

COVID-19 Recovery: Stimulus beyond job creation



/ DESIGN FOR A BETTER FUTURE

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Governments are responding to the pressing needs caused by COVID-19 and have funded extra economic stimulus projects.

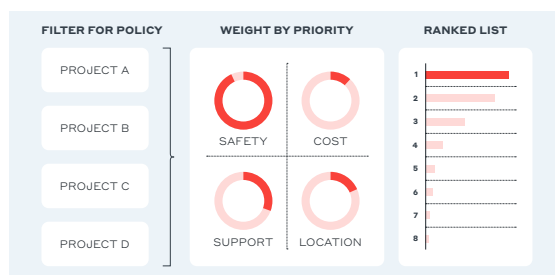
Future work-programs can be used as the basis for stimulus programs – good projects before the pandemic will likely be high-priority projects afterwards. However, short-term infrastructure pressures may justify interim, light-touch, accelerated or proactive investment.

Addressing those immediate and short-term pressures is a priority, but decision makers still need confidence that the chosen projects generate the best possible community outcomes in terms of the number of jobs created, value for money and long-term legacy. The projects that are fastest to deliver, will not always create the best stimulus.

Focusing on quickly selecting and mobilising projects often limits the time available to assess detailed costs and benefits or to develop a business case. An expedited approach that applies a prioritisation tool can help identify projects for fast delivery that also maximise value and benefits.

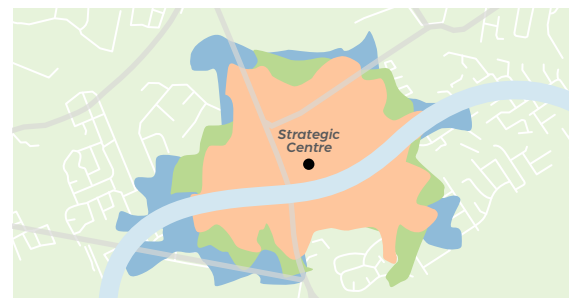
In response, we have developed two tools to help clients develop justifiable, optimised work programs.

WSP's Prioritisation Tool uses publicly available data combined with project information and assessment considerations, such as deliverability, to complete a comparative analysis of potential projects. The outcome? It allows us to present robust investment packages to our clients that meet their overarching policy objectives.



WSP's Prioritisation Tool

WSP's Customer Connectivity Tool graphically demonstrates, for example, how well key activity centres connect to workers and residents, and how new potential projects can change these measures.



WSP's Customer Connectivity Tool

Both tools can be used to inform investment decisions across a range of infrastructure portfolios.

The following case studies demonstrate how the tools have been used in New South Wales and Victoria.

Key Takeaways

Stimulus packages should reflect emerging challenges.

Leveraging available data gives decision makers confidence that packages will leave a positive legacy.

WSP's tools for appraising and prioritising investment can be applied to a range of portfolios.

Using graphical tools to understand customer needs supports strong project outcomes.

Focusing on smaller projects within big packages will generate more jobs and local community benefits.

Projects selected for stimulus funding should have clear benefits to the community beyond direct job creation.

A Case Study: *Prioritising Active Transport Infrastructure*

Cycling's popularity has rapidly grown during the pandemic as quiet streets are ideal for essential exercise.

During the pandemic, governments have directed stimulus funding to plan and deliver pop-up cycle infrastructure.

Encouraging more people to cycle to work or school can create more physical distancing space on public transport. The City of Sydney (with the NSW Government) is installing six pop-up cycleways, and Melbourne and Brisbane councils have announced similar cycle networks in CBDs and surrounds.

When economic activity and traffic return to pre-pandemic levels, fewer cyclists will be confident enough to return to the streets' mixed traffic conditions. Newer, less confident cyclists will likely commute by bicycle only if their route offers safe, separated infrastructure or lower traffic levels.

The urgency of stimulus spending combined with compressed project planning timeframes, creates a challenge to build infrastructure that offers long-term benefits. How do we select the best active transport projects? How should we prioritise them to offer the most people the best travel time, safety and health benefits?



A Case Study: Prioritising Active Transport Infrastructure

IDENTIFYING PROJECTS

More and more transport strategies are focusing on accessibility-based goals and metrics. The Greater Sydney Region Plan: A Metropolis of Three Cities defines three CBDs and 40 other strategic centres. Its vision is a city where most people live within 30 minutes of their jobs, schools, health facilities, other services and leisure destinations. Aligning cycleways with this strategic vision can start by focusing on potential cycling commutes within 30-minutes of major employment centres.

