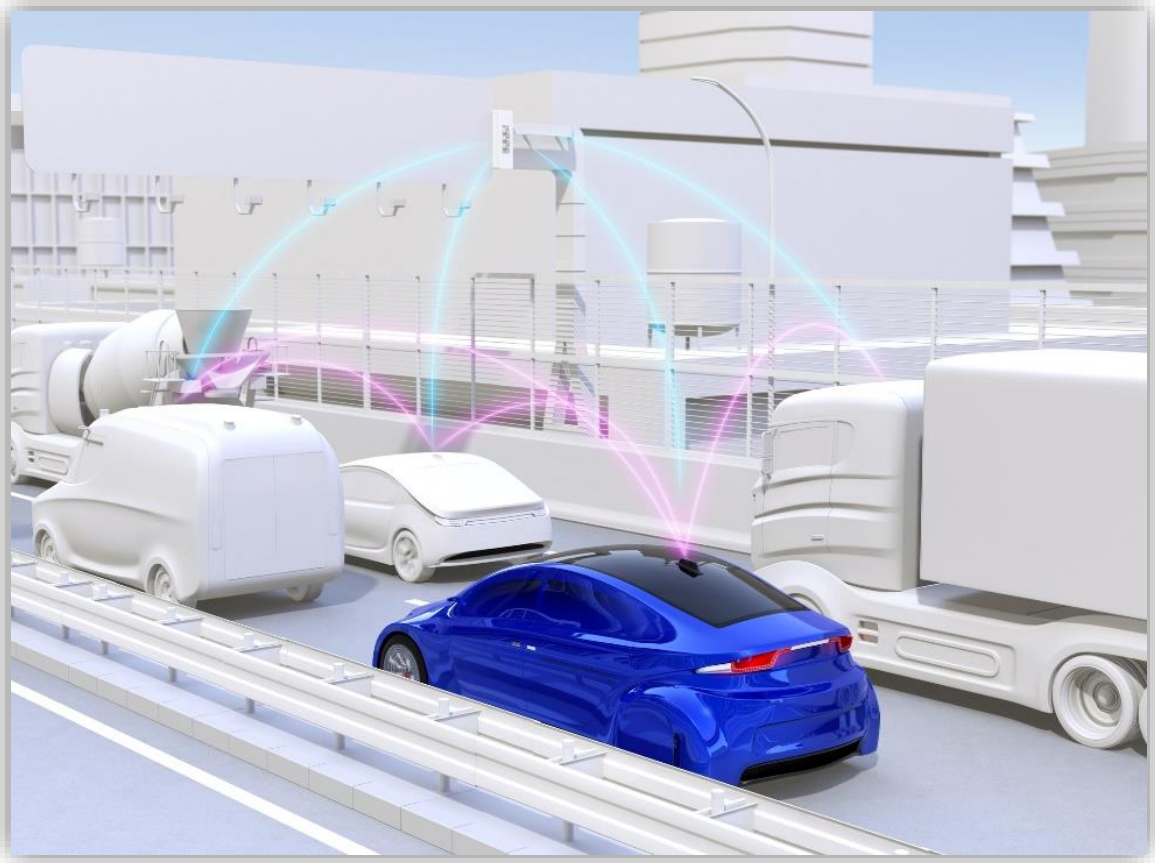
Connectivity

Roadside Units (RSUs)



