

Capability Statement Institute for Sensible Transport





Who we are and what we do

'a city is judged
by the quality
of its streets'

Jane Jacobs

The Institute for Sensible Transport is an Australian transport consultancy focused on helping cities become more vibrant and sustainable. We develop creative transport strategy, rigorous analysis and carefully designed plans, all focused on helping to make cities more liveable, sustainable and vibrant.

As the urbanist Jane Jacobs said, a city is judged by the quality of its streets. We are committed to the application of evidence based, best practice transport strategy to help make city streets great.

We work with all levels of government, both in Australia and internationally on sustainable mobility, disruptive transport innovation, professional development and policy and strategy formation.

Our key capabilities include:

- Disruptive transport innovation
- Active transport planning, forecasting and cost benefit analysis
- Bicycle plans, strategies, network designs, and 'complete streets' development
- Car parking policy and reform
- Active transport wayfinding strategy and design
- Study tours and seminars on transport innovation
- Electric bike policy and assessment of impacts
- Bike share feasibility and evaluation
- Transport emissions auditing and emissions reduction strategy development
- Place based transport plans
- Shared transport platform policy development



Dr Elliot Fishman

As the Director of the Institute for Sensible Transport over the past 13 years, Elliot has played a pivotal role in all our major projects and leads our work on bike share, e-bikes, disruptive transport and professional development. Dr Fishman has extensive experience in the field of integrated transport planning, and was coordinator and lecturer of the Integrated Transport Planning course at RMIT University.

Dr Fishman's ability to inspire cities to think boldly about the city they want to be in 50 years is highly sought after, both in Australia and internationally. Elliot has led investigations for governments around Australia on emerging transport technology and the implications for policy makers.

Dr Fishman is a leading thinking on integrated transport and sustainable mobility planning, having provided advice to the Prime Minister's Office, Transport for London and the NYC Department of Transportation. In recent years he has prepared ambitious, best practice transport strategies for local governments in Victoria and NSW. These have included land use and transport planning elements that have sought to maximise the beneficial components of emerging transport technology, such as MaaS possibilities and the shift from short car trips to active transport. Dr Fishman's innovative work on the possible impacts of driverless vehicles has led governments to rethinking how best to capitalise on the emergence of these technologies.

Elliot has written for the Age, Newscorp publications, the Canberra Times, Sydney Morning Herald as well as many of the world's highest-ranking peer reviewed transport journals. Elliot has undertaken work for the OECD and the National Government of Singapore. Dr Fishman is an experienced communicator and has facilitated a large number of transport planning workshops and has an excellent ability to write technical documents accessible to a wide audience.



Liam Davies

Liam is a Senior Transport Analyst and has worked for the Institute for Sensible Transport since late 2015. Prior to his appointment at the Institute for Sensible Transport, Liam was RMIT's top transport planning student, demonstrating his understanding of transport research and strategic principles, emerging issues and best practice transport innovation. He has an in depth knowledge of the Victorian Planning Scheme as well as the NSW DA and LEP process.

Liam's excellent GIS and analytical skills have helped our clients understand their current transport problems and his ability to envision a path towards a more sustainable, less car dependent future has proven tremendously valuable to the government agencies he has worked with. Liam has a deep understanding of all modes of public transport, including their operational and infrastructure requirements. There is always a public transport element in the projects Liam is involved in.



Vaughn Allan

Vaughn has worked as a Transport Analyst at the Institute for Sensible Transport since 2017. He has also worked at the Department of Premier and Cabinet, and Bicycle Network. Vaughn has a very strong understanding of the Victorian Planning Scheme, transport data analysis, street redesigns, integrated transport, active transport and GIS based analysis and modelling.

