

MINUTES

**Region 10 Research Workshop:
Improving Collaboration in the Northwest**
University of Washington South Campus Center
Seattle, Washington - June 8-9, 2006

Attendees

Ahmed Abdel-Rahim, ahmed@uidaho.edu, University of Idaho
Fouad M. Bayomy, bayomy@uidaho.edu, University of Idaho
Robert Bertini, bertini@pdx.edu, Portland State University
Doug Brodin, brodind@wsdot.wa.gov, Washington State Department of Transportation
Mike Brower, michael.brower@fhwa.dot.gov, Federal Highway Administration
Billy Connor, ffbqc@uaf.edu, University of Alaska
Joseph P. Conway, joe.conway@fhwa.dot.gov, Federal Highway Administration
Karen Dixon, karen.dixon@oregonstate.edu, Oregon State University
Michael P. Dixon, mdixon@uidaho.edu, University of Idaho
Kenneth Dueker, duekerk@aol.com, Portland State University
Jim Elieff, jim_elieff@dot.state.ak.us, Alaska Department of Transportation
Anne Goodchild, annegood@u.washington.edu, University of Washington
Mark Hallenbeck, tracmark@u.washington.edu, University of Washington
Christopher Higgins, chris.higgins@orst.edu, Oregon State University
Eric Jessup, eric_jessup@wsu.edu, Washington State University
Barnie Jones, barnie.p.jones@odot.state.or.us, Oregon Department of Transportation
S.J. Jung, sjung@uidaho.edu, University of Idaho
Richard Krochalis, rick.krochalis@fta.dot.gov, Federal Transit Administration
Michael Kyte, mkyte@uidaho.edu, University of Idaho
Wes Lum, wes_lum@dot.ca.gov, Caltrans
Thomas E. Marchessault, thomas.marchessault@starpower.net, U S DOT, RITA
David McLean, mclean@wsu.edu, Washington State University
Matthew Moore, Matthew.Moore@itd.idaho.gov, Idaho Transportation Department
Christopher Monsere, monsere@pdx.edu, Portland State University
Steve Muench, stmuench@u.washington.edu, University of Washington
Nancy Nihan, nihan@u.washington.edu, University of Washington
Paul R. Olson, paul.olson@fhwa.dot.gov, Federal Highway Administration
Leni Oman, OmanL@wsdot.wa.gov, Washington State Department of Transportation
Lee Padilla, leep20@gmail.com, University of Idaho
Julie F. Rodwell, julie.f.rodwell@odot.state.or.us, Oregon Department of Transportation
Scott Rutherford, scottrut@u.washington.edu, University of Washington
Satvinder Sandhu, satvinder.sandhu@fhwa.dot.gov, Federal Highway Administration
Sidney Stecker, sidney.stecker@fhwa.dot.gov, Federal Highway Administration
Anne Vernez-Moudon, moudon@u.washington.edu, University of Washington
Richard Wall, rwall@uidaho.edu, University of Idaho,
Yinhai Wang, yinhai@u.washington.edu, University of Washington
Thomas Weaver, tweaver@uidaho.edu, University of Idaho
Lei Wu, wu1629@uidaho.edu, University of Idaho
Dave Yonge, yonge@wsu.edu, Washington State University

Welcome/ Introduction

June 8, 9:04 a.m.

Michael Kyte, PhD, PE Professor, Transportation Education, University of Idaho, Moscow, ID thanked Jamie Akiona and Markus Thomi for audio/visual setup.

Historic UTC meeting for Region X. Presented a NY Times article on collaboration. Shared anecdotes about travel. Discussed “organizing the blocks”, taking on responsibilities in even, workable increments. Stated that collaboration will need pooled UTC funds, alignment with NW DOTS, federal government alignment establishing problem statements, pooled funds for multi-state involvement.

Presented program schedule, introduced attendees.

Quotes: “. . .high percentage of Americans support collaboration between NW universities and state DOTS” (*laughter*). “With this sort of outpouring of public support we have no reason to not want to work together.” “. . . hopefully goals can be reached over several months, or even several years.” “Let’s not try to take too big a bite at once.” “I encourage all to be as vocal and outrageous as possible. . .thinking out loud is the only way we’ll accomplish what we want.”

