

Why Transportation (Engineering)?

Transportation Association of Canada Conference

Nicolas Saunier
nicolas.saunier@polymtl.ca



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Mix of introduction to transportation, personal perspective and advice under the angle of **intelligent transportation systems (ITS)**

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- ▶ what is intelligent in ITS?

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- ▶ ITS is even more multidisciplinary

Challenges in Transportation

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- ▶ Health impacts: road accidents, respiratory diseases, lack of physical activity leading to an obesity epidemic

Some Solutions

- ▶ Building more roads?

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- ▶ Optimize the existing infrastructure

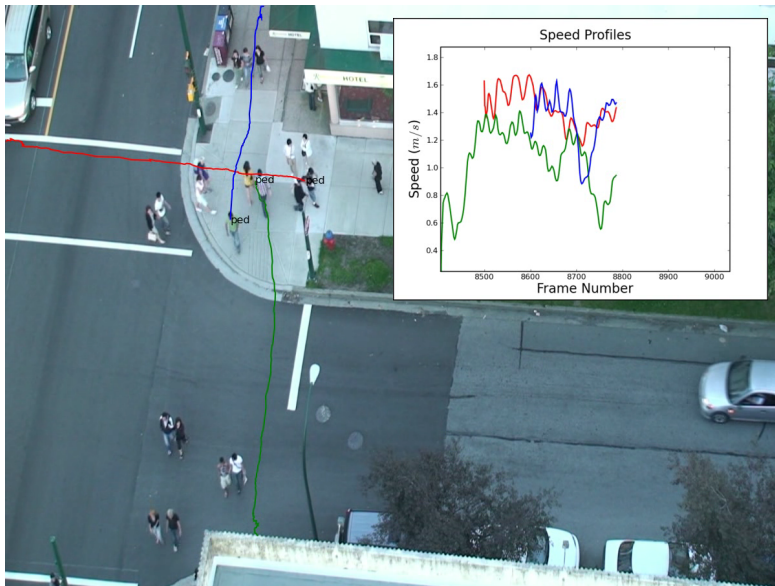
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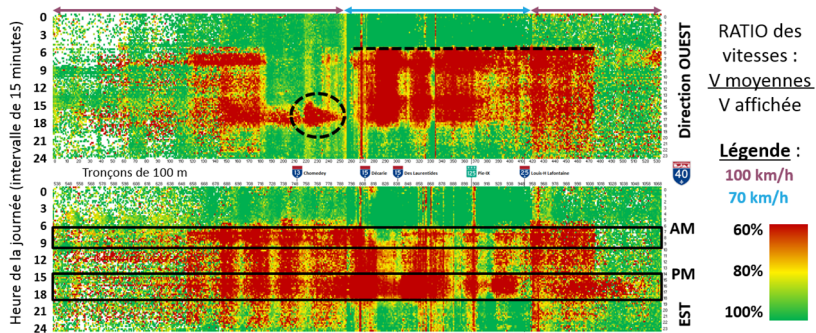
- ▶ Building more roads?
- ▶ Optimize the existing infrastructure
- ▶ Manage demand, e.g. through real time pricing
- ▶ Collect better data and provide real time information

Current Research: Video Analysis and Road Safety



Videos

Current Research: Probe Vehicle Data Collection



(MTQ project led by Prof. Catherine Morency)

Game Changers

Game Changers or Not?

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Game Changers or Not?



(source)

Game Changers or Not?

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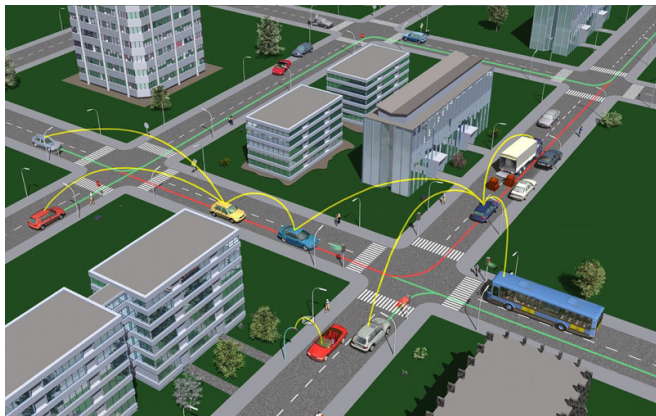
ROAD TO THE FUTURE

Autonomous Cars Will Make Us Safer

By [Daniel Bartz](#) November 16, 2009 | 8:00 am | Categories: [Cool Cars](#)



Game Changers or Not?



(source)

Unprecedented Time of Opportunities

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- ▶ New models of organization: open source software, open data, open science
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- ▶ Make things, participate in hackathons, find your closest hackerspace/fablab