Our People

Selection of recent projects



Yarra Ranges Integrated Transport Strategy

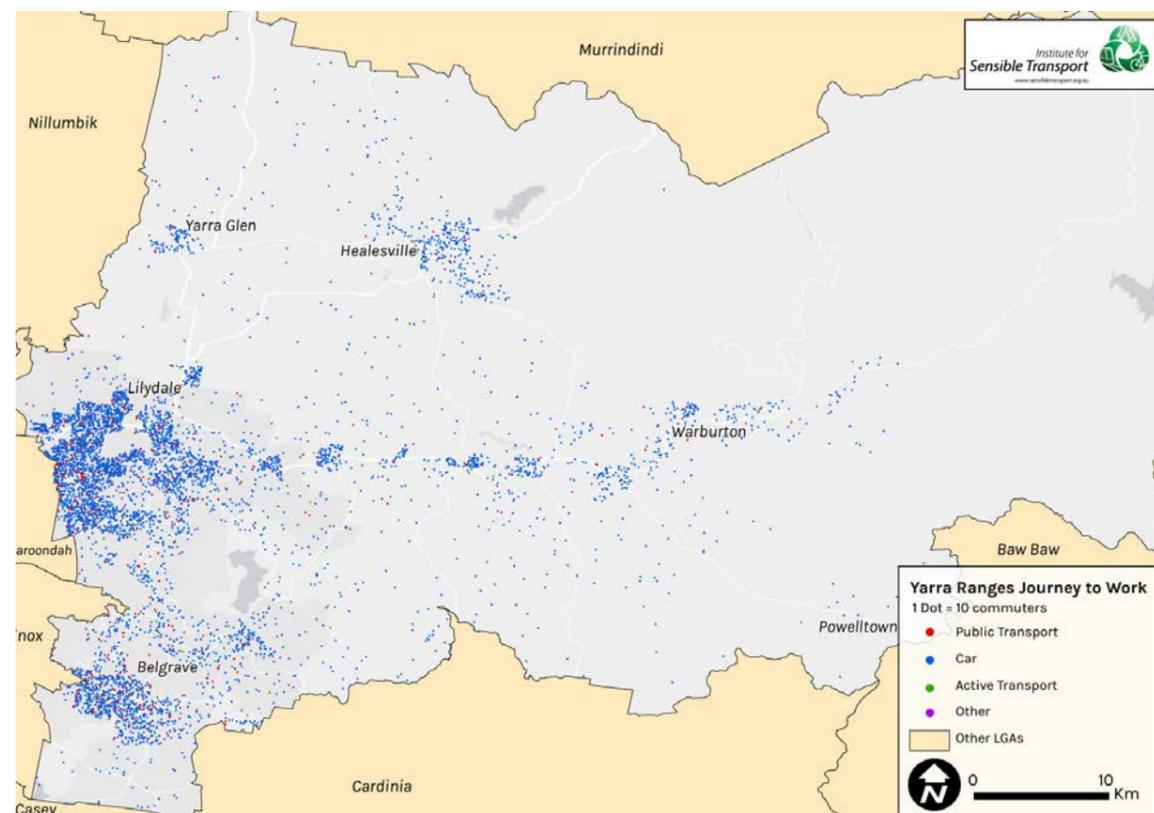
Yarra Ranges Council
2019 - 2020

We were engaged by Yarra Ranges Council, a local government on the eastern edge of Melbourne, to prepare their first Integrated Transport Strategy.

This project commenced in early 2019 and is scheduled to be completed in February 2020 and will provide Council with a blueprint for guiding transport investment and policy decisions.

Community and Councillor engagement have been an integral part of the process, from day one, to ensure the final Integrated Transport Strategy to ensure their aspirations form the basis of the Strategy. We've also facilitated a number of face to face community engagement sessions and designed a custom platform to enable the community to have input using any internet connected device.

An analysis of existing transport and land use data was delivered to Council and provided a clear picture of how far people travel, and by what modes, as well as crash patterns and the existing level of service for different modes of transport. We have been able to provide a clear picture of existing travel behaviour, crash statistics, density patterns and transport projections.



Spatial variation in journey to work origins, Yarra Ranges residents

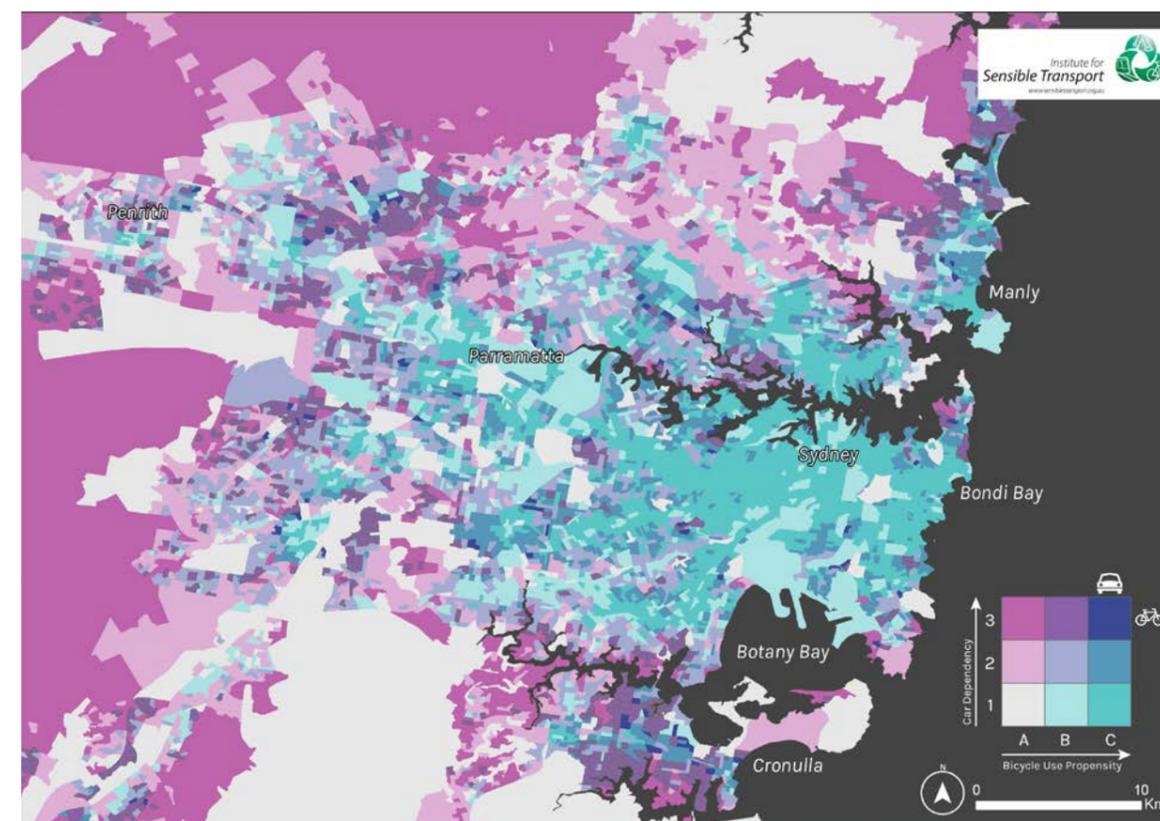
Business Case for Cycling

Transport for NSW
2018 - 2019

In partnership with ShapeTransport, we assisted Transport for NSW understand existing levels of cycling and how an improved bicycle network, coupled with population growth factors may influence future cycling levels.

