

Toward a Strategy of Improved International Cooperation in Transport Research

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TRANSIT
COOPERATIVE
RESEARCH
PROGRAM

PRACTITIONER'S HANDBOOK

NATIONAL
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REPORT 536

From Handshake
to Compact:
**Guidance to Foster
Collaborative,
Multimodal
Decision Making**

TRANSPORTATION RESEARCH BOARD
OF THE NATIONAL ACADEMIES

Strategies & Tools for Enhancing Collaboration

- Clearly defined goals & objectives
- Agreement on language and terms
- Ad-hoc planning & decision-making structures
- Task forces & committees
- Common work/activity programs
- Staff assignment/rotation
- Staff training
- Third-party facilitation
- MOUs/MOAs
- Collaboration technology
- Co-location
- Forming a new organization

For Collaborative International Research

- Clearly defined goals and objectives
- Mutual benefit from research
- Institutional structure and process that deals directly with constraints
- Credible champions that convince funding agencies (most likely with partners that bring resources to the table)

European Commission's Seventh Framework Programme

- **Aeronautics and air transport**
 - Reduction of emissions, work on engines and alternative fuels
 - Air traffic management, air safety
 - Environmentally efficient aviation
- **Support to European global satellite navigation system**
 - Galileo and EGNOS
 - Navigation and timing services
 - Efficient use of satellite navigation

European Commission's Seventh Framework Programme

- Sustainable surface transport
 - Development of clean and efficient engines and power trains
 - Reducing the impact of transport on climate change
 - Intermodal regional and national transport
 - Clean and safe vehicles
 - Infrastructure construction and maintenance, integrative structures

- Surface Transportation-Environmental Cooperative Research Program (STEP)
- Strategic Highway Research Program II
- Cooperative Research Program on Freight Capacity
- National Cooperative Highway Research and Transit Cooperative Research Programs
- State DOT Research
- University Transportation Research Centers

- Environmental Protection Agency
- Department of Energy
- National Science Foundation
- Foundations
- And many, many more

Mutually-of-Interest Research (Two Examples)

- Issues relating to public health
 - Safety
 - Vehicle emissions
 - Climate change
 - Water quality
 - Transport of disease
 - Security threats
 - Sustainable mobility
 - Etc.

Mutually-of-Interest Research

- Issues relating to travel behavior
 - Mobility factors
 - Human factors
 - Demand modeling
 - Land use effects
 - Technology and modal influences
 - Impact of pricing and other economic factors
 - Etc.

On the
institutional
front...



Institutional Structure and Process

- Ad hoc and informal
- Partnerships on a case-by-case basis
- Formal organizational partnerships for sustained programmatic research
- Lead organization responsibility (with money)

Individual researcher and case-by-case partnerships....

- Personal contacts are critical...and, in some cases, someone “opens the door”
- Often limited to a project-specific experience
- Not systematic and often does not provide critical mass for impact of consequence
- Overarching institutional program is still very helpful

Formal Partnerships and Arrangements

Example: ECTRI/TRB MOU

- Scanning tour
- Young researchers opportunities
- Article in *TRNews*
- ECTRI participation in TRB
- ECTRI participation in annual meeting

Example: ECTRI/TRB MOU

- Exchange information on transportation research and events
- Strengthen U.S. participation in European research initiatives
- Building research cooperation between U.S. and European research bodies
- European speaker at TRB luncheon
- Joint committee on future transport coordination and action program

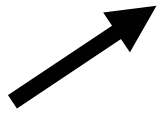
It seems to me at the programmatic level....

- Formal institutional connections are key...NSF-to-NSF, government-to-government, association-to-association
- Clearly defined strategic plan....and action steps to achieve targeted goals
- Stable funding, from a variety of sources
- Clearly defined (and influential) champion(s), especially from research consumer groups (e.g., private industry)

And at the programmatic level, you are better able to deal with the barriers....

Which include....

- Lack of information on access to research opportunities
- Insufficient knowledge of the research capabilities of potential research partners
- Inadequate understanding of the process of culminating “the deal”
- But still troublesome, the most important...



Sponsor definition of
research domain



Sponsor limitations on
use of funds



Non-research project
(critical) events

Possible Options

- Elevate transport research in those organizations that have funding ability for international collaborative research
- Convince “constrained” funding sources to change
- Establish separate funding source(s) with “unrestricted” funds (perhaps from foundations or those with world-oriented missions)

In sum, transport research is not only multi-disciplinary, multi-modal, and multi-jurisdictional, it is also more than ever multi-national.

It only makes sense to establish multi-national collaborative partnerships that provide the most productive and cost effective means of addressing some of the pressing problems facing each of our countries...and the world.