



Seeking sustainable mobility

Traveling is always an eye opener. After several weeks on the road, we're back with an even stronger conviction that MARCON's new mobility model is the optimal way to a cleaner, more efficient and universally accessible transportation in the future. But we have also come to the conclusion that it not only can, but it must evolve to a financially self-sufficient and s u s t a i n a b l e p u b l i c transportation system.

Governments cannot tax their citizens any more than they already are. Quite the opposite, governments must

deliver better value to their citizens.

Public transit undoubtedly delivers great value to those of us living in urban areas (the great majority of the Canadian population). But the model on which it is built is simply not sustainable. Most transit systems increase their losses with additional passengers. As all government levels declare being short of revenues, it should be obvious that the business model must change if public transportation is to live up to its full potential.

The extensive road infrastructure we have laid

across the country cannot be indefinitely expanded and is becoming increasingly onerous to maintain. The help of the private sector through mechanisms such as public-private partnerships is only taking us part of the way to a solution as the state invariably inherits the assets from PPP ventures, and with them, a great deal of financial responsibilities for maintaining them.

Every morning, a great many of us get into our expensive vehicles (the average total cost of ownership of a car is approximately \$12,000 for a



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run of the mill vehicle, 18,000 km / year but can easily exceed \$1/km for many of us) to line up for an hour in traffic and park that vehicle in an expensive lot while we We repeat the work. frustrating exercise in the evening. Why? Because alternative modes of transportation (including public transit) are not yet convenient enough for many of us, and not accessible enough for others.

While commuter parking lots represent an improvement in terms of making public transit more accessible, getting there means that we must use a car before we can save time on a crowded highway. This results in spending more on transportation (the price of the bus pass added to the expense of owning and operating a vehicle) and making even less use of an expensive asset. Reasonably, we cannot continue spending the amounts required to sustain a car we barely use 5% of the time because public transit is not convenient. makes no sense, not from a personal perspective and not from a societal perspective.

Indeed, neither the private nor the public model is financially sustainable in the long term. And remember, in both cases, we, taxpayers, pay the entire bill. Whether you use them or not, you pay into the current transit system and the current road infrastructure through your taxes. Clearly, we need a much more rational and sustainable model.

Shared mobility is our best hope for such a model.

With the availability of technology (through our smart phones) allowing us to use alternative modes of transportation more efficiently, our current mobility options will make less and less sense in the future.

Add to this technology, a shared fleet of vehicles that can accommodate every need, and we can reduce our individual mobility costs while improving convenience and productivity. With a shared fleet of vehicles, we can also reduce our carbon footprint, even with conventional internal combustion engines. So imagine if we used a shared fleet of electric vehicles!

- But wait, that's not all. With a shared fleet of clean autonomous vehicles, we will be able to ...
 - shrink our overall cost of transportation

- almost eliminate our emissions
- eradicate congestion in our cities
- save most of the 2,200 Canadian lives lost in road accidents every year
- avoid the large, large majority of the 170,000 road injuries that occur in Canada annually, and
- diminish our tax burden through savings in health and transportation.

And, ALL THIS CAN BE MADE FINANCIALLY SELF SUFFICIENT WITHOUT ANY GOVERNMENT SUPPORT OR INTERVENTION after we make the transition.



What is needed is a vision, some political courage, the will to succeed and appropriate planning. We are ready. Are you?



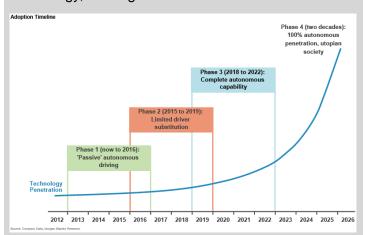
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In the news

Morgan Stanley: Global savings from autonomous vehicles \$5.6 trillion per year

It is estimated that the **annual savings** associated with this technology equate to \$1.3 trillion for the US (8% of GDP). The anticipated adoption timeline demonstrates a rapid pace of penetration of the technology, starting in 2022-2023.



NJ Transit to offer Vanpools statewide

We are witnessing new examples of multi-modal mobility daily. Based on what we heard at CUTA's conference last week, we believe many of the transit properties in Canada will be leaders in this space. http://www.sacbee.com/2013/12/02/5963471/enterprise-rideshare-partners.html

Sweden: the world's first public pilot for driverless cars

Volvo will test 100 driverless cars in Sweden http://www.digitaljournal.com/article/363216

UK government has announced it wants to make the UK a world centre for the development of driverless cars

http://www.bbc.co.uk/news/technology-25230483

California's DMV released new regulations for testing of autonomous vehicles http://www.scpr.org/news/2013/12/04/40747/driverless-

The impacts of autonomous vehicle technology are starting to be felt

We have discussed, on several occasions, that the new mobility landscape (and more specifically, autonomous vehicle technology) will have important consequences on numerous industries. One of these industries is P&C insurance.

Recently, Steve Kuhn, Head of Fixed Income Trading at Pine River Capital Management, discussed, on Bloomberg TV, the reasons for shorting Progressive Insurance. http://www.bloomberg.com/video/why-is-steve-kuhn-short-progressive-insurance-FXWnvCfPTjmA26CzZrcerg.html

Progressive's revenues are highly (>90%) concentrated in auto insurance. Despite the fact that the company, according to Kuhn, is a well-managed organization, the share is trading at 18 times earnings - higher than their competitors.

The other reason for shorting Progressive: driverless technology. While, he acknowledges that vehicles that drive themselves will not be on our roads tomorrow, he feels explains that as the level of automation of these vehicles increases, the number of collisions should decline, translating into lower premiums.

Eventually, with the arrival of Level 4 automation, the insurance model will change completely.