We created a model, using Big Data, to estimate daily cycling volumes and how the provision of safer infrastructure might boost cycling participation, across all the major population centres of NSW. As part of this project we were also able to identify the parts of NSW that have very high levels of short car trips, to provide insights into where enhanced conditions for cycling may have the strongest impact on replacing some car use.

The figure below combines the results of our Bike Use Propensity Index with our Car Dependency Index, to highlight areas that overlap (darkest shade). These are the regions of Sydney in which there is a high level of car dependence, and many of the underlying predictive factors for future bike use. This was developed to identify the areas in which bicycle infrastructure can play a stronger role in shifting short car trips to cycling.



Spatial variation and overlap in Greater Sydney in propensity to cycle and current car dependence

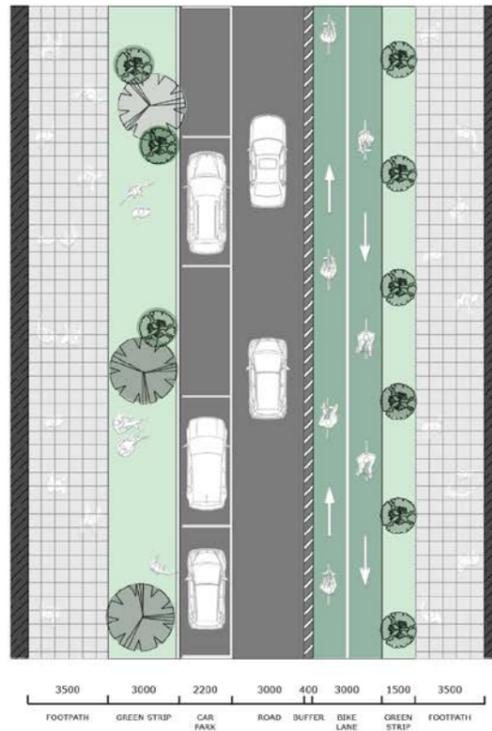
Moonee Ponds Activity Centre Transport Plan

Moonee Valley
City Council
2018 - 2019

Moonee Ponds has the most intensified urban development within the municipality of Moonee Valley in inner Melbourne.

We were commissioned, in partnership with Movement & Place Consulting to provide a plan for enhancing the quality of the Moonee Ponds Activity Centre through transport innovation. This project involved a detailed assessment of parking, traffic flows and provided Council with street transformations that offered more a more vibrant public realm and enhanced conditions for sustainable mobility.

The images below offer a conceptual redesign for a key shopping street within the Moonee Ponds Activity Centre that currently lacks greenery, wider footpaths or bicycle infrastructure. Our re-designs helps to align the street with Council's strategic direction for a more sustainable, healthier city.



Conceptual re-design of under performing street in Moonee Ponds, which included a substantial increase in green, sustainable infrastructure, while boosting the safety of the modes Council wishes to promote

Electric vehicle charging implementation plan

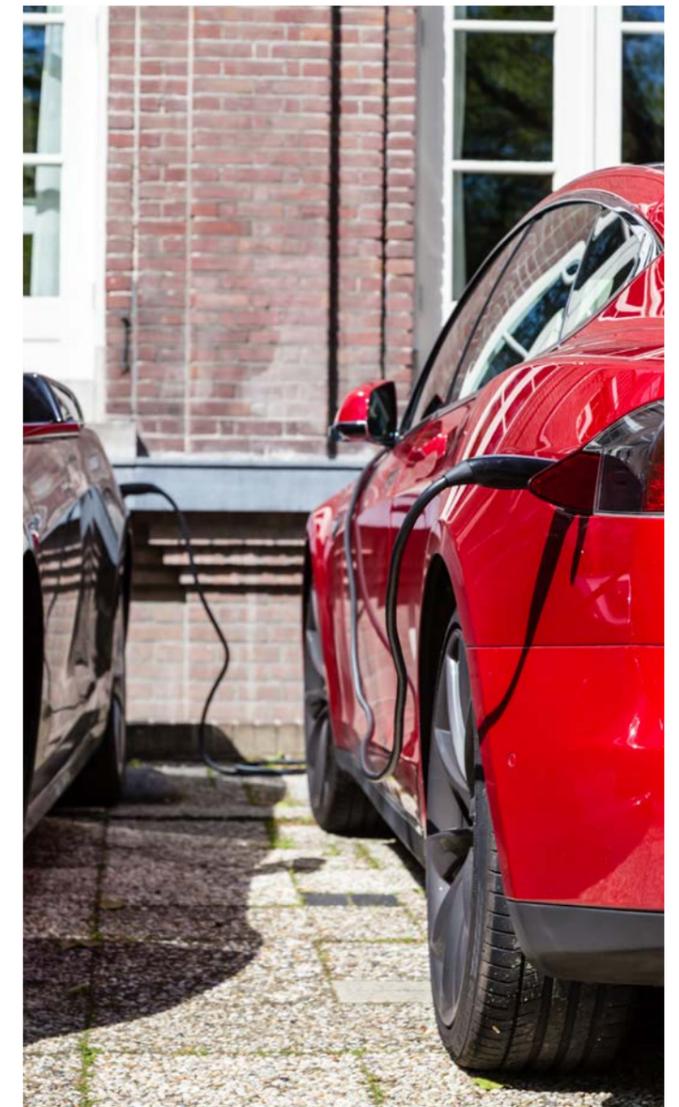
City of
Port Phillip

The City of Port Phillip commissioned our team, along with SGS Economics and Planning, to assist them in meeting their target of a zero-emission vehicle fleet by 2028.