State DOT Presentations

After Mike Kyte’s opening remarks, Jim Elieff of the Alaska Transportation Department gave his presentation.

Jim Elieff’s Presentation

- Outlined department overview, structure, research areas, discussed collaboration with university transportation centers
- Regional boundaries, locations of DOT&PF (three distinct regions)
- Maintenance stations throughout state (84 total)
- 2,113 center line miles (Federal Highway System)
- 1,508 center line miles (Alaska Highway System)
- Airports - 258
- 47 state owned harbors, 21 local government
- 33 ports-of-call, 3500 nautical miles, 10 vessels
- Overview and details of organizational structure
- Org. structure – statewide design and engineering services structure (details)
- Processes used to identify/select research projects
 - Research project selection criteria
 - Projects funded the last two years
- Pooled fund projects

- Expected focus areas
- Research projects by percent of budget
- Expected funding levels
- Links to UTCs
- Opportunities for research collaboration
 - Aspects: Practical, Innovative, On-Time, Within Budget
 - More help in identifying and developing research needs
 - Foster relationships between practitioners and UTC academic communities
- Roadblocks to research collaboration discussed
- What can UTCs offer?
- Discussed how best to eliminate wasted efforts
- Took questions

Quotes: “Let’s give Mike a hand for providing a template, without it we’d not be able to go off in eight different directions” (*laughter*). “We’re behind schedule, probably has to do with me just being hired in December.” “\$5m worth of research needed in our wish list.” “My Picasso. . .is this chart on where we’ve spent our research dollars in past.” “Heavy into construction and materials” “More money in 2003 than we have today.” “Billy and have been talking about improving MIA.” “Have discussed participation between research folks with Billy’s UTC on some advisory committee.” “We welcome participation of UTCs in research in technology transfer.” “We can really use the help in identifying and developing our research.” “Very parochial in the research topics we choose to fund.” “Not stingy or closed minded in our choices.” “Selection process very simple and flexible.” “Can UTCs put a catalog together of their capabilities – handy thing for me.” “Are UTCs competitive or collaborative?” “Can they provide a single point of contact?”

Matt Moore, Research Manager of the Idaho Transportation Department

- Organizational structure
- Responsible for: All ITD Contract Research, T2, UTC, NCHRP, TRB, AASHTO SCOR & RAC, NTPEP, NPHQ, SGTDD, Pooled funds, SHRPP II & State Forces research
- Discussed process to Identify/Select Research Projects
- Projects funded the last two years
- Pooled fund projects
- Expected priorities of focus areas
 - Education system
 - Relevance
- Discussed expected funding levels

Quotes: “Past amounts of pooled funding does not represent what we have in mind for the future.” “Priorities of focus areas not an end, but a means to an end”

“Really want to focus on the higher education system.” “\$1.4m total funding levels” “Want research to be outcome driven. . .heavily focused on outcomes, re: NIATTs” “Have had discussions about timeliness, equity between organizations.”

Barnie Jones, Oregon Department of Transportation

- Discussed organizational structure
- Research project selection process
 - Eight expert task groups
- Presented flow chart of selection process
- List of projects
 - Traffic safety/ITS
 - Structures
 - Geotechnical, hydraulic, and environmental
- Pooled fund projects
 - RAC supported
 - Three other sources
- Research priorities
- Opportunities for research collaboration
- Funding levels (\$2m)
- SPR research program (\$2.6m)
- Expenditures
- Links to UTCs
- Roadblocks to research collaboration

Mike Kyte invites questions for first three presenters. Discussions are inaudible.

