

# Project appraisal & evaluation

Investment prioritisation

Project appraisals

Business cases

Program evaluation

Model development

# Introduction

Understand what projects and programs work and effectively engage with public funding and approval processes.

We help project stakeholders leverage the strategic thinking, rigorous analysis and funding required for successful project delivery. Our services range from developing frameworks for prioritising investments right through to preparing detailed business cases for individual projects.





# Expertise & Experience

Investment prioritisation

Project appraisals

Business cases

Program evaluation

Model development

# Investment Prioritisation

## Prioritisation frameworks

SGS has helped government agencies and non-government enterprises prioritise project development funding; essentially front ending business case development processes and ensuring that development resources are invested in the highest ranked projects.

We do this by working with portfolio managers to develop prioritisation criteria and scoring systems, usually based on:

- Strategic alignment
- Underlying need
- Financial impacts
- Socioeconomic impacts
- Project delivery cost and risk.

Our prioritisation frameworks combine insights from available data with the collective nous in our client and project teams to overcome information deficiencies.

Our frameworks enable an investment pipeline to be adequately planned.

Client	Project
Infrastructure NSW	Cultural Infrastructure investment framework
Creative Victoria	Cultural Infrastructure investment framework
Vic Department of Health & Human Services	Public housing infrastructure investment framework
University of NSW	Infrastructure development opportunities plan





## Investment planning

We also develop detailed investment plans with infrastructure agencies responsible for managing a network of facilities that span across geographic regions.

This is a multifaceted process which requires:

- Forecasting demographic demands across the region over time
- Converting these forecasts to infrastructure and/ or floorspace demands
- Aligning demand forecasts with existing/ committed infrastructure supply capacities
- Identifying the scale and evolution of demand/ supply gaps
- Assessing how discrete investments will address these gaps, and
- Developing an overall investment plan for the agency which includes the scope, scale and timing of specific investments across the regional network to optimise outcomes.

Client	Project
Brisbane Catholic Education	Planning for new schools across Southeast Queensland
Victorian Education	School investment sequencing across Melbourne
Court Services Victoria	VCAT accommodation plan
Auckland Libraries	Library network investment plan
Inner Melbourne Councils	Sports & recreation investment plan
Queensland Education	Inner city school provisioning plan
Melbourne Catholic Education	School investment plan for Melbourne

## Case study projects

# Cultural infrastructure investment prioritisation

## CLIENT: INFRASTRUCTURE NSW

As part of its update of the State Infrastructure Strategy for NSW, Infrastructure NSW was developing a strategy for future investment in cultural infrastructure.

Amongst other things, INSW commissioned SGS to establish:

- Best practice in terms of the economic appraisal of cultural infrastructure investment and, in doing so, clearly scope the economic/ welfare benefits that are generated
- An internal priority setting framework, enabling INSW to appropriately plan for its annual budget bids

SGS developed a multi-criteria prioritisation framework for internal use by INSW, as well as briefing material for project proponents on how to present evidence in response to the prioritisation criteria.

SGS also worked with INSW to prioritise competing cultural infrastructure investments, with prioritised investments featured in the NSW Cultural Infrastructure Strategy.

# Regional active sport & recreation investment plan

## CLIENT: INNER MELBOURNE ACTION GROUP (IMAP) COUNCILS

SGS prepared strategic advice for the planning, provision, development and operation of sporting and recreation assets and spaces within the inner region of Melbourne that respond to the evolving community, sporting and recreation demands of an increasing resident and local workforce population.

The project included a detailed assessment of supply and demand for sport and recreation facilities, a review of case studies and extensive engagement with council staff in the IMAP region. The analysis was used as a basis for developing a strategy for future provisioning of facilities across the IMAP region, including recommendations regarding how existing facilities might be improved to optimise participation.

The IMAP Regional Sporting Facility Strategy seeks to outline an ambitious and regionally focused vision and set of actions which the member councils can collectively work toward to address the challenge of increasing demand for sporting facilities in a well-established urban area.

Beyond a simple supply, demand and gap analysis used in traditional studies, this strategy outlines a range of innovative opportunities and solutions which will be critical to meeting the significant provisioning challenge.

# Project Appraisal

## Economic appraisal

SGS has developed economic appraisals (also known as cost benefit analysis) across a range of infrastructure, regulatory and service delivery proposals.

Infrastructure	Regulation	Service delivery
Roads and rail transport	Land use change	Community transport
Tourism and events	Affordable housing	Public libraries
Environmental assets	Dwelling regulation	Design review
Education – schools, TAFE	Outdoor advertising	Urban planning assistance
Social and affordable housing	Property taxation incentives	Sporting programs
Recreation & cultural facilities	Public housing stock transfer	Electronic planning systems
Public realm, parks & gardens	Industrial incentives	Environmental financing
Urban development/ renewal	Electronic gaming machines	Planning services
Health - arts in hospitals		

We have a well-honed approach to performing economic appraisals, consistent with the guidelines mandated by state treasuries across Australia.

This approach:

- Differentiates the outcomes generated under each of the competing project options
- Identifies, describes and then monetises wherever possible the incremental costs and benefits generated by the project options
- Contrasts these monetised costs and benefits over the project's lifecycle and then calculates performance measures using discounted cashflow techniques
- Accounts for the likely scale of non-monetised costs and benefits before making conclusions regarding the economic efficiency of each project option, and
- Accounts for the distribution of the costs and benefits among stakeholder groups before making conclusions regarding the social equity of each project option.

Client	Project
Building Queensland	Five new primary schools in SE Queensland growth areas
University of NSW	Randwick Innovation Precinct
NSW Environment & Heritage	Aboriginal Cultural Heritage reforms
Arts South Australia	Adelaide Contemporary
Major Projects Victoria	Melbourne Park precinct upgrades
Sunshine Coast Council	Valuation of the Interurban Break (Non-urban land)
Royal Botanic Gardens, Cranbourne	Establishing the Australian Garden
VicRoads	Glasscocks Road upgrade
Vic Health & Human Services	Social housing investment program
Health Infrastructure NSW	Arts in health infrastructure

## Socioeconomic impact assessment

SGS has developed scores of socioeconomic impact assessments which assess the direct and indirect economic and social impacts of project implementation on affected communities.

Our approach is to integrate quantitative and qualitative approaches; ensuring a balanced view of overall impact on each of the key stakeholder groups is developed.

