

Appendix D:

Major project case studies

This appendix includes the 8 major project case studies we selected to examine 10 projects in more detail. We assessed progress in these high materiality projects and examined root cause factors driving significant project changes to better understand risks to effective project delivery. The case studies are published separately and can be read independently of this report.

Figure D1: Case studies

Project name	Entity the project is allocated to in the Budget	Entity delivering the project	Sector	Approved TEI in 2024–25 BP4	Page
Building a world class hospital for Frankston families	Department of Health	VIDA	Health and human services	\$1.12 billion	D–2
Car Parks for Commuters	VicTrack	Department of Transport and Planning	Transport	\$590.51 million (has further funding up to \$610.21 million)	D–9
City Loop fire and safety upgrade (stage 2) and intruder alarm	VicTrack	<ul style="list-style-type: none"> Department of Transport and Planning VIDA 	Transport	\$464.61 million	D–17
Melbourne Arts Precinct Transformation Phase One	Melbourne Arts Precinct Corporation	Development Victoria	Culture, sport and community	\$1.57 billion	D–25
North East Link (all roads packages)*	Department of Transport and Planning and North East Link State Tolling Corporation	VIDA	Transport	\$26.21 billion (aggregate TEI of all the North East Link tunnels and roads packages)	D–32
North East Link Toll Collection Capability project	North East Link State Tolling Corporation	North East Link State Tolling Corporation and VIDA	Transport	Not for publication. This project is funded within the \$14.03 billion TEI allocated for North East Link – Primary Package (Tunnels) and State Tolling Corporation)	D–41
Nyaal Banyul – the Geelong Convention and Event Centre	Department of Jobs, Skills, Industry and Regions	<ul style="list-style-type: none"> Department of Jobs, Skills, Industry and Regions Development Victoria 	Culture, sport and community	\$449.10 million	D–48
Suburban Rail Loop East – Development, Initial and Early Works	VicTrack	Suburban Rail Loop Authority	Transport	\$2.37 billion (funding up to \$2.5 billion was announced by the government in November 2021)	D–55

Note: *We have merged all 4 separate Budget initiatives related to the roads and tunnel components into one case study.

Source: VAGO.

Frankston Hospital redevelopment

The Frankston Hospital redevelopment is under construction in Melbourne's south-east and is aiming to be operational in 2026.

The project will modernise facilities, address shortfalls in capacity and improve the hospital's ability to meet contemporary healthcare standards.

Figure 1: View of the Frankston Hospital redevelopment



Source: Victorian Infrastructure Delivery Authority.

Key project data

2024–25 BP4 project name:	Building a world class hospital for Frankston families
Previous reporting name:	N/A
Project lifecycle phase:	In delivery/under construction
Financial year when first disclosed:	2019–20 (funding for planning)
Current approved cost (TEI):	\$1.12 billion
Original approved cost (TEI):	\$562 million (not published because there was no BP4 produced in 2020–21)
Cost variance analysis:	Increased by 99.3% (\$558 million)
Expected completion date:	Quarter 3 2025–26
Original completion date:	Quarter 4 2024–25
Time variance analysis:	Delayed by 3 quarters (up to 9 months)
Responsible (BP4) entity:	Department of Health (DH)
Delivery entity:	Victorian Infrastructure Delivery Authority (VIDA) and Peninsula Health
Approval authority:	DH

Note: BP4 is Budget Paper 4: State Capital Program. TEI stands for total estimated investment. The 2019–20 budget allocated \$6 million to plan the Frankston Hospital redevelopment. The full project cost was funded in 2020–21.

Project summary

Project description and purpose The Frankston Hospital redevelopment project will redevelop and expand the existing Frankston Hospital.

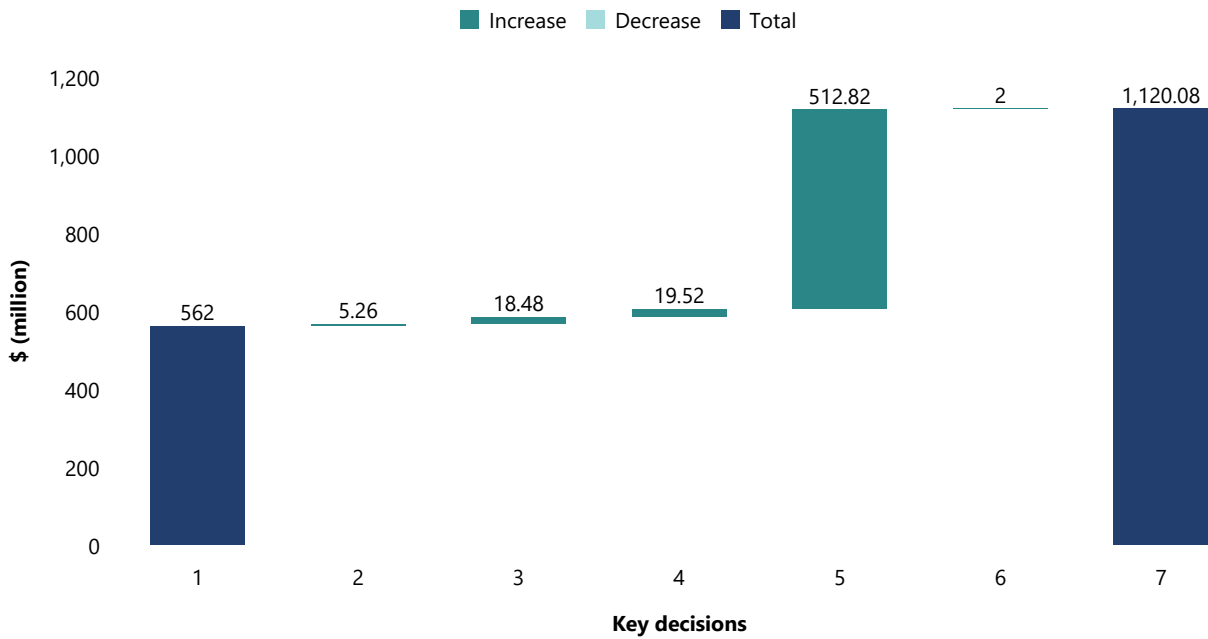
The redevelopment will address the existing hospital's capacity issues and help meet contemporary standards for health services. It will provide 130 more hospital beds, 15 new operating theatres and new spaces for an oncology ward and day clinic. It will also expand maternal, children's and mental health services.

Several built elements will be added to the hospital, including:

- a new acute health services tower
- a new multi-deck carpark
- relevant infrastructure improvement works.

Some existing buildings and garden grounds will be refurbished and improved by the project.

Figure 2: Budget changes to the Frankston Hospital redevelopment project



Legend

Key decision	Date and detail
1	2018: original TEI undisclosed in BP4
2	2021–22 BP4: funding for mental health and alcohol and other drug hub
3	2021–22 BP4: funding for paediatric emergency department zone
4	2021–22 BP4: funding for a multi-deck car park
5	2022–23 BP4: additional 102 points of care and whole-of-life costs. Project now under the public–private partnership (PPP) model.
6	2024–25 BP4: extra \$2 million funding for expanded emergency department reception and triage
7	2024–25 BP4: current TEI

Source: VAGO.

Project status

Red, Amber and Green (RAG) status The criteria we used for this RAG assessment can be found at the end of this case study.