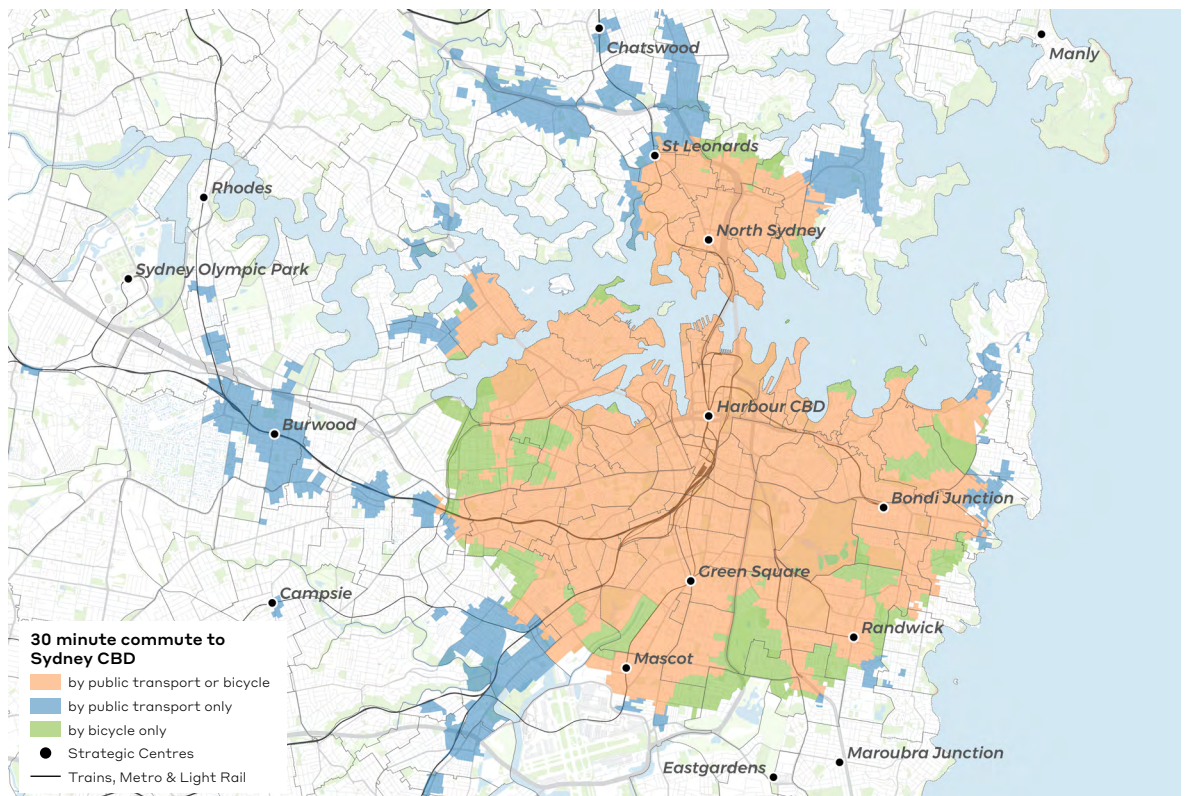
WSP's Customer Connectivity Tool uses existing publicly available data to measure travel time accessibility for public and active transport, helping decision makers prioritise infrastructure investment. The map compares the 30-minute accessibility catchments of public transport against cycling to the Sydney CBD, highlighting

areas where either public transport or cycling have the travel-time advantage.

While customers can travel further along rail or bus corridors, cycling journeys along a direct route from some corridors are potentially faster than public transport. The analysis highlights gaps in the public transport network and can inform planning for new separated cycle links, targeting the corridors in which cycling is faster than public transport to encourage more people to cycle.

These compelling graphics can also be used in community consultation, to illustrate the benefits of different transport modes.

Accessibility maps for the Melbourne, Brisbane and Parramatta CBDs are found in the appendix



WSP's Customer Connectivity Tool

A Case Study: Prioritising Active Transport Infrastructure

PRIORITISING PROJECTS AND PREPARING A PACKAGE

In partnership with CDM Research, we developed the **WSP Prioritisation Tool** and dashboard for Victoria's Department of Transport (DOT). The government agency needed to rank active transport projects to prepare packages which reflect changing government priorities, while transparently assessing the most pressing needs and contextual delivery challenges.

