

ECTRI TRB US Scanning Tour 2013 July 21st – 26th

„Transport and Liveability – Sustainability of urban areas“



Tour Summary

By Prof. Dr.-Ing. Uwe Clausen

Valencia, November 14th, 2013

Monday, July 22: Boston / Cambridge, Massachusetts

Visit to MIT, Center for Transportation & Logistics (CTL)

Presentations:

Introductions & Overview of SCALE and CTL

[*Prof. Yossi Sheffi*, Director CTL

& *Dr. Chris Caplice* Executive Director CTL, Director MIT Freightlab]

Introduction & Overview ECTRI

[*Prof. Dr.-Ing. Uwe Clausen*, ECTRI, Director Fraunhofer IML]

Overview of Freight Lab Projects

- State of the Scale Network: The 2012-2013 Update
[*Dr. Chris Caplice*]
- The Impact of Bimodal & Lognormal Distribution in Ocean Transportation Transit Time on Logistics Costs
[*Lita Das*, Doctoral Candidate, MIT ESD, *Dr. Basak Kalkanci*, *Dr. Chris Caplice*]
- Airlift Planning under Uncertainty
[*Atikhun Unahalekhaka*, Doctoral Candidate, MIT ESD]
- Resilient Transportation Planning - WalMart
[*Dr. Francisco Jauffred*, Research Scientist, MIT FreightLab]

Mega City Projects Overview

[*Dr. Edgar Blanco*, Director MIT MegaCity Logistics Initiative]



Monday, July 22: Boston / Cambridge, Massachusetts

Visit to MIT, Center for Transportation & Logistics (CTL)



At MIT we met AGNES at the AGELAB.

We got as a bonus a very interesting introduction to why and how the lab was set up.

AGNES is equipped with a suit, glasses and other devices that the test-person put on to simulate higher age, driving the simulator while researchers register drivers performance under various conditions.

Monday, July 22: Boston / Cambridge, Massachusetts

Visit to MIT, Center for Transportation & Logistics (CTL)

Focus:

- Logistics presentations
- MIT freight transport model system:
reduced empty lorry miles, Wal-Mart saved 20 M \$ per year
- Mega City: last mile in big cities



Monday, July 22: Boston / Cambridge, Massachusetts

Visit of Volpe National Transportation Systems Center

Presentations:

Welcome, Introductions and Overview of the Volpe Center

[*Robert Johns*, Director and Associate Administrator, Volpe; *Anne Aylward*, Deputy Associate Administrator for Research and Innovation, Volpe]

Perspectives of European Transport Research

[*Prof. Dr.-Ing. Uwe Clausen*, Director Fraunhofer IML & ITL, TU Dortmund]

The U.S. national framework for transportation planning and considerations for megaregions

[*William Lyons*, Principal Technical Advisor, Center for Transportation Policy and Planning, Volpe]

Advanced Vehicle Technologies: V2V and Automated Vehicles

[*Gary Ritter*, Director, Center for Advanced Transportation Technologies, Volpe (TBD)]

Has Growth in Vehicle Use Peaked?

[*Don Pickrell*, Ph.D., Chief Economist, and *David Pace*, Senior Economist, Volpe, Center for Transportation Policy and Planning (TBD)]

Global Maritime Domain Awareness (MDA)

[*Kam Chin*, Chief, Situational Awareness and Logistics, Volpe (TBD)]



Monday, July 22: Boston / Cambridge, Massachusetts

Visit of Volpe National Transportation Systems Center

At the VOLPE center we got very interesting presentations from a wide range of subjects:

Decline in overall vehicle kilometers in the USA, national transport planning, a real life test site of ITS solutions with vehicle to infrastructure as well as vehicle to vehicle interfaces and their real-time AIS-data application for maritime vessels globally represented the scope of their activity.



Volpe doesn't get any basic funding from the ministry.

One of the most interesting presentation was given by David Pace: "Has Growth in Vehicle Use Peaked"?

Also, "U.S. National Framework for Transportation Planning and Considerations for Megaregions" sparked thoughts, because, it seems that in the United States, the focus is on the performance of the transport system not in extending the transport network.

Tuesday, July 23: Washington D.C.