Figure 3: Entity self-assessment compared to VAGO assessment

	Scope	Cost	Time	Benefits
Entity self-assessment	Green	Green	Green	Green
VAGO assessment	Green	Green	Green	Amber

Note: Entity self-assessments were made in the specific project survey. Based on the information VIDA provided and survey responses, VAGO assessed benefits as amber because benefits measurements processes are not fully developed and baseline data to measure benefits achievement is insufficient.

Source: VAGO.

Cost, time and scope performance

The project is on track, with 47 per cent of the construction funding spent at the time of this review. Reports from the project's independent reviewer (IR) show that main construction is well underway. The new emergency department zone refurbishment is in progress.

There have been 3 government-approved scope changes to improve the existing emergency department reception and triage area at Frankston Hospital, which have impacted TEI.

These scope changes have not impacted the current forecast completion date.

Risks and emerging pressures



A contractor's piling rig collapsed early in the project's preparation works, causing a delay to the initial building schedule. The schedule was amended to make up the delay and is on track.

An IR oversees and reviews the project's design and construction. The IR reports to all project parties and checks the private sector's performance and compliance with project requirements.

The project is on track to achieve commercial and technical acceptance dates. The IR has identified some risks to the project. For example, the current schedule groups together large works packages, but the IR notes these should give more detail to increase transparency and accuracy.

The IR also notes that the remaining time contingency is too low and should be reviewed.

Variance analysis

Over the last 5 years, the project has experienced major scope changes and PPP procurement model approval, which have increased its overall TEI. If measured against its original approved TEI, the project's cost has increased by 99.3 per cent. This is because the TEI has changed over time in line with scope and procurement model evolutions, reflecting government decisions.

Starting at \$562 million in 2018, the project increased to \$605.26 million in the 2021–22 financial year, because the government decided to add a multi-storey car park and 2 new emergency department initiatives. These new elements were initially out of scope but were included to deliver other health system initiatives and grow clinical support services to meet patient demand.

The TEI increased by another \$512.82 million when the successful PPP bidder identified a design solution that the government considered more optimal. VIDA told us that this new TEI sat within affordability boundaries set by government. The increase in TEI also reflected that the project was now being delivered under a PPP model. Government policy requires additional capital investment, plus lifecycle and project financing costs from the PPP model to be disclosed in the TEI.

The TEI increased to \$1.12 billion after a modification order by DH in 2023 allocated an extra \$2 million to improve the existing emergency department reception and triage area. DH decided these were necessary after design and clinical service model reviews.

Impacts of scope and other changes

There are multiple avenues for monitoring, reporting and mitigating project risks and issues, involving VIDA, Peninsula Health, the Department of Treasury and Finance (DTF) and the private sector party (Exemplar Health).

Because it is a PPP, the project is monitored by an IR who inspects and assures the project deliverables, as well as construction schedules and building quality.

We have not seen any evidence showing how any impacts on expected benefits were analysed or considered.

Key funding stakeholders

Stakeholders The project has a \$1.12 billion TEI, which includes \$10 million from the Australian Government. The Australian Government is contributing funding, together with the state government, to develop the new paediatric zone. This aligned with a 2021–22 system-wide budget initiative called 'Building emergency departments kids and families can count on'.

Project benefits

Benefits DH and Peninsula Health are responsible for implementing the benefit management plan (BMP) and benefits realisation. The current BMP was last updated in December 2018 and does not reflect key project decisions. This includes decisions about adopting a PPP model and adding additional scope. A Gate 6 benefits review is required by the government to be conducted after a project is handed over. Before this, recording benefits progress using a benefits measurement system would help identify whether the project is on track to achieve expected benefits. VIDA and DH's internal processes to track and report progress against project benefits are under review. DH told us that it believes the project is on track to achieve its expected benefits, including improved outcomes for patients and staff and improved access to healthcare. According to VIDA and DH, other benefits, including increased clinical speciality, will be achieved by adding specific mental health, alcohol and other drugs, and maternal and children's health service areas to the new facility. As the project is being delivered through a PPP model, there are likely to be further benefits that are not captured in the existing BMP. These include whole-of-life maintenance outcomes and various risk transfers to the private sector.

Governance and assurance

Governance and assurance The project has a well-described governance and assurance system. VIDA, Peninsula Health, DTF and the private sector participate in planning teams and control groups that have their own terms of reference. The control groups escalate issues to the project steering committee who agree on key cost, schedule and scope changes. The steering committee can make recommendations to the DH secretary and the Minister for Health Infrastructure if necessary. The project is also subject to the high value high risk framework and has completed 3 gateway reviews. It had a project assurance review scheduled to happen in late 2024. There were no substantial issues raised from the last gateway review conducted in 2021. A Gate 4 review is not required, as the project is a PPP and policy exempts the need for this review step. A machinery-of-government change in April 2024 merged the Victorian Health Building Authority with the Major Transport Infrastructure Authority to form VIDA, which has had some impact on governance and coordination arrangements.

Procurement approach

PPP model The Frankston Hospital redevelopment project is a PPP. This is publicly documented in the project summary that was tabled in the Parliament and available on DTF's website.

VIDA told us that its procurement approach focused on value for money by allocating risks to the private sector, increasing private sector innovation and incentivising project delivery on time and within budget.

Better practice

Better practice



VIDA and DH have adaptively reused some newer buildings on the campus and are incorporating them into the PPP design. DH told us that this reduces the carbon impact of a full-scale demolition and new build approach.

Good project practices have been noted in gateway reviews.

These include VIDA providing site condition assessment reports to bidders to facilitate their understanding of latent site risks. Additionally, VIDA expanded the services scope under the PPP to include whole-of-life risks. VIDA said this improved the accuracy of the market responses to the government.

RAG rating definitions

Rating	Scope	Cost	Time	Benefits
Red	Current approved project scope is at risk and requires action and a decision by the government	Project is likely to be more than 20% over its current approved budget	Project is likely to be more than 6 months behind its current approved schedule	Project benefits measurement systems are not in place and baseline and progress data for project benefits described in the business case, investment logic map (ILM) or BMP is not available
Amber	Scope risks are emerging but are being managed and no action or decision is required by the government at this point in time	Project is likely to be 11–20% over its current approved budget	Project is likely to be 4–6 months behind its approved schedule	Project benefits measurement systems are immature and baseline and progress data for project benefits described in the business case, ILM or BMP is unreliable
Green	Current approved project scope is clear and can be delivered within budget and schedule	Project is likely to be 0–10% over its current approved budget	Project is likely to be 0–3 months behind its current approved schedule	Project benefits measurement systems are well developed and baseline and progress data for project benefits described in the business case, ILM or BMP is reliable and up to date
N/A				There are no tangible or measurable benefits specified in the project's business case or objective(s)

Source: VAGO.

Car Parks for Commuters

The Car Parks for Commuters program of capital projects is helping to deliver the government's commitment of 21,000 new and upgraded car parks at train stations across metropolitan and regional Victoria.

The program also delivers improved accessibility, security cameras and lighting, and more bicycle parking facilities at selected stations.

Figure 1: Tarneit Station car park and bus interchange



Source: Car Parks for Commuters program, Department of Transport and Planning.

