



# The Ottawa AV Ecosystem

**The First End-to-End Integrated AV Test Environment of its Kind in North America**



# Ottawa is a Tech Hub

For three decades, Ottawa has been a global leader in telecommunications technology. Today, Canada's capital is one the hottest and most diverse tech hubs in North America.

NATIONAL CAPITAL REGION  
POPULATION  
**1,324,000**

NATIONAL CAPITAL REGION  
ICT WORKFORCE  
**77,000**

NATIONAL CAPITAL REGION  
TOTAL WORKFORCE  
**756,000**

**1,822** KNOWLEDGE BASED  
BUSINESSES IN THE NATIONAL  
CAPITAL REGION EMPLOY OVER  
**69,000** PEOPLE

# Our Sectors



Life Sciences



Software



Digital Media



Communications  
Technology



Clean  
Technologies



Aerospace,  
Defence & Security

**Spartan**

**QNX**

**SIMWAVE**  
CONSULTING

**HUAWEI**

**ThermalFrost**

**GENERAL DYNAMICS**

**TURNSTONE**  
BIOLOGICS

**shopify**

**Brinx**

**ciena**

**GaN** Systems

**LOCKHEED MARTIN**

**Abbott**

**IBM Watson**

**MERCURY**  
FILMWORKS

**ERICSSON**

**zibi**

**MDS**  
Measured by the Power of Precision

**clearwater**

**Ford**

**fuel**  
YOUTH ENGAGEMENT

**NOKIA**

**CLEARFORD**  
WATER SYSTEMS INC.

**FORTINET**

# Ottawa Public and Private AV / CV Testbeds



# Addressing Key AV Challenges

Focused on enabling entrepreneurs, SMEs and multinationals to address five key AV/ CV challenges:



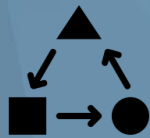
- **AV operations in inclement weather** such as snow, ice, fog, and high winds



- Development of systems that pinpoint the location of **hidden objects** (such as seeing around corners to spot moving people or objects)



- **Cybersecurity** – AVs, smart infrastructure, and the Internet of Things



- **Interoperability**, the ability of computer systems or software to exchange and make use of AV-generated data



- **Communication:** Vehicle-to-Vehicle, Vehicle-to-Infrastructure (city), Vehicle-to-Network (DSRC/GPS/ 4G/ 5G)