We created a framework to identify a sequential plan for transitioning their vehicles to zero-emission and provided a charging network implementation plan. We created a GIS based Index to identify areas of relatively high latent demand for publicly available electric vehicle charging and a set of policies to speed the transition towards lower emission transport.

This project assisted Council by providing:

- An overview of electric vehicle take-up, barriers and measures to increase adoption.
- An assessment of different charging infrastructure and case studies of local government's involvement with electric vehicle charging programs.
- A clear illustration of which vehicles currently contribute the most to the City's emissions.
- An assessment of which fleet vehicles offer the best opportunity for replacement with electric vehicles
- A geospatial assessment of the areas within Port Phillip likely to have the strongest take up of publicly accessible charging locations
- Insights into the most appropriate role for Council in facilitating the development of a charging network in Port Phillip.



Electric charging infrastructure is required to facilitate the transition to clean mobility

Darebin parking strategy: Issues and Opportunities

Darebin
City Council,
2018

This project involved a detailed policy and data analysis on issues related to car parking, to assist Darebin City Council as it begins the process of car parking policy reform.

This project enabled our team to demonstrate what can be gained by reforming parking policy, including the opportunity created when unnecessary parking is replaced by wider footpaths, more green space, protected bicycle lanes and public transport priority routes.

The two images below offer an impression of the conceptual proposal we were able to offer the client, highlighting that when kerbside parking is removed, more space is available for protected bike lanes, dedicated tram routes and more reliable and less frustrating general traffic lanes. Creating these multi-modal 'complete streets' is a core part of our work.



High Street, Thornbury, VIC
(current)



High Street, Thornbury, VIC
(conceptual proposal)

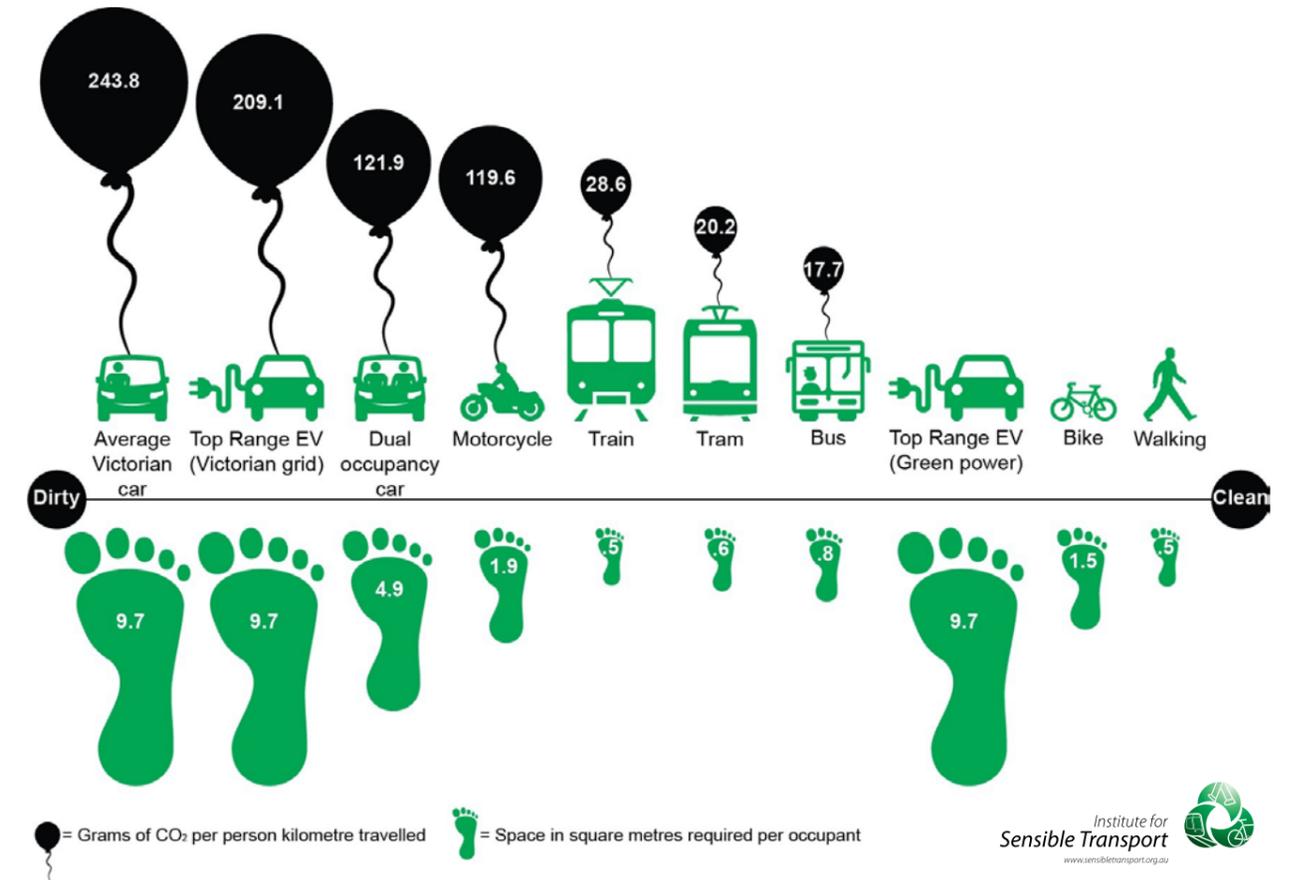
Transport and emissions

City of
Melbourne,
2018

We assisted the City of Melbourne in developing a stronger understanding of the emissions within their municipality attributable to transport (air, land, water).

