

South Australia High Productivity Vehicle network access

LOCATION

South Australia

SECTOR

Transport

PROPONENT

South Australian Government

EVALUATION HISTORY

Planning Investment
(Problem/Opportunity Identification)
- February 2016
Planning Investment
(Options Analysis) – May 2025



Problem Description

South Australia's High Productivity Vehicle network extends over multiple key freight corridors, including the Dukes Highway, Sturt Highway, Augusta Highway, Eyre Highway and the Outer Harbor link in Adelaide. It is crucial for transporting goods between regional areas of South Australia and providing connections to Victoria and Western Australia, as well as connections to intermodal terminals at ports and rail nodes. However, parts of the High Productivity Vehicle network are not approved for Performance Based Standards Level 4A vehicles (i.e. vehicles 53.5 metres in length), restricting the efficiency of freight movements.

The existing network transits through Greater Adelaide and regional townships, creating safety risks and reducing liveability for local communities. Safety risks are also present across the network where road conditions have deteriorated, and road safety infrastructure is inadequate. Some sections of the freight network are also vulnerable to extreme weather events.

Strategic Fit

The South Australian High Productivity Vehicle Network Program (the program) has been developed to address network constraints and improve productivity, safety, resilience, and liveability. The program objectives align with the strategic themes of the Australian Government's Infrastructure Policy Statement.

Overall, the approach to the options analysis appears rigorous. A long list of options was developed by identifying individual upgrades across sections of the network that respond to the defined problems. The upgrades were appropriately assessed through multi-criteria analysis and combined to develop network-wide options. The network-wide options aligned to South Australia's freight strategies, investigations and corridor studies.

The network-wide options were then assessed against additional criteria, and the option that combines upgrades to meet all program objectives was identified as the preferred option. The scope of this option incorporates a range of road infrastructure upgrades to 19 defined sections across 7 corridors. Types of upgrades include safety improvements, bridge and intersection upgrades, township bypasses (including Truro Bypass), flood resilience improvements, and grade separations. The scope also includes installation of Intelligent Transportation Systems in some locations across areas of the network to support future investment in smart road infrastructure.

Some scope changes were made to the preferred option without detailed justification or clarification of how changes will impact the expected outcomes. However, the merit of the options will continue to be analysed in the next stage of planning.

Societal Impact

Stakeholders across industry and government have been appropriately consulted throughout the development of the program. Engagement with First Nations stakeholders has been undertaken, identifying potential risks to native title and moderate likelihood of encountering undocumented cultural heritage sites.

Social impacts of the program have been appropriately assessed and integrated in the options analysis. Forecast benefits are travel time savings for freight vehicles and other road users, reduced vehicle operating costs and safety benefits. Regional townships and road users are expected to experience larger but fewer freight vehicles, which is expected to deliver liveability benefits.

Sustainability impacts have been assessed, and the economic appraisal quantifies expected benefits from reduced operational emissions due to decreased road maintenance and fuel use. The program is also considered to future-proof the network for low and zero emissions freight vehicles which are heavier than current regulations allow.

The impact of embodied emissions from construction have been quantified and incorporated in the assessment of shortlisted options. However, the cost of embodied emissions was not monetised in the economic appraisal, resulting in overestimation of net benefits.

Overall, the preferred option for the program has merit and supports the program objectives of productivity, resilience, safety and liveability. Based on current analysis and cost estimates, the preferred option scope, including Truro Bypass, is expected to deliver net benefits to the South Australian community.

Deliverability

Factors related to deliverability of the program were used to inform the options short-listing process. This included a qualitative assessment of the ease of construction for program options, and the level of disruption expected.

Potential approaches for packaging, contracting and sequencing delivery were identified. While more detailed consideration of delivery will be prepared at a later stage, this level of analysis is considered appropriate for this stage of planning.

Next Steps / Recommendations

The South Australian Government intends to progress individual project business cases for upgrades included in the program, with Truro Bypass, Swanport Bridge Upgrade and the Greater Adelaide Freight Bypass projects identified as priorities.

We recommend the SA Government continues to engage with Infrastructure Australia in developing the business cases for individual projects, and that the costs of emissions are considered in the analysis.