

PODCAR CITY

The Advanced Transit Symposium with Podcar City 7 will take place at the George Mason University in Arlington, Virginia from October 23 until October 25

THE PODCAR CITY CONFERENCE 7 AND THE ADVANCED TRANSIT SYMPOSIUM IN WASHINGTON D.C. 23.10 - 25.10 2013

INNOVATION IN PUBLIC TRANSPORTATION



Conference keynote presentation:

CONGRESSMAN JIM OBERSTAR

It is a pleasure for us to present Mr Oberstar as keynote speaker at the Podcar City 7 Conference in Washington DC October 23-25



James Louis "Jim" Oberstar is an American politician who served in the United States House of Representatives from 1975 to 2011. He was chairman of the House Transportation and Infrastructure Committee from 2007-2011 and is a member of the Democratic Party. Full bio available at www.podcarcity.org/washington

Newsletter #2 August 15

In this issue:

Keynote: *Jim Oberstar*
ATN: *Modutram Development*
Elon Musk: *Hoperloop and ATN*
Self Driving cars: *Stanford Update*
Meetings: *Aerospace June 28*
Plus Program Update!

Important Hotel information

The official hotel is Best Western Pentagon with adjacent Comfort Inn as an option. All information on Registration and Booking is available at:

www.podcarcity.org/washington

The Podcar City Conference is about Transportation and Innovation. Not just a better car, bus or time table. We need real innovation in transportation. We need to explore the Next Generation which will be safer, faster, more reliable, efficient and just more plain fun to use than what we have today. A lot of thought has gone into the ideas of Automated Transit – Podcars, self driving cars, people movers at airports, automated subways and not least how to link them with existing systems. Podcar City is the world's largest meeting on this topic, the seventh since our first gathering in Uppsala, Sweden, in 2007. We welcome all professionals and interested parties who are affected by today's broken transit system and think we can actually do something about it. You will meet speakers and participants from many backgrounds working together, making the sessions anything but ordinary.

OCTOBER 23-25 2013

AT ISSUE: To provide a networking environment to educate, facilitate and convene for a free flow of thoughts, ideas and concepts - to develop and showcase new and improved modes of transportation based on sustainability and renewable energy so that the efficiency and state of existing transportation systems can be improved and enhanced.

As organizers, we are happy to have representatives from US DOT, many prestigious Universities, industry, elected officials and civil servants from all over the world ... and not least you ... to help us make real change in today's world with serious issues about how we move around and how we use our resources.

Welcome! And let's do something extraordinary together!

Christer Lindstrom, INIST

PROUDLY PRESENTED IN COOPERATION WITH:



MODUTRAM ATN Technology goes ahead



MODUTRAM's GRT (Group Rapid Transit) system is an open innovation platform designed to meet the demand for sustainable transportation in Latin America. The company has worked with partner companies, universities and research centers over the past three and a half years, and now has a complete test track that includes 660 meters of track, 2 vehicles, a passenger station, a separate maintenance station / control room, and the control system. One important focus of the development work was to integrate existing technologies in an innovative way, striving to minimize the initial investment required for a specific installation.



MODUTRAM will launch the first version of its system for tourism applications in 2014. Their ATN system is impressive and we very much look forward to hear more about it at the Podcar City Conference, October 23-25 2013.

Some facts: The test track has a low-speed inner loop at ground level and a connected high-speed elevated outer loop. It includes two 15% inclines (up and down ramps), curves with 3-meter radius, and a total of 4 merge and 4 diverge sections. Vehicles are 1.55 meters wide and the track is 1.20 meters wide. MODUTRAM representatives are open to working together with additional partner companies, including those offering solutions that incorporate renewable energy, including solar, in the design.

