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INSTITUTE FOR SUSTAINABLE FUTURES

ISF: RESEARCH

Institute for Sustainable Futures

UNIVERSITY OF TECHNOLOGY SYDNEY

SUSTAINABLE TRANSPORT

ABOUT ISF

The Institute for Sustainable Futures (ISF) is a research and consulting organisation at the University of Technology, Sydney. We work with industry, government and the community to help create sustainable futures through research, consultancy and training.

Our excellent and fast growing reputation across Australia and internationally is for innovative, solution-focused interdisciplinary consultancy projects. The key to our approach is integration and alignment across strategic, tactical and operational activities.

We work in a number of different research areas using a variety of approaches. This capability statement outlines our expertise in the field of sustainable transport. Capability statements for the other areas we work in are available from our website.

OUR SUSTAINABLE TRANSPORT WORK

Transport systems are vital to sustaining economic and social interaction. The type of access they provide sets operating costs for businesses and residential precincts, shapes the size of markets and labour catchments, determines the degree of opportunity for the young, the elderly and people with special needs, can transform local neighbourhood amenity and impacts on environmental integrity.

On all these fronts, the transport systems we build today will have an indelible effect on the sustainability prospects of our cities and regions over the longer-term.

Where conventional transport strategies and consultancies focus on mobility — increasing movement — ISF's work recognises improvements to accessibility as the key goal of sustainable transport systems.

Our accessibility-based approach seeks to enhance exchange opportunities. This can be achieved through greater active and public transport network development, land-use changes, greater use of internet-based communications and changes to workplace practices and management procedures.

The competitive advantage of access-based solutions includes lower energy use that translates into reduced operating costs, lower greenhouse gas emissions and fewer environmental impacts.

WHAT WE OFFER

The Institute offers research and analysis services on the economic, social and environmental costs and benefits of transport systems, and provides advice on the development and implementation of sustainable transport solutions.

Our commitment to interdisciplinary research enables us to engage with the operational aspects of transport as well as social and governance factors that affect communities and our clients.

ISF's academic commitment to teaching and learning, in addition to research consultancy, puts it in a unique position to pass on skills to clients, thereby assisting with capacity building in the growing field of sustainability.

AREAS OF WORK

Urban and Regional Transport Futures

> spatial planning for sustainable communities
> sustainable transport transition strategies
> alternative transport technologies
> carbon emission and oil vulnerability assessment
> workplace travel plans (WTPs)
> active transport planning strategies

Post-Implementation Analysis of Transport Projects

> triple bottom line impact assessment
> before and after network analysis
> relative accessibility across modes

Governance and Community Engagement Processes

> Citizen Juries
> enquiry by design
> alliancing frameworks for project delivery

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RECENT SUCCESSES

The Institute has undertaken projects for government departments and agencies, as well as transport-related businesses. Some of our recent project highlights are listed here. Details of other projects can be found on our website.

Your Development Walkability Factsheet – CSIRO
Our research for the CSIRO's Your Development web portal for sustainable urban developments demonstrates the business case for sustainable sub-divisions. It consolidates available knowledge, as well as providing links to other leading materials and case studies.

Active Transport for Childcare Centres – Southern Sydney Regional Organisation of Councils
This report examines the current highly car-dependent travel behaviour of parents taking their children to and from childcare centres. It identifies barriers to using active transport — walking and cycling — and was used to develop interventions to increase active transport rates in the Southern Sydney region.

Frankston Bypass Expert Witness report and presentation
We presented technical material to the Frankston Bypass Inquiry in Victoria that resulted in the recommendation that induced traffic growth should be included in all future motorway assessments.

Greener Transport Guide – NSW Department of Environment and Climate Change and UBD
This 16 page guide informs UBD readers on ways to reduce the environmental impact and cost of their travel needs. It provides concise information on climate change and peak oil and contains practical advice on active and public transport alternatives, car sharing, corporate access and fleet management plans and road freight.

Induced Traffic Growth Study on Sydney's M4 and M5 motorways – NSW Government
This analysis compares the before and after conditions arising from additions to Sydney's M4 and M5 motorways. It quantifies and distinguishes traffic reassignment from mode-shifting and additional road vehicle trips induced by short-term reductions in travel times brought about by the capacity additions.

Moving On: Public Transport Blueprint for Sydney – Rail, Tram and Bus Union (NSW)
A comprehensive literature review, desktop research and a series of interviews with transport experts that generated a ten-point plan for a sustainable transport future for Sydney. The plan was used to press for better policy outcomes in the public transport sector and gained the support of both unions and environmentalists.

Plug-in Hybrid Electric Vehicle (PHEV) Conversion
We have undertaken the conversion of a Toyota Prius to a Plug-in Hybrid Electric Vehicle for several clients. These vehicles will make short trips of up to 30 - 48km, depending on the battery performance and speed, using energy obtained from renewable energy charged at a residence or workplace.

UTS Transport Strategy & Access Guide – University of Technology Sydney
This project develops a Workplace Travel Plan to improve sustainable access for staff, students and visitors travelling to and from UTS. It sets out strategic changes to walking and cycleway provision, staff salary packages, on-site video conferencing facilities, UTS' vehicle fleet operations and parking facilities.

Stirling City Centre Enquiry by Design – Department of Planning and Infrastructure, WA
This project required expert input from ISF in relation to the role that the urban transport system — arterial roads and public transport services — would play in supporting sustainable access to new development in the proposed Stirling City Centre in noth-west Perth. A three day Inquiry by Design workshop was organised to assess how different road and transport scenarios would influence travel behaviour and development potential. A wider regional view of Perth's land-use and transport systems was required to put the redevelopment of Stirling in context. ISF contributed significantly to this project due to our practical understanding of climate change and oil depletion issues that are impacting on urban sustainability.