The quantitative approaches used by SGS include computable general equilibrium (CGE) modelling and input output (IO) modelling.

Essentially SGS:

- Develops models of regional economies
- Identifies the project's direct impacts on the regional economy
- Shocks the regional economic model with these direct impacts
- Traces the indirect impacts that are triggered by multiple rounds of buyer and supplier transactions within the regional economy, and
- Measures how these direct and indirect impacts accumulate in Gross Regional

Product (value added) and regional income, employment, investment and export levels.

Our qualitative approaches identify the key stakeholder groups impacted, as well as the direction, degree, and duration of impacts.

We strive for a semi-quantitative assessment enabling the social impacts to be integrated with the economic impacts.

Client	Project
Building Queensland	Five new primary schools in SE Queensland growth areas
Vic Level Crossing Removal Program	Station options for selected level crossing removals
University of Sydney	Eveleigh Innovation Precinct
National Gallery of Victoria	National Gallery of Victoria Contemporary
Fraser Coast Council	Hervey Bay Education Precinct
Major Projects Victoria	Melbourne Park sporting precinct upgrades
NSW Health Infrastructure	Relocation of regional public hospital
DPC Victoria	Homes for Victorians Package
DHHS Victoria	Public housing estate renewal program
Committee for Geelong	Geelong Ring Road
SA Government	Tonsley Park redevelopment
SA Government	Airport Food Park development
VicRoads	Glasscocks Road upgrade
State Libraries of Qld, Vic & SA	Public library operations
NSW Landcom	Redevelopment of Green Square



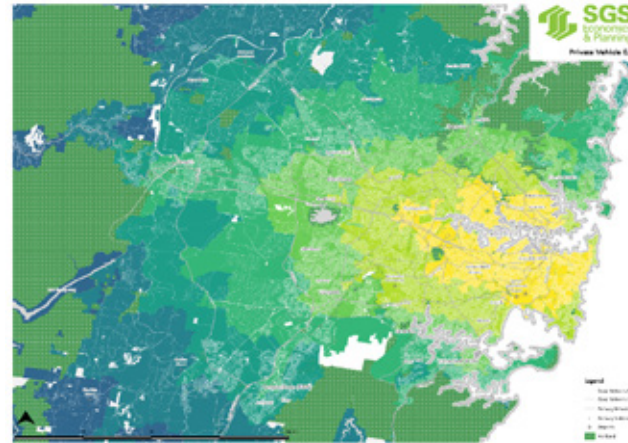
## Land price impact modelling

SGS models how land prices across regions are estimated to change in response to strategic infrastructure provision and/ or land use regulatory change.

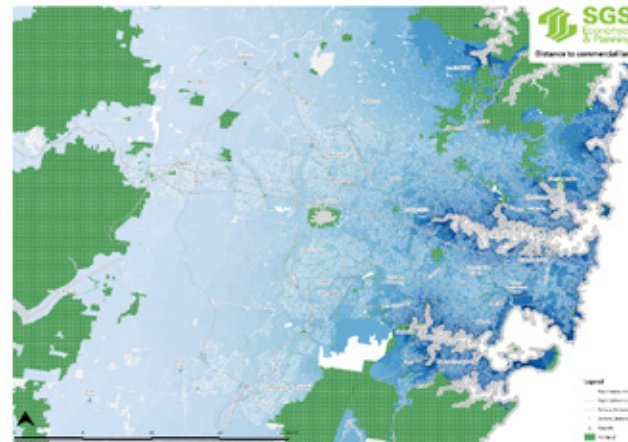
These insights can inform land acquisition, infrastructure prioritisation, individual project appraisals and business case development, and infrastructure funding/ capture strategies. Our hedonic price modelling considers the following variables:

- **Metropolitan connectivity**
  - Access to employment opportunities
  - Access to service opportunities (education, health, etc)
- **Local context**
  - Land use zoning/ regulation
  - Accessibility of natural assets (beaches, parks, rivers, etc)
  - Local amenity (views, vegetation, topography, industrial land, etc)
- **Site potential**
  - Land parcel size and shape
  - Value of existing improvements.

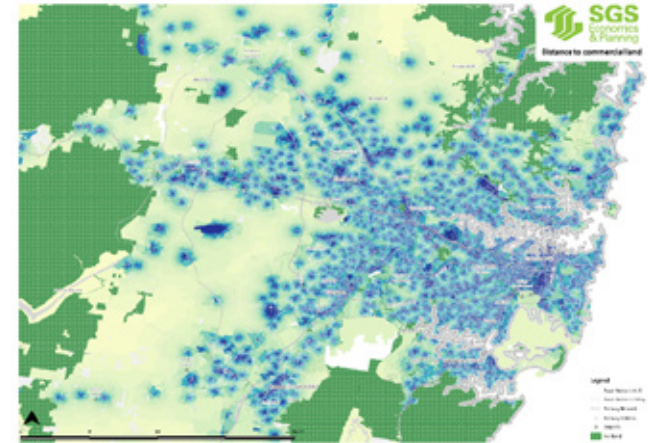
## Accessibility of employment opportunities



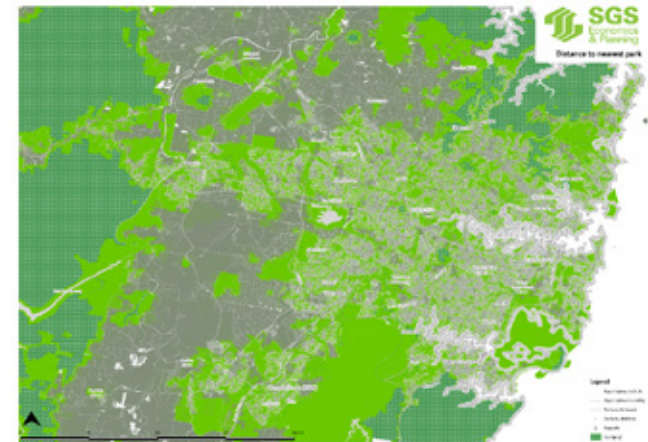
## Proximity to the coast



## Proximity to local shopping centres



## Proximity to parks



## Case study projects

# Arts in health empirical study

### CLIENT: HEALTH INFRASTRUCTURE NSW

SGS was commissioned by Health Infrastructure NSW and Create NSW to undertake one of the most comprehensive reviews of arts in health in NSW to date.

