



GTA consultants



Improving Transport Corridors: Hitting the mark with COVID-19 responses

Australian Governments are faced with a significant challenge and a huge opportunity in considering transport infrastructure investment in response to the impacts of COVID-19 and our economic recovery.

Across our cities transport infrastructure is being developed and constructed at unprecedented rates. These major projects will form the backbone of our future transport networks and are both a response to, and a driver of bigger, denser, and more connected cities.

Right now, we're experiencing a radical shift in travel patterns and demands. Even as Australia awakens and clambers out of isolation

restrictions, we are seeing suppressed activity on our roads and on public transport.

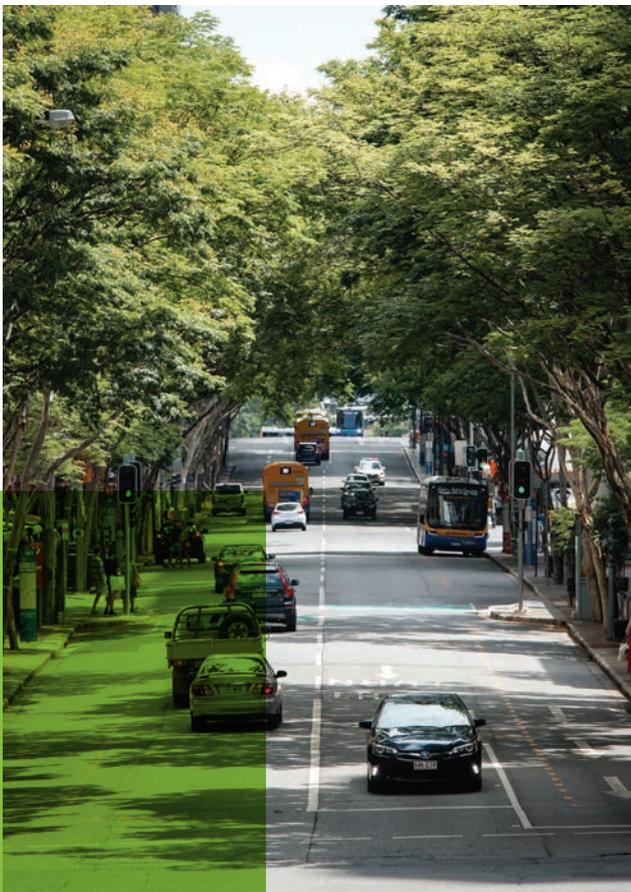
There is a range of commentary and ideas regarding what we could be doing now and as we transition out of the current situation over the coming three to six months, and beyond.

However, there is significant uncertainty in what a recovery might look like and how the COVID-19 period might affect how people and goods will need to move, and how and why those demands will occur.

And beyond the recovery, will there be a new normal and if so, will that be short-lived, or will some changes be likely to stick?

We are seeing shifts across all modes:

- **Public Transport:** Peak hour public transport is currently challenged with capacity limits due to social distancing and potential perception into the medium term around safety from community transmission. How quickly will public transport patronage recover to pre-COVID levels and will it occur at different times throughout the day as people work staggered shifts?
- **Car dependency:** Locations around the world are coming out of isolation and are seeing increased traffic congestion as car travel becomes the preferred mode for social distancing. What is the impact of this potential increase in car dependency: short-term pain or a long-term issue to be managed?
- **Active travel:** There is an expectation and anticipation that cycling and walking will increase particularly during the period where public transport may not be a practical option for many. How many of the people that adopt these modes will continue post the peak COVID pandemic?



The stimulus dilemma

It is clear transport infrastructure will have an important role to play in the economic stimulus story over the remainder of 2020 and into 2021. The pressure is on governments to pivot quickly to the recovery effort and to spend stimulus money wisely. Indeed, never has the maxim 'the right project in the right place at the right time' been more relevant.

Governments and the community more broadly are faced with some tricky questions:

- How should we tackle the pressure to deliver projects quickly?
- How can the projects best stimulate the economy?
- What criteria and priorities should guide decision-making now?
- How do we handle uncertainty and the range of possible futures?
- What outcomes are we trying to achieve?
- What legacy do we want to leave after the COVID-19 period has passed?

The impetus for job retention and creation through construction activity is clear, however, the stimulus task goes beyond this. It needs to play out at multiple scales, from major projects through to medium and smaller ones, so the community sees benefits quickly across the network.