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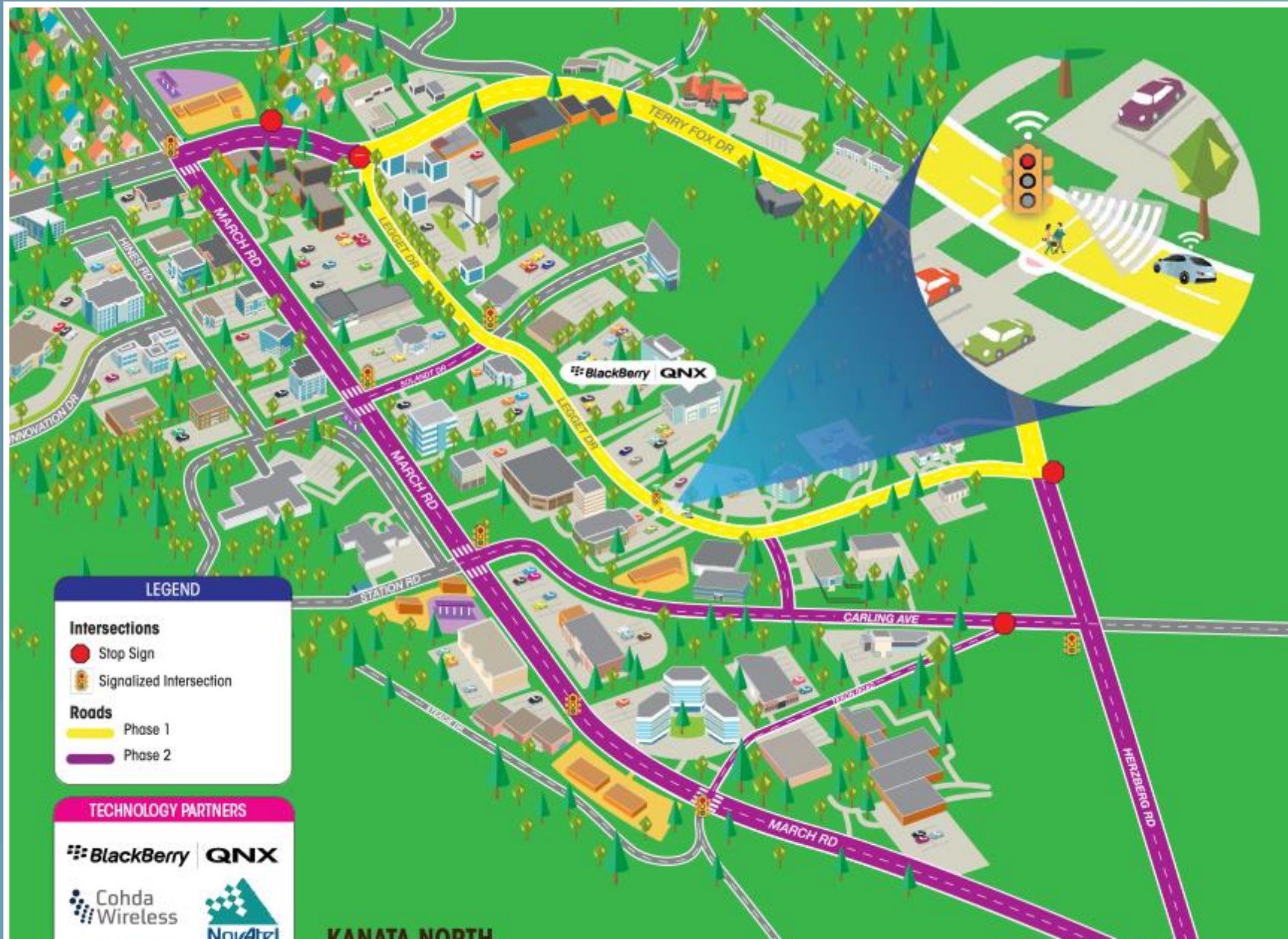


# The Ottawa Public AV Test Track

- Located in Canada's largest technology park
- Equipped with 9 traffic lights, cross walk and communications technology including: DSRC, and GPS and coming soon, 4G-LTE and 5G technologies for V2I, V2V, V2P and V2N
- City of Ottawa Partnership: Dedicated Short Range Communication (DSRC) transmitters at the traffic lights, repainted street lines in the test area, and accelerated installation of connected LED street lights- opportunity to



# Ottawa AV Public Test Route







Autonomous  
Vehicles

Ottawa has become the first municipality in  
Canada to connect an autonomous vehicle to  
live city street infrastructure!

Anchor companies such as QNX, Autonomous Vehicle Innovation Centre and Ford's Research and Engineering Centre have established Ottawa as a world-class hub for AV..





# The Ottawa Private AV Test Track

- Equipped with the traffic lights, cross walk and communications technology including DSRC, 4G-LTE and 5G technologies for V2I, V2V, V2P and V2N
- Secure/ Gated 1,860-acre facility with 1,560 acres of farmland with an additional 1,600 acres from the Canadian Food Inspection Agency
- 16 KM paved road network with multiple buildings
- Private optical fiber onsite
- Cross collaboration with multiple testbeds in one location i.e. Precision Agriculture, Public Safety





An aerial night view of Ottawa, Canada, featuring a vibrant sunset sky in shades of orange and red. The city lights are visible, including the Parliament Hill and the Ottawa River. The text "Thank you!" is overlaid in the center.

**Thank you!**