SGS's research was directed towards developing an accurate and reliable method for identifying and measuring the benefits of arts in health infrastructure investment, namely in public hospitals.

SGS was also tasked with assisting the Department to:

- Better understand and quantify the impact of investment to date
- Promote the impact of arts in health across agencies as appropriate, and
- Assist in the long-term review of impacts over decades to come.

The project adopted a description of arts in health consistent with the national definition, which broadly refers to: *“the practice of applying creative, participatory or receptive arts interventions to health problems and health promoting settings to create health and wellbeing across the spectrum of health practice from primary prevention through to tertiary treatment”*.

A range of methods were employed by SGS to uncover the benefits of arts in hospitals, including:

- A comprehensive review of all relevant background material and literature to identify the key issues.
- An extensive stakeholder engagement process with key health agencies, health care professionals, academics and coordinators of arts in health programs at selected hospitals.

- Case studies to map arts and health infrastructure alongside population health needs and to explore the impact of arts in health interventions in several NSW hospitals.

SGS's findings reinforce that investment in arts infrastructure in public hospitals contributes to high quality health care environments and supports the ongoing operation of impactful arts programs.

Drawing on the evidence gathered, SGS was able to work alongside Health Infrastructure NSW and Create NSW to generate a framework that identifies both primary and secondary benefits. Benefits were grouped into preventive health savings, staff experience, patient experience and visitor experience and patient health outcomes.

Health Infrastructure NSW now has the tools required to test these benefits with key Health Infrastructure projects across metropolitan, Western and Rural NSW.

## Level 5 hospital relocation and expansion

### CLIENT: HEALTH INFRASTRUCTURE NSW

Providing quality healthcare and cutting waiting times for planned surgeries is a priority for the NSW State Government as stated under the NSW Premier's Priorities. Health infrastructure – and specifically hospitals – are critical to achieving that aim in regional NSW, especially in those regions where a significant growth in demand has necessitated a substantial increase in the service delivery capacity of hospitals. To deliver on the expansion and relocation of this Level 5 Hospital in regional NSW, the Local Health District and NSW Health Infrastructure were required to submit a planning application which includes the preparation of a Social and Environment Impact Assessment (SEIA).

SGS prepared this assessment which identified and evaluated the extent of economic and social impacts that will result from the hospital's relocation and expansion. Our approach included:

- Reviewing background materials to define the key issues
- Profiling the hospital's regional catchment to understand the socio-economic context
- Linking that contextual understanding in (1) and (2) to the core purpose of the hospital's redevelopment and relocation as articulated in the evolving Business Case
- A Social Impact Assessment which assesses the extent to which the proposed expansion and relocation addresses a range of issues in the community: including health, amenity and access to services, as defined under the catchment profile (2)
- An Economic Impact Assessment which presents direct employment and economic impacts, as well as calculating the wider economic effects on output, value added and employment using econometric modelling, and
- Identification and assessment of positive and negative externalities which are likely to result from the relocation and expansion of the hospital.

Our work combined a mix of quantitative and qualitative methods to consider the positive and negative impacts of the proposed hospital redevelopment. We allowed NSW Health Infrastructure to confidently argue that, on balance, the proposed hospital redevelopment would create an overall positive social and economic impact for the community.

## Social impact assessment of the Miranda Dental Hospital

### CLIENT: MORAN CORPORATION PTY LTD

SGS was commissioned to undertake a Social Impact Assessment (SIA) for the proposed development of Miranda Dental Hospital. The purpose of the study was to identify possible positive and negative social impacts of the proposed development during its construction and operational stages, along with mitigation measures to address negative impacts on the local and wider community.

- SGS has applied the following methodology to identify the hospital's social impacts:
- Consultation with the client to establish all relevant details about the proposed dental hospital
- Strategy and policy literature review to identify the social impacts associated with this type of development
- Baseline social profiling of relevant catchment areas to relate the analysis of likely social impacts and their relevance to the impacted population groups
- Dental and oral health services analysis, including assessment of the demand for dental services, dental and oral health services and facilities audit, and analysis of existing facilities.

Ultimately, we concluded the proposed hospital would provide net positive social impacts on patients, visitors and employees, as well as Miranda town centre residents, visitors and businesses, in terms of crime and safety due to improved passive surveillance.

This conclusion was based on our identification, description and quantification (where possible) of the following impacts:

- Improved availability and capacity of dental and oral health services and facilities
- Improved physical and financial accessibility of dental and oral health services
- Enhanced regional employment, skills and education and research outcomes
- Local impacts on traffic and car parking, safety and amenity
- Enhanced agglomeration and clustering of health services.



## Developing cost benefit metrics for school infrastructure

**CLIENT: NSW DEPARTMENT OF EDUCATION**

SGS prepared a pilot cost benefit analysis of improving education infrastructure in NSW.

The pilot study assessed the incremental costs and benefits of the redevelopment of Parramatta Public School and Arthur Phillip High School into high rise, future focussed learning schools equipped to facilitate contemporary pedagogy.

The pilot study considered two different base cases, ensuring the likely value of the project was fully appreciated:

- Do nothing scenario – as the demand for public school places begins to exceed supply, some children will simply miss out on school.
- Do minimum scenario – the minimum standard of education is met by installing demountable schoolrooms at existing schools.

SGS undertook an extensive review of empirical research that examined both the impact of future focussed learning on students' learning outcomes and the relationship between educational attainment and lifetime earnings. We then developed new metrics to value the benefits of young people attending schools, as well as the benefits students gained from learning in high-quality future focussed learning classrooms that facilitate 21st century pedagogy.

## Valuing the inter-urban break between Brisbane & the Sunshine Coast

**CLIENT: NSW DEPARTMENT OF EDUCATION**

Southeast Queensland's Inter-Urban Break is located in the northern region of Moreton Bay Regional Council and the southern region of the Sunshine Coast Council. It is the break between the urban development areas in these municipalities.

SGS was commissioned to place an economic value on the Inter-Urban Break using a total economic value framework. That is, SGS was asked to demonstrate how the Inter-Urban Break generates economic value given its existing array of uses, including those values that are not recognised in private land development equations.

SGS used available data sources to estimate each of the values generated by the Inter-Urban Break, recognising that 'market prices' do not exist for some of the values described. The values estimated include:

- Agriculture
- Tourism
- Recreation
- Environment
- Rural living, and
- Intrinsic values.