Quotes: “Recently put both sides of SPR program under one manager, but it also presented an element of a raid on the money – has actually worked out real well.” “I’m a little staff heavy.” “Significant staff capability, six with advanced degrees, much research experience within staff.” “We’ve always invited universities to participate in our process.” We invite CTS researchers to adopt ODOT initiated problem statements at the second stage.” “We’re trying to vet as much of our program as possible through the CTS process.” “We get 125 problem statements a year, each expert of every task group looks at 20” “Have had success with multi-university projects, but collaboration piece has fizzled”. “Compound overhead is a problem.” “We won’t be able to work with out of state universities for a while in order to maximize work we do with CTS.” “We have issues with pooled fund projects” “I’m sure I’ve used up way more than my share of time.”

Doug Brodin, , Acting Director, WSDOT Office of Research and Library Sciences.

(Anecdotes, short exchange with **Leni Oman, Director, WSDOT Office of Research and Library Sciences** followed by laughter)

- Discussed organizational structure
 - Library as part of organizational structure
 - Five research managers
- Discussed RACs
- WSDOT organizational structure
- Was under planning office until just two years ago
- Project selection process
 - Even years; requests through RACs, seminars
 - Odd years; Programs finalized, PIs selected, projects initiated

(Leni Oman interjected: “Seminars are coming back again as a means of connection, but it’s up top a RAC as to whether a seminar is sponsored.” “We will be soliciting input from 12 of the research institutes.”)

Doug Brodin added that ideas can be submitted anytime.

- Projects funded past two years
 - Discussed two pages of SPR funded projects

(**Mike Kyte** interjected: “All pages available on website.”)

- Discussed pooled fund projects participation
- Focus areas
 - Six focus areas in all
- Expected funding levels
 - \$2.9m of federal SPR
 - \$785k of matching funds
- Links to UTC
- Opportunities for collaboration
- Roadblocks to research collaboration

Quotes: “\$200k each biennium set aside for Quick Response RAC research “
”Some priorities of projects are changed as we speak.” Roadblocks: “UTCs have one year cycle, we have two; no agreement structure for collaboration; different priorities and interests, different cultures, political drivers, different expectations.”

Q&A, remarks. Doug and Leni discuss different tacks and methods for collaboration and funding.

Break, 10:44 a.m.

UTC Presentations

Billy Connor, Director, Alaska University Transportation Center

- Discussed organizational structure, boards and panels.
 - Governing board – guidance, goals
 - Technical advisory board – selecting projects
 - Executive board – management
- Discussed research selection process
- Center theme: Development of transportation in cold regions
- Faculty experience/emphasis areas went over current available staff.
- Active research projects: soil, sand, seismic activity, ice control, vegetation, reduction of rutting, Yukon River deck replacement, impact of salt on foamed asphalt
- Discussed focus for next two years: fish passage, soil liquefaction, freight issues in Bristol Bay
- Long term goals include improving fuel economy in cold temps, reduction of construction and maintenance costs, improving freight efficiency
- Formal links to state DOT: Alaska DOT&PF will represent on governing board and advisory panel; are working on cooperative agreement; AUTC provides input on the research needs process.
- Opportunities for collaboration
 - DOTS (short term)
 - USDOTS (long term)
- “Looking to coordinate all teams”
- Encourage multi-disciplinary teams, pool education funds, share training curriculum, improve ability to work with states outside universities home state
- Discussed roadblocks

Quotes: “We’re changing the model for our faculty – moving away from purely academic to half the time UTC, half the time teaching” “Our idea is to make response more effective.” “Let’s get a roadmap of where we want to be in five years and we’ll update that on an annual basis.” “Don’t want people to spend a lot of time on detailed proposals that won’t go anywhere.” “I’m pushing hard for vehicle performance in cold temperatures.” “We’re in the process of hiring new faculty, still looking for two in geotechnical and two in construction.” “Alaska doesn’t like using herbicides, we’re trying to change their minds on that.” “Industries focus on both long and short term solutions – bottom line is they’re looking for profit, and we need to look how we can improve the bottom line for industry.” “Need to bring multidisciplinary teams together.” “Pool of studies might have barriers, but if we put our thinking caps on we can overcome any kind of funding barriers.” “I think we can also improve the quality of the projects we are putting out by putting more minds on it.” “Universities come up with good ideas but can’t take them to the implemental steps.” “Universities are often criticized for their inability to respond quickly.” “Universities are out of touch with industry, are egocentric, are not outcome based, often do not appreciate timeliness.” “I hope

to resolve some of these issues in the breakaway groups throughout the conference.”