Participation in closing session of TRB Conference on
"Transportation and Sustainability: An International Perspective"

Presentations:

**Sustainable Transportation Systems and Sustainability
as an Organizing Principle for Transportation Agencies,
NCHRP 20-83(07)**

[*John Wiegmann, Booz Allen Hamilton*]

**A Guidebook for Sustainability Performance Measurement
for Transportation Agencies, NCHRP Report 708**

[*Josias Zietsman, Texas A&M Transportation Institute*]

**Climate Change and the Highway System:
Impacts and Adaptation Approaches, NCHRP Project 20-83(05)**

[*Michael M. Meyer, Parsons Brinckerhoff*]

**A European Perspective of Current and Future Research
on Sustainability in Transportation**

[*Prof. Uwe Clausen, Fraunhofer IML,
European Conference of Transport Research Institutes*]



Tuesday, July 23: Washington D.C. Meeting with TRB

Before we continued across the continent to Portland (Oregon) we had a touchdown at a TRB seminar in Washington DC.

In the Sustainability Seminar at TRB very renowned researchers presented their NCHRP reports, and the conversation was lively.

Bob Skinner mentioned the ECTRI TRB MoU encouraging both the European delegation and the US researchers to cooperate more closely to the benefit of research and the transport sector.



Wednesday, July 24: Portland, Oregon

Visit of OTREC - Oregon Transportation Research and Education Consortium



Presentations:

Intro to OTREC @ Portland State University (PSU)

[*Jennifer Dill*, Director OTREC]

Transport Intersections Between Science, Policy and Politics

[Prof. R.L. Bertini; Dr. Miguel Figliozzi]

Bicyclists' Intake & Uptake of Traffic-Related Air Pollution

[Alex Bigazzi]

Presentation about ECTRI: Institute of Transport Economics (TOI)

Norwegian Centre for Transport Research, Oslo

[Kjell Werner Johansen, ECTRI, TOI]

History of biking in Portland

[Peter Knooce, City of Portland]



Wednesday, July 24: Portland, Oregon

Visit of OTREC - Oregon Transportation Research and Education Consortium

At Portland State University/ OTREC, the University Transport Centers (UTC) program was shown. Academic and applied research, as well as planning and construction of infrastructure for cyclists, pedestrians, electric vehicles and further development of the tram/lightrail that was introduced from the 1990s.

Portland prioritized soft modes very strong and managed cross fertilization between research and implementation to the benefit of both.



Several networks of the universities compete for transport research funding. OTREC is one UTC, and its themes are the Advanced Technology, the interaction of Transportation and Land Use, as well as Healthy Communities. The latter means much more than the promotion of road safety, including cycling, which is important, both here and in California in general.

Thursday, July 25: Oakland, California

Visit of MTC Metropolitan Transportation Commission

Presentations:

MTC Overview, Plan Bay Area & Climate Initiatives Program

[Ken Kirkey, Director of Planning & Ursula Vogler, Project Manager, Climate Initiatives Program]

Climate Program

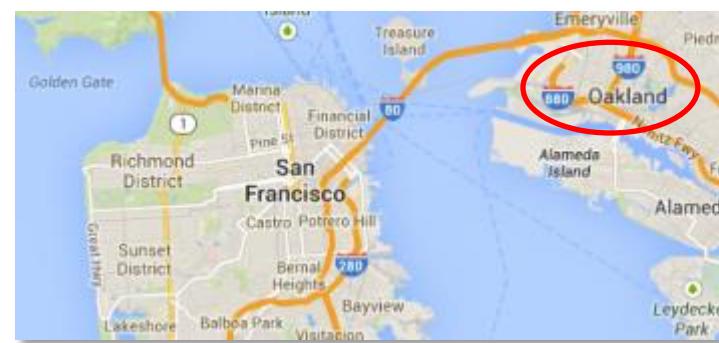
[Carolyn Clevenger, Planning]

Plan BayArea - Sustainable Transportation

[Doug Johnson, Planning]

Presentation about ECTRI: ITS Toolkit and its Knowledge Base / Inference Engine

[Heikki Kanner, ECTRI, VTT]



Thursday, July 25: Oakland, California

Visit of MTC Metropolitan Transportation Commission

Thursday morning we met with the MTC (Metropolitan Transportation Commission for the San Francisco Bay area) and were introduced to their planning for a more climate friendly transport system.