Lizie Michel, INIST

Three other active vendors of ATN systems today:



Vectus



Ultra

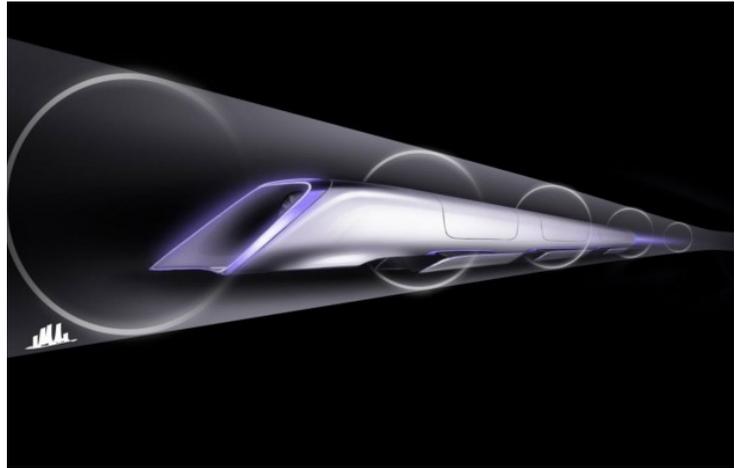


2Getthere

Not registered yet?

Goto www.podcarcity.org/washington and register now!

Elon Musk, HyperLoop and what's really important in innovation for public transportation



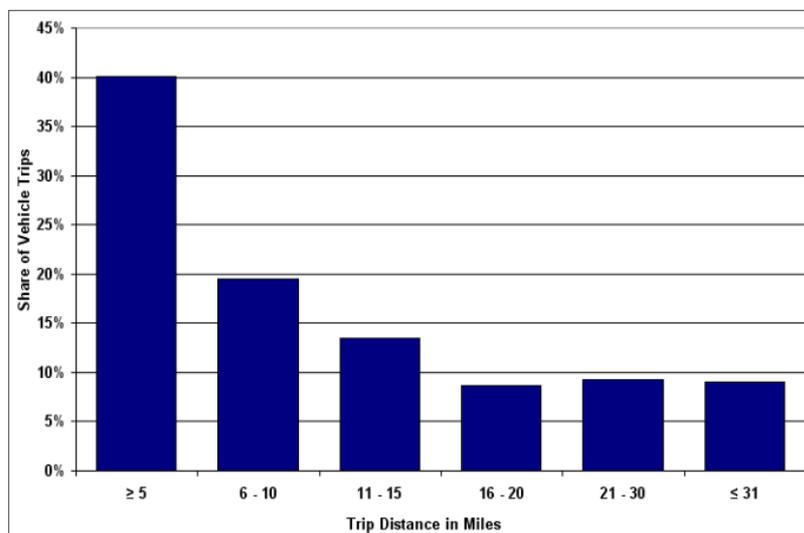
By Christer Lindstrom, INIST

Recently **Elon Musk**, a well known entrepreneur in California, proposed a very high speed transportation system called Hyperloop. As with other early stage inventions and ideas, this concept also has a combination of interesting features and technical issues to address before it can become a reality. As a proponent of change in the transportation industry toward automated and energy efficient systems, I am of course happy that this idea has gotten such global coverage. I will nonetheless make one important point in order to provide some perspective on Mr Musk's concept:

Almost all transportation is local.

The longer the distance between two points, the less likely the need for transportation. Stated differently, the potential impact of local change will be 10x that of long distance transportation solutions. Most motorized trips are very short, 5-10 miles, and if you include commuting, well over 90% take place within 35-40 miles. Also important is the impact transportation has on liveability. Cities are heavily saturated with idled cars. The vehicles moving are far fewer than those parked. A high speed rail or Hyperloop goes from node to node and therefore it does not impact the city very much except for a central station in or near the city core. These two factors – that almost all travels are local and that personal cars are used for a large portion of those travels – translates into what our focus must be. First we must address the issues at hand with short trips, then we can think about Hyperloops and other hopefully great ideas about new kinds of transportation. I think Hyperloop and other ideas deserve attention. Resources will better serve society when applied where the gain is the most rewarding.