Michael Kyte, National Institute for Advanced Transportation, University of Idaho.

- Discussed organizational structure, staff, faculty, decision making process
- Center theme: Transportation technology
 - Clean vehicle technology
 - Traffic operations control
- Faculty experience/emphasis area
 - Bio-diesel, hybrid, clean snowmobiles
 - Traffic operations and controls: signal controller technology, simulation, arterial traffic management, safety, transportation infrastructure
- Discussed all active research projects
- Two year focus:
 - Traffic control systems
 - Management of highway systems
 - Highway safety
 - Research, education, and training
 - Pavement design
- Roadblocks
 - Lack of information/communication
 - Not looking past organizational boundaries

Quotes: “Just as of last March for the first time it was cheaper to buy bio-diesel fuel than standard diesel.” “Soon starting a Sustainable Energy and Transportation Laboratory; 50k sq.ft. facility, so far \$1.5 in funding.” “Mike Dixon is involved in traffic operations department, simulation, traffic control.” “UTC integration of research assures workforce will stay there, apparently in five years 50% of us will be gone – not sure what this means - thrown out or reaching magic age.” “I think there are lots of opportunities for collaboration that we can explore in breakaway meetings” “Difficult to collaborate – unwillingness to look beyond our own organizational interests.” “We need to look for more of a formal structure” “We’ve seen that state DOTs are different, how can we align?”

Robert Bertini, Portland State University

- Organizational Structure
 - Executive Committee, Board of Advisors, Staff
- Discussed caveats; has opinions to share, “please correct me if I’m wrong.”
- Decision making process

- Central theme
- Faculty Experience/Emphasis Areas
- Formal links to State DOT
 - Expects involvement at many levels
 - Plans a retreat with researchers, faculty at all campuses
- Discussed opportunities for collaboration
- Discussed congestion relief
- Suggested topics via ODOT website
- Suggested sharing education programs
- Roadblocks
 - Distance
 - University calendar constraints
 - Students come and go
 - Communication can improve
- Conclusion – “Remember our students!”

Quotes: “Traveled 23 hours last night to get here – some words may come out of my mouth that are not intended.” (*laughter*) “We’re working on a name for our center” “We focus on nano-science, sustainability, electron microscopy.” “I am the only staff, I also build the website.” “Caveat: some points here may have been created in a vacuum, and represent only my opinion.” “We are still developing our plan, so all of what’s here (shown on PowerPoint presentation) may not be approved by RITA.” “Our first RFP will be issued after strategic plan is approved at some point this summer.” “We view healthy communities in terms of access to transportation.” “Multi-modal is another one of our catch phrases.” “We have - Chris Higgins: renowned research in bridge arena; Karen Dixon, nationally known capabilities in safety and geometric design; Chris Monsierre, safety and operations; Jim Strathman, not here today, focuses on transit operations; Tony Ruffalow. Homeland Security; Roger Lindgren at OIT, simulation and pavement design; Kate (last name unintelligible) director of national center for accessible transportation; David Kim is lead on pricing experiment, road charging experiments.” “No active research projects yet funded by our UTC, but a lot at our four campuses.” “Will be defining our priorities over the next two years.” “We’re hoping the new UTC in Oregon will spawn more interaction between faculty and students.” “Faculty are always late with our products.” “We are part time researchers who do a million other things.”

