

THE UNIVERSITY OF BRITISH COLUMBIA



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MEMORANDUM

February 10, 2006

To: Senate  
c/o Ms. Lisa Collins, Manager of Senate Secretariat Services

From: Lorne A. Whitehead  
Vice President Academic and Provost

A handwritten signature in blue ink that reads "George A. MacLure".

Re: **Establishment of the Centre for Global Transportation Studies**

**Recommendation:**

**I recommend that Senate approve the establishment of the Centre for Global Transportation Studies at The University of British Columbia**

The background and rationale for the proposal to establish the Centre are provided in the attached document submitted by Dr. Michael Isaacson, Dean, Faculty of Applied Science, and Dr. Daniel Muzyka, Dean, Sauder School of Business. The proposal has been reviewed by, and has the support of, the Committee of Deans.

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Attachment: Proposal to Create a Centre for Global Transportation Studies at The University of British Columbia

# **Proposal to Create A Centre for Global Transportation Studies at The University of British Columbia**

## **1. Overview and Rationale**

This proposal establishes the case for a transportation studies research centre at the University of British Columbia (UBC) that has global reach. Despite the obvious importance of transportation to an interconnected world, no global centre of excellence in transportation studies adequately considers the unique challenges and opportunities facing the transportation sector. The proposed Centre for Global Transportation Studies at the University of British Columbia will fill this void. In its research, outreach and related activities, it will identify major determinants of policy effectiveness, monitor a changing global political environment, assess objectively the changing needs of transportation industries, and encourage the development and application of advanced technologies and technical innovation.

UBC will build on its existing strengths in transportation research and studies to establish a Centre that will be a catalyst for the future of transportation industries. The Centre will symbolize the importance of transportation and its roles in fostering economic, environmental, security, and social goals. It should be emphasized that the Centre will not supplant or duplicate existing activities but rather enhance by exploring new areas and linking current initiatives.

Beneficiaries of the Centre will include the following:

- All levels of Government as they look towards a centre of excellence in transportation that can assist in decision-making.
- Multiple industries as they look for unbiased views on the major issues and opportunities facing transportation, particularly in the face of globalization.
- The academic world as a centre is formed to concentrate effort and bring together ideas in an area that traditionally has spanned multiple faculties.
- Canada at large as ties are created and strengthened with other countries around the world dealing with the same issues, for example Singapore. Indeed, we have an opportunity to become a leader within the transportation field, attracting decision-makers and academics from around the world.

The Centre will be a world-renowned venue for frank, objective discussion of major transportation issues. It will link governments, industry, non-government organizations and researchers. It will serve these functions in Canada and North America but also internationally as a global resource for transportation leaders through a network of joint research, conferences, programs and educational initiatives.

## **2. Current Strengths**

The University of British Columbia has a distinguished history for contributing to Canada's transportation sector. UBC related strengths include the following:

### **Sauder School of Business**

The Sauder School of Business has been a leader in transportation economics for some four decades, and is home to the Centre for Transportation Studies. Its Transportation, Logistics and Operations Management Group likely represent the strongest contingent of transportation and logistics skills among all Canadian universities. Recently funded are the Vancouver International Airport Authority, CN and Bombardier Chairs that ensure the great strengths in these areas will continue well into the future. Moreover, Sauder (and UBC in general) have superb international links in the maritime and aviation hubs of Hong Kong, Singapore, and the Øresund region of Copenhagen and Malmö, along with very strong and growing links with Seoul, Shanghai, Beijing, Guangdong and Ningbo. The new Centre of Excellence in Intelligent Transportation Systems and Freight Security in the Sauder School and the Faculty of Applied Science at UBC place UBC in a strong position to explore security issues.

### **Faculty of Applied Science**

The transportation engineering group of the Civil Engineering Department has a worldwide reputation for its research in traffic management and safety and in measuring the impacts of transportation. The group's research activities in traffic management and safety have received wide recognition and are being used by several transportation agencies in Canada and the US including the US Federal Highway Administration, Transport Canada, the BC Ministry of Transport, and State Farm Insurance, among others. The group has also been very active in the evaluation and application of advanced technologies in transportation research, with several major projects in Canada dealing with Intelligent Transportation Systems (ITS). The group helped to establish a provincial ITS vision and strategic plan for using advanced technologies to help solve provincial, regional and local transportation issues. It enjoys funding from a prestigious industry-backed endowed Chair in Construction Management.

