Social Impact Assessment in Transport Planning

This is the 22nd factsheet about recent social procurement and social value research which is relevant in an Australian construction and infrastructure industry context.

This fact sheet summarises a recent book chapter into the role of Social Impact Assessment (SIA) in the planning and development of transport projects.

The work was undertaken by Lara Mottee and the chapter can be accessed online here or by contacting the author directly.

Please feel free to distribute this factsheet to anyone who may be interested.

Distinguished Professor Martin Loosemore
University of Technology Sydney
https://profiles.uts.edu.au/Martin.Loosemore

Why the study

- Transport infrastructure projects form part of the social fabric of daily life, providing connectivity between different sites and activities such as households, industry, employment, and commercial centres.
- The potential impact transport has on society is linked to the physical form of the infrastructure, the geographical characteristics of its location, and the relationships transport has with other locations across time and space, as measured by accessibility and mobility.
- The varied footprints of transport infrastructure present different methodological challenges for SIA practitioners and transport planners interested in assessing the social impacts of transport projects.
- There is a need to better understand how social issues are conceptualised and assessed during planning and development of transport infrastructure, address constraints and limitations to practice.

What Lara did

- The author reviewed international peer-reviewed research and best practice guidance on identifying, assessing and managing social impacts of transport in the field of SIA from a multi-disciplinary perspective.
- Using these sources, the author discusses the influence of SIA on social outcomes in two broad project phases of the lifecycle of transport projects, identifies key social issues in each phase and highlights how to enhance the benefit SIA in the transport sector to diverse communities, populations and society.
- The result is an in-depth discussion on contemporary understandings and emerging issues in the field of SIA and social performance practice.
- The author's work forms part of the *Handbook for Social Impact Assessment and Management*, which is available open source here.

What Lara found

SIA methods use a mix of data sources to understand societal, community and local needs and perspectives.

Basic steps in an SIA should involve (1) identifying those impacted, (2) undertaking an impact significance assessment, (3) determining how to manage any negative impacts and enhance benefits.

While guidelines exist such as the International Association of Impact Assessment Social Impact Assessment Guidance for assessing and managing the social impacts of projects there are still challenges to achieving beneficial outcomes from projects. These include:

Limitations and constraints to achieving social outcomes:

- Tokenistic community engagement and unethical or inadequate social impact assessment practices undertaken by professionals without training in the social sciences.
- Lack of integration of social outcomes into planning policy, land use plans and subsequently project goals.
- Depriorisitation of social outcomes to progress economic and technical priorities (time, budget, scope).

- Minimising local-level social needs and values in favour of the wider population in metropolitan or state-level strategies.
- Limited implementation of adaptive impact management and mitigation strategies to respond to change in the environment.
- Minimal or no follow-up monitoring of social issues raised during assessments to facilitate public accountability.

To address these limitations and constraints, Lara determined that opportunities for creating social benefits and avoiding harm need to be explored from the earliest stages of transport project planning.

The transport planning process can be divided into two very broad phases and as transport planning progresses from Phase 1 to Phase 2, SIA's role shifts to managing project impacts.

- Phase 1 - Strategic and conceptual phase (SIA the problem solver)
    - Limited engineering design, multiple concepts, scope for feedback and design change, generalised assessment of impacts
    - Most potential to influence long-term positive impact on society.

- Phase 2 - Detailed design, construction and operation (SIA the impact manager)
    - Concept design and business case agreed, assessments of tangible, intangible, direct and indirect impacts in a designated footprint during regulatory and planning processes.
    - Most potential to minimise local impacts on communities.

Evaluation and management: choosing an adaptive approach to assessing benefits or negative impacts, that recognises uncertainty, to manage changes over time.

Phase 1 - Strategic and Conceptual Phase (SIA as the problem solver)

Undertaken alongside modelling or to inform modelling at the early stages of planning, SIA in the early stages of project planning is an opportunity for:

- Supporting decision-makers to choose between several concept options.
- Identifying where and how individuals, communities and populations may be included or excluded by a transport intervention.