Applause

Nancy Nihan, Director, Transportation Northwest

Discussed:

- Organizational structure
- Decision making process timeline
- USDOT general research areas
- Active research projects

- Plans for next two years
- Collaborative work
- Formal links to state DOT
- Opportunities for collaboration
- Roadblocks

Quotes: “TransNow director for 18 years, first program had 10 centers for each fed region, now there are 60.” “All centers are now under a school or college as are TransNow and TRAC.” “RFP announcements have been open in the past.” “This year was the first time we tried the process online.” “Two universities in our consortium, UW and WSU; trying to coordinate with state DOT, one of our biggest matchers.” “A lot of project selection is driven by technical merit and match, now we want to do special projects that TransNow can provide extra match – then we can fund best researchers and take the project that has highest technical merit.” “Will set aside a little bit for basic research, all in past has been for applied research.” “I’d like to see FHWA volunteer some reviewers and external project contacts to follow research throughout study, review final reports.” “Proposal process – 10% set aside for tech transfer.” “We’ll provide fed funds, matches, and look for partners.” “Very important that technical merit is very big part of process.” “New emphasis on freight and ITS as it relates to urban traffic and freight operation.” “Researchers must prove they have match - Need letters of commitment before project is started.” “We have multi-university project involving two of our youngest faculty members: Anne Goodchild just joined us in November, and Eric who 10 years ago was outstanding student of the year.” “ITS in both electrical and CE departments.” “Y. Wang was here to fix computers.” “For next two years, concentration on collaborative efforts.” “Region X consortium was started in October, next meeting is October in Portland, followed by Anchorage meeting in May, 2007.” “We’re developing a regional website for all universities in our region, which will include information to share, some areas will need passwords.” “Looking at new areas of collaborators.” “Looking at things we can do to meet the national research priorities.” “Students should be in on the start of research projects, we have to work this out.” “Faculty must do research to get them tenured and promoted.” “DOT needs immediate results, implementation, and we need a trade-off.” “Final point everyone has made: This all takes a big effort – time and money - we’re all underpaid and busy – has to be something we all think is worth it, and by today’s meeting it looks like it is.”

Federal Presentations

Wes Lum, AASHTO Research Advisory Committee

Overhead presentation:

[http://www.webs1.uidaho.edu/mkyte/region10-June_2006/presentations/RITA%20Presentation%20to%20Region%20X%20Meeting%20\(2\).pdf](http://www.webs1.uidaho.edu/mkyte/region10-June_2006/presentations/RITA%20Presentation%20to%20Region%20X%20Meeting%20(2).pdf)

Quotes: “Research needs must go somewhere to get funding because they have absolutely no money as a standing committee.” “Bidders should know SHRP II are cutting back on research they can fund.” “Fed legislation that authorizes a 6-yr. transportation program is currently called Safety Loop – spells out where money will be spent in very specific areas.” “Gave us more money for research, but also more UTCs to absorb the funding – best light I can put it in.” “Worst light: they over programmed for federal highways – consequence: you have been brought in by RITA to discuss priorities.” “Every AASHTO standing committee has research needs they work on every year - they all come forward to the NCHRP nomination and decision process – accepts only state DOT or federal highway to be able to nominate a project.” “Other Cooperative programs: transit, airport, commercial truck, bus, safety synthesis program, soon, a freight and hazmat program – also a planning and enviro program called STEP.” “I think you should be bidding on RFPs, but I really think you can help us by looking at unfunded projects in various programs.” “We receive about 200 projects a year, only fund 30-40.” “Lots of opportunities to see where there are funding needs, we’re not able to fund it all – I think you should be working with your home state as much as possible to facilitate procurement problems.” “You might consider centers of excellence.” “Be flexible – state may need to change what they are addressing.” “Recommend reading for you and your researchers this systems approach.” “All kinds of hurdles we have to assess.” “I suggest reaching out to other regions in the country.”