Key project data

2024–25 BP4 project name:	Car Parks for Commuters (CPC)
Previous reporting name:	N/A
Project lifecycle phase:	In delivery/under construction
Financial year when first disclosed:	2019–20
Current approved cost (TEI):	\$610.21 million*
Original approved cost (TEI):	\$150 million
Cost variance analysis:	Increased by 306.81% (\$460.21 million)
Expected completion date:	Quarter 2 2025–26
Original completion date:	Quarter 4 2022–23
Time variance analysis:	Delayed by 10 quarters (approximately 2.5 years)
Responsible (BP4) entity:	Victorian Rail Track (VicTrack)
Delivery entity:	Victorian Infrastructure Delivery Authority (VIDA), VicTrack and local councils on behalf of the Department of Transport and Planning (DTP)
Approval authority:	DTP

*The TEI in the 2024–25 BP4 was \$590.51 million. The Australian Government committed another \$19.7 million in its 2024 Budget. Note: BP4 is Budget Paper 4: State Capital Program. TEI stands for total estimated investment.

Figure 2: Greensborough Station multi-deck car park and bus interchange



Source: Car Parks for Commuters program, DTP.

Project summary

Project description and purpose

The CPC program is helping to deliver the Victorian Government’s commitment of 21,000 new and upgraded car parks at train stations across metropolitan and regional Victoria. The government promised to deliver 10,000 new and upgraded spaces in 2014. Another 11,000 new and upgraded spaces were committed in the 2018 state election.

In 2021–22, all Victorian-led car parking projects and programs were consolidated under one program to maximise efficiencies and streamline reporting.

The CPC program has 45 projects across 43 train stations. As at August 2024, 39 projects were completed and 6 either in procurement, detailed development, or construction. VicTrack, VIDA and local councils are managing project delivery on DTP’s behalf.

Apart from car parks, the CPC program also delivers better accessibility, security camera and lighting improvements, as well as new bus facilities and more bicycle parking at various train stations.

The CPC program, which is specifically dedicated to station car parking, is also supported by other major transport investments. These other investments also contribute to the overall commitment of 21,000 new and upgraded car parks.

Project status

Red, Amber and Green (RAG) status

The criteria we used for this RAG assessment can be found at the end of this case study.

Figure 3: Entity self-assessment compared to VAGO assessment

	Scope	Cost	Time	Benefits
Entity self-assessment	Green	Green	Green	Green
VAGO assessment	Green	Green	Green	Amber

Note: Entity self-assessments were made in the specific project survey. Based on the information DTP provided and survey responses, VAGO assessed benefits as amber because benefits measurements processes are not fully developed and baseline data to measure benefits achievement is insufficient. Car parks are not a project benefit, they are an asset, so are better described as a project output. Source: VAGO.

Cost, time and scope performance

The CPC multi-site work program is almost complete and is within the 2024–25 BP4’s approved TEI. Watergardens will be the last site to be delivered.

The CPC program’s TEI has increased by \$460.21 million from its original TEI in the 2019–20 BP4. DTP, on VicTrack’s behalf, has partly documented reasons for TEI variances in BP4 footnotes.

For example, DTP told us that other reasons that were not listed in BP4 footnotes include the impact on scheduling of time needed to align with other interfacing transport projects.

Risks and emerging pressures

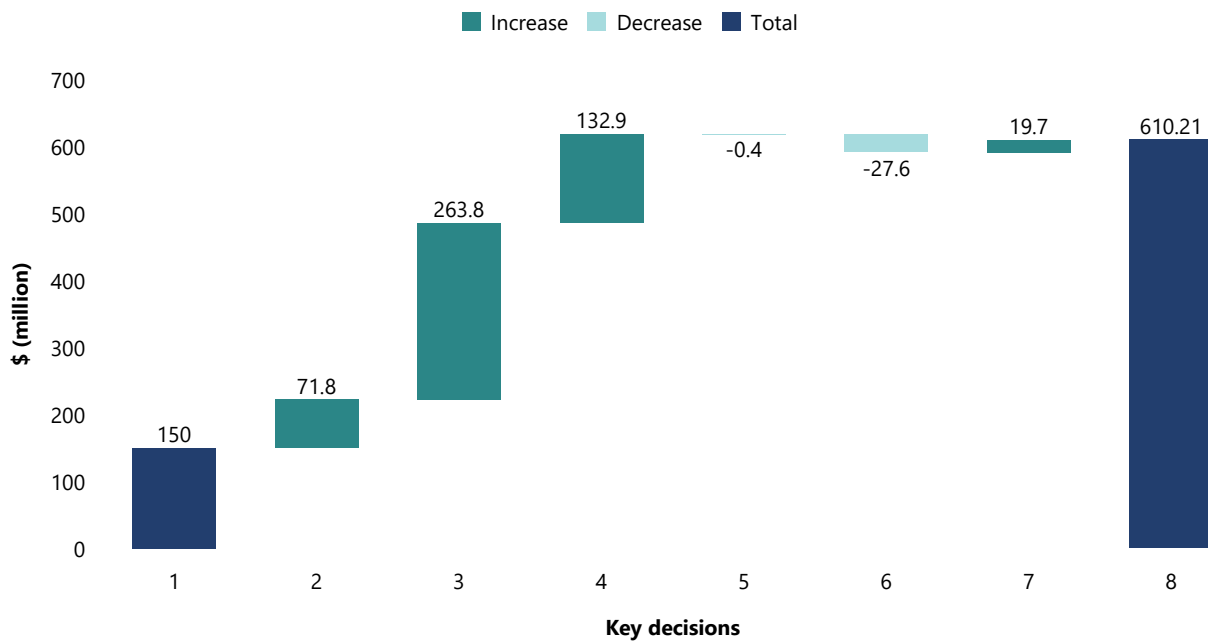


Project risks and emerging issues are reported by project delivery agencies on a fortnightly basis to DTP.

Project risks are individually managed by delivery agencies in accordance with the DTP-endorsed project management plans and project brief. Where issues are not resolved, they are escalated to DTP.

The CPC program is nearing completion. Although the final site at Watergardens is currently finalising approvals, DTP says it expects to deliver the expected outcome by December 2025.

Figure 4: Budget changes to the CPC program



Legend

Key decision	Date and detail
1	2019–20 BP4: original TEI
2	2021–22 BP4: TEI increased to include previous programs underway
3	2021–22 BP4: TEI increased because additional funds for 33 projects were approved by government for new projects
4	2022–23 BP4: TEI increased because committed Australian Government funds were released, 2 new projects added at East Pakenham and Greensborough bus interchange
5	2022–23 BP4: TEI decreased due to operational reclassification
6	2024–25 BP4: TEI decreased due to accounting treatment for grant to council for Sunbury
7	May 2024 Federal Budget: TEI increased to include additional Australian Government funding for its share of additional costs on joint projects
8	Post-2024–25 BP4: Updated TEI

Source: VAGO.

Variance analysis

There has been ongoing development since the program was first announced in the 2019–20 Budget. For example, the CPC program initially committed to deliver 33 new and upgraded car park projects across 32 stations, but this increased to 45 projects across 43 stations.

If measured against its original approved TEI and compared to the current approved scope, the overall CPC program’s cost has increased by close to 306.8 per cent. DTP told us that this is because:

- the government expanded the program scope
- further development work was needed for some car park delivery options
- project schedules and delivery approaches were amended to align with other projects.

Cost escalation pressures and program consolidation over time also increased program cost.

DTP's reasons for cost increases have not all occurred at each car park site where there has been a cost increase.

Additional project sites and increased scope and program consolidation have increased the current approved time by approximately 2.5 years.

The 2024–25 Federal Budget confirmed \$19.7 million in Australian Government funding for the CPC. DTP told us that this would fund the Australian Government's remaining 50 per cent share of some joint project costs.