## Local community benefits & economic impacts of public library services

### CLIENT: PUBLIC LIBRARIES SOUTH AUSTRALIA

Public Libraries SA commissioned SGS to provide an independent analysis of the benefits of public libraries in South Australia; to inform the advocacy agenda in relation to funding, recognising the ongoing financial pressures being placed on public library operations.

SGS had completed similar work in Victoria and Queensland, and Public Libraries SA wished to replicate this work in South Australia so that the value of public libraries could be clearly and confidently advocated.

The objectives of this project were to estimate the contributions of South Australian public libraries by independently:

- Estimating the costs, benefits and net benefits (or community welfare gains) generated by South Australian public libraries, and
- Assessing the economic value added and employment generated by public library services in local economies across South Australia.

As part of this work, we surveyed the users of six SA libraries supporting a case study approach to different library categories. Library user use of, and importance placed on, different library services was established. Willingness to pay for library services and economic impacts generated were also established, in addition to an accurate profiling of library users.

## Protecting Melbourne's parks from overshadowing

### CLIENT: CITY OF MELBOURNE

The City of Melbourne appointed SGS to prepare a cost benefit analysis of proposed new planning controls to limit additional shadowing of parks in certain parts of the municipality.

This included valuing the following benefits of the proposed planning controls:

- The value of avoided loss of sunshine in parks for users
- Retained visual amenity for neighbouring properties and passers-by
- The value of bio-diversity and ecological services supported by preserved sunshine in parks, and
- Avoided health costs caused by diminished visitation to parks associated with greater overshadowing.

As part of this work, we conducted a survey of inner Melbourne residents in two sample strata: those within 3 km of the Melbourne CBD; and those in higher population density postcodes within 10 km of the CBD.

The survey captured park use and valued city amenities using a choice modelling willingness-to-pay approach with particular focus on valuing the social benefit of protecting existing sunshine patterns.

# Business Cases

SGS has developed numerous, successful business cases for federal and state government agencies using the treasury mandated guidelines.

We have also applied relevant aspects of these guidelines for local governments and private sector interests aiming to successfully engage with public sector decision making (e.g. the annual budget process, grants programs) around Australia.

Public sector business cases aim to promote the best investment outcomes for Australian communities, ensuring that public sector stakeholders:

- Address the right problems and pursue the right benefits
- Choose the best value for money investments
- Deliver investments as planned, and
- Realise the benefits the investments set out to achieve.

SGS has significant expertise at both the conceptualise (preliminary or strategic business case) and prove (full or detailed business case) stages, having developed the following cases:

Client	Project
Artspace	Redevelopment of the Gunnery, Woolloomooloo
Create NSW	Redevelopment of the former Darlinghurst Gaol
Sport & Recreation Victoria	Shooting Sports Facilities Program
Australian Centre for Moving Image	ACMI redevelopment
Department of Planning, Victoria	Redevelopment of Fishermans Bend
City of Melbourne	Queen Victoria Market Renewal Program
Sydney Theatre Company	Redevelopment of Walsh Bay facilities
Museums Victoria	Redevelopment of Scienceworks precinct
Transport for NSW	Key roads in South West Growth Centre
Sport & Recreation Victoria	Frankston Health, Wellness & Aquatic Centre
Create Victoria	Heidi Museum of Modern Art
Arts Victoria	Establishing an arts precinct in Collingwood
Emerald Tourist Railway Board	Reinvestment into Puffing Billy Tourist Railway
Department of Planning, Victoria	Community Facility Funding Program
Department of Planning, Victoria	Expert Assistance Program
Department of Planning, Victoria	Creating Better Places Program
VicUrban	Harbour Esplanade
Regional Development Victoria	Regional rail links in the High Country
Department of Planning, Victoria	Restoration of heritage rail bridge, Orbost



## Case study projects

# Fishermans Bend urban renewal

**CLIENT: FISHERMANS BEND TASKFORCE**

If the renewal of Fishermans Bend is appropriately approached, it can become an integral part of Melbourne's CBD growth strategy, i.e. by becoming a high density, mixed use, connected, green place to live, work, learn and invest. However, the renewal of Fishermans Bend is not without its challenges. Most of the land is already zoned Capital City and 90% is in private ownership. For these and other reasons, a conventional approach to urban renewal would squander the unique opportunity presented.

SGS developed the preliminary business case to support Cabinet's deliberations over the proposed Framework Plan and governance arrangements for renewing Fishermans Bend.

A key deliverable that informed the business case was a triple bottom line assessment of the competing development options for Fishermans Bend. This assessment:

- Quantified the benefits of avoided infrastructure, reduced congestion, health savings, value added and labour force productivity lifts, and compared these to the
- Higher costs of transport, open space, community and other infrastructure needed to substantially lift the quantity and quality of development through the precinct.

Another key deliverable was a funding model which contrasted how the costs for transport, open space, community and other infrastructure could be funded by a suite of rates and charges (e.g. ICPs, DCPs, open space contributions, rates, land tax, and stamp duty).

# Queen Victoria Market renewal program

**CLIENT: CITY OF MELBOURNE**

The Queen Victoria Market has been in steady decline over the last 20 years. We worked with the City of Melbourne to review the existing Queen Victoria Market Precinct Renewal Program and to prepare its detailed business case.

We tested three options for addressing the Market's challenges:

- Business as usual with no increased investment
- Limited intervention measures, and
- Council's full-scale renewal program.

Following a rigorous strategic, financial, triple bottom line and risk assessment, we concluded that Council's \$250 million investment for a full-scale renewal program was the best way to secure the Market's long-term viability. This option will address the key problems facing the precinct, as well as deliver a superior financial and community welfare return.

The full-scale renewal program seeks to transform Queen Victoria Market into a thriving and diverse marketplace where future generations will be able to support Melbourne's local character and culture.

# Program Evaluation

SGS has extensive experience in evaluating government funded programs in accordance with treasury evaluation guidelines and other best practice evaluation guidance materials.

These formal evaluations answer the following questions:

- What is the evidence of a continued need for the program and role for government in delivering it?
- What is the evidence of the program's progress toward its stated objectives and expected outcomes, including alignment between the program, its output, departmental objectives and any stated government priorities?
- Has the program been delivered within its scope, budget, within the expected timeframe, and in line with appropriate governance and risk management practices?
- Has the department demonstrated efficiency and economy in relation to the delivery of the program?
- What would be the impact of ceasing the program (e.g. service, jobs, community impacts) and what strategies have been identified to minimise negative impacts?
- If ongoing funding was provided, what level of efficiencies could be realised?

