International Research Board: Written comments on SAMOT operations 2010 and 2013
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1 Introduction

A general goal that has been set for SAMOT in relation to success criteria for VINN Excellence Centers is to conduct research of the highest international quality within several disciplines. We constantly evaluate progress toward this goal by regular reporting of our research production. For instance, the SAMOT Evaluation System (SES) provides a number of key performance indicators (KPIs) that are used to measure and monitor research progress (academic research dissemination, activities of educating young scientists and impact of research).

On a regular basis we also ask the SAMOT International Advisory Board (IAB) to review the research progress. The IAB was established to provide SAMOT research program with the benefit of the expertise and knowledge of a highly select group of internationally recognized experts in the field of transportation. Board members provide their invaluable insights into how the program can be developed further against this target.

This report is divided into three parts. The first part presents the three members of the International Advisory Board, their specific area of expertise and recent publications. The second part contains reports from each member in 2010 and in 2013. This is followed by a third part with comments on the IABs reviews made by the SAMOT executive team.

Karlstad 2013-06-16

Professor Margareta Friman, Director of SAMOT
2 SAMOT’s International Advisory Board

An international advisory board was set up during Stage 1, consisting of researchers from Norway (R. Hjorthol), the Netherlands (H. Timmermans), and the USA (P. Mokhtarian) who have links with SAMOT’s operations and areas of research. The scientific activities of SAMOT are reviewed by this distinguished board of internationally-recognized scientists. The IAB was invited to SAMOT in Karlstad 2007 and have since then met several times a year at international conferences and have had contact via e-mail. The mission of the IAB is to guide SAMOT’s future research strategies by:

- Providing suggestions for immediate and long-term research initiatives;
- Identifying research opportunities and collaborations;
- Regularly reviewing SAMOT’s project portfolio;
- Discussing/reflecting upon the role which SAMOT could play in the international arena;
- Enhancing awareness of SAMOT within its members’ respective research communities.

This part contains a presentation of the members of the SAMOT International Advisory Board.

2.1 Professor Timmermans

Harry Timmermans is Professor of Urban Planning at the Eindhoven University of Technology, in the Netherlands. In 1992 he founded the European Institute of Retailing and Services Studies (EIRASS) in Eindhoven, the Netherlands. His main research interests focus on human judgement and choice processes, mathematical modelling of urban systems, spatial interaction and choice patterns, and the development of decision support and expert systems for application in urban planning. He has published several books and many articles in journals in the fields of marketing, urban planning, architecture and urban design, geography, environmental psychology, transportation research, urban and regional economics, urban sociology, leisure sciences and computer science.
Some of the main projects under the supervision of Professor Timmermans relate to activity-based models of transport demand, modelling the dynamics of activity scheduling behaviour, life trajectories and travel choice, information provision and activity-travel behaviour, social networks and travel, the marketing of public transport, group decision-making and activity-travel behaviour, from activity-based modelling to events-based modelling.

Professor Timmermans serves/has served on more than 20 journals in urban planning, transportation, retailing, tourism, housing, marketing, modelling, and geography. He is founding editor of the Journal of Retailing and Consumer Services. Publications have appeared in leading journals in all these fields as well as in some others.

**Selected publications**


2.2 Professor Mokhtarian

Patricia Mokhtarian is Professor of Civil and Environmental Engineering, Associate Director of Education at the Institute of Transportation Studies, and Chair of an interdisciplinary graduate program in Transportation Technology and Policy at the University of California, Davis.