We were able to provide a snapshot and data led discussion of current trends in transport emissions. We aligned the City of Melbourne's method of calculating emissions with international (GPC) protocols. This project also provided a set of recommendations designed to bring the City of Melbourne's transport emissions in line with climate change commitments.

To help illustrate the relationship between emissions, and space consumption, we developed the infographic shown below, which demonstrates why public and active transport are so important for growing cities seeking to reduce their emissions and congestion levels.



Understand the emissions and space intensity of different transport modes

Dockless Bike Share Parking Infrastructure Guidelines

VicRoads,
2017

Melbourne, like many other cities, witnessed the unplanned introduction of dockless bike share in 2017.

In this work, we assisted the Victorian government develop an understanding of the parking requirements of dockless bike share and what measures could be taken to enhance the contribution of this growing mode of transport to mobility options in cities.

In this VicRoads commissioned report, we produced a literature review of the approaches taken in different cities that have dockless bike share; examining successful techniques to manage this new form of public transport.



We helped the Victorian government gain an improved understanding of what other cities have done to address issues associated with the introduction of dockless bike share

Homebush Bay Wayfinding Strategy and Masterplan

City of
Canada Bay,
2017

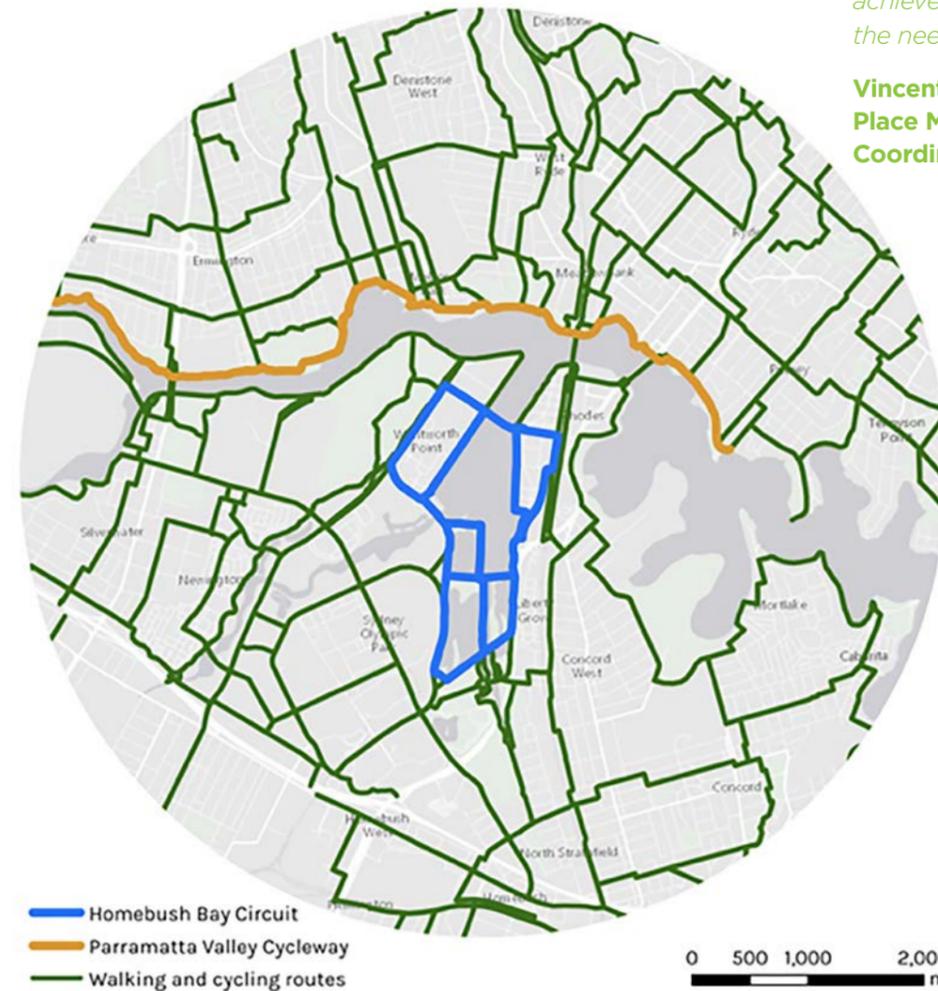
We led an international consortium to deliver a comprehensive design for a cohesive walking and cycling circuit around Sydney's iconic Homebush Bay, the site of the 2000 Olympics.

This Homebush Bay Wayfinding Strategy and Masterplan was commissioned by the City of Canada Bay, Sydney Olympic Park Authority and the City of Parramatta, and funded by the NSW Government.