To answer these questions, a tailored methodology is always prepared to reflect the program's context and its specific objectives. Often this calls for: logic mapping, literature reviews; extensive stakeholder engagement; case study development; data analysis and modelling; economic appraisal; and future need assessment.

Client	Program
Department of Premier and Cabinet, Victoria	Government Architect's Design Review Program
Department of Human Services, Victoria	Country Football Netball Program
Department of Human Services, Victoria	State Sports Infrastructure Program
Department of Human Services, Victoria	Men's Shed Program
Department of Environment, Victoria	Ballarat's Water Future
Department of Planning, Victoria	Rural Flying Squad Program
Department of Planning, Victoria	Community Facility Funding Program Evaluation
Department of Planning, Victoria	Expert Assistance Program
Department of Planning, Victoria	Creating Better Places Program
Department of Planning, Victoria	Mid-Term Review of Victoria's Heritage Strategy
Department of Planning, Victoria	Community Building Initiative
Department of Housing, Queensland	Urban Renewal Program
Department of Housing, Queensland	Joint Inner City Homelessness Response
Department of Communities, Queensland	Government Reforms of Residential Services
FACSIA, Commonwealth	Aboriginal Housing & Infrastructure Programs
FACSIA, Commonwealth	Communities in Crisis Strategic Response
VicUrban	Harbour Esplanade
Regional Development Victoria	Regional rail links in the High Country
Department of Planning, Victoria	Restoration of heritage rail bridge, Orbost

## Case study projects

# Housing affordability - program logic & evaluation framework

## CLIENT: NSW DEPARTMENT OF PLANNING

The NSW Government released A Fair Go for First Home buyers: A \$2.2 billion program to improve housing affordability in 2017. SGS was commissioned to develop a program logic and evaluation framework of the program to ensure program outcomes, process and economic impacts would be fully understood.

The plan proposed a package of 26 measures (a total of 34 individual measures) with the overall aims of:

- Increasing grants and concessions available to first home buyers
- Increasing housing supply at reasonable prices
- Accelerating the delivery of infrastructure to support growing communities.

SGS delivered an evaluation framework and a dashboard of indicators to facilitate regular reporting on the Strategy.

SGS prepared the program logic, the results chains for the program initiatives and their short, medium and long term outcomes. On the basis of that a prioritised outcome evaluation framework was established, as well as an economic evaluation framework assessing the seven long term outcomes in terms of economic costs and benefits.

# Evaluation of the Victorian Design Review Framework

## CLIENT: OFFICE OF THE VICTORIAN GOVERNMENT ARCHITECT

SGS evaluated the Victorian Government Design Review Panel, a three-year pilot program run through the Office of the Victorian Government Architect. From its inception, the VDRP offered expert peer review to significant State Government funded projects by a panel of eminent urban design and architecture professionals. It was established to provide independent and authoritative advice to government and statutory decision makers across Victoria about the design of significant development proposals.

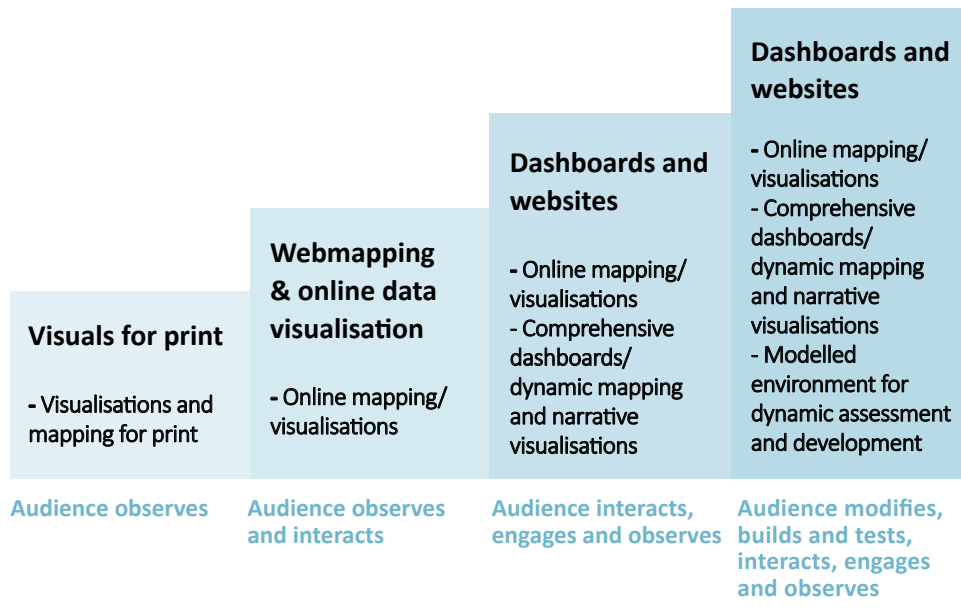
SGS reviewed the activity of the VDRP program and tested the extent to which the program met its stated objectives, was effective and efficient in its operations, and delivered value for money. Data was collected through participant surveys, case studies and interviews with key program stakeholders.

The evaluation revealed that the program was effective in achieving its objectives and anticipated outcomes, and had been implemented efficiently. It was found to be a unique program in the Victorian context, with a demonstrated ongoing need for the skills of the body in championing design quality in the built environment, in the interests of all Victorians.



# Model Development & communication tools

SGS's capability in providing valuable policy insights through experience, research and analysis is matched by an ability to inform and communicate message through graphical means - both digital and print. We develop graphic solutions ranging from static designed images for documents and presentations, through to tailored interactive products for client-testing or storytelling.



