

# INNOVATING MUNICIPAL ASSET Management

## 5G Enabled 3D Mapping

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**SAFESIGHT**



# SafeSight - Our Innovation TEAM

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- Established in 2016, 100% Canadian owned and operated in Northern Ontario
- We are a team of 13 innovative Creators, Engineers and Software developers
- We leverage multi-discipline team structure to increase our innovative edge
  - Mechanical Engineers
  - Aerospace
  - Electrical Engineers
  - Software Architects
- Experienced Innovators, with a portfolio of deployed innovations



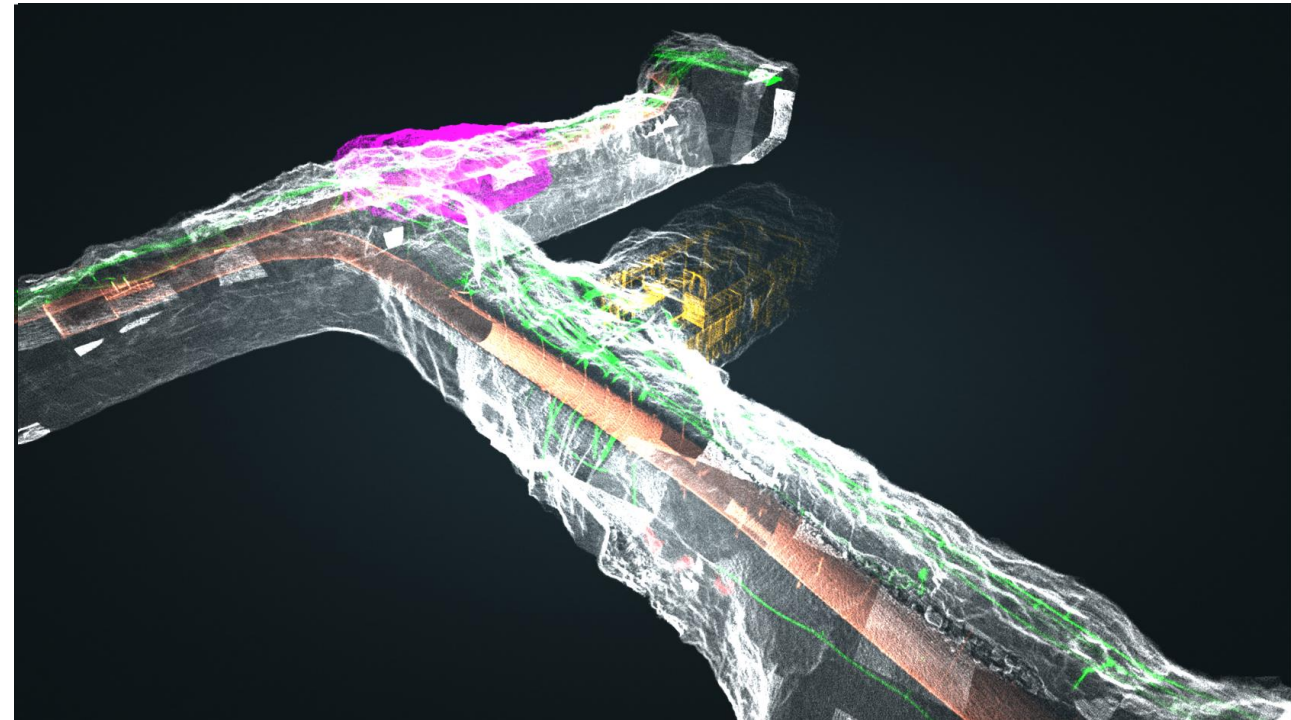
# The heart of Innovation

Our mission as a company is to transform “what” and “if” into “how might we”.

In that context we have created innovated solution that collect data that would otherwise be “uncollectable”.

What we have learned is ....

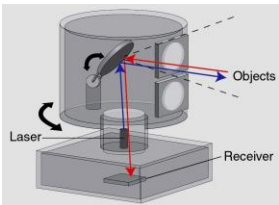
*“Innovation is born out of reshaping or reapplying the existing into an applied possibility to solve or evolve how things are done. “*