Quick but rigorous

Australia's government health and economic interventions have been swift, decisive, and clear. Stimulus transport responses also need to move quickly but be decisive and defensible.

Of course, any project needs to fit the bigger picture. We need to bring forward the right projects over the upcoming months, and beyond, that connect stimulus outcomes with the longer-term ambitions of connectivity, liveability, and environmental performance.

Simple but targeted project identification and assessment can identify schemes that complement the existing infrastructure pipeline and have the desired impact.

For example, a number of coordinated small-to-medium projects along a corridor could radically improve local conditions to achieve outcomes like 20-minute neighbourhoods, while also achieving broader network movement objectives.

What does a stimulus transport project look like?

At its simplest, successful stimulus transport projects involve a program of interventions at network hot spots or 'pinch points'. This may include intersection and road network upgrades to remove bottlenecks, improve travel time reliability, safety, and network resilience, as well as use of technology to enable smart infrastructure. In terms of an assessment, such activity will meet economic criteria, be quick and relatively straightforward to deliver, be easily bundled for additional benefit, be deliverable by smaller contractors, and spread employment and activity across multiple sites.

A corridor perspective

To fully grasp the type of projects and outcomes that could be achieved by stimulus projects, GTA has considered improvements that could be made along a transport corridor to address key objectives such as bus priority, pedestrian safety, cycling safety and capacity, road safety and network optimisation.

Tackling specific transport corridors allows for scalability into programs, consistency and management of interdependencies and the ability to achieve multiple outcomes with single occupations. A program of projects could include:



Objective	Potential stimulus improvement measures
Bus Priority	<ul style="list-style-type: none"> ■ Implement new bus lanes – in some cases simple road marking exercises to redistribute roadspace ■ Bus jump gates at intersections ■ Changing left lanes to left turning except buses ■ Priority bus signals ■ In-setting parking/loading to support bus lanes ■ Bus stop upgrades for DDA and multi-door access ■ Piloting use of Priority Vehicle or Bus/Truck Lanes
Pedestrian safety	<ul style="list-style-type: none"> ■ Footpath widening ■ Kerb buildouts/extensions at crossings (separate out waiting pedestrians and passing pedestrians and reduce crossing times) ■ Side road entry treatments/continuous footpaths ■ Raised crossings ■ Roundabout upgrades with raised zebra crossings ■ Slip road improvements reducing vehicle speeds and providing crossings ■ Signal timing changes to provide more crossing time ■ Closing roads in one direction and removing parking to allow wider footpaths
Cycling	<ul style="list-style-type: none"> ■ Installation of temporary bike lanes using road marking and physical measures ■ New permanent bike lanes– both physically separated and line-marked ■ Bike boxes at signals and intersection improvements ■ Maintenance of existing bike lanes and shared paths including new surfacing, vegetation clearance, and refreshed line markings ■ Reduce speed limits to 30 kph and create bicycle boulevards ■ New bicycle parking in activity centres and train stations
Road safety	<ul style="list-style-type: none"> ■ Standardised markings/signing on sections of roads ■ Increased use of reflectors – e.g. at the edge of Clearway lines ■ Hard shoulder installation on rural roads ■ Consistent hazard warning signs for bends ■ Consistent township gateway entry treatments. ■ Resurfacing/drainage –maintenance ■ Speed limits reviews and changes ■ Anti-skid surfacing
Network optimisation	<ul style="list-style-type: none"> ■ Simple line-marking and signage to improve lane usage and remove blocking ■ Right/left lane extensions ■ Side road closures or switch to left in/left out to minimise friction and conflict on arterial roads ■ Removing 3 to 2 lane configurations at intersections to simplify, reduce friction and lost time ■ Turning restrictions / bans ■ Traffic signal reviews (noting demand changes) ■ Queue loops and additional detectors at intersections



Overcoming barriers

Bringing stimulus funding into action quickly is a critical element in Australia's economic recovery. With the right decision framework we protect against the risk of delivering the wrong projects in the wrong place at the wrong time – or simply not delivering anything at all.

A corridor approach based on small-to-medium complementary projects is a low risk way of quickly spreading and embedding benefits across our cities, and into the hands of the communities that use them.

Taking the next step

GTA is well-placed to assist governments to set their agenda as well as align and leverage stimulus investment to enable communities to thrive through transport.

Led by seasoned senior practitioners, we work with all levels of government, assembling the right combination of technical expertise for each assignment.

Importantly we bring a comprehensive understanding of government sector requirements, organisational needs, and those of the community.



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