Testimonial

"The Institute for Sensible Transport were able to demonstrate an exceptional understanding of world's best practice in balancing the needs of different modes of transport and integrating more walking and cycling into local travel...(They) utilized graphically clear street cross sections and mapping demonstrating that the provision of safe and attractive walking and cycling facilities could be achieved on the Circuit while recognising the needs of motorists"

Vincent Conroy,
Place Management
Coordinator, City of Canada Bay



We developed a comprehensive walking and cycling network, integrated with wider transport opportunities in Sydney

Bike Plan

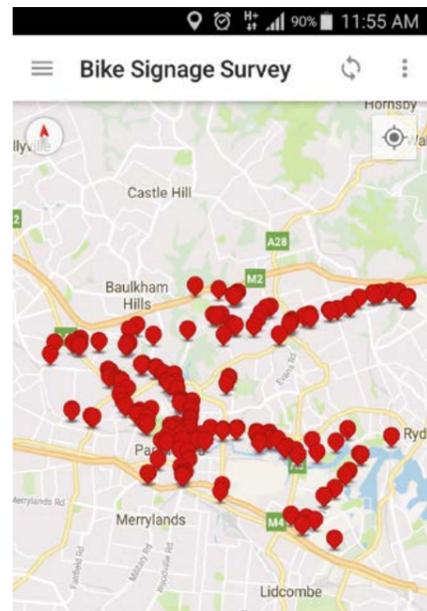
City of Parramatta, 2017

As Parramatta continues its urban intensification and rapid population growth, we assisted the City of Parramatta in the development of a detailed Bike Plan, designed to boost the contribution of cycling to meeting current and future transport challenges.

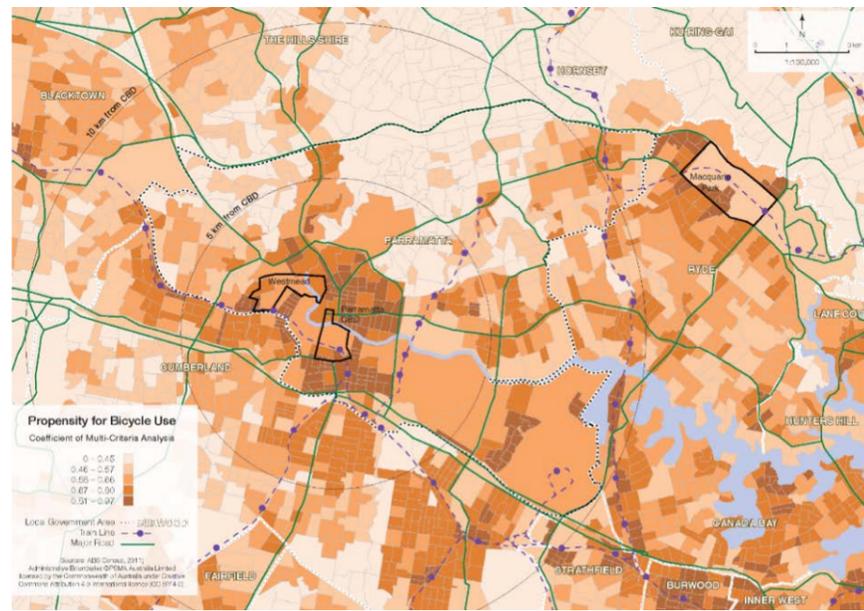
This project involved a 'saddle survey' using HD handlebar mounted video and a specially designed mobile App to document existing conditions and potential improvements (see snapshot of data overview below).

A detailed network of bicycle lanes and paths were recommended, costed and usage forecast provided over the next 30 years, taking into account government estimates of population growth rates.

We were able to provide Parramatta with a cost benefit ratio, offering an indication of the long-term return on investment in building their bicycle network. To ensure that the bicycle infrastructure was being recommended in the areas with the highest latent demand, we developed a data led Bike Use Propensity Index, utilising Census and bicycle count data, the results of which are shown below. This helped to ensure the infrastructure recommended was being placed in the areas most likely to be used.



The collection of detailed, local data in a GIS format is essential to our approach