Client	Project
Department of Prime Minister and Cabinet	Cities performance framework dashboard
Infrastructure NSW	Spatial labour patterns maps for inclusion in reports
Create NSW	Mapping the arts and culture landscape of Western Sydney visuals for print
Insurance Group Australia	Interactive map showing regions at greatest risk of natural disasters in Australia
Infrastructure Victoria	Detailed spatial maps profiling the economic, social and environmental strengths and challenges of Victoria's six metropolitan regions.
City of Whittlesea	Interactive dashboards helping to understand the extent and nature of gender inequality in employment in Whittlsea
Self-funded research and analysis	Interactive maps showing the economic impact of COVID-19 and summer bushfires at LGA level
Self-funded research and analysis	Interactive map showing the impact of COVID shutdown on vulnerable worker

## Case study projects

# Maintenance planning tool

## CLIENT: HEALTH INFRASTRUCTURE NSW

SGS developed a Maintenance Planning Tool for Health Infrastructure Asset Management to assist Local Health Districts (LHDs) to undertake preventative maintenance planning. More specifically, this tool will:

- Produce a maintenance schedule showing the date/s in which the maintenance will be due for each asset in LHD's asset register, based on the asset type/class and standard maintenance procedures.
- Assess the resource and budgetary requirements of the maintenance schedule, including the calculation of labour and material costs based on standard durations and per unit costs of different maintenance activities.
- Allow LHDs to specify alternative scenarios of maintenance procedures or cost assumptions, and assess the maintenance requirements under these scenarios, including resource and cost implications.
- Provide an interactive dashboard in Excel comprising summary charts and tables to support reporting and decision making. For example, this may include the end of life profile for LHD's assets to assist the capital planning process, and asset mix by condition, criticality and type.
- Export output files that can be fed into the Asset and Facilities Management Online (AFMO) platform.

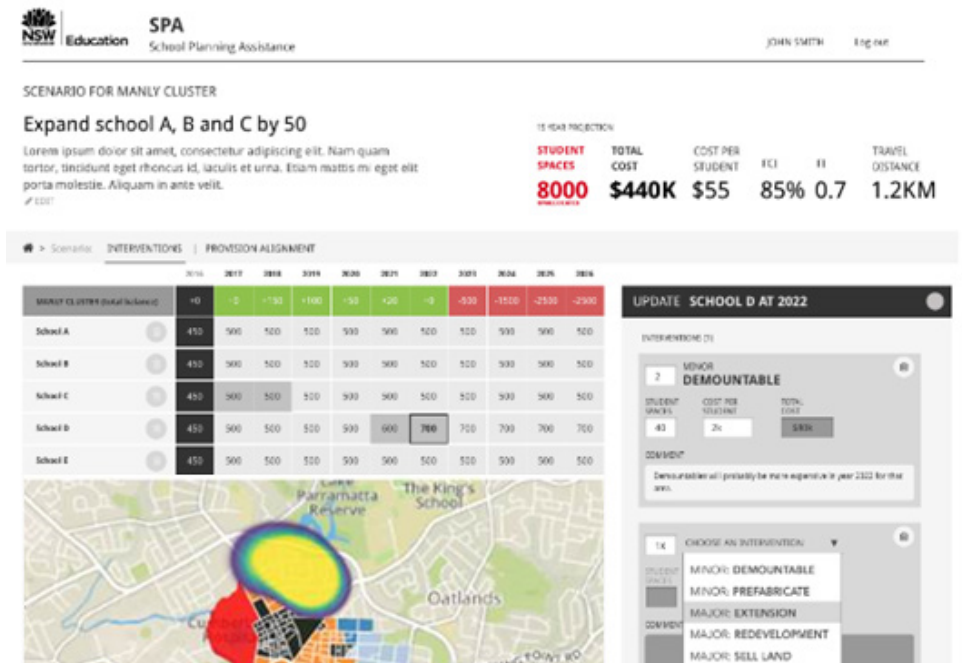


# School planning assistance web tool

## CLIENT: NSW DEPARTMENT OF EDUCATION

SGS in partnership with Small Multiples developed a simulation model that calculates and then rates the performance of various asset options in response to meeting student enrolment demand and a range of other supply factors. This tool assists with the capital asset planning process currently being implemented by NSW Department of Education (DE) to maximise efficiency in the way they cater for significant growth in enrolments in its schools, and in maintaining existing assets.

The tool will be used repeatedly by DE's asset planners to generate a range of asset solutions, assess and select a short list from these scenarios, and then undertake cost benefit and risk assessment for the shortlisted scenarios to identify a preferred asset response for each school cluster.





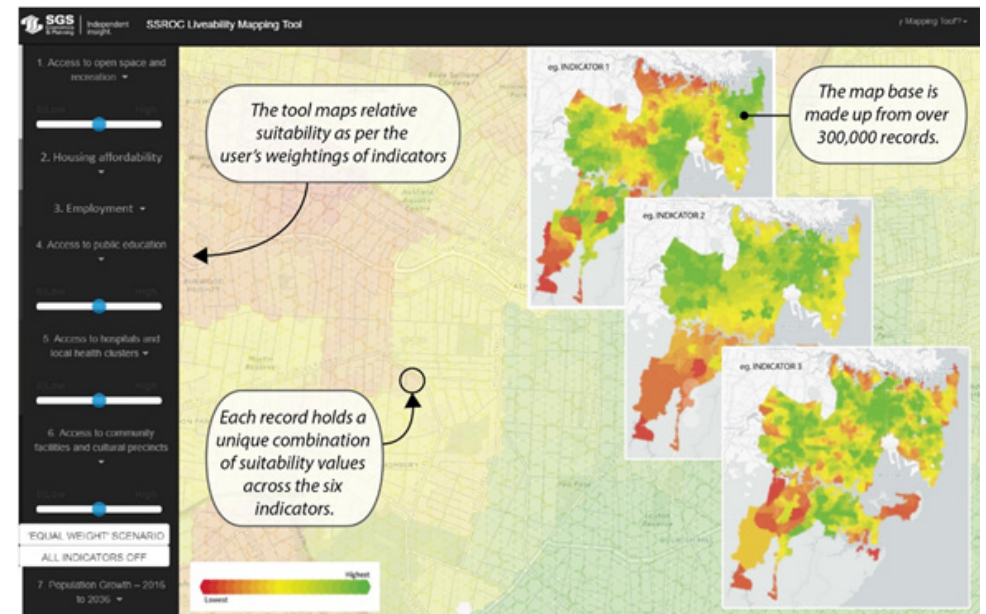
# Liveability indicator mapping web tool

**CLIENT: SOUTHERN SYDNEY REGIONAL ORGANISATION OF COUNCILS**

SGS was commissioned by Southern Sydney Regional Organisation of Councils (SSROC), to embark on strategic research to baseline and understand relative liveability in Sydney's south against a range of indicators. In particular, SSROC was interested in how urban intensification, as proposed in the District Plans, can deliver a dividend, or benefit, to local communities.