The tool had to consider a range of project types and sizes with different stakeholder needs from several government departments (Transport, Health, Education and local government). Community and advocacy groups helped confirm priority objectives for investing in active transport.

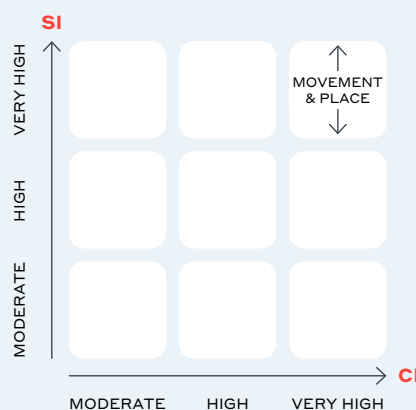
WSP and CDM worked with stakeholders via interviews and workshops to understand the active transport investment challenges. The framework used publicly available data (including population, school enrolments, crashes) to assess how well the project stacked up in terms of its 'Strategic Importance'. It considered matters of deliverability, community support and funding to let decision makers assess the project's 'Contextual Importance'.

As a result, the DOT assessed both Strategic Importance and Contextual Importance factors and applied weightings to prioritise projects that (for example) address safety concerns, or deprived areas, and/or improve public transport access. The final project dashboard allowed decision makers to filter projects and test the sensitivity of different weightings.

WSP's Customer Connectivity Tool enhanced this process by measuring projects against accessibility indicators such as access to employment, education and medical care.

The tool calculates how far a person can travel by public transport, walking and cycling within a given travel time both with and without the project, calculating the indicators to reflect ease of access to employment, health and education (among others). For example, the upgraded infrastructure's faster travel speed may give residents along a separated cycleway 30-minute access to an extra 50,000 jobs and two hospitals.

In this way, **WSP's Customer Connectivity Tool** indicators can be used to assess the Strategic Importance of projects in a stimulus package.



Strategic Importance (SI)

Alignment with Network Planning strategic guidance and current government strategies

Contextual Importance (CI)

Other contextual factors which increase the importance of a project ranging from political, economic and opportunities

Movement & Place (M&P)

Movement and Place Strategic Focus Score (SFS) providing an indication of the problem in line with the strategic function of the location using a multi-criteria decision analysis

A Case Study: Prioritising Active Transport Infrastructure

MANAGING FINITE RESOURCES

Overall, our data-driven tools can be used to develop and refine a program of projects that delivers tangible short-term results, to a specific value, and in specific locations.

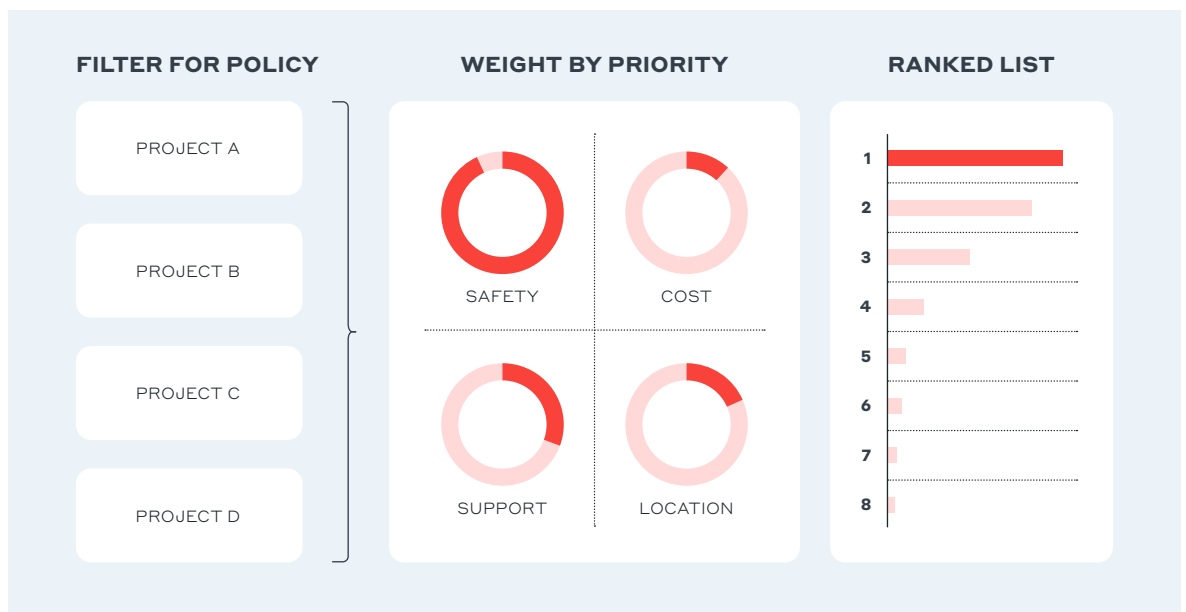
Decision makers can instantly test the impact of changing priorities (for example, prioritising by geography, or sector, or policy objective) and come up with sub-packages for each indicator. They can refine the prioritised project based on available funds. Should budgets vary, the prioritisation tool can also be used to quickly accommodate changes.