Graph below: Statistics 2009 on Miles traveled by car – Source: <http://nhts.ornl.gov> and www1.eere.energy.gov/vehiclesandfuels/facts/2010_fotw612.html



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Cars without a driver = Great benefit for ATN development

By Christer Lindstrom, INIST

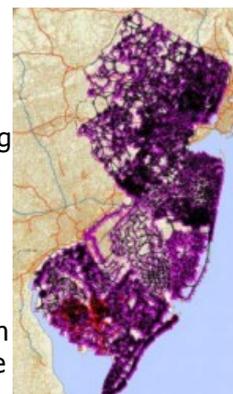
Alain Kornhauser has more than most people involved in the ATN community looked into both ATN and self driving cars. In the recent years Alain has worked on a very interesting study of a large ATN network covering most of New Jersey. In addition to this he has also started looking into the impacts of a fleet of automated taxis based on self driving cars.



There are a few important observations from his research that ATN proponents should seriously consider thinking about. The two most important lessons and observations are for me the following:

- **No system is ever stronger than its weakest point**

In the design of a large scale ATN system the NJ example shows that the cost/benefit ratio could be questioned. The average trips/day cost was to me a bit high, over \$20 per day/person. That is lower than with using a car but still a bit high. The study did not as I could see take into account the reduced cost for parking and less energy use though, so I look forward to a more comprehensive analysis on the societal aspects of the large network.



- **Features of an ATN system can be emulated with Automated taxi system**

This work is very interesting to me – I had proposed such a study in 2008 at the Ithaca Podcar City conference and even put in a business plan request together with people at University of Wyoming, Laramie. I see now that this is actually being done at Princeton by Alain and his team. The concept is labeled **aTaxi** and the results so far are encouraging to read.

New Jersey Large Scale ATN System

Alain is one of the moderators and speakers at the Podcar City Conference in Washington DC October 23-25. For those who have interest in automated cars, the aTaxi concept and not least his experience from the large scale New Jersey simulation I recommend you to participate in his presentation. Anyone wanting to read the entire presentation, please see www.cs.princeton.edu/courses/archive/fall12/cos402/readings/kornhauser_slides.pdf

Update: Aerospace Corporation

On June 28 a workshop was held at Aerospace corporation in collaboration with the City of San Jose and the Mineta Transportation Institute. The presence of US and international expertise was impressive. The presentations were mainly on the findings from the earlier released ATN report initiated by the City of San Jose. The report was probably the most comprehensive ever on an ATN specific implementation study.



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PROGRAM UPDATE -August 21

For full program please see www.podcarchive.org/washington

Who's coming so far? Advanced Transit Association, Aerospace Corporation, Arlanda Airport, Beamways AB, University of California Irvine, Department of Transportation, Federal Transit Administration, George Mason University, Google, Greenville County SC, University of Southern Illinois, KOMPASS, Mineta Transportation Institute, Modutram, City of Mountain View, Institute for Sustainable Transportation, International Institute of Sustainable Transportation, Lea+Elliott, City of Minneapolis, Mobility Lab Arlington, Princeton University, City of San Jose, University of San Jose, City of Santa Cruz, City of Sigetuna, Stanford University, City of Sunnyvale, Swedish Transportation Authority, Swenson Solar, Trans.21, City of Tyresö, City of Umea, City of Upplands Vasby, City of Uppsala, City of Varmdo

Wednesday October 23 – Venue TBA

6:00 pm - 7:30 pm - Welcome Reception

Institutional welcoming committee remarks by:

US DOT, Swedish DOT (Trafikverket), KOMPASS, ATRA, INIST, MTI, Lea+Elliot

Thursday October 24 - George Mason University, Arlington Branch

8.00 Registrations and Exhibits

8.30 Welcome Remarks

8.50 Keynote Speaker TBA

9.15 Conference Overview and Workshop info

Short information about the conference with all sessions presented by the moderators for each track.