There is a strong focus on civil engineering aspects of transportation, including the design, analysis, construction and maintenance of ports and airports, roads, rails, bridges and tunnels. The Mechanical Engineering Department is a leader in alternative energy technology, vehicle safety, occupant safety, and human factors research. The Electrical and Computer Engineering Department is leading the way in hardware and control system innovation and in information and communications technologies, while Metals and Materials Engineering is developing lighter, cheaper and stronger materials for

transportation vehicles. The Faculty also houses UBC's Clean Energy Research Centre, which is adding to the knowledge base of alternative energy research.

### **Faculty of Graduate Studies**

School of Community and Regional Planning (SCARP). The School of Community and Regional Planning has been involved in urban and regional transportation planning for four decades. The high-profile Bombardier Chair in Urban Transportation studies the technological, economic, environmental, social and political aspects of urban transportation systems, policy analysis and teaching within the fields of urban transportation systems, land-use strategies and sustainable development.

The Institute of Asian Research. The recently funded Chevalier Professorship in Transportation and Local Development in China adds significantly to the Asian transportation policy and analysis capacity of the university and thus to the capability of the Centre. Work draws together experts in transportation and housing from academia and private business, professional transportation planners from large cities like Beijing, senior representatives from major transport manufacturing companies, and local Chinese officials and decision-makers involved in transportation management.

The Liu Institute for Global Studies. This UBC institute pursues interdisciplinary and policy-related research on global public policy issues related to human security, and other global phenomenon including population explosion, water and food security, world health, climate change and border security agreements.

The Centre for Integrated Research on Sustainability. UBC has a number of facilities for sustainability technology research including the Centre for Integrated Research on Sustainability. Strategies are evaluated that address the sustainability challenges posed by population growth. The Centre will be the most innovative in North America, demonstrating leading edge research on sustainable design practices, products and systems.

### **Faculty of Arts**

The Canadian transportation sector will also benefit enormously from the presence at UBC of exceptionally strong departments of Economics, Political Science and Psychology. These departments will bolster the ability of the Centre to deal with complex economic and political issues attendant to transportation.

### **Faculty of Law**

Transportation is a highly regulated industry. Some transportation industries like marine shipping have specialized law and rules guiding them. Environmental law also increasingly impinges on transportation, as do municipal and

administrative law. Finally, complex public-private partnerships and strategic alliances are playing an increasingly central role in transportation. UBC's strong Faculty of Law offers assistance in dealing with these complexities that will be part of future transportation policy and investments in all of the transportation industries in all parts of Canada.

### **3. Governance**

Analogous to other inter-Faculty Centres at UBC, the intended governance structure of Centre is as follows:

Director. The Centre will be managed by a full-time Director who will report to a steering committee, and who will manage full-time staff employed by the Centre. The Director will have no role with respect to the conditions of employment (salaries, promotions and tenure, teaching obligations, vacations, etc.) of faculty members who are members of the Centre.

Steering Committee. The Director will report to a Steering Committee, comprised of the Deans (or their designates) of the participating Faculties. The Steering Committee will meet once a year, and will report to the Provost. It will approve the annual budget of the Centre, including its fundraising plans, and will confirm the appointment or reappointment of the Director. The Dean of the host Faculty will chair the Steering Committee.

Participating Faculties. The participating faculties will be:

- Faculty of Applied Science
- Faculty of Arts
- Faculty of Graduate Studies
- Faculty of Law
- Sauder School of Business

Host Faculty. Initially, the host Faculty will be the Sauder School of Business. Every three years, the host Faculty will be determined by the Steering Committee, with the ultimate decision to be made by the Provost.

Advisory Committee. The Director will also consult with an External Advisory Committee, comprised of representatives of industry, governments and other external stakeholders.

Faculty Members. Faculty members working with the Centre will remain full-time members of a home Department or unit within a Faculty. Their salary budgets will reside in their home unit, and their conditions of employment (salaries, promotions, tenure, teaching obligations, etc.) will fall under their home unit.

Principles. The administration of the Centre will include the following principles:

- The Centre will not offer degree programs - these will reside in the existing Faculties.
- The Centre may administer and hold research contracts, with corresponding overhead payments directed to the Centre and/or the home unit of the principal investigator, as established at the time a research contract is developed.
- The Centre will be reviewed periodically in accordance with common university practice, and its functioning will be terminated when deemed appropriate.

#### **4. Budget and Resources**

The annual revenues of the Centre will arise through interest income from Endowments, annual contributions to the Centre budget from the private sector and governments, and one-time or annual contributions by the participating Faculties. All such contributions will be directed to the activities for which a particular contribution is made.