Joe Conway

Quotes: “Tom Marchessault couldn’t be here from RITA - I am gonna try and stay at the project level as I talk today – focus on results.” “Have we articulated research projects well? Not sure we’ve done a good job.” “I view UTCs as a new partner.” “Special session at TRB on Tuesday(?) – research and program managers went over focus areas.” “Real issue for UTCs – how do we talk one on one?” “It’s not like we have all the answers, we just want to find out what’s being done.” “Federal highway has similar budget issues as everyone else.” “Be patient – it may not have been the right time when you made that phone call.” “We’re gonna have more workshops like the urban mobility one we just had, safety might be the nexton, Explorer research programs, really wanna leverage resources.” (Question and answer unintelligible)

Richard Krochalis

Quotes: “We here in King County have purchased 230 hybrid buses \$140m investment of new technology – don’t know why they did this but King County went to Bechtel.” “Disaster preparation more a priority: for example, I think the DOT works closely with the state of Florida since Katrina.” “If you have relationships with your congressional delegation, don’t ignore that, especially if you have a big strategic university initiative.” “Talk to those folks, it’s a good way to get some dollars.” “I’m really happy this was all pulled together, because I think dialog is something that’s been missing.”

Mike Kyte: “I take the points about universities telling other people what we do – we don’t do a good job about giving the message to our end users.”
Ten to 15 minutes late – sorry about that.”

12:44 p.m.

Lunch Break

Breakout Sessions

Group Reports and Notes:

http://www.webs1.uidaho.edu/mkyte/region10-June_2006/report/report04.htm

and:

http://www.webs1.uidaho.edu/mkyte/region10-June_2006/report/report05.htm

June 9, 2006 – 1:46 p.m.

Final reflections

The following notes were taken from the presentations of four workshop participants who gave their overall reflections of the workshop.

Lee Padilla, University of Idaho graduate student

Collaboration means pooling resources to meet common goals. There were a number of good technical areas discussed. We need to have a desire to collaborate. We need to have a plan to make it happen, for example, the pool fund projects. We need to stop talking and start doing. We have good examples of what we might work on together.

Three tips:

- start small, something do-able.
- start within our region.
- start with a pilot project.

Eric Jessup, Washington State University

“I’m fairly confident that I’ve never in a two day period heard or said the word *collaboration* more often than I have today or yesterday!”

The attendance at the workshop is a good indicator that people are interested in collaboration. How do you define collaboration-this is different depending on our perspective. Collaboration is not a silver bullet-it sometimes costs more to do collaboration, and will often lead to larger projects, larger budgets, and longer timelines. Transportation is complex and this makes collaboration difficult. This

forum is a great step forward in helping us to find ways to work together. We have been able to learn more about who we are and our common interests. We should start small, form unions where they make sense.

Leni Oman, Washington State Department of Transportation

We are clearly hungry for some degree of collaboration. We are still coming to better understand what our needs are. We need to give universities access to TRIS and RIP so that they can begin to post their research work here. Region X needs a web site or some other source for us to share our research needs and priorities. We need to work on the "process pieces": how to do collaboration. The National Cancer Institute offers some tools on how to do collaboration that we might learn from. We need to be able to show the value of research. We could also serve as a clearinghouse for information on transportation research results. Time is a big issue for state DOT staff as research is often a collateral activity and not a high priority.

What would be helpful to have: What is our expertise at the universities? What is timing needs and schedules for decision-making? How should we communicate in non-hierarchical organizations? How do we play matchmaker? What are our accomplishments? How can we partner for other funding sources, such as EPA or NIH?

What is FHWA doing? They need to provide their research roadmaps. What do they want to do that they can't fund? How can we partner with FHWA? They need to provide links to their corporate web site. Where are competitive funding opportunities available?

What do we want to achieve in our program so that we can sell our program in the next authorization?

Barnie Jones, Oregon Department of Transportation

There is strong support in the region for collaboration. We are motivated to collaborate. We've talked about three types of collaboration, between individuals, including all stakeholders in decision-making, and pooling funds. These are all different aspects of collaboration.

We talked a lot about the national agenda and how we fit in. This is mainly a UTC issue. The national research agenda is a work in progress, with many different forms. There is a leap of faith to go from national priorities to a specific project list. How do we do this? The owners of the national agenda are broke.

What are the next steps? We have a viable series of next steps. The state DOTs are considering how to form a pooled fund activity modeled loosely after the New England consortium. The four research program directors need to understand the New England model and see what makes sense in our region. There are some alternatives to consider in implementing this concept. The timetable is to have a proposal drafted and circulated by our next meeting in October.