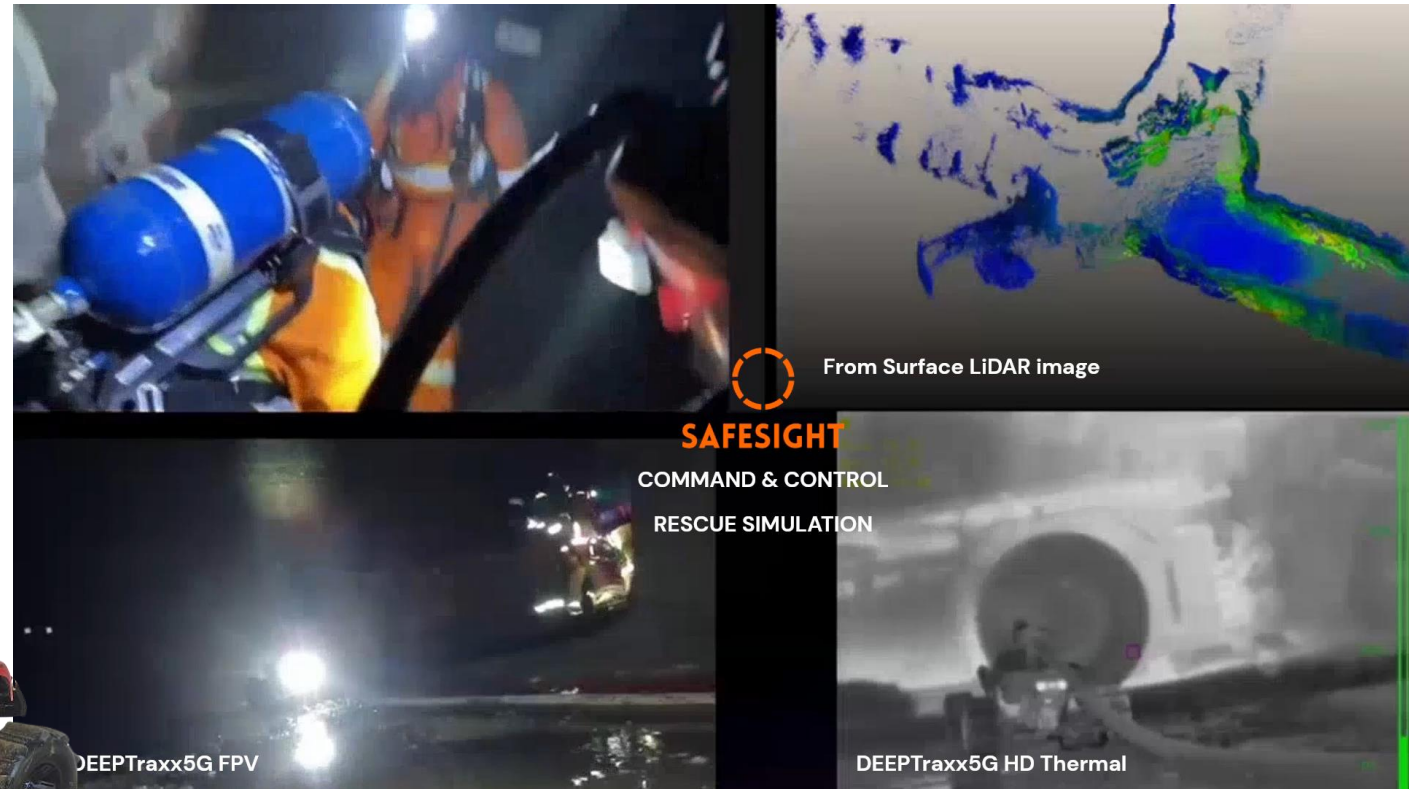
# SafeSight - Our Latest Achievement

The integration of 5G technology and our in-motion laser scanning solution to allow responders underground real-time from surface support in Emergency search and rescue

**LiDAR**;(light detection and ranging) is a method for determining ranges (variable distance) by targeting an object with a laser and measuring the time for the reflected light to return to the receiver.