Impacts of scope and other changes

There is a well-documented governance structure to oversee the CPC program and mitigate risks and issues. DTP has various governance and assurance mechanisms at both the CPC individual project and the overall program level to assess project risks, variances and impacts on TEI.

At the project level, delivery partners, such as VicTrack and VIDA, give DTP fortnightly delivery updates that detail any project change impacts. DTP uses these to approve budget and scope changes.

At the program level, variances against government's committed budget and scope are assessed and recorded in DTP's program report. DTP then briefs the Minister for Public and Active Transport on impacts and seeks endorsement and approval for any variances.

DTP assesses impacts against CPC program objectives and whether they represent overall value for money based on the project scope. For example, a variance can be approved when delivery partners ask to use unallocated funding for additional but useful work items above the base project scope.

DTP told us that delivering the program over time with rolling cost variations allowed government to deliver car parks best suited to the site's complexity and deal with specific site constraints. For example, projects at complex sites, which may warrant multi-deck car parks, may require more time for planning and development work.

This decision-making process shows that DTP may not have thoroughly planned or estimated complex car parking sites costs before seeking funding.

DTP told us it was difficult to thoroughly plan all the current CPC car park sites and ascertain site complexity. This is because the program has grown and developed over time, with new projects added since it was first funded.

Key funding stakeholders

Stakeholders

The CPC program has received funding from the Victorian and Australian governments.

The CPC program recently received further Australian Government funding. An additional \$19.7 million from the Australian Government was confirmed in the 2024–25 Federal Budget.

This contribution was not disclosed in the 2024–25 Victorian state Budget due to Federal Budget timing. This new contribution adjusts the program's TEI to \$610.21 million.

Project benefits

Benefits DTP considers that the main benefits from the CPC program are to deliver the committed car park numbers and associated scope at each site, as promised at the 2014 and 2018 elections.

The benefits of providing these new and upgraded spaces include making it easier for travellers to access their station and improved safety, accessibility and customer experience. We note that DTP did not identify specific car park delivery as a benefit in its benefits management plan.

There are other benefits noted in DTP's benefits management plan. These include patronage growth at improved stations, improved customer satisfaction, increase in bicycle parking and reduced complaints. There is no evidence that these benefits are reviewed as each site project's scope evolves or tracked once projects are complete.

There may be other benefits from the new car parks that could have been assessed during program delivery. These include:

- better access to public transport
- improvements in safety through better lighting and security cameras
- cycling promotion.

These benefits are noted in the overall business case and in project delivery briefs but are not specifically tracked or measured.

Governance and assurance

Governance and assurance The program has a well-described governance system.

Project delivery partners, such as VicTrack, VIDA and local councils, are part of project control groups that have their own terms of reference. Delivery partners need to ensure that their projects' scope aligns to DTP's project requirements.

DTP assures the Minister for Public and Active Transport by providing fortnightly program and project updates to the minister's office. The Minister for Public and Active Transport updates Cabinet as required.

Gateway reviews were not required for the CPC program because all sub-projects are valued below \$100 million and were not assessed by the Department of Treasury and Finance as high value high risk.

DTP and Australian Government officials participated in regular weekly meetings during the jointly funded sites' early planning and development phases related to the Australian Government's involvement in the CPC program. These meetings now take place every second month while the program is being delivered.

Procurement approach

Multiple models The CPC program involves multiple delivery agencies and different procurement approaches for each project and committed site.

DTP told us that its procurement approach is based on a 'delivery optimisation approach', which categorises each project's site and commitment. Doing this allows DTP to consider interfacing projects, site constraints and conditions, as well as location and market capacity, which may offer delivery and management efficiencies.

DTP has used various delivery partners, such as councils, VicTrack and VIDA. VIDA's works have been done concurrently with interdependent level crossing removal projects, using existing alliances. Other delivery partners have used different contracting models and contractors.

We saw examples of some innovative models, such as joint ventures or long-term leasing, to achieve the desired net parking outcomes.

Better practice

Better practice and lessons learnt

The CPC program uses different procurement approaches and pragmatically designs solutions to achieve site-specific outcomes.

The CPC program also coordinates its works with other concurrent transport projects, such as level crossing removals. This approach optimises construction resources already on site, minimises local disruption and enables an integrated site solution.

For example, the East Pakenham train station initially began with a car parking commitment at Pakenham. It evolved into a commitment for a new station at East Pakenham because this growth area had limited car parking facilities. East Pakenham was delivered as part of the broader Pakenham level crossing removal project.

DTP told us that delivery partners at the project level capture and analyse project lessons learnt. The process is ongoing after each sub-project is delivered. For example, for the Belgrave carpark, VicTrack noted that having a clearer scope with operational requirements at the start allowed for a better project scope instead of workshopping requirements mid-design.

DTP also told us it will review lessons learnt at the end of the full works program. To date, key lessons learnt include:

- each station car park site varies considerably in complexity and constraints
- using a benchmark cost for a car parking space is not reliable and should be avoided
- specific site constraints drive the cost per car park with complexities including utilities, land availability (including size and shape) and environmental approvals.

DTP also collects and analyses lessons learnt regarding community and stakeholders through its delivery partners at the project level.

RAG rating definitions

Rating	Scope	Cost	Time	Benefits
Red	Current approved project scope is at risk and requires action and a decision by the government	Project is likely to be more than 20% over its current approved budget	Project is likely to be more than 6 months behind its current approved schedule	Project benefits measurement systems are not in place and baseline and progress data for project benefits described in the business case, investment logic map (ILM) or benefits management plan (BMP) is not available
Amber	Scope risks are emerging but are being managed and no action or decision is required by the government at this point in time	Project is likely to be 11–20% over its current approved budget	Project is likely to be 4–6 months behind its approved schedule	Project benefits measurement systems are immature and baseline and progress data for project benefits described in the Business Case, ILM or BMP is unreliable
Green	Current approved project scope is clear and can be delivered within budget and schedule	Project is likely to be 0–10% over its current approved budget	Project is likely to be 0–3 months behind its current approved schedule	Project benefits measurement systems are well developed and baseline and progress data for project benefits described in the Business Case, ILM or BMP is reliable and up to date
N/A				There are no tangible or measurable benefits specified in the project's business case or objective(s)

Source: VAGO.

City Loop fire and safety upgrade

The City Loop fire and safety upgrade has delivered critical safety-related improvements to sub-surface stations in the Melbourne underground rail loop.

Upgrades include installing modern smoke detection, smoke extraction and sprinkler systems. It also built fire and smoke refuges for people with limited mobility.

Figure 1: City Loop fire and safety upgrade in Flagstaff Station



Source: Victorian Infrastructure Delivery Authority.

Key project data

2024–25 BP4 project name:	City Loop fire and safety upgrade (stage 2) and intruder alarm
Previous reporting name:	N/A
Project lifecycle phase:	Practical completion (handover to operator and defects phase)
Financial year when first disclosed:	2016–17
Current approved cost (TEI):	\$464.61 million
Original approved cost (TEI):	\$132.86 million
Cost variance analysis:	Increased by 249.69% (\$331.75 million)
Expected completion date:	Quarter 2 2023–24
Original completion date:	Quarter 4 2019–20
Time variance analysis:	Delayed by 18 quarters (3.5 years)
Responsible (BP4) entity:	Victorian Rail Track (VicTrack)
Delivery entity:	Victorian Infrastructure Delivery Authority (VIDA)
Approval authority:	Department of Transport and Planning (DTP)

Note: BP4 is Budget Paper 4: State Capital Program. TEI stands for total estimated investment.