Picture 2. Professor Mokhtarian

Patricia Mokhtarian is a Professor of Civil and Environmental Engineering, the Associate Director for Education of the Institute of Transportation Studies, and Graduate Adviser of the interdisciplinary graduate program in Transportation Technology and Policy. Dr. Mokhtarian has specialized in the application of rigorous quantitative methods to the study of travel behavior for more than 30 years, authoring or co-authoring more than 160 refereed journal articles, technical reports, and other publications. A key research interest has been the impact of telecommunications technology on travel behavior, with additional interests in land use and transportation interactions (especially the influence of the built environment on travel behavior, after accounting for self-selection), attitudes toward travel itself, congestion-response behavior, travel time budgets, induced demand, and the transportation/air quality impacts of transportation demand management measures. Dr. Mokhtarian is the founding chair of both the International Telework Association and Council and the Committee on Telecommunications and Travel Behavior of the Transportation Research Board. She is an emeritus member of the latter committee, as well as of the
TRB Committee on Traveler Behavior and Values. She is North American co-editor of Transportation, and on the editorial boards of the Transportation Research Part A, Transport Policy, and Transportation Letters journals. She has served on several National Academy of Sciences and Transportation Research Board study committees, most recently the TRB Study Committee on the Relationships among Development Patterns, Vehicle-miles Traveled, and Energy Consumption; and the TRB/Institute of Medicine Study Committee on Physical Activity, Health, Transportation, and Land Use.

Selected publications


### 2.3 Chief Research Officer Randi Hjorthol Ph D

Research activities at the Institute of Transport Economics are organised into main areas of research. Each area is identified by a research framework which defines its overall purpose and the specific research questions that are to be answered by the various research projects. A Chief Research Officer is in charge of each research area, with quality assurance of the projects forming part of his/her responsibilities. Randi Hjorthol is the Chief Research Officer of the “Travel behaviour and mobility” programme. The object of the programme is to study the social conditions of travel activity, develop theories, and improve methods of collecting data about travel activities and behaviour. The programme includes studies of all transport modes and travel purposes, both private and business, short and long. It also includes the interplay between transport and information and communication technology (ICT).

The program supervised by Hjorthol comprises the following areas: (1) Methodological development, accomplishing and analysing national travel behaviour surveys, and special studies of air traffic. (2) Studies of the organisation of everyday life and industrial production related to travel and mobility. (3) Market and competition analyses, forecasts, transport statistics and studies of travel quality, and perceptual aspects of journeys. (4) Studies of driving forces concerning travel activity, for instance the use of information- and communication technology, trends in urban development, changes in life-style and demography.
Selected publications


### 3 Review reports

This section contains each IAB members’ written reports 2010 and 2013 on research work performed at SAMOT.

#### 3.1 Report of Professor Timmermans

**3.1.1 Report 2010**

I think the portfolio of research themes at SAMOT is inspiring, relevant, and innovative. Passenger perception, in my view, is the more traditional approach – nevertheless, it deals with an important issue as many decisions are based on perceptions as opposed to reality. Moreover, managing perception may be easier and at least more cost-effective than
investment in infrastructure. The second topic expands the first one and the larger context of service provision/offering is the most important one. While this approach has become mainstream in the service management literature, little work has been done in transportation along these lines, hence this should be regarded as potentially innovative work. It should also bring different tools to the marketplace, which is still largely thinking in terms of fare structures. The third topic represents the larger context of the institutional context - the impact this may have on topics (1) and (2) seems highly relevant.

Research efforts at SAMOT, illustrated by these topics as well as the list of published and submitted papers, demonstrate that the center of excellence can become a leader in this field of research. Publication in both the service management literature and the transportation literature emphasizes the rigour and relevance of research efforts. The position of the institute can be further strengthened by organizing international conferences, by becoming a member of international working groups in this area of research, and by activating an international exchange programme and similar activities. The competence of the centre is relatively unique, hence a leading international position certainly looks feasible.

In addition to purely academic work, the centre could also play a part in organizing an international as well as a national platform on best practices, examples of cases benefiting from the results of PhD studies or theory developed at the centre. To the extent that the industry is open to such a dissemination of knowledge, it is often hard to find real-world examples and case studies. TRB (Transportation Research Board) has dedicated committees and specialized journals have started to appear.

### 3.1.2 Report 2013

It is becoming increasingly evident that SAMOT ambitions are becoming reality. Whereas service aspects of transport has been a neglected are of research in transportation and beyond, members of SAMOT have been quite successful drawing attention to this topic area in different areas of research. Their research output has found its way to many conferences and high quality journals.