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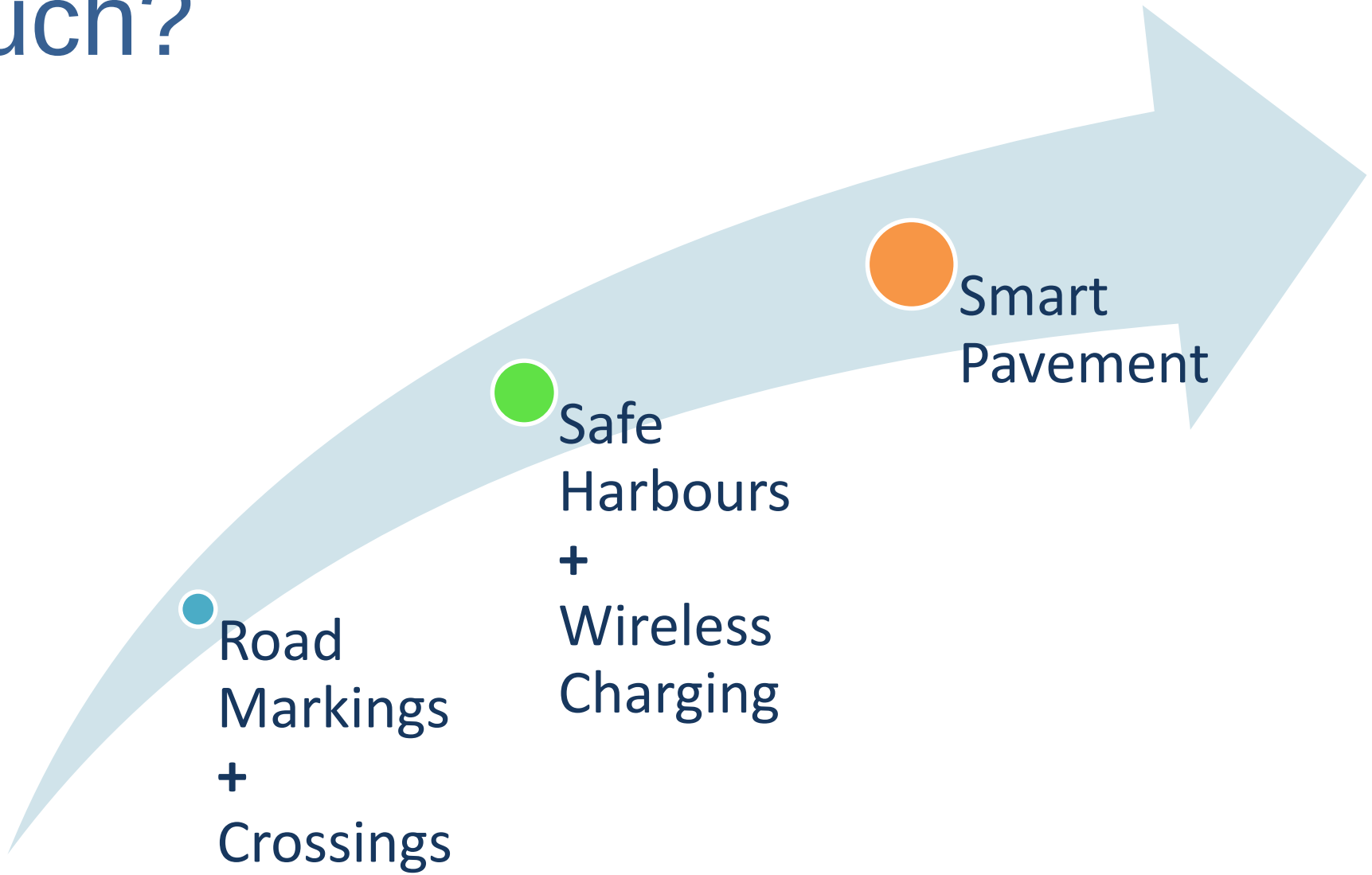
Too much?



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Autonomous Vehicle Innovation Network

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AUTONOMOUS VEHICLE INNOVATION NETWORK (AVIN)

- Support Ontario and its companies to capture the global market opportunity and create high-quality jobs for Ontarians
- Help the province's transportation systems and infrastructure plan for and adapt to these emerging technologies

AVIN is an initiative by the Government of Ontario through the Ministry of Economic Development, Job Creation and Trade (MEDJCT) and the Ministry of Transportation (MTO) and administered on their behalf by Ontario Centres of Excellence (OCE).

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PROGRAMS

- AV Research and Development (R&D) Partnership Fund
- Talent Development
- WinterTech Development
- Regional Technology Development Sites
- Demonstration Zone

AVIN programs focus on supporting the development, testing, piloting/demonstration and commercialization of technologies in light vehicles (cars, trucks and vans), heavy-duty vehicles (commercial vehicles, trucks, buses and RVs), transportation infrastructure, intelligent transportation systems and transit-supportive systems.

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CENTRAL HUB

The AVIN Central Hub is a dedicated team that supports delivery and administration of AVIN programming, and provides three key functions

Connect & Coordinate

A focal point to help coordinate among industry, academia, research organizations and governments, and connect interested stakeholders and members of the public

Opportunity Identification

Knowledge translation, research, data/information and trend analysis, acting as a bridge between technology and policy

Awareness & Education

Promote AVIN programs and Ontario's AV testing pilot and build awareness of Ontario's growing CAV community

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AVIN Specialized Reports

Features of the Infrastructure Facilitating the Operation of CAVs

November, 2018

https://www.avinhub.ca/reports/

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THANK YOU

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