Project summary

Project description and purpose	<p>In October 2012, the Victorian Ombudsman found that a 'major incident in the MURL could pose considerable risks for commuters travelling through the tunnels, for persons in the MURL stations and in buildings above them'.</p> <p>The government funded this project in 2016 as the second stage of critical fire and safety upgrade works within the MURL at Parliament, Flagstaff and Melbourne Central stations.</p> <p>The project scope includes:</p> <ul style="list-style-type: none">• sprinkler systems upgrade• platform smoke extraction systems• extraction fans and other smoke evacuation shaft equipment upgrades• smoke barriers around some open-sided inter-platform escalators• fire rated and smoke-protected safety refuges for persons with limited mobility• integrating new safety systems into the MURL's technical and operating environment.
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Project status

Red, Amber and Green (RAG) status The criteria we used for this RAG assessment can be found at the end of this case study.

Figure 2: Entity self-assessment compared to VAGO assessment

	Scope	Cost	Time	Benefits
Entity self-assessment	Green	Green	Green	Green
VAGO assessment	Green	Green	Green	Amber

Note: Entity self-assessments were made in the specific project survey. Based on the information VIDA provided and survey responses, VAGO assessed benefits as amber because benefits measurements processes are not fully developed and baseline data to measure benefits achievement is insufficient.
Source: VAGO.

Cost, time and scope performance

The project is nearly complete and is currently delivering within its approved scope, cost and time targets.

VIDA told us that the project’s operational milestone was achieved on 16 April 2024 and physical works completion was achieved 15 days later on 1 May 2024. Practical completion was achieved in September 2024.

Final completion is expected in quarter 2 2023-24,, with all safety works now operational. These project milestones are defined in the project's contract.

There are some final cosmetic works to be performed, such as plaster patching and painting. Other issues to resolve include site rectification, defects and final finishes in some stations, as agreed with Metro Trains Melbourne (MTM), the metropolitan train franchise operator.

Risks and emerging pressures

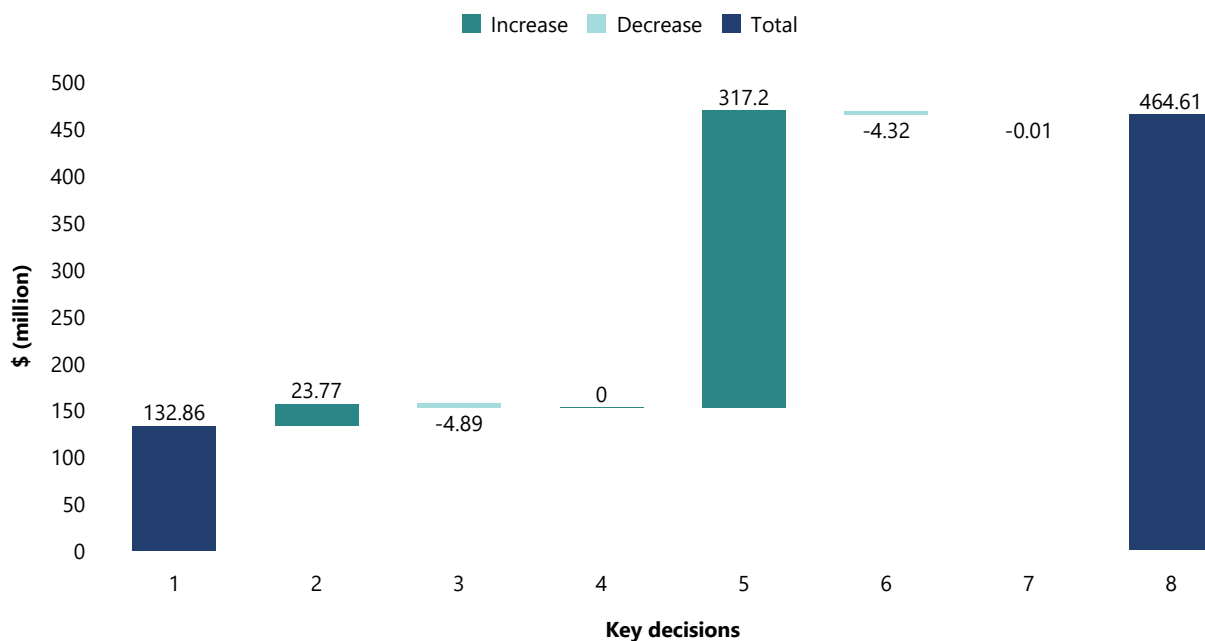


Most material project risks and pressures were resolved through the decision in late 2020 by the government to adopt an alliance contracting model. This resulted in a project procurement and costing reset.

Practical completion and final functionality commissioning, site remediation, station finishes and reliability inspections will need to be managed carefully throughout the project close-out phase.

The alliance will need to focus on producing a quality outcome that meets scope expectations and expected benefits from the project, particularly the safety and functionality aspects. MTM, as an alliance participant, is expected to be heavily involved in final close-out works.

Figure 3: Budget changes to the City Loop fire and safety upgrade



Legend

Key decision	Date and detail
1	2016–17 BP4: original TEI
2	2018–19 BP4: TEI increased to meet additional scope and design requirements
3	2018–19 BP4: TEI decreased due to capital reallocation to operating expenditure
4	2021–22 BP4: TEI TBC following the original contractor entering administration
5	2022–23 BP4: TEI increased due to project scope changes and market conditions
6	2023–24 BP4: TEI decreased due to capital reallocation to operating expenditure
7	2024–25 BP4: TEI decreased due to capital reallocation to operating expenditure
8	2024–25 BP4: current TEI

Source: VAGO.

Variance analysis

There has been a significant and material, or nearly 250 per cent, TEI variance from the original project’s commencement in 2016 to now. The current scope and approach was confirmed in 2022.

VIDA told us this cost increase was due to needing to do additional smoke and fire modelling and project re-scoping. This identified a requirement for larger fans, different wiring, standby generators and associated structural and engineering works, which all had an impact on project cost.

There was limited evidence available for us to view and understand the decision-making processes that led to the project’s first iteration. The original approach was to be delivered as a state-nominated franchisee project. This would be overseen by MTM, under Public Transport Victoria’s (PTV) direction. PTV is now defunct as an entity and its functions have been incorporated into DTP.

DTP was unable to maintain this original approach after the main works contractor's business collapsed and was not able to appoint a new builder to take over the incomplete works.

The amended project TEI, confirmed via revised costings done by DTP and VIDA, has not deviated from expectations since it was approved in 2022.

Impacts of scope and other changes

There has been a 3.5-year delay to the project since the project was first announced. Revised project timelines were agreed in conjunction with confirmation of the new delivery approach.

Most of this delay occurred before scope and other changes were agreed by government, and prior to project delivery being allocated to VIDA by DTP.

The delay was not anticipated because the project's original contractor's business suddenly collapsed. The delay was unable to be addressed until a new delivery approach was confirmed by government, which appointed VIDA as delivery agency and used one of its already contracted alliances to complete the works.

Around a year of delays were due to PTV, the Department of Treasury and Finance (DTF) and the former Office of Projects Victoria assessing appointment of a new delivery agency and the new procurement approach. Another round of delays occurred after VIDA was required to do further development work to seek the release of more project funding from central contingency.

This lengthy delay to the safety upgrade works implies that during this period, the risks identified in the Victorian Ombudsman's report as well as DTP's own updated safety modelling were not mitigated. This means that underground City Loop stations may have been relatively less safe than they could have been.

