International Comparative Study of Mega Transport Projects: Outline of Overall Study Methodology

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Conference on Future Urban Transport
Berkeley Center for Future Urban Transport
May 19-21, 2008
Overall research questions:

1. What constitutes a ‘successful mega urban transport project (MUTP)?

2. How well has risk, uncertainty and complexity been treated in the planning, appraisal and evaluation of such projects?

3. How important is context in making judgements regarding the above questions?
Clarification questions:

1. What constitutes a MUTP, what are its boundaries and typologies?

2. What stakeholder perspectives of judgement are to be investigated and how (see Figure 1)?

3. How does one identify generic and context-specific judgements of success and lessons?
Figure 1: Methodology for data collection

Methodology Development

Data Collection

Analysis & Synthesis

Findings & Dissemination

Defining Study Aims

National MUTP Background & SD Challenge WPs

Pre-Hypotheses Narrative Pattern Analysis

Secondary Source Project Data

Project Database

Pattern Analysis

Hypotheses Testing

Stage 1A/1B

Stage 2

Stage 3

Generic Lessons and Planning Guidelines

Project Profile and Contextual Information

Unstructured Interviews

Policy Agenda and Challenges

Hypotheses-led Structured Interviews

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Centre for Mega Projects in Transport and Development

Future Urban Transport, Berkeley, 19-21 May 2008
Criteria for judging MUTP success

1. Traditional criteria relating to cost overruns, completion dates, generation of travel time savings for users and adequate rates of returns to investors.

2. New emerging agenda related to vision(s) of sustainable development (see Figure 2).

Figure 2: Study methodology framework
Context setting

1. Sustainability visions & challenges (see Figure 3)

2. National background/policy/planning/funding frameworks

3. Geographical/spatial context analyses

4. Cultural and institutional contexts

5. Temporal dimensions of above
## Proposed Assignment of MUTP Sustainable Development Challenge Topics

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Data collection

- From MUTP stakeholders (including those impacted by projects) using pre-hypotheses website questionnaires and selected naïve face-to-face interviews, with emphasis on story-telling employing Narrative Pattern Analysis.

- From secondary sources, including reports, websites etc. producing project profiles with information of project characteristics inserted into a shared web-based GIS data base with both geographical and spatial dimensions.

- From MUTP stakeholders (including those impacted by projects) using hypothesis-led website questionnaires, face to face interviews employing Narrative Pattern Analysis of story-telling of project experiences by selected key decision-makers.
Case study analyses of MUTP components

- Examination of treatment of uncertainty, risk and complexity and importance of context

- Examination of underlying and driving concepts

- Examination of major issues confronted

- Examination of dominant methodology and techniques employed (path dependency?)
Case study analyses of MUTP fulfilment of traditional appraisal criteria

1. Completion within budget

2. Completion on time

3. Completion within expected range of generated benefits to users

4. Completion with rates of return acceptable to stakeholders
Case study analyses of MUTP contribution to sustainability vision

1. Defining sustainability, sustainable urban development and sustainable transport
2. Economic dimensions of sustainability vision
3. Environmental dimensions of sustainability vision
4. Institutional dimensions of sustainability vision
5. Social/cultural dimensions of sustainability vision
Case study review of MUTP responses to sustainability challenges:

- Accessibility
- Accountability
- Affordability
- Biodiversity
- Cohesion
- Competitiveness
- Ecology
- Globalisation
- Health
- Privatisation
- Safety
- Subsidiarity
- Transparency
- Viability
- Energy
- Territory
The Partners & their Case Studies
**Australia**
- Sydney Harbour Tunnel
- Perth Metro Rail
- Melbourne City Link

**France**
- Meteor in Paris
- TGV Mediterranee
- L2 in Marseille
- Millau Viaduct and A75

**Germany**
- Innercity-Tunnel in Berlin (road, rail, subway)
- BAB 20 Motorway from Hamburg to Rostock/Sczecin
- ICE-High Speed Line from Cologne to Frankfurt/Main
Greece
• Attiki Odos ('Athens Road' - motorway)
• Rion Antirion Bridge
• Athens Metro

Hong Kong
• Western Harbour Crossing
• KCRC West Rail Development
• Airport Rail Link

Japan
• Tokyo Aqua Line
• Seikan Undersea Tunnel
• Chiba Monorail
Netherlands
- HSL- Zuid (fast speed TGV railway from Brussels to Amsterdam)
- Randstad rail (inter-regional rail)
- Westrandweg (including second Coentunnel)

Sweden
- Öresund Link
- The Southern Link
- Copenhagen Metro
- Arland Air-Rail Link
USA
- Alameda Corridor, Los Angeles, CA
- I-15, Salt Lake City, UT (highway Interstate)
- AirTrain, Jamaica, Queens - transit NY

UK
- The CTRL (Channel Tunnel Rail Link)
- Elisabeth II Bridge
- Jubilee Line Extension