SHORT-TERM JOB CREATION AND LONG TERM BENEFITS

WSP's Prioritisation Tool can be adapted to guide an estimate of jobs created. Recent Australian studies have noted the employment effects of investing in transport infrastructure are generally strong as transport infrastructure investment supports labour and businesses. Smaller and simpler projects, such as building or refurbishing footpaths and cycle paths, may employ people without specialised skills as manual labourers.

These observations were confirmed in the US by the Political Economy Research Institute which studied 58 infrastructure projects and concluded that active transport projects generated more direct, indirect and induced jobs for each \$1 million of investment than all other types of road infrastructure projects. This reflects the higher proportion of labour in the cost of active transport investment, and the fact that materials are typically locally obtained.

WSP's Prioritisation Tool



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CONCLUSION

To provide short-term economic stimulus and leave a long-term infrastructure legacy, we must quickly develop robust stimulus packages that are evidence-based, support clear communication with key stakeholders, and ensure investments are linked to policy objectives.

WSP's Customer Connectivity Tool visualises the gaps in our cities' transport networks in a format that clearly leverages existing data sources, while **WSP's Prioritisation Tool** links the latest data to overarching policy objectives so we can prioritise projects based on their strategic importance – thereby linking investment to strategy.

WSP's Prioritisation Tool also supports nuanced assessment of a projects' Contextual Importance, representing factors such as community support, land availability and delivery challenges. Understanding Contextual Importance allows decision makers to weigh up projects' potential deliverability challenges.

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Agencies should know that pressing time scales are no barrier to coming up with a robust and transparent investment package to support the community, and the economy.

Talk to WSP to understand how we can support you through applying our existing tools.

OUR TEAM SPECIALISES IN

- / Strategic policy, regulation & communications
- / Planning & mobility
- / Infrastructure investment decisions

- / Performance, participation & change
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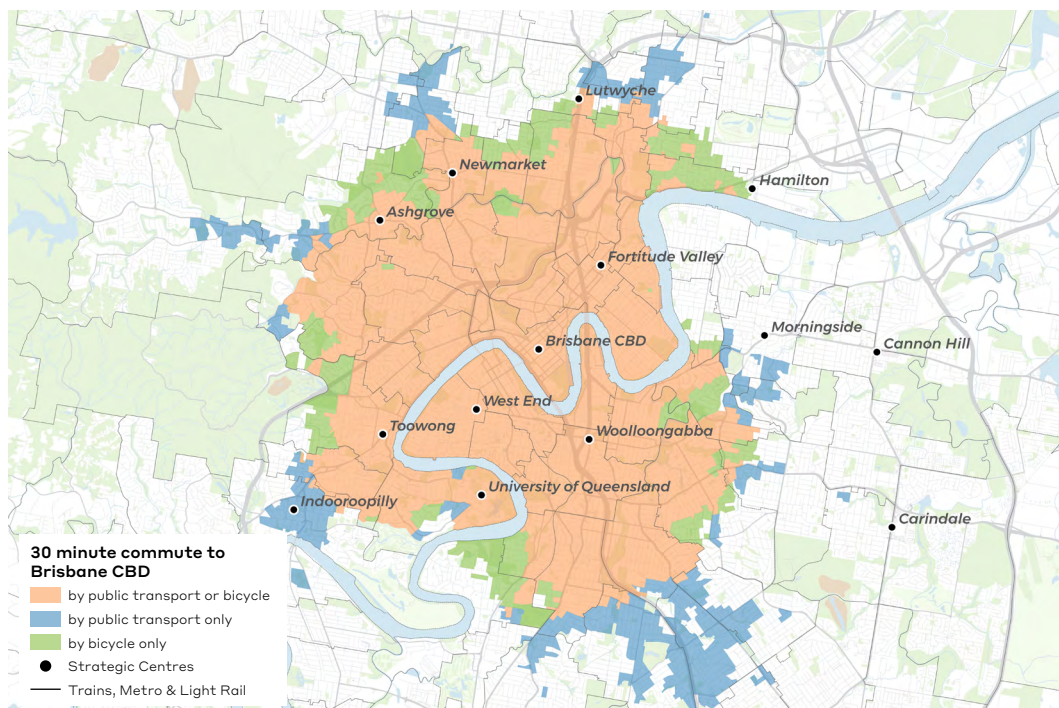
Appendix