However, massive train patronage reductions during the COVID-19 pandemic did reduce the number of passengers in the City Loop, resulting in a decreased exposure of passengers to a safety risk from fire and smoke events.

Since the works commenced under VIDA's oversight, time variance has been negligible.

Key funding stakeholders

Stakeholders This project is fully funded by the Victorian Government.

Project benefits

Benefits The project's original expected benefits are mainly safety-focused. They are predicated on reducing impact from fire, smoke or explosion. The new fire and smoke safety refuges installation also gives more safety to commuters, especially for people with limited mobility or low capacity to self-evacuate.

There is also a deeper benefit from gaining assurance that the MURL stations are meeting contemporary expectations for fire and rail safety, especially in the context of a new adjoining metro line that has had to meet modern standards and requirements for evacuation, firefighting and safety.

The project assurance review conducted in May 2021 recommended, among other things, that the business case should be updated to include a benefits management plan (BMP) and metrics.

VIDA told us that a BMP review was undertaken in July 2022. DTP, VIDA and MTM agreed on 2 benefits for assessment after project delivery:

- benefit 1: improved station safety by increasing the available safe evacuation time and increasing the capacity to safely accommodate trapped people

- benefit 2: reduced exposure to costs arising from smoke and fire damage by increasing the extent of sprinkler coverage and reducing the percentage of station space affected by smoke.

DTF has recently requested VIDA to undertake a standalone Gate 6 review, which is due 6–18 months after project completion, in accordance with the project assurance plan. This is a requirement of the government's high value high risk (HVHR) process.

VIDA confirmed that a 'lessons learnt' review will be conducted following practical completion, which may capture additional benefits arising from project delivery, where these are evident. A value for money (VfM) report will also be prepared in accordance with the *National Alliance Contracting Guidelines: Guidance Note 4 Reporting Value-for-Money Outcomes* (September 2015) after the project reaches practical completion.

The VfM report will detail the extent to which the project achieved the benefits documented in the business case. The VfM report will be an input to a future Gate 6 review to be organised by DTF.

Governance and assurance

Governance and assurance This project has had a troubled history. It was heavily affected by the original contractor's collapse, which triggered severe cost and time overruns. The government changed the previous procurement approach of state-directed franchisee works as part of the decision-making processes for the project.

Some of the original works components (such as tunnel intruder detection and alarm systems) were performed by MTM because these were not in the previous contractor's scope of works.

Completing the project involved a range of key decisions by government and detailed analysis of an appropriate response to the project's scope, which involve critical safety works.

The project was allocated to VIDA and pursued as an additional works package within an existing VIDA alliance. This existing alliance has MTM as a non-owner participant.

This decision meant that the project was inducted into the existing governance and oversight processes used by VIDA with its contracted alliances, as well as the broader VIDA governance and assurance environment. These systems are well-established.

The project is HVHR and has had several gateway and project assurance reviews. The first project assurance review focused on the overall project and whether the state should appoint VIDA to deliver remaining works through an existing alliance. The second project assurance review focused on the project's transition to VIDA and the design development process.

The Gate 4 review focused its recommendations on whole-of-government communications and the need for more detailed fire and smoke modelling and resource planning. We saw evidence that these recommendations were acknowledged and addressed.

Procurement approach

Alliance contracting model

For the second phase of the project, there is good evidence of a detailed procurement analysis and identification of which existing VIDA alliance would be most appropriate to take on this project.

Open book costing and risk sharing approaches are inherent to alliance contracting and this was applied to the reset project to generate new cost and time forecasts.

Delivery was performed by an existing VIDA– alliance with appropriate technical capability and delivery capacity, plus a track record of working on complex rail projects in a brownfield environment.

Having MTM in the alliance also embedded operational coordination and rail safety interfaces because MTM is the accredited rail operator and is accountable to the Office of the National Rail Safety Regulator for passenger safety in the rail environment.

VIDA told us that it often delivers complex projects in brownfield environments that require significant stakeholder involvement. This challenge is increased by the need to coordinate critical occupations within an operating rail network.

VIDA considers that the alliance approach is suited to projects with this complexity profile because:

- risks and opportunities are shared to overcome project issues more quickly, avoid risk premiums and adversarial behaviour
- it facilitates active participation by the state
- key stakeholders (such as MTM) are incentivised to align with delivery partners
- the cost, risk and reward regime incentivises all participants to deliver efficiently
- the performance risk and reward regime incentivises meeting other state objectives in excess of project objectives (for example, skills, sustainability and diversity)
- the same team develops and delivers the project, resulting in the state having earlier visibility of true project costs
- project costs are open book and transparent
- commercial terms are locked in due to the framework contract in place.

There is also an expectation that risks are shared collaboratively and dynamically managed by parties best able to manage them, and that key decisions should be made in the spirit of best for project.

Better practice

Better practice



A number of better practice project delivery and procurement matters are embedded and encouraged by the alliance model. The safety upgrade works have benefited from applying them.

In particular, there are inherent processes and controls in an alliance model that require openly examining and collaboratively resolving unexpected cost increases, as well as minimising disputes.

VIDA said that its alliances are incentivised to improve and innovate through key performance indicators and adopting other alliances' initiatives.

A benchmarking process has been used to actively assess projects in development against previously completed similar projects to track and compare costs in all building disciplines, as well as safety, time and disruptions. VIDA said this allows it to apply lessons learnt from previous projects and make sure alliances are utilising best-practice solutions and improvements.

It has also developed an online resource to share information and lessons learnt (including videos) across the level crossing removal program and the alliance workforce. VIDA said this tool is regularly updated and used extensively.

RAG rating definitions

Rating	Scope	Cost	Time	Benefits
Red	Current approved project scope is at risk and requires action and a decision by the government	Project is likely to be more than 20% over its current approved budget	Project is likely to be more than 6 months behind its current approved schedule	Project benefits measurement systems are not in place and baseline and progress data for project benefits described in the business case, investment logic map (ILM) or BMP is not available
Amber	Scope risks are emerging but are being managed and no action or decision is required by the government at this point in time	Project is likely to be 11–20% over its current approved budget	Project is likely to be 4–6 months behind its approved schedule	Project benefits measurement systems are immature and baseline and progress data for project benefits described in the business case, ILM or BMP is unreliable
Green	Current approved project scope is clear and can be delivered within budget and schedule	Project is likely to be 0–10% over its current approved budget	Project is likely to be 0–3 months behind its current approved schedule	Project benefits measurement systems are well developed and baseline and progress data for project benefits described in the business case, ILM or BMP is reliable and up to date
N/A				There are no tangible or measurable benefits specified in the project's business case or objective(s)

Source: VAGO.

Melbourne Arts Precinct Transformation Project Phase One

The Melbourne Arts Precinct Transformation Project Phase One is upgrading facilities in and around Arts Centre Melbourne's Theatres Building and the surrounding precinct.

The works include constructing The Fox: NGV Contemporary gallery, and establishing a new urban garden, to be called Laak Boorndap, that will traverse and link the arts precinct.

Figure 1: Artist's aerial impression of the Melbourne Arts Precinct Transformation Project Phase One when complete



Source: Melbourne Arts Precinct Corporation.