The project and tool developed six indicators to describe and measure liveability: access to open space, housing rental affordability and mortgage stress, access to centres and employment, relative job accessibility, access to public education, access to hospitals and local health clusters, access to community facilities and cultural precincts.

The project yielded three deliverables, 1) a findings report outlining the intent, process and implications of the analysis for strategic planning, 2) a technical report outlining the analytics in drawing big data from a range of government and open sources to produce relative liveability performance indicators, and 3) an innovative interactive web based tool allowing users to interrogate the liveability indicators outcomes and a small area level and combine these individual indicators to create a composite picture of weighted indicators.





# Leadership Team

Andrew McDougall

Ellen Witte

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Andrew McDougall, Principal & Partner

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**Andrew delivers rigorous analysis and insights to help government and business leaders make informed public policy decisions and improve community welfare.**

Andrew leads our consultancy-based projects including: investment prioritisation and planning; financial and economic appraisals; business case development; evaluation of government programs; and regional economic analysis, strategy development and action planning. His focus in all these contexts is on how new projects or investment can improve client objectives and community welfare.

He works with infrastructure stakeholders to optimise urban renewal, housing, transport, education, health, cultural and recreational infrastructure through appropriate planning, analysis and funding.

Andrew has worked for clients in all tiers and jurisdictions of government, and the private and not for profit sectors; not only in Australia but in New Zealand, Saudi Arabia, United Arab Emirates, Oman and Malaysia.



Ellen Witte, Principal & Partner

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**Ellen is a public policy and economics specialist with a keen interest in solving social planning issues.**

Ellen has over twenty years of experience in business case development and social, economic, environmental and financial analysis. She has specialist expertise in housing policy and climate change mitigation and adaptation. She is the leading force behind the national Rental Affordability Index which serves as a means to inform the public debate around housing affordability in Australia.

She led various evaluation and assessment programs in collaboration with universities, driving ground-breaking insights into for instance the transition into a low carbon economy, housing solutions as economic infrastructure and adaptation pathways to address developing risks in the Lower Hunter floodplains. She believes in the power of engagement and collaboration and uses her communication, facilitation and consultation skills to deliver solutions that are developed with and owned by clients, stakeholders and communities. She is a regular media commentator and speaker at conferences and events, which support her passion for engaging with stakeholders to make lasting impacts in the public interest.



Yuan Deng, Principal & Partner

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**Yuan specialises in cost benefit analyses, infrastructure network planning, social infrastructure needs assessment, development feasibility studies and land use planning and forecasting for government and private clients.**

Yuan is an Actuary with extensive experience in economic appraisals and statistical modelling. During his 10 years at SGS, Yuan has developed expertise in the areas of cost benefit analysis, infrastructure demand modelling, land economics, financial appraisals, land use planning and forecasting.

Yuan has led a wide range of financial and economic appraisals (CBAs) on behalf of various government agencies to support their capital business cases seeking for treasury funding. These assignments span over a diverse array of projects, including transport, education, community and cultural infrastructure, as well as government-led IT investment. He is also highly experienced in effectively communicating complex modelling issues and results to a broad range of stakeholders in central government agencies and get their 'buy-in' on the modelling approaches and appraisal methods.



Dr Marcia Keegan, Associate & Partner

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**Marcia has a genuine love for the science of economics, finding it fascinating quantifying social, economic and environmental issues and getting impactful projects off the ground.**

Marcia is an experienced economist with over fifteen years' experience across the private, public and academic sectors. During this time Marcia has mastered a wide range of economic methods in modelling, projections, data analysis and policy analysis, and has managed a wide range projects. Her particular areas of expertise are project evaluation, including cost-benefit and cost-effectiveness analysis; financial analysis; regulation impact assessment; regional economic impact assessment; and microsimulation modelling.

She often helps our clients describe and quantify the benefits of their planned projects- not just the financial returns- but also the economic, social and environmental impacts on the wider community. Her project work spans education and other social infrastructure, transport projects, climate change mitigation investments, regulation impact assessments and investments in social programs.





Marcus Spiller, Principal & Partner

E: [mspiller@sgsep.com.au](mailto:mspiller@sgsep.com.au)

**Marcus' core passion is social justice which he describes as 'ensuring that everyone has access to opportunity, is valued and participates in decisions that affect them'.**

A founding partner at SGS, Marcus is formally qualified in commerce and urban planning. He has practised as a consultant for much of his career, though he has also worked as an academic, local government town planner, Ministerial Adviser and senior bureaucrat in State and Commonwealth Government agencies. He is an expert in regional economic development, housing policy, infrastructure funding and metropolitan governance. This includes writing and co-editing two books on urban management.

Marcus is a recognised leader within the urban policy community. He is a past National President of the Planning Institute of Australia and a former Board member at VicUrban (now called Development Victoria). He has served on the Commonwealth Government's Housing Supply Council and the equivalent body set up by the NSW Government. Marcus has been appointed an Adjunct Professor in the School of Global, Urban and Social Studies at RMIT University and an Adjunct Professor in the Faculty of Built Environment at UNSW. He is also an Associate Professor at the University of Melbourne.



Sarah Brennan, Associate

E: [sbrennan@sgsep.com.au](mailto:sbrennan@sgsep.com.au)

**Sarah is an urban planner who specialises in business cases, policy analysis and strategy development.**

She seeks to understand what makes cities tick and how to make our urban futures more sustainable and inclusive. Sarah is a strategic integrator who can translate complex concepts and information into simple, coherent and well-structured documents. She develops recommendations that are practical, align with broader intent, are broadly supported and provide evidence to inform further decision making about investments and next steps.

Sarah has significant experience in transport planning, governance, arts and culture, public space, environmentally sustainable design, demographics and stakeholder engagement. She has worked on projects across various scales, from local community-based initiatives to state-wide projects. Her expertise includes strategy and policy development, business cases, project management, research and spatial planning.





Will Boadle, Senior Consultant

E: [wboadle@sgsep.com.au](mailto:wboadle@sgsep.com.au)

**With expertise in planning and economics, Will is an analytical and strategic thinker who delivers evidence-based advice to inform practical decision making.**

Will is passionate about tackling pressing social, economic, and environmental challenges that the world is currently facing. His work is based on evidence and is always thoughtfully considered. He is interested in how planning can help develop more active and sustainable transportation and how this can lead to transport becoming more accessible.

Other areas of interests at work include understanding creative and civic precincts, increasing tourism, and urban greening and resilience.