*Innovative Transportation Technologies – Running Projects – Stan Young, ATRA
Emerging Transportation Technologies – R&D- Alain Kornhauser, Princeton University
Urbanism & Transit – An overview- Shannon McDonald, Southern Illinois University
A General Transportation System – Kjell Dahlström, GTS Foundation
Planning in practice – Examples- David Little, Lea+Elliott
Software Tools – R&D- Ingmar Andreasson, Logistikcentrum
Economics and Financing – New and old models- Donna Maurillo, MTI
Swedish-US Memorandum of Cooperation – Cities for change – Matthew Lesh, US FTA
Station and Real Estate Transit design – US and SE – Susanne Ingo, Trafikverket*

9.45 Innovative Transportation Technologies – Running ATN Projects

Moderated by Stan Young, ATRA

What is the status of the operational ATN systems today? What projects are we to expect in the near future, and what about the test tracks running?

Presentations of systems Ultra, Vectus, 2Getthere, Minimetro, Modutram and more.

10.45 Break & Exhibits

- 11.15 Emerging Transportation Technologies – R&D
Moderated by Alain Kornhauser, Princeton University
A series of projects using self driving cars for new mobility solutions are emerging.
How can this technology promote public transportation, and what is the state of art?
- 12.15 Lunch at venue
- 13.30 Breakout session A1- Main Venue - Urbanism and Transit – an Overview
Moderated by Shannon McDonald, University of Southern Illinois
How do new ideas in transportation solutions play into the urbanism planning processes?
What are the obstacles and possibilities?
- 13.30 Breakout session B1- Exhibit Hall – A General Transportation System
Moderated by Kjell Dahlström and Jan-Erik Nowacki, GTS Foundation
The GTS concept takes podcar technology to a globally standardized level.
What would the implications be of a much larger network than just local feeders
and distribution systems?
- 14.45 Break, Exhibits
- 15.10 Breakout session A2- Main Venue – Planning in practice
Moderated by David Little, Lea+Elliott
A lot of experience can be drawn from practical implementations in the US
and elsewhere. Automated systems and new ideas can be challenging to accept
for a transit agency, and the rise of these systems at congested areas shows
potential for much more than what is implemented today.
- 15.10 Breakout session B2- Exhibit Hall – Software Tools for planning
Moderated by Ingmar Andreasson, Logistikcentrum
A general problem with working with new modes of transportation is the fact that the current
planning tools and software packages do not include such possibilities. However, a series of
recent developments has proven to be effective for change. This session focuses on such
ideas, in practice and theory.
- 16.25 Final first day panel discussion
Moderated by former Congressman Jim Oberstar
- 17.00 End of Day one
- 19.00 Conference Dinner, Venue TBA
Dinner speech TBA.

Friday October 25

- 9.00 The Swedish – US memorandum of cooperation – current projects and initiatives
Information from Matthew Lesh, DOT and Christer Lindström, INIST
Since the agreement was signed in September 2010, a series of events and projects are
underway. We will hear from DOT, Trafikverket, KOMPASS, Academia and businesses
on what is going on right now plus from four cities working on change in Sweden and USA.
- 10.15 Break and Exhibits

10.45 Financing & Risk Management

Moderated by Donna Maurillo, Mineta Transportation Institute

How do we finance new modes of transportation? What are the risks and how can we mitigate them?

12.00 Lunch and Exhibits

13.30 HSR, Station and Real Estate Transit design – connected systems and ideas

Presented in cooperation between by US DOT and Trafikverket

Moderated by Susan Herre and Susanne Ingo

The point of mode change is one of the strongest drivers of development, but also an achilles heel of the transit system – we prefer not to change. How can ATN and other new technologies enhance the design and use of High Speed Rail, and other modes of existing transportation?

14.45 Special Workshop TBA including the MTI Report

16.15 End of Conference – Final Panel – Solar Skyways Prize