Key project data

2024–25 BP4 project name:	Melbourne Arts Precinct Transformation Phase One
Previous reporting name:	N/A
Project lifecycle phase:	In delivery/under construction
Financial year when first disclosed:	2021–22 (project was first funded in the 2020–21 budget, but no BP4 was tabled in that financial year)
Current approved cost (TEI):	\$1.57 billion
Original approved cost (TEI):	\$1.41 billion
Cost variance analysis:	Increased by 11.35% (\$0.16 billion)
Expected completion date:	Quarter 2 2028–29
Original completion date:	Quarter 2 2028–29
Time variance analysis:	No variance
Responsible BP4 entity:	Melbourne Arts Precinct Corporation (MAP Co)
Delivery entity:	Development Victoria (DV)
Approval authority:	Minister for Creative Industries, Treasurer

Note: BP4 is Budget Paper 4: State Capital Program. TEI stands for total estimated investment.

Project summary

Project description and purpose	<p>The Melbourne Arts Precinct Transformation (MAPT) Project Phase One aims to provide a flagship offering for contemporary art and design in Melbourne.</p> <p>The MAPT project started in 2022 and has 4 components:</p> <ul style="list-style-type: none">• The Fox: NGV Contemporary, which is a new dedicated gallery for contemporary art and design to be completed by 2028• maintenance works at Arts Centre Melbourne (ACM). This includes refurbishing the State Theatre building, extending the basement and doing critical maintenance. The theatre is ageing, which impacts visitor experience, safety and operational efficiency• Laak Boorndap, a new public garden, to be completed by 2028, giving 18,000 square metres of new and renewed public space and supporting infrastructure. This aims to revitalise the arts precinct and better connect existing facilities• upgraded shared services infrastructure, which will supply power and other services to the new gallery and whole precinct.
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Project status

Red, amber and green (RAG) status The criteria we used for this RAG assessment can be found at the end of this case study.

Figure 2: Entity self-assessment compared to VAGO assessment

	Scope	Cost	Time	Benefits
Entity self-assessment	Amber	Amber	Green	Amber
VAGO assessment	Amber	Amber	Green	Amber

Note: Entity self-assessments were made in the specific project survey. VAGO agrees with the entity assessment ratings. Source: VAGO.

Cost, time and scope performance

MAPT Phase One is on track. There are no significant scope, time, cost or benefits changes to what has been publicly reported.

Scope options have been managed through a value management interactive process with senior stakeholders to reduce potential cost overruns.

Risks and emerging pressures



The overall MAPT project is technically complex. It also exists within a complex stakeholder interface and delivery environment, involving many partner agencies and other key stakeholders within the precinct and across government.

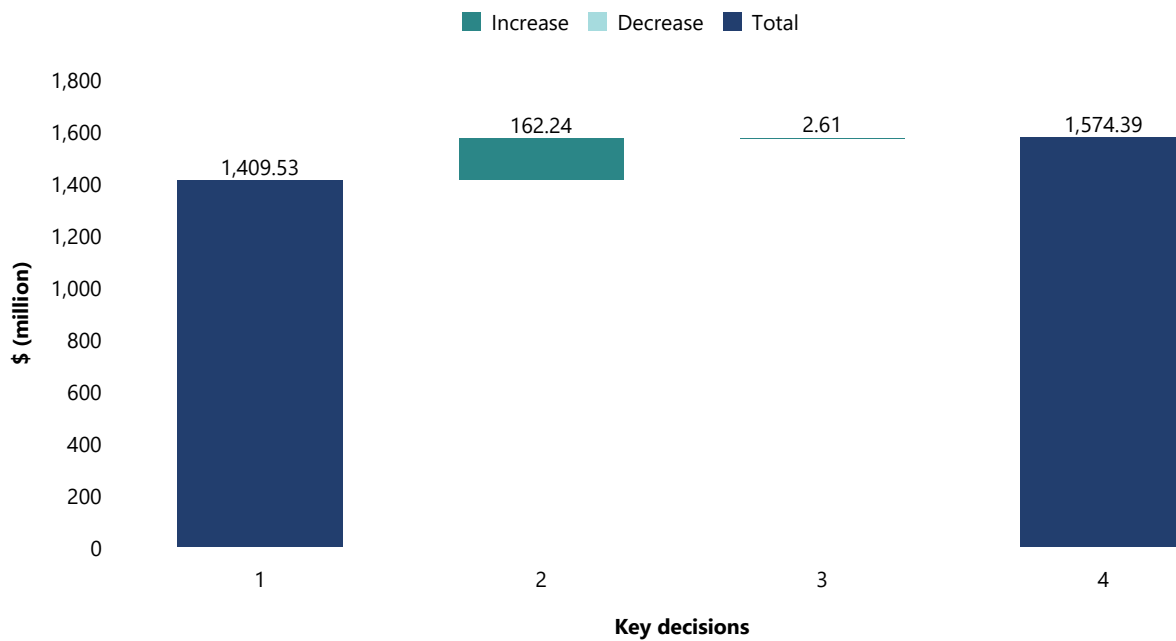
Phase One has some exposure to rising costs. This risk means that MAP Co may not be able to manage public-facing commitments within scope and cost.

Another risk is that philanthropy targets may not be met, so the state’s capital costs may not be offset by donations, as expected.

Other pressures MAPT is facing include:

- challenges around the precinct’s engineering and construction
- materials shortages
- rising rates for materials, labour and transportation
- many complex and unique attributes of the buildings and facilities in the precinct
- lower risk appetite among contractors
- uncertainty within the subcontractor market and construction supply chain.

Figure 3: Budget changes to MAPT Phase One



Legend

Key decision	Date and detail
1	2021–22 BP4: original TEI, MAPT was originally funded in the 2020–21 Budget but there was no BP4 published for that year
2	2022–23 BP4: TEI increased due to an expanded scope totalling \$162.24 million, which includes the roll-in of another previously funded project for renewal of the State Theatre and public realm and associated works
3	2023–24 BP4: TEI increased due to reclassification of \$2.61 million to capital expenditure from operating expenditure. Estimated completion date listed as quarter 2 2028–29
4	2024–25 BP4: current TEI

Source: VAGO.

Variance analysis

The current approved TEI for the project is \$1.57 billion compared to an original \$1.41 billion. The \$0.16 billion upwards change in TEI was due to the government’s decision to expand the scope of works and roll-in a previously approved project for refurbishment works at the State Theatre as well as other public realm and associated works.

Impacts of scope and other changes

While there has been an increase in TEI due to additional scope, there has been no other significant change. Based on current forecasts for scope, time and costs, MAP Co told us there are no scope changes that would impact expected benefits.

Key funding stakeholders

Stakeholders

The Victorian Government is the main project funder.

There has been substantial philanthropic funding committed to the project. These philanthropic funds offset the capital costs that the state would otherwise have to pay to deliver the project.

The Fox family pledged \$100 million in April 2022 to support the new NGV Contemporary gallery and received naming rights after this donation.

The Ian Potter Foundation donated \$20 million in 2020 towards building the new gallery, and \$15 million in 2024 to refurbishing the State Theatre.

According to MAP Co data, the National Gallery of Victoria (NGV) has a target to contribute further philanthropic donations. Arts Centre Melbourne also has a target to raise and contribute donations.

Project benefits

Benefits

The MAPT benefit management plan (BMP) has been incorporated into the project's detailed implementation plan. This plan outlines key performance indicators and associated evaluation methods. Most will only be measurable after project delivery and will rely on available public data sources, such as annual reports.

According to MAP Co's self-assessment in our project survey, project benefits measurement systems are immature, and data collection related to project benefits described in the business case, investment logic map (ILM) or BMP is not reliable.