Liz Mackevicius, Senior Associate & Partner

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**An urban planner with over a decade of public policy experience, Liz enjoys the complexity and challenge of regional metropolitan planning, open space planning and municipal markets.**

She has strong analytical, conceptual and project management experience, advising all tiers of government and private sector clients on the nature and implications of long term growth and change occurring in cities and regions.

Understanding how places can change, have changed and should change from conceptual and analytical perspectives drive much of her work. Liz puts significant effort into delivering thorough, evidence-based work and establishing analytical frameworks to understand cities and places. Also important to Liz is addressing issues around gender equality and living healthier lives with access to natural environments.

Before joining our team, Liz worked at the Victorian State Government where she contributed to many significant projects and policy reforms, including Plan Melbourne, Melbourne Metro Rail Project, and retail policy and policy work for Regional Development Victoria.

# Why SGS



As a certified B Corp, we want all people in Australia to benefit from prosperous and sustainable places and communities. With high standards of accountability and transparency, we play a critical role as independent and trusted advisors to the governments and organisations that shape Australia's cities and regions. Our robust, evidence-based insights inform policy and strategy decisions and help solve pressing social, economic and environmental issues.



## How we add value

### 1. Assurance that we resource every project with the right people.

We take great care to form specialist, fully resourced project teams led by at least one director. Our client feedback shows that our system works.

### 2. Guarantee that we are transparent, committed and accountable.

Our B Corp certification proves that we meet world-standard environmental and social performance and transparency and accountability measures.

### 3. Confidence that we understand all tiers of government.

We have 30 years' experience working with all tiers of government, and many of our team members held senior government roles before joining SGS.

### 4. Access to rigorous analysis and trusted independent advice.

We help our clients find rigorous and practical solutions and make informed decisions. Our project track record shows that great things can happen with the right insight.

### 6. Meaningful and useful data.

Our clients no longer need to worry about making sense of complex data – we use digital tools and specialist know-how to make complex data meaningful and useful.

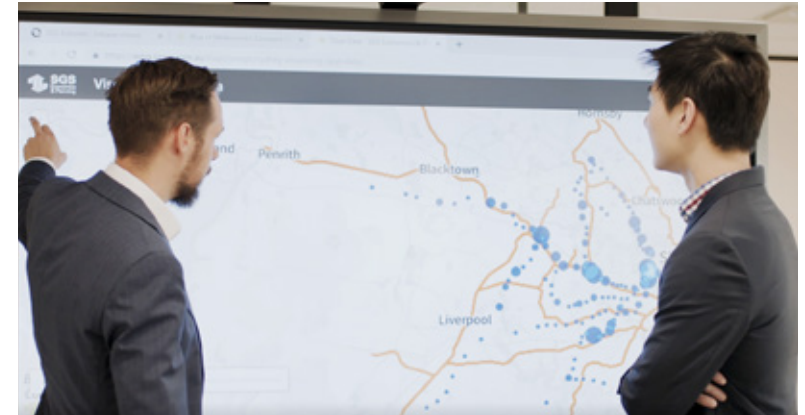
## Seven ways we create value for our clients

### 5. Opportunity to develop specialist skills and capability.

We work to make a positive impact on the world and believe that sharing expertise and experience with our clients and the wider community is another way to achieve this.

### 7. Access to original research & insights.

We challenge conventional thinking and invest in innovation and self-funded research. We openly share our research findings and insights with our clients and often conduct training workshops and seminars.



### Who we are

Established in 1990, SGS is a public policy advisory business informing important policy and investment decisions for more sustainable cities and regions. We have 65 team members with diverse expertise and experience working on projects throughout Australia and New Zealand from our Sydney, Melbourne, Canberra and Hobart offices.

### Why we work

We work for the public interest and aspire to provide Australia's best independent policy advice. Our commitment to social good is woven into the fabric of our culture. A certified Benefit Corporation (B Corp), we are part of a global movement of people working for a more equitable, prosperous and sustainable society.

### How we work

Our B Corp certification and employee-owned business structure support our purpose. Unlike many consultancies, we invest our time, our resources, and our very best thinking to solving pressing issues for our clients rather than focus solely on shareholder returns. This approach gives our clients assurance and security, especially on challenging projects.

## How we help

Our evidence-based insights help clients understand how places, communities and economies function, assess what projects and programs work, and plan future places and precincts. Our work is rigorous and practical – with a proven and clear path between our analysis and advice. Beyond advisory services, we hold workshops and courses to share knowledge collaboratively. The figure below outlines our services at a high level.

### UNDERSTAND

#### Places, Communities & Economies

Get informed with critical insights from data, spatial analytics and research

### ASSESS

#### What works

Assess, monitor and evaluate projects and programs

### SHAPE

#### The Future

Prepare plans, policies and prioritise investments

### LEARN

#### Collaboratively

Build specialist skills and knowledge together

## Advisory services in more detail

### UNDERSTAND

Get informed with critical insights from data, spatial analytics and research

- Research economic and social issues, including employment, social harm and economic analysis
- Forecast growth and trends, including land use, population, employment, housing and demographic forecasts
- Identify stakeholder needs, including land use audits and stakeholder engagement
- Visualise data meaningfully using interactive maps and dashboards, website visualisations and interactive indices.

### ASSESS

Assess, monitor and evaluate projects and programs

- Prioritise projects and programs, including strategic needs assessments, investment plans, strategic business cases and place-base assessments
- Evaluate projects and programs, including financial and economic appraisals, socio economic impact assessments, cash flow models, program evaluations and detailed business cases.

### SHAPE

Prepare plans, policies and prioritise investments

- Plan cities and regions, including housing strategies, metropolitan plans, open space and recreation plans and transport model impact assessments
- Plan future places and precincts, including town centre studies, employment, economic and housing studies, and industrial and retail studies
- Shape good public policy, including governance models, policy options analysis, policy options development, and policy workshops
- Analyse infrastructure funding options, such as local infrastructure plans and value capture appraisals.



## Client commitment

A working partnership requires commitment, collaboration and open communication which is why we implemented a formal client service guide supported by a client feedback and listening program.

The SGS client service guide and client listening program empowers our team to gather, track and action feedback and improve how we communicate and deliver our products and services.

The image to right shows client feedback on projects in March 2019- March 2021. It's an honest look at how we do business.

## Client feedback March 2019 - March 2021



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