

## **Atkinson Center for a Sustainable Future -- Topical Lunch Summary**

**Title: Innovation of the Surface Transportation Sector**

**Organizers: Rick Geddes, Al George**

**Date: August 2, 2013**

### **Attendees:**

Martha Armstrong, Lauren Chambliss, Ricardo Daziano, Fernando De Aragon, Frank DiSalvo, Kieran Donaghy, Oliver Gao, Ephraim Garcia, Rick Geddes, Al George, Brandon Hencey, Ying Hua, David Jung, David Kay, Hadas Kress-Gazit, Michael Manville, Chris Miller, Paul Mutolo, Chen Ng, Linda Nozick, Jonathan Ochshorn, Tom Paige, Omid Rouhani, Joah Sapphire, Helene Schember, Zellman Warhaft

### **Brief Summary:**

#### ***The issue, and why bring it to Cornell***

After going around the room for introductions, Tom Paige of The Aerospace Corporation provided a briefing on the vision of transforming transportation systems – which could transform other urban systems. A recent feasibility study of an automated transportation network system for the City of San José provided a springboard for understanding the challenges. Innovative automated transportation systems will require continued development and integration of complex technology solutions. Innovations in finance, land use, regulation, safety and security, and other systems factors are all relevant to this effort. This problem -- major public sector innovation -- requires a comprehensive, interdisciplinary systems approach. Cornell's broad and deep expertise is well suited to tackling this.

#### ***Managing the systems approach to transportation innovation***

The management structure must be robust for this effort to demonstrate value and potential ROI to both the public and private sectors. The approach must have the quality of a neutral third party that ultimately evaluates the integration of technologies to assure best performance for the public. The management structure must also provide fiduciary oversight and show that there will be return on investment. Controlling risk and clearly defining value are both needed to attract public and private investment.

#### ***Participants' comments***

- Participants across Cornell may volunteer their efforts in developing this idea for a year or two. The early planning then needs to attract funding.
- Creating a virtual center to support the community working on this may be a better approach than creating a facility.
- Need industrial partners to provide matching funds.
- Investment in new technologies will create jobs.
- An earlier Topical Lunch created a group to look at energy transitions. This idea could inspire a similar group looking at transportation transitions
- A number of people in engineering are working on robotics, sensors, signaling and other technology related to automated transportation.

- Be careful not to decide what the “it” is in advance, and then look for applications.
- One of the three research hubs at the NYC Tech campus is “Built Environment”. An initiative around transportation innovation could provide a set of issues to connect both campuses.
- People are not exogenous to this system. Acceptance and finding how to motivate people to use new technologies are part of this issue.
- Innovative transportation technologies could use dedicated right of ways, or existing roads -- not excluding either possibility at this time.
- Consider creative funding ideas, not just taxes, but investment of retirement funds. Would need to show how their investment would make profits for the funds. NYS Common Retirement Fund is the third largest in the US and has no exposure in infrastructure. DiNapoli is the sole trustee.

***Attendees contact information***

Chambliss	Lauren	elc55
Daziano	Ricardo	ra477 (via conference phone)
De Aragon	Fernando	fdearagon@tompkins-co.org
DiSalvo	Frank	fjd3
Donaghy	Kieran	kpd23
Gao	Oliver	hg55
Garcia	Ephraim	eg84
Hencey	Brandon	bmh78
Hua	Ying	yh294
Jung	David	dj59
Kay	David	dlk2
Kress-Gazit	Hadas	<a href="mailto:hadaskg@cornell.edu">hadaskg@cornell.edu</a>
Manville	Michael	mkm253
Miller	Chris	cm284
Mutolo	Paul	pfm2
Ng	Chen	
Nozick	Linda	lkn3
Ochshorn	Jonathan	jo24
Paige	Tom	Thomas.Paige@aero.org
Rouhani	Omid	om67
Sapphire	Joah	j.sapphire@globaldynamicgroup.com
Schember	Helene	hrs6
Warhaft	Zellman	zw16
Geddes	Rick	rrg24
George	Al	arg2
Armstrong	Martha	marthaa@tcad.org