MTC allocates more than 1 G\$ per a year for San Francisco Bay Area transportation projects. Any new project must be included Bay Area Plan to qualify for state or federal funds. According to the plan growth in land use will be directed to the areas (Priority Development Areas), which are already built in areas, which will have public transport connections, and that already have either a housing and/or jobs.

The vast majority (88 %) of funding is spent on maintaining the existing transport network, 7 % on the public transport network and 5% on the road and bridge network expansion. The plan is a set of measurable objectives, related to the desired impacts, and not on the use of money as before. The programme is funding the innovative initiatives related to climate change, tests, etc., that will reduce CO2 emissions.

THU&FRI, July 25&26: Davis, California

Visit to ITS Institute of Transportation Studies, University of California, Davis

Presentations:

Welcome and Introduction to ITS-Davis and UC Davis

[*Prof. Dr. Susan Handy*, Environmental Science & Policy; Interim Director, ULTRANS]

Perspectives of European Transport Research

[*Prof. Dr.-Ing. Uwe Clausen*, Fraunhofer IML, ECTRI]

Reducing Vehicle Travel

[*Prof. Dr. Susan Handy*, Environmental Science & Policy; Interim Director, ULTRANS]

NextSTEPS Program and Research

[*Prof. Dr. Joan Ogden*, Environmental Science and Policy; Director, NextSTEPS Program]

Overview of UC Pavement Research Center Pavement

Sustainability Research

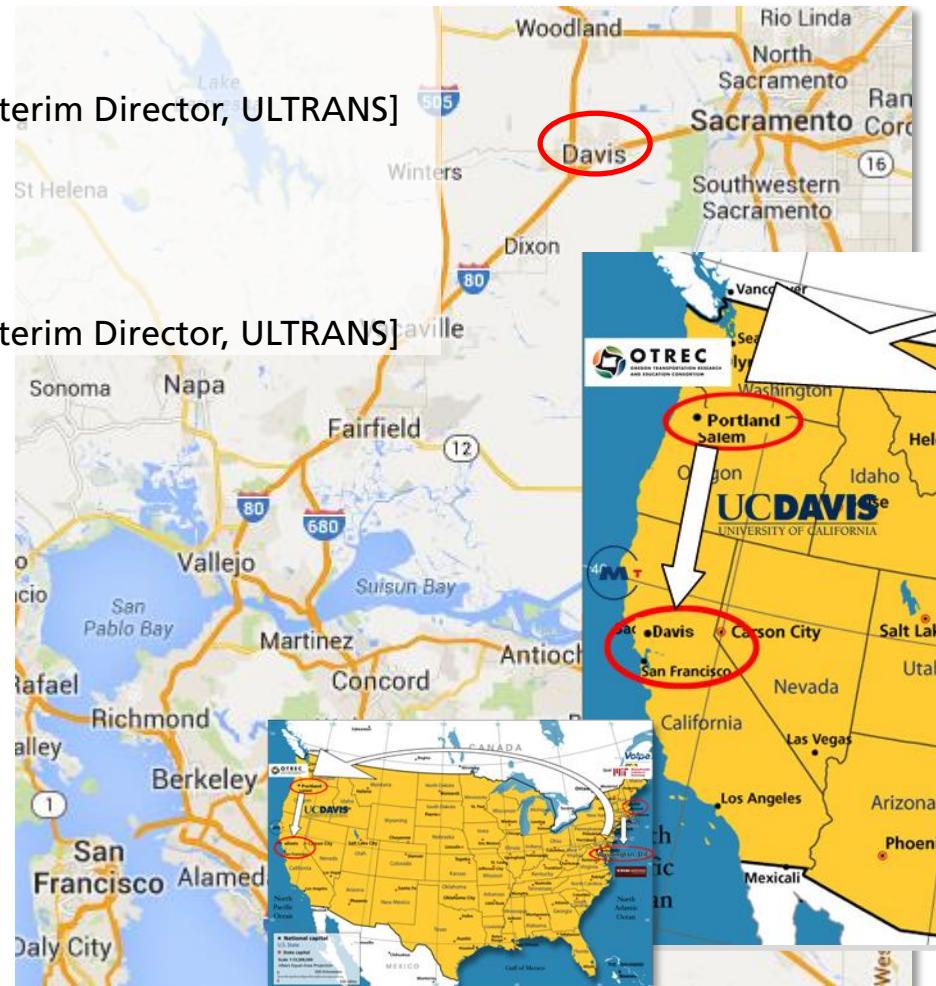
[*Dr. David Jones*, Research Scientist, UC Pavement Research Center (UCPRC)]