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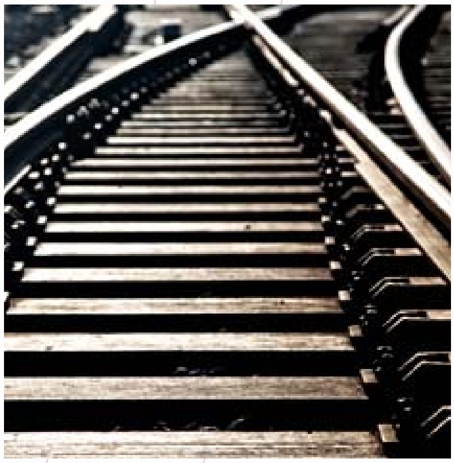

OUR SUSTAINABLE TRANSPORT TEAM

Stuart White

As Director of the Institute with over twenty years experience in sustainability research, Professor White's work focuses on achieving sustainability outcomes at least cost for a range of government, industry and community clients across Australia and internationally. He has led several projects that present a vision for Sydney's transport future and has developed options for a decision-making model for transport.

Michelle Zeibots

Dr Michelle Zeibots is a transport planner and Senior Research Consultant at ISF with more than 15 years experience in the strategic development of urban passenger transport systems. Her work draws together operational, behavioral and administrative aspects of urban transport networks. Her most recent projects include a post-implementation assessment of the Roe 7 highway for Main Roads Western Australia and Stirling City Centre Redevelopment for the WA Department for Planning and Infrastructure.

Emma Partridge

Emma Partridge is a qualitative social researcher and Research Director at ISF whose work addresses the social dimensions of sustainability. She specialises in active transport as a means of improving both environmental and health outcomes in urban environments. Her recent projects include the 'Getting about green' section of the 2009 UBD Sydney street directory, case studies of urban environments for the NSW Premier's Council for Active Living and a guide for Councils on active transport and childcare centres.

Chris Riedy

Dr Chris Riedy is a Research Director at ISF with extensive experience as a researcher, consultant and author on sustainability policy. Chris' work is concerned with energy policy, climate change response and the social and cultural dimensions of sustainability. He has written and presented on diverse issues, including sustainability science, energy and transport futures, public participation, social justice and the ethics of climate change response. He is a regular commentator on energy and greenhouse policy and the President of the Climate Action Network Australia.

Alison Atherton

Alison Atherton is a Research Principal at ISF and has worked with several leading Australian organisations on sustainability reporting, strategy development and environmental management systems. Alison specialises in helping organisations to incorporate sustainability into their operations. She worked on a project for the Rail, Tram and Bus Union to produce a transport blueprint for Sydney, *Moving On*, and led the development of the UTS Sustainable Transport Strategy and Transport Access Guide.

Additional Expert Advisors

Prof John Whitelegg – Internationally renowned transport engineer and workplace travel plan expert, he developed the world's first national standard for WTPs, commissioned by the British Standards Institute.
Public Transport for Sydney.

Dr Garry Glazebrook – Expert on Sydney's urban transport, sustainable urban transport systems and urban development, with nearly 30 years' experience in consulting and in government policy positions. He has published widely in the fields of transport and planning, most recently a 30 year public transport plan for Sydney. He is a member of the Herald Public Inquiry into Public Transport for Sydney.

Chris Dunstan – Research Principal specialising in removing regulatory and market barriers to the development of sustainable energy and encouraging the integration of electric vehicles into the electrical system.

Conal Horgan – Research Consultant with extensive experience in Plug-in Hybrid Electric Vehicle (PHEV) conversions and new transport technology including Australia's first 'Vehicle to Grid' (V2G) interactive vehicle.

Dr Chloe Mason – ISF Research Associate specialising in mobility management as a complement to traditional demand management activities.

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BENEFITS OF WORKING WITH ISF

Track record:
We have been conducting project based research for Australian and international clients for a decade and have an excellent reputation for innovative solutions-focused work.

Grounded in theory and best practice:
Our researchers are not only up to date with best practice and current thinking — they contribute to it. Their research is published regularly in academic journals as well as industry and scientific publications and the popular media.

Practical & diverse experience:
Our researchers come from varied backgrounds, including: engineering architecture, management, economics, science, social sciences, international studies and political studies. Most have worked in both government and commercial environments, so we know how to deliver independent and feasible solutions to suit the needs of a diverse range of clients. We are small enough to offer our clients personalised service and large enough to offer a diversity of research skills.

Collaborative approach:
We seek to create change towards a sustainable futures by building capacity in organisations and individuals, and in the community more broadly. This means that we actively aim to pass on our knowledge and skills to our clients through close collaboration.

WAYS WE CAN HELP

Consulting and research services:
We can provide the research you need to move towards sustainable futures. We provide consulting services under both negotiated and tendered contracts.

Professional advice:
You may need assistance with preliminary work before embarking on a larger project or an external review of an existing program. Our professional advice is available either for an hourly rate or on a package basis.

Partnerships:
Whilst we have many ongoing partnerships across a range of technical fields and can coordinate a specialist team to meet your requirements, our researchers are also available to join new or existing partnerships as needed.

Guest speakers:
We are experienced in communicating complex issues in an accessible and engaging way. Our researchers are often invited to speak at conferences, forums, workshops and seminars. We are also frequently called upon by print, radio and television journalists for expert opinion.

PUBLICATIONS

We are committed to sharing the results of our work in the interests of a more sustainable future for all. Many of our reports, discussion papers, journal articles and conference papers can be downloaded from our website.

CONTACT US

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