

Podcar City 2014 - Newsletter July 28 2014

Podcar City 8 -More ATN interest than ever!

This year we have seen a dramatic surge in conferences, seminars, development and not least public interest in ATN and related technologies. Automation In this newsletter you can read about the display of a Podcar at the Swedish Almedalen Week, an exciting report from San Francisco about the team at San Jose state University and their display at the huge Solar Conference plus much more.

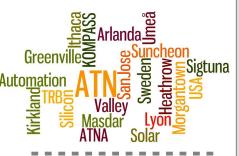


The conference is addressing you as a real estate developer, urban planner, elected official, agency person, academic, architect, traffic planner, consultant and others who are involved and concerned about how we form the emerging urban society today and for Future Generations. The 2½ day conference will cover different topics:

- Podcars at airports for mobility and development
- Urban trends and added values with Podcars
- Land use challenges and opportunities with Podcars
- State of the Podcar Industry
- Procuring process, business and financing models .. and more!

REGISTRATION, MORE INFORMATION AND CONTACT:

http://podcarcity.org/arlanda



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A PODCAR AND AN ISLAND FULL OF POLITICS



Every year the Swedish top politicians, decision makers and agency leaders join together in a one week meeting of politics, policy and research at the island of Gotland, Sweden. The meetings always take place the first week of July and this time the Swedish legue of cities interested in ATN Technology KOMPASS organization was represented with a real Podcar for display.

The Podcar was loaded with information, a large video screen, virtul simulations provided by 4Dialog and even a 3D glass setup was available, much to the njoyment of everyone trying them on. After an intense week it is clear to all of us at the booth – Podcars are very well accepted by the general public, it's actually the politicians that for some reason thinks people might be hesitant. Over the full week of 500 people sat in the podcar and 499 were positive and only one negative...and yes, he was intoxicated. The Sweidhs national elections will be held September 14, and the Podcar will be on display all over the Stockhol area before the elections for people to touch, feel and experience the possibilities of future transportation in Stocholm and Sweden.



The podcar and ATN Vislualization by 4Dialog with Oculus Rift was one of 3,500 events going on at Almedalen, July 2014



(c) SJSU 2014 – Shortened version. Full article with photos at http://engineering.sjsu.edu/news-and-events/news/sjsu-students-unveil-their-innovative-solar-powered-automated-transit-network? page=0%25%202C1%2C1

SJSU students unveiled their innovative solar-powered Automated Transit Network design at July 8-10 Maker Faire

All aboard the ATN

When you think about Silicon Valley, usually innovation comes to mind – next might be traffic congestion. With the INIST collaboration, SJSU Spartans focus on both. Professor Burford Furman challenged his mechanical engineering students to pursue INIST's design challenge – the Spartan Superway project to create a solar-powered ATN is the result. The Spartan team won a \$5,000 prize for their submission. There were about 20 students who participated with the founding Spartan Superway team, but since then, that number has nearly tripled.

Connecting the cabin to the bogie. Students attach a mock-up of the cabin to the movable support that travels along the guideway. It takes an enormous network of players to design and develop the ATN system – eight design teams, four colleges (Davidson College of Engineering, College of Business, College of Humanities and the Arts, College of Social Sciences), including approximately 100 students over four semesters, faculty, alumni, program managers, corporate mentors, advisors and donors, and government leaders in six Bay Area cities.

Cory Ostermann, a senior, in mechatronics who serves as lead on the hardware controls team, has worked at least 30 hours a week to get ready for Maker Faire. "The Spartan Superway isn't just another class project," Ostermann says. "It's been a unique opportunity to work in an environment more akin to an industry internship, with multiple teams of engineers working towards a common goal. More importantly, it's an opportunity to affect change in the world and help shape the future," he says.







<u>Future stops – the sky's the limit</u>

The future seems bright for this enterprise – with limitless possibilities to expand. "It's exciting to consider all the possibilities to increase the academic connections for this effort on campus," concludes Furman. "For example, sociologists can help us understand what people value in personal mobility; economists can determine the impact of ATN on the automobile industry, new industries, or economic changes if car ownership and usage is reduced; environmentalists can explain the impact on the environment if ATN is widely adopted; and communications/marketing professionals can help us educate the public about a new transportation paradigm."

However, funding is critical, reports Furman. To expand the effort, SJSU has applied for an NSF grant of \$10.2 million, in conjunction with several institutions and international partners. "We've not yet scratched the surface of seeking funding from other sources," he says.



ADVANCED VEHICLES SYMPOSIUM JULY 15-17 by Larry Fabian

The 3rd Automated Road Vehicle Symposium (ARV-3) was held in San Francisco the week of July 14, or more precisely at SFO, the airport south of the city. Several TRB committees organized the program in conjunction with the Association for Unmanned Vehicle Systems International (AUVSI). ARV-1 was held in Irvine in 2012. Last year it took place at Stanford University. With attendance and interest growing, this year it was at the Hyatt at SFO.