A data-led illustration of where latent demand exists for future cycling

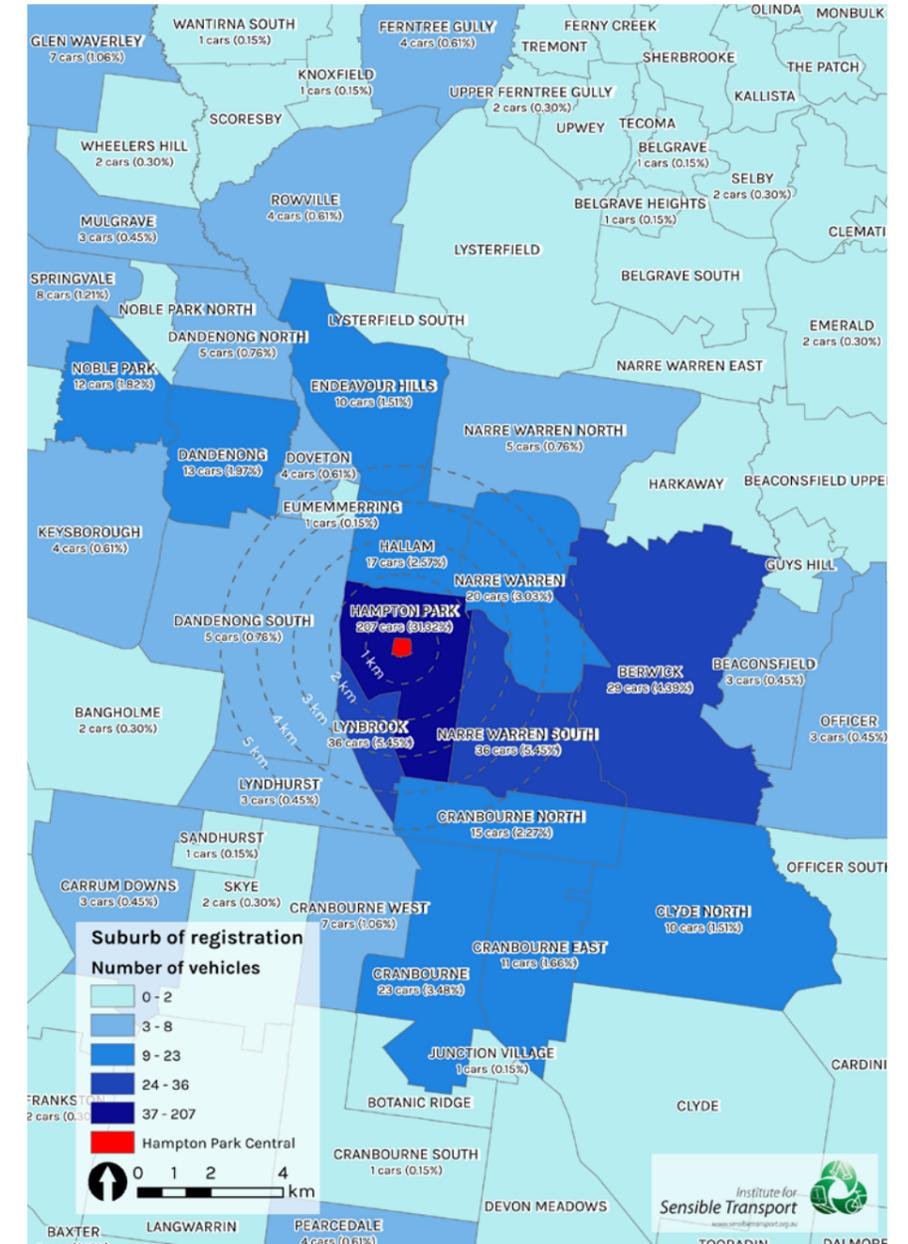
Hampton Park Central Access and Movement Study

Casey City Council, 2017

We recently completed this place-based transport plan for Casey City Council.

The focus was on people, rather than vehicles and this led to a design process in which priority was offered to pedestrians, cyclists and public transport users, as these are the modes that are current under-represented within this Activity Centre.

As with all our work, a data-led approach was taken and this included an analysis of the address of registration for the vehicles parked within the study area (see image below). This provided our team with insights as to the likely distance people may have been travelling to arrive at the Activity Centre. Most vehicles were registered at the same, or an adjoining postcode to the study area itself.