Generic Rotary LiDAR

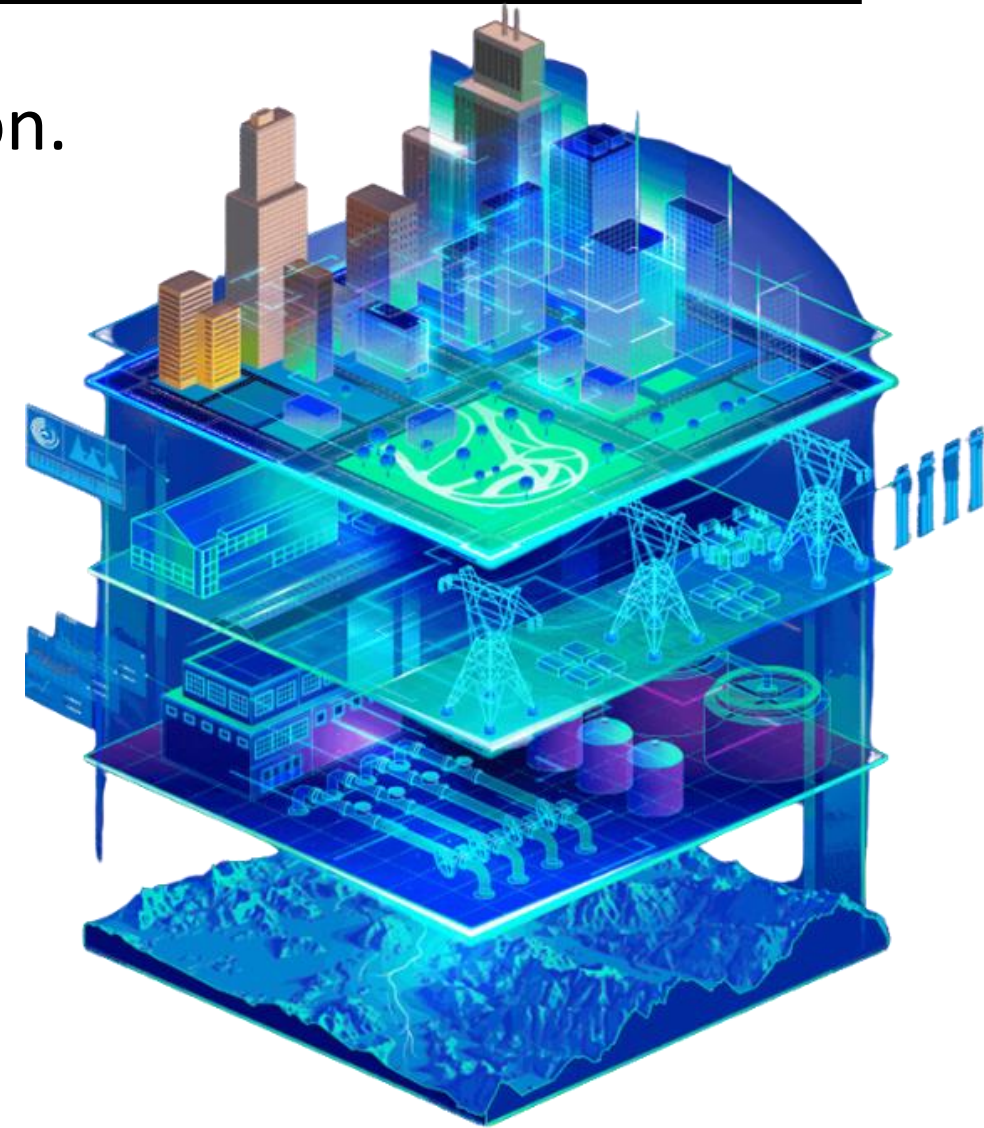


# Building a Digital Municipality

“What” and “if” we re-imagined that solution.

“How Might We”, transform city transportation vehicles into sophisticated data collection devices

“How Might We”, support asset management and the development groundwork for a municipal digital twin.





# From the Existing to Applied Possible

To dramatically transform current processes and information available for municipal infrastructure management specifically around; roads, curves, roadside, and rail crossings.

The Possible: a plug and play 5G Data Collection Unit and supporting software that would gather the critical metrics identified by the municipality to make informative and timely decisions.



**5G SafeScanner 3.1**

**5G Project  
Innovation**



**5G RoadScan V1**



# The Solution



Municipal Collection Vehicle



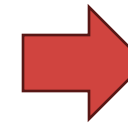
Rogers 5G  
Infrastructure



SafeSight 5G  
RoadScan Technology



Key Data Points (road, curve, shoulder)



Secure Centralized Data

A 5G mobile utility to gather key road digital models and measurements for:

- Roads,
- Curves,
- Roadside and shoulder
- Rail crossings

Supported by Basic RoadAlert AI solution that provides evaluation and alters to engineers.

## **Accessibility:**

This solution could be leveraged by over 400 municipalities in the province of Ontario

## **Financial:**

Ontario spends approximately \$28 Billion on road management; our technology has the potential to reduce that spending by 5% through proactive not reactive management.

## **Extended Applications:**

The same solution with no modification can be easily extended within the municipality to:

- Subway tunnel and track measurement and management
- Storm drains
- Sewers and culverts
- Any Rail and Rail beds measurement



# Outcomes for Municipalities and Ontario

**Transform road safety and management across the Province.**

## IMPACTS

- **COST SAVING ROI**
  - 5% savings in Road management
- **ENVIRONMENTAL**
  - Soil Erosion
  - Water table
  - Habitat
- **Digital Twin Foundation**
  - Leverage the same solution to assemble the digital twin foundation.

## OUTCOMES

- **PLUG & PLAY TECHNOLOGY**
  - Creates Provincial ROI opportunity of over \$300M annually
- **TRANSFORMS ANY VEHICLE IN ONTARIO INTO A CONNECTED VEHICLE**
- **EXTENDABLE TO:**
  - Subway Rail and track management
  - Municipal infrastructure
  - Mining Sector Road and environment support
- **FOLLOW-ON INVESTMENTS GENERATED IN ONTARIO TECH SECTOR in Ontario**
  - 5G infrastructure
  - AI data analytics

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# Thank You!

Connect with us



**SAFESIGHT**

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