The quality of the research in general is of high quality, but some evolving lines of research stand out. In particular, by disseminating concepts and approach in the field of happiness to the transportation community under
the umbrella of well-being, their research on this topic has become leading in transportation and a rapid following seems to emerge.

Last year has again contributed to the international reputation of the centre of excellence. Further impact can be established by integrating the concepts and methodologies the centre has developed into existing dominant approaches to travel demand forecasting, especially in the context of transport demand management.

3.2 Report of Professor Mokhtarian

3.2.1 Report 2010

The three themes are quite appropriate, and the project portfolio addressing them is impressive. The first theme might be better named “Travellers’ perceptions of public transport”, because several projects involve car drivers as well as (or instead of) transit passengers. (Also, see the possible future research ideas below). In general, it makes sense to me to have a theme that reaches beyond current users, to consider how best to attract new users (or, to increase the frequency of infrequent users). Such a theme is not currently clearly articulated.

SAMOT scholars are clearly productive and professionally engaged, as evidenced by the sizable contributions made to the international peer-reviewed literature. However, it is likely that “SAMOT” per se is not a well-recognized entity. As an organization, perhaps SAMOT could become more visible through the co-sponsorship (even if in name only) of conferences and other relevant activities. Individually, SAMOT scholars could become more involved in organizations such as the International Association for Travel Behaviour Research and the Transportation Research Board (committees, Annual Meetings), where their affiliation with SAMOT is more consciously promoted.

Possible future research ideas (these are drawn from my somewhat US-centric experience – they may not be too pertinent to the European context in some cases). The current and previous research of the center seems focused on existing public transport passengers. It might be good to expand the focus to prospective passengers. Can we identify people for whom transit is a practical alternative to driving (or being a car
passenger), and conduct experiments to attract them to transit? There is, of course, a growing body of literature concerning this idea, but I believe there is still a lot to learn. I found this recent paper by van Exel and Rietveld (https://www.jtlu.org/index.php/jtlu/article/view/15/81) to be very provocative, and would love to see follow-up work along those lines: comparing perceived with actual travel times by transit, looking at measures relative to car travel times and assessing the extent to which better information provision to car users could influence them to switch to transit. (This may already be included in the “Car users’ capacity to predict satisfaction with public transport” PhD programme).

What do children learn about public transport, and when do they learn it? Is waiting time an issue (as it is for most places in the US, with long headways)? If so, how can the unpleasantness of waiting be eased? Are transit stops/stations equipped with free Wi-Fi? How about creating some games that can be played at bus stops, ideally where more than one person could join in? Or a giant “Etch-a-Sketch” of some sort – an erasable electronic drawing board of some kind? I’m sure some creative people could come up with ways for passengers to amuse themselves while waiting. Preferably ways that involve active mental and/or physical engagement, not just watching some idiot-box electronic TV gadget …

3.2.1 Report 2013

By this point, SAMOT has really come into its own, as we say. There is growing international recognition of the importance of the center, as evidenced in part by the ongoing attraction of visiting scholars. SAMOT’s publication record is strong in numbers, but more importantly in impact. In terms of my own areas of interest, for example, the work on travel satisfaction and the relationship between travel and subjective well-being is truly pathbreaking, serving as a foundation on which a great deal of future work will build. I am already citing it heavily in my own research, and many other scholars are doing the same.

As a suggestion for the future, perhaps it could be useful to report citation numbers for the project’s publications, at least in the aggregate, if not paper-by-paper. However, it should be stressed that this would only provide a measure of scholarly impact. One of the real strengths of SAMOT is that it has adroitly managed to retain both scientific excellence and real-world relevance, and this too has magnified its impact.
SAMOT’s three themes of (loosely speaking) perceptions (demand-side), operations (supply-side), and institutions (broader context), represented by concentric circles on the project’s main webpage, are still logical and compelling. Although the divisions between these themes are relatively clean, it could be valuable to consciously build projects that link themes, teaming researchers with diverse backgrounds and expertise. For example, a theme-2 project evaluating the effectiveness of various operational plans (whether scheduling, network design, or other such aspects) could take into account the satisfaction of current and prospective users (theme-1) in assessing each plan’s effectiveness.