This ARV-3 session explored evolutionary and revolutionary pathways to leverage automation in public transportation. Eleven speakers shared perspectives and thoughts over a wide range of issues, including the influence of the mobility revolution taking place with web- and app-enabled ride- and vehicle-sharing. How do automated vehicles intersect with public transport? Sam Lott noted that it was about fifty years ago that full automation was introduced to mass transit. He stressed that there are many lessons from this transit experience for the ARV world. He pointed to opportunities of using transit operations as excellent testing grounds for automation concepts.

International Perspectives

Christer Lindstrom described Stockholm's interest in ATN to prevent more 'rubber on the roadways' in their complicated, island-speckled metropolitan area. ATNs were mentioned in the USDOT's research agenda by Vincent Valdez of the FTA. He organized a breakout session on 'Mobility on Demand' -- transit that puts a premium on passengers.

ARV-3 elicited much thought provoking comments and insights from Adriano Alessandrini, Rod Diridon, Neil Hoose, Joseph Kopser, Jerry Lutin, Brian O'Looney, Louis Sanders, and Susan Shaheen. Presentations will be available on the ARV conference web site. Proceedings are being compiled. Breakout session organizers included Dan Fagnant, Reuben Juster, Alain Kornhauser, Walt Kulyk, Scott LeVine, Rachel Liu, Shannon Sanders McDonald, Nazy Sobhi, and Stanley Young.

ATRA Workshop

The week ended with an ancillary workshop entitled 'Envisioning Automated Vehicles within the Built Environment: 2020, 2035, 2050'. It was targeted to staff from MPOs, county and regional agencies. It had a strong planning contingency, designed as a charrette examining various aspects of the built environment. How would ATN impact, and hopefully improve communities by the anticipated proliferation of ARV in various forms. The mini-charrette held at Technix-2014 provided inspiration for hosting this Silicon Valley event.

The ATRA Workshop was attended by over 85 professionals from the Bay Area and many from the ARV symposium. Attendees broke into smaller groups, each addressing a specific concern or aspect, one even dedicated to ATN.

Hopefully it opened minds. Many problem and design scenarios described came to inevitable conclusions that point to what ATN would comprise or problems ATN would solve. And these require some level of public ownership and the need for some kind of central 'control'.

SJSU Professor Burford Furman noted that autonomous vehicles alone will not cut it. Central management and control are needed, Otherwise ARVs will mean more congestion, more sprawl, and perhaps greater social inequity, parking needs. ARVs will potentially interfere with walkers and bikers as well as street traffic. He brought up important energy issues that figure big into policy-making for future transportation. He felt that many ATN 'enthusiasts' pay little attention to the bigger energy picture, and GHG and climate violence.



MODE SHIFT

By Larry Fabian, Editor of Podcar.org

In previous centuries, change came with the new generation. Today, for the first time in history, change is coming to all generations. Adults and seniors are adapting to their new environments with life-style changes born of necessity. Part of that is their mobility, and a big shift just happened in Boston.

Twenty years ago, everyone with common sense, a few bucks in his or her pocket and self-respect owned a car. From 1960 to 2000, it was unthinkable that state and metropolitan officials would adopt a major public work plan for pedestrian and biking infrastructure with excellent prospects for funding. A bike/ped shift has happened in Massachusetts, not just the City of Boston, but with Cambridge, Somerville and scores of suburbs that make up the larger "Hub" of Massachusetts Bay. It's totally awesome!



courtesy of: www.ecowatch,org

Modes and Modalities

In the world of government budgeting, the elevation of biking and pedestrian amenities on the modal menu with highways and conventional transit is significant. It was powered by the cooperation of strong pedestrian advocacy, active cycling interests, demanding transit users. It happened in a Federal context changed by former USDOT Secretary LaHood who opened doors to funds for biking projects.

Massachusetts has flung them wide open! This shift is likely to spread to others cities and urban regions across the USA. It already has. A growing number of people of all generations willingly choose not own cars. With Zipcars and carsharing, there's a new calculus in mobility thinking. Those who don't own cars save, on average, \$8000 a year and are healthier because of aerobic mobility. They burn less petroleum and add fewer molecules of carbon dioxide to the atmosphere. By and large, they don't know about, nor do they care about details of PRT or podcars.

Professional Shifts for Life-Style Shifts

A growing tide of life-style shifts is upon us. It is here. Hail to Boston Livable Streets, who beam visions of greenway paths throughout Greater Boston, and the new generation of city walkers who have turned throw-away neighborhoods into thriving communities where not to own car is cool. Where will new generations of architects, engineers and planners take this? ATN infrastructure brings several new variables to the financial formulae that will be used for the cost/benefit analysis of ped-bike and transit projects. Fare revenues may be substantial -although taxi drivers may not be happy. ATN guideways can carry conduits for wires, cables and tube systems, adding value to the project. Whether in the public or private sector, the more return there is on an investment, the more likely that it will go forward. Designed with karma-comforting solar power collectors, elevated ATN may be acceptable to community groups. In quiet spots, ATN guideways can run alongside bikers, joggers and walkers. In congested areas, sections can go underground. A new ATN planning resource will soon be published by the Mineta Transportation Institute of San Jose University. Stay tuned!