PROJECT TYPE	ROAD	BICYCLE	PEDESTRIAN	OFF-STREET TRAIL	NUMBER OF PROJECTS	DIRECT JOBS PER \$1 MILLION (\$US)	INDIRECT JOBS PER \$1 MILLION (\$US)	INDUCED JOBS PER \$1 MILLION (\$US)	TOTAL JOBS PER \$1 MILLION (\$US)
Total, all projects					58	4.69	2.12	2.15	8.96
Bicycle infrastructure only		●			4	6.00	2.40	3.01	11.41
Off-street multi-use trails				●	9	5.09	2.21	2.27	9.57
On-street bicycle and pedestrian facilities (without road construction)		●	●		2	4.20	2.20	2.02	8.42
Pedestrian infrastructure only			●		10	5.18	2.33	2.40	9.91
Road infrastructure with bicycle and pedestrian facilities	●	●	●		13	4.32	2.21	2.00	8.53
Road infrastructure with pedestrian facilities	●		●		9	4.58	1.82	2.01	8.42
Road infrastructure only (no bike or pedestrian components)	●				11	4.06	1.86	1.83	7.75

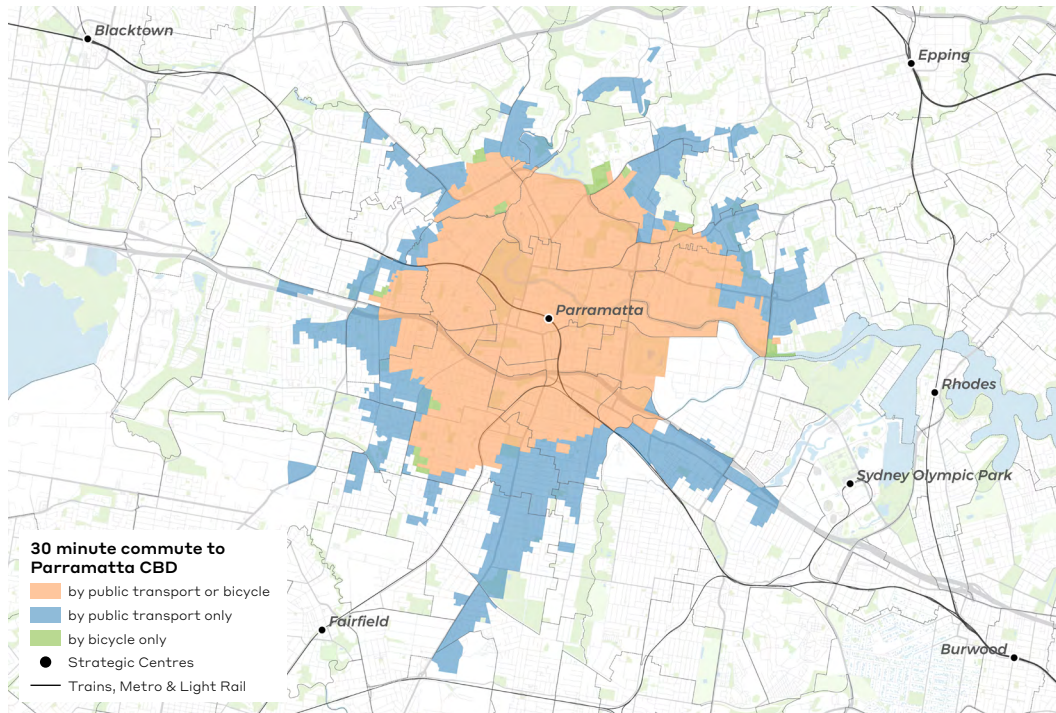
^{1.} Fiscal stimulus for low-carbon compatible COVID-19 recovery: criteria for infrastructure investment, CCEP Working Paper 2005 June 2020, section 4.3.4

^{2.} Pedestrian and Bicycle Infrastructure: A National Study of Employment Impacts, Political Economy Research Institute, June 2011

Appendix



Appendix



WSP's Customer Connectivity Tool