In early phase assessments, example social issues, risks and opportunities include:

- Siting of infrastructure and proximity to residential areas and schools, impacts on air pollution, safety around stations, changes in road safety for cyclists for example.
- Improving accessibility and connectivity to increase potential for participation in society, reducing potential for social isolation and exclusion.
- Physical infrastructure and human health impacts, such as potential to exacerbate climate change induced extreme weather events.
- Opportunities for positive social impact on mental health and wellbeing, such as enhancing walkability and active transport modes
- Integrated design elements to address impacts or enhance sustainability in a neighbourhood or city.

Phase 2: Detailed Design, Construction and Operation phase (SIA the Impact Manager)

Social issues become more focused on the project's direct interface with communities. This may be the first time affected communities will be hearing about the project and understand its impact on their lives.

SIA at this phase of the project should include:

- Balanced assessment of social benefits and costs against the needs of vulnerable and marginalised communities in accordance with best practice guidelines (Vanclay et al., 2015).
- Construction and operational social impacts of the design and construction methodology and temporary and short to medium term effects relative to strategic goals.

- Detailed management strategies to mitigate impacts and reduce potential social risks.
- Social Impact Management Plan to allow for the management, monitoring and adaptation of proposed impact management strategies as the environments change over time.

Table 1 presents a list of example questions that might be considered by practitioners preparing SIAs for typical large transport projects. This list is not exhaustive.

Social impacts	Example key questions in transport
People's way of life	How will the project influence accessibility and mobility of individuals and communities to access the services they need for daily life? Will it enhance opportunities, constrain or modify them?
Culture	Will the transport development impact upon the cultural value that communities place on local areas? Will the project result in a permanent loss of value?
Community	Will the transport development result in any community severance or loss of community cohesion through the presence of new infrastructure? Can social cohesion be enhanced through the provision of improved accessibility to services and facilities?
Political systems	Has the community been involved in the strategic discussions regarding the transport development? Do its members feel their voices have been heard and are their needs being met?
Environment	What direct impacts on the environment have been identified (such as to water quality, air, noise) that will result in impacts upon the community? How significant are these impacts to those affected?
Health and wellbeing	Will the transport development result in impacts on health and wellbeing, particularly those most vulnerable? Will the presence of the project (in construction or operational) result in prolonged impacts on mental or physical health and subsequently the wellbeing of a community or vulnerable individuals? Has pedestrian and user safety been considered in the design of the proposal?
Personal and property rights	Has property acquisition been avoided as far as possible? How do those impacted by acquisitions feel about the process, any compensation as part of the process, or will they be disadvantaged?
Fears and aspirations	Does the affected community have concerns about safety accessing, and living surrounding the new transport infrastructure? Will the project align with their future aspirations for the local area?

Source: The author, based on Vanclay (2002, 2003); NSW Department of Planning and Environment (2021).

Table 1 Questions considered by SIA practitioners

What this means

Public transport projects can be highly political and contentious, requiring a balanced and fair perspective in weighing up the benefits and impacts to support decision-making. SIA provides a well-established methodology for providing the evidence needed to underpin balanced, fair and transparent decision-making.

Project managers, sponsors, financiers, decision-makers and SIA practitioners should consider the following in effectively applying SIA in transport projects:

1. Timing: start as early as possible to have the maximum potential impact on project outcomes;

2. Engagement: carefully consider how the transport development will be creating benefits or negative impacts for the individual, community or society and how these people will be engaged in the SIA research and how social commitments agreed will be delivered in the project.

3. Experience: SIA practice can be manipulated in the development of projects, if not managed by experienced practitioners. Be sure to engage specialists, especially with qualifications in the social sciences.

4. Ethical practices: SIA requires engagement with directly affected communities complimented by statistical research. Principles of Free, Prior and Informed Consent, supported by transparent and rigorous engagement practices are essential.

5. Budget: Ensure there is adequate funding allocations for research and engagement in undertaking the SIA (in addition to other planning approval documents, such as an Environmental Impact Statement) and for follow-up of social impact management strategies at regular intervals.