Another suggestion for future research is the following. My eye was caught by the completed project on affective forecasting, a fascinating and important topic. Although the two concepts are not at all the same, thinking of affective forecasting brought to mind the issue of incorporating attitudes into travel demand forecasting. Many people have dismissed the inclusion of attitudes into the regional travel demand models used in practice, because, they say, we cannot forecast attitudes, and thus applying such models to some future horizon year would be impractical. However, we cannot forecast attitudes because we have never seriously tried to do so. A few studies have offered some practical ideas for moving forward along those lines, and expansion into that area would offer the opportunity for truly revolutionary research by SAMOT.

### 3.3 Report of Chief Research Officer Hjorthol 2010

#### 3.3.1 Report 2010

SAMOT’s three research themes are of societal importance as well as academic research interest. They cover key issues and objectives within the sector of public transport and there is good coherence between them. The research projects and publications show wide variation in approaches and topics, demonstrating a centre enjoying growth. Passengers’ perceptions of public transport are crucial for their choice of transport mode. The perception is the reality for the (potential) passenger. In order to use this perception in practical planning, the basis of the perception has to be “decomposed” into components that can be related to actual measures and schemes. The work of Theme 2, passenger service in a chain
of events perspective, is a natural successor to Theme 1. Within this theme, the contributions made by SAMOT are important due to the holistic approach that is not found so often in transport research. Theme three represents the contextual approach involving several actors using the social, economic and political context.

As far as can be seen from the project description and the publication list, work has mainly focused on the first two topics and less on the “contextual” challenges in Theme 3. A greater focus on Topic 3 would thus, perhaps, be important for further research. In this theme, social trends and development will also be research aspects that are important for the development and use of public transport. What seems to be missing from SAMOT’s research so far is evaluations of different policy instruments and measures, which are of great importance to the success of public transport.

When it comes to SAMOT’s role in the international arena, I have little to add to Timmermans’ suggestions.

3.3.2 Report 2013

The ambitions of SAMOT seem to be successful by their widely documentation in international journals of good quality. They also have received international recognition with cooperation with international recognized scholars. The publications seem to be strong on the service aspects, and a new and interesting topic is subjective well-being, which has received attention in transport research the last couple of years. The articles from SAMOT contribute with interesting discussions to this theme.

The development and interaction of SAMOT’s three themes; perceptions of public transport, public transport’s customers offering and public transport’s regulation and institutional framework is perhaps a little difficult to detect in the publication list. It seems that the first topic has been more important in the projects (or at least in the publications) than the two others, at least compared with the third.

More attention on topic three is perhaps found in the PhDs. As in an earlier comment, I think the study of institutional framework and regulation of the public transport are of special importance in a time of economic problems and environmental/climate challenges.
4 Comments from SAMOT’s executive team

Based on the report in 2010, we identified the following activities as important to work with:

- Change the name of Theme 1 in order to better reflect our ongoing research
- Expand and further develop the research taking place in Theme 2
- The proposal for new research projects suggested by the IAB will be considered and discussed in preparation for Phase 3 with the partner and researcher council
- Investigate the possibility of greater visibility (e.g. co-sponsorship) at international conferences
- Encourage senior researchers to involve themselves in various international working groups and committees

These activities have been dealt with in different ways during Stage 3. The latest report (2013) indicates that we have succeeded in our efforts. Some suggestions for the future is to report citation numbers for the project’s publications, further strengthen our efforts to build projects that link themes, teaming researchers with diverse backgrounds and expertise. Some ideas are also given on the development of individual projects. These ideas and suggestions are valuable for the continuing developments of SAMOT in the future.