California's GHG Policy Model for Transportation

[*Prof. Dr. Daniel Sperling*, Director, ITS-Davis; Member, California Air Resources Board]

Transportation from Human-Centered Perspective

[*Alexandra Millonig*, AIT, ECTRI]



THU&FRI, July 25&26: Davis, California

Visit to ITS Institute of Transportation Studies, University of California, Davis

After lunch on Thursday we transferred by minibus to University of California at Davis and met professors and researchers at the ITS led by Professor Daniel Sperling. In northern California bicycling and public transport was highly focused on the research and planning agenda.



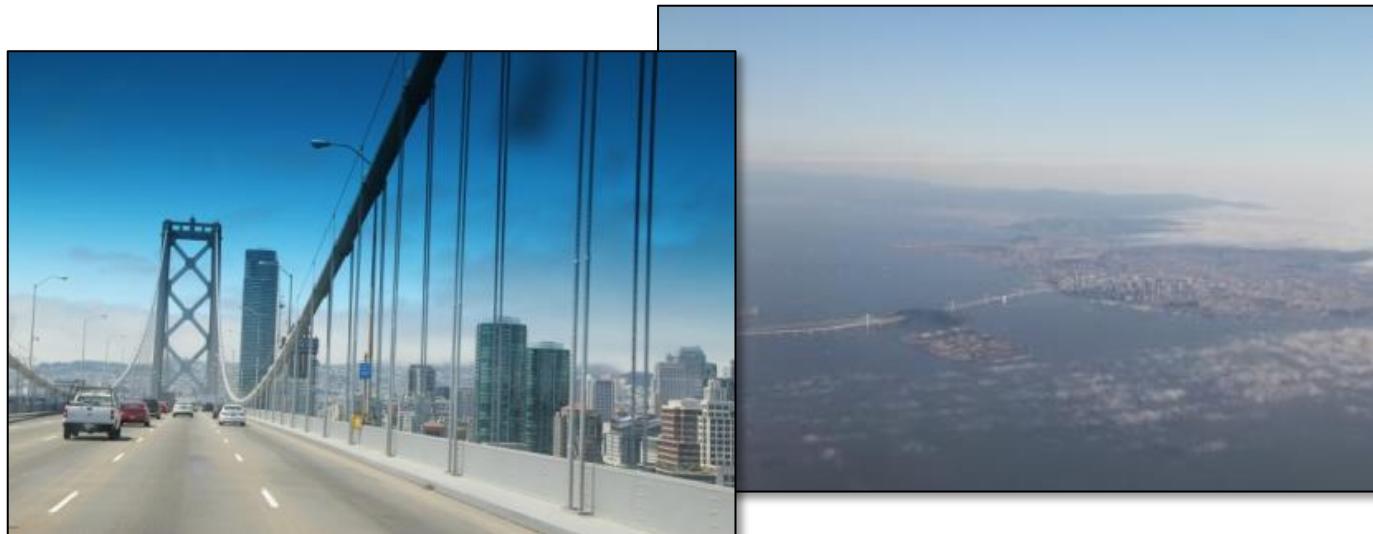
Governor Schwarzenegger's transport adviser Professor Daniel Sperling told about the California greenhouse gas abatement strategy, that is aiming to develop vehicles and fuels, and reduce the vehicle mileage.

After the Tour...

... we learned that only 8 weeks after our scanning tour two universities we visited were among the 5 winners of national grants as 2013 University Transportation Centers:

- Portland State University (Oregon) for “liveable communities”
- University of California (Davis) for “environmental sustainability”

A third university (MIT) is a regional winner with it's safety research.



Thank you !



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