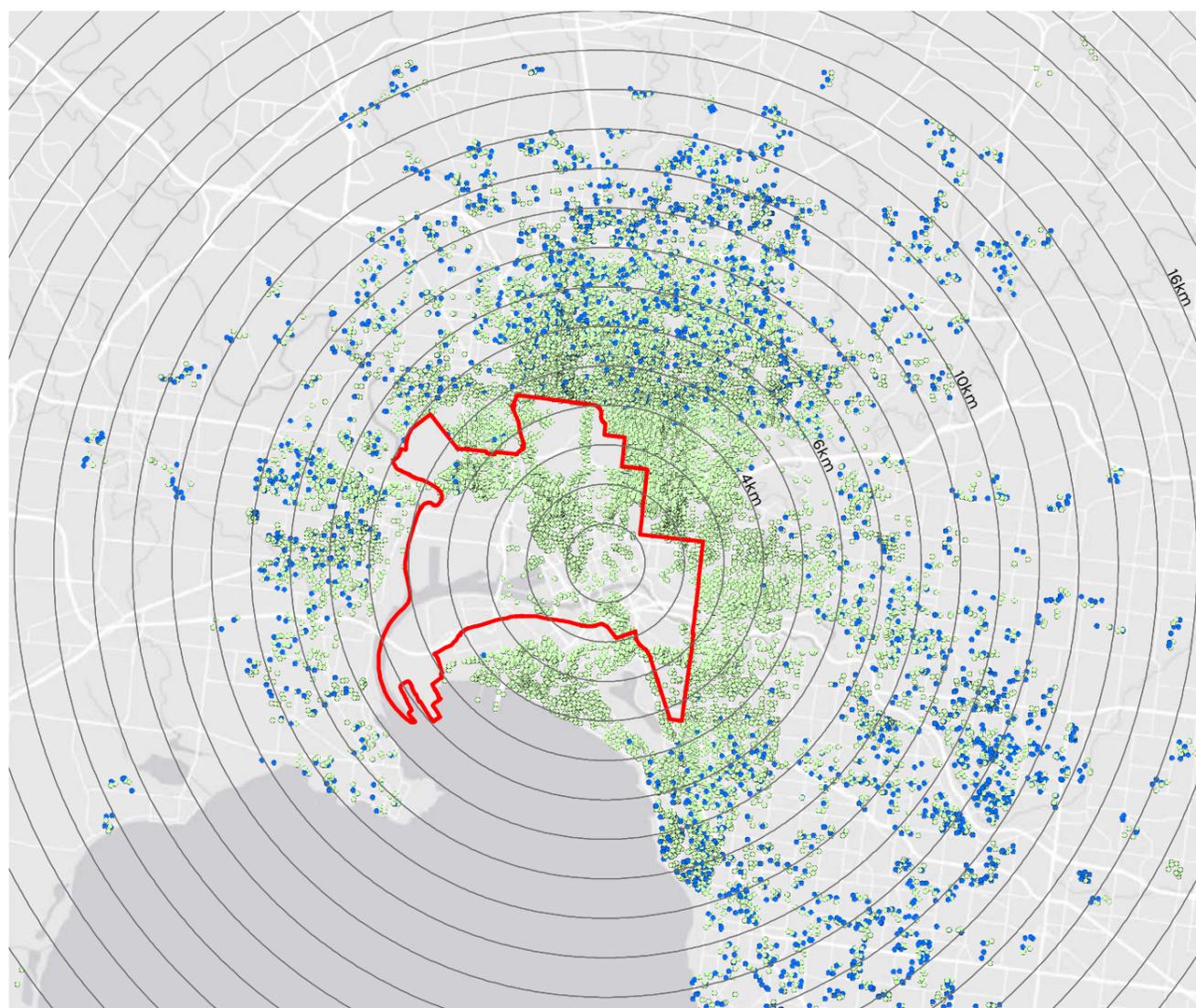
Understanding where cars are registered

Potential for electric bike use in Melbourne

City of Melbourne, 2018

As part of the City of Melbourne’s Transport Strategy Refresh, we provided an analysis of the potential for e-bikes to contribute to the growing transport task facing a fast-growing Melbourne.

This project included an overview of the latest developments in the e-bike market, the influence e-bikes are having on travel behaviour in other markets and what the City of Melbourne can do to maximise the contribution of e-bikes to provide safe, efficient mobility.



Helping the City of Melbourne understand the potential for e-bikes to meet the growing transport challenge

Transport innovation study tour to the Netherlands, 2018

The Institute for Sensible Transport uses its extensive network of Dutch transport and land use experts to curate a week-long tour of transport innovation in the Netherlands.

An emphasis is placed on translating best practice examples into the Australian context and past attendees have included representatives from Infrastructure Australia, Transport for NSW and local government transport planners and Councillors from around Australia.

Our study tours look at the Dutch transport and land use system as a whole, with a focus on lessons that can be translated into the other, more car dependant contexts. Whilst it is impossible to ignore cycling in the Netherlands, our study tours take a broader view, encompassing the full set of transport options in the Netherland and what it means for Australian cities.



The 2018 study tour delegates learning about street transformation and vibrancy from the chief landscape architect, City of Amsterdam

Sydney Bike Share Feasibility Study

Inner Sydney Councils,
2017

We assisting a group of inner Sydney Councils understand the global context regarding the rapidly changing international bike share industry.

Our work included:

- Bike share case studies from London, NYC, Washington, D.C., San Francisco, Melbourne, and Brisbane.
- Key benefits and opportunities for bike share in Sydney.
- Integration of a future Sydney bike share program with public transport, including options for Smartcard compatibility.
- Bike share propensity index: This was developed as a map of Sydney, indicating areas of high and low forecast bike share use.
- Design principles for the placement of docking stations.
- Assessment of suitable bike share hardware for Sydney.
- Optimal process for user sign up and customer interface.
- Consideration of helmet requirements and potential measures to mitigate lower usage levels due to existing legislation.
- Bicycle infrastructure network and impact on usage
- Potential funding sources and program costs.
- Governance and contract management.



Sydney Bike Share Feasibility Study Operational Recommendations

Prepared by Dr Elliot Fishman, Institute for Sensible Transport with a assistance from Dr Lorelei Schmitt, Senior Sustainable Transport Consultant and Louise Baker, Principal Sustainable Transport Consultant, both of Opus International Consultants.

August 2016

Institute for
Sensible Transport

www.sensibletransport.org.au



Professional development seminars

2010
- ongoing

The Institute for Sensible Transport have, for over eight years, held professional development seminars on a range of emerging transport topics.

These include seminars on:

- Innovations in parking policy and practice, with the world's foremost authority on the topic, Professor Donald Shoup.
- App and ride sharing services and the impact on mobility, with Professor Allan Fels, Uber and the taxi industry.
- The Psychology of Transport Behaviour with New York Times best selling author, Tom Vanderbilt.
- Road user pricing and autonomous vehicles with former Victorian Premier John Brumby, Reserve Bank Board Member Professor Ian Harper, and the then Productivity Commission Chairman Peter Harris.



The former Premier of Victoria, John Brumby AO, delivering his Keynote address at our seminar on road user pricing in 2017.

Moonee Valley Integrated Transport Strategy

Moonee Valley
City Council,
2015/16

This project provided Moonee Valley with a 25-year blueprint to reform transport policy in in this inner northern Melbourne LGA and provide closer alignment with Council's overarching strategic objectives.

A Safe Systems approach was applied that served to reduce the risk of serious and fatal collisions and had an emphasis on boosting safety outcomes for sustainable transport users. A multi-criteria analysis was used to ensure the actions contained in the Strategy supported Council's ambition to be a health, sustainable community in the future.



We helped Moonee Valley City Council by developing a 20-year transport blueprint to meet their wider city objectives

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