Shaping the Ethical Future of Autonomous Vehicles in Canada

A call for ethical standards and responsible development

Audience: Policy Makers and Technology Developers

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1

Agenda

- Why Canada Needs Ethical AV Standards Now
- Benefits of AVs for Canadians
- Unique Canadian Challenges
- Ethical Risks and Concerns
- Recommendations for Policy Makers and Developers

Ethical Framework for Autonomous Vehicles in Canada

Autonomous Vehicles (AVs) promise safer, more efficient roads but raise complex ethical questions.

In Canada, public trust and adoption depend on establishing strong ethical standards.

Safety & Accountability
- Ensuring AVs are programmed to prioritize human life and follow legal standards.

Privacy & Data Security
- Protecting the vast amount of data AVs collect on users and pedestrians.

Equity & Accessibility
- Making AV technology accessible to all, including rural communities and individuals with disabilities.

Ontario's 10-Year Pilot Project:

Ontario launched a long-term AV pilot to test and refine AV safety measures.

Quebec's Shuttle Trials:

Self-driving shuttles operating in controlled settings to assess feasibility.
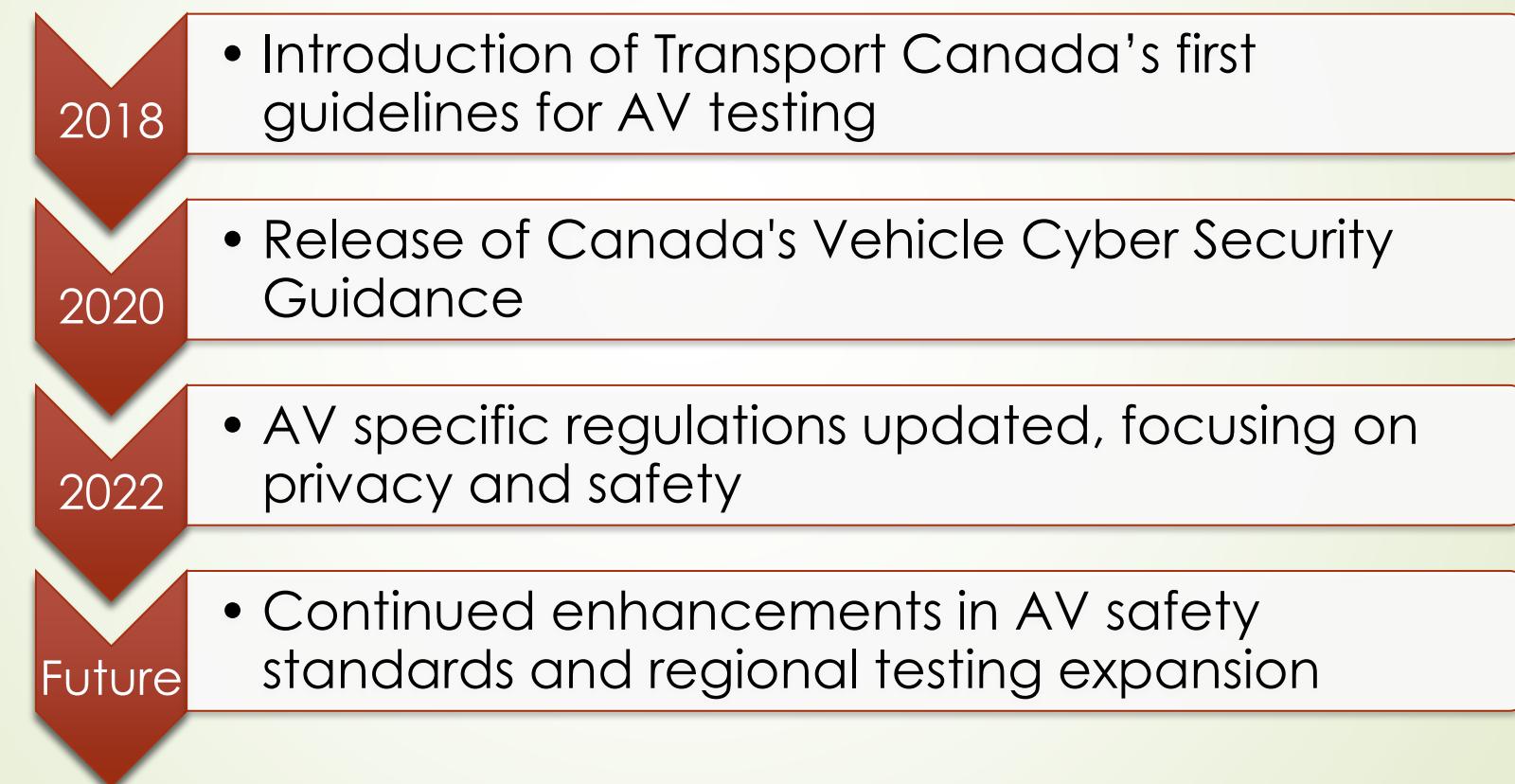
National Guidelines on AV Safety:

Framework provided by Transport Canada to guide safe testing.

Current AV Landscape in Canada

Timeline of Key AV Developments in Canada

2018
- Introduction of Transport Canada's first guidelines for AV testing

2020
- Release of Canada's Vehicle Cyber Security Guidance

2022
- AV specific regulations updated, focusing on privacy and safety

Future
- Continued enhancements in AV safety standards and regional testing expansion

Some pros and cons of AVs

Pros

- Improved Road Safety
- Increased Accessibility
- Reduced Traffic Congestion
- Environmental Impact

Cons

- Ethical and Legal Challenges
- Data Privacy and Security
- Job Losses in Driving Industries
- High Development and Maintenance Costs

Key Ethical Concern 1: Safety and Accountability

- Ensuring AVs prioritize human life in all scenarios.

- Defining **accountability**: Who is responsible in the event of AV failure?

Technology

Environment

Ethics

Key Ethical Concern 2: Privacy and Security

- **Data Collection**: AVs gather extensive data on users and surroundings.

- **Data Protection**: Policies needed to safeguard personal and location data.

Key Ethical Concern 3: Equity and Accessibility

Access for All:

AVs should be accessible to rural communities and those with disabilities.

Inclusivity:

AV technology should benefit all Canadians equally.

Recommendations for Policymakers and Developers

Standardize safety protocols across provinces

Establish clear accountability laws for accidents.

Enhance data security standards specifically for AV data.
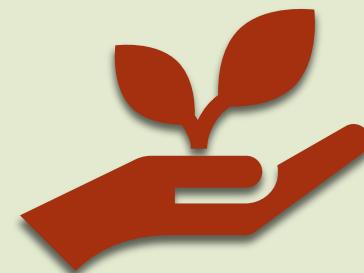
Prioritize accessibility in AV development

Conclusion:
A Safe, Ethical Path Forward

Canada's AV framework focuses on safety, privacy and equity.

Future AV integration depends on strong ethical standards and public trust.

Questions?

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