MAP Co told us that a scheduled 2024–25 benefits management plan update with project partners will better reflect expanded or evolving benefits over time. VAGO suggests that this update should review the type of data that would be needed to assess benefits achievement and from where that data would be most appropriately sourced.

MAP Co could also improve clarity around which agency will measure the medium to longer-term benefits expected after project delivery. The expected economic benefits stated in the rationale for the investment will need a measurement approach that allows for specific attribution and linkage to the capital investment.

Governance and assurance

Governance and assurance

The MAPT governance and assurance environments are well-described. The project controls plan, prepared by DV, outlines key program controls and processes.

MAP Co has established a First Peoples Committee and there is evidence that it engaged with traditional owners in precinct design, especially the proposed gardens.

There is also a Design Excellence Committee chaired by the Victorian Government Architect. This committee's membership is independent of consent authorities, such as the Department of Energy, Environment and Climate Action and the City of Melbourne, and is a parallel process to the design approval process.

The formal governance structure includes a bimonthly project steering committee and MAP Co board meetings (focusing on scope and budget), as well as ministerial endorsement and Treasurer approvals as required (such as for gateway review process reports and central contingency drawdown).

The MAPT program memorandum of understanding executed in March 2023 sets out DV, MAP Co, the Department of Jobs, Skills, Industry and Regions, Arts Centre Melbourne and NGV roles.

DV contracts expert reviewers as part of its design and verification processes, which is detailed in the project management plan.

Assurance mechanisms and various reviewers' roles and responsibilities are well-described. MAPT has followed the Department of Treasury and Finance's high value high risk requirements and actively participates in gateway reviews and other assurance activities.

Procurement approach

Managing contractor model

MAPT is using a managing contractor for one package and a 2-stage approach for the other key project procurement. MAPT north has works underway and contracted with Lendlease. MAP Co is currently evaluating tenders for MAPT south, which is the largest construction package.

MAP Co modified the MAPT north and south procurement approach from the initially expected novated design and construct with competitive early contractor involvement model to a 2-stage managing contractor approach.

MAP Co told us that the procurement model change was driven by significant inherent project risks in the construction market at the time. There was also some uncertainty related to aspects of the State Theatre component, such as latent conditions and heritage matters.

These procurement model changes were made after considering market conditions and market feedback from confirmed bidders, recommendations from a development and efficiency review workshop and external legal reviews. This change was endorsed by the project control groups and project steering committee and approved by the MAP Co board.

This decision was also examined in a gateway review, endorsed by the relevant minister and approved by the Treasurer prior to its release to market.

Better practice and lessons learnt

Better practice

Better practice examples identified in external gateway review reports include:

- extensively using subject matter expert advice while developing the scope, schedule, risks and budget in the tender process
- flexibility in adjusting the proposed procurement approach in response to deteriorating market conditions
- a comprehensive design issues register.

MAP Co told us its approach to consultation and engagement with First Peoples was meaningful and set a high standard that other public infrastructure projects could emulate.

Aunty Gail Smith, an Elder representing the Wurundjeri Woi Wurrung Cultural Heritage Aboriginal Corporation recently bestowed the name Laak Boorndap (which means heaven's beauty) to the new urban garden.

MAP Co has a program-wide lessons learnt register that has been developed to capture issues or achievements experienced at any point in the project that could be referenced for providing future guidance and learning opportunities. At the end of key milestones, MAP Co said it encourages directors and senior managers to share lessons learnt with relevant project teams to promote continuous improvement and prevent recurring issues.

Lessons learnt have been formally recorded from the northern package and were used to refine the procurement strategy for the southern package.

RAG rating definitions

Rating	Scope	Cost	Time	Benefits
Red	Current approved project scope is at risk and requires action and a decision by the government	Project is likely to be more than 20% over its current approved budget	Project is likely to be more than 6 months behind its current approved schedule	Project benefits measurement systems are not in place and baseline and progress data for project benefits described in the business case, ILM or BMP is not available
Amber	Scope risks are emerging but are being managed and no action or decision is required by the government at this point in time	Project is likely to be 11–20% over its current approved budget	Project is likely to be 4–6 months behind its approved schedule	Project benefits measurement systems are immature and baseline and progress data for project benefits described in the business case, ILM or BMP is unreliable
Green	Current approved project scope is clear and can be delivered within budget and schedule	Project is likely to be 0–10% over its current approved budget	Project is likely to be 0–3 months behind its current approved schedule	Project benefits measurement systems are well developed and baseline and progress data for project benefits described in the business case, ILM or BMP is reliable and up to date
N/A				There are no tangible or measurable benefits specified in the project's business case or objective(s)

Source: VAGO.

North East Link (all roads packages)

The North East Link (NEL) is a large and complex suite of projects building tunnels and freeways that will connect and upgrade the Eastern Freeway and the M80 Ring Road.

This case study looks at the roads and tunnels elements of the primary package and the state and freeway packages.

Figure 1: North East Link new twin tunnels construction



Source: Victorian Infrastructure Delivery Authority.

Key project data

2024–25 BP4 project names:	North East Link – Primary Package (Tunnels) and State Tolling Corporation (Greensborough)	North East Link (State and Freeway Packages)		
		Eastern Freeway Upgrade (Springvale to Hoddle)	M80 Ring Road Upgrade (Greensborough)	North East Link Connections (Bulleen/Watsonia)
Previous reporting names:	<ul style="list-style-type: none"> • 2017–18: North East Link (from Greensborough) • 2018–19: North East Link (from Greensborough) • 2019–20: North East Link • 2021–22: North East Link (from Greensborough) 			
	2022–23: North East Link – Primary Package (Tunnels) and State Tolling Corporation	<ul style="list-style-type: none"> • 2022–23: North East Link (State and Freeway Packages) (Greensborough) • 2023–24: North East Link (State and Freeway Packages) (Greensborough) 		
Project lifecycle phase:	<p>Different projects are at various stages ranging from in delivery, under construction and in procurement.</p> <p>The primary package’s main public–private partnership (PPP) works are underway. The Victorian Infrastructure Delivery Authority (VIDA) told us that the Eastern Freeway Upgrade and M80 Ring Road Upgrade delivery has also started. The remaining 2 Eastern Freeway packages (Burke to Hoddle and Tram to Springvale) are still in the market.</p>			
Financial year when first disclosed:	2017–18			
Current approved cost (TEI):	\$26.21 billion (aggregate value of all NEL packages)			
	\$14.03 billion	\$5.71 billion	\$3.82 billion	\$2.64 billion
Original approved cost (TEI):	\$15.64 billion			
Cost variance analysis:	Increased by 67.58% (\$10.57 billion)			
Expected completion date:	Quarter 2 2028–29			
Original completion date:	Quarter 4 2026–27			
Time variance analysis:	Delayed by 6 quarters (approximately 1.5 years)			
Responsible (BP4) entity:	State Tolling Corporation (STC)	Department of Transport and Planning (DTP)		
Delivery entity:	STC and VIDA	VIDA		
Approval authority:	Minister for Transport Infrastructure	DTP		

Note: BP4 is Budget Paper 4: State Capital Program. TEI stands for total estimated investment. There was an initial \$100 million announced for planning in the 2017–18 BP4 but this was later included in the overall TEI in the 2019–20 BP4.

Project summary

Project description and purpose

The NEL is a suite of tunnel and freeway projects to connect an upgraded Eastern Freeway and upgraded M80 Ring Road. The NEL aims to reduce travel time along the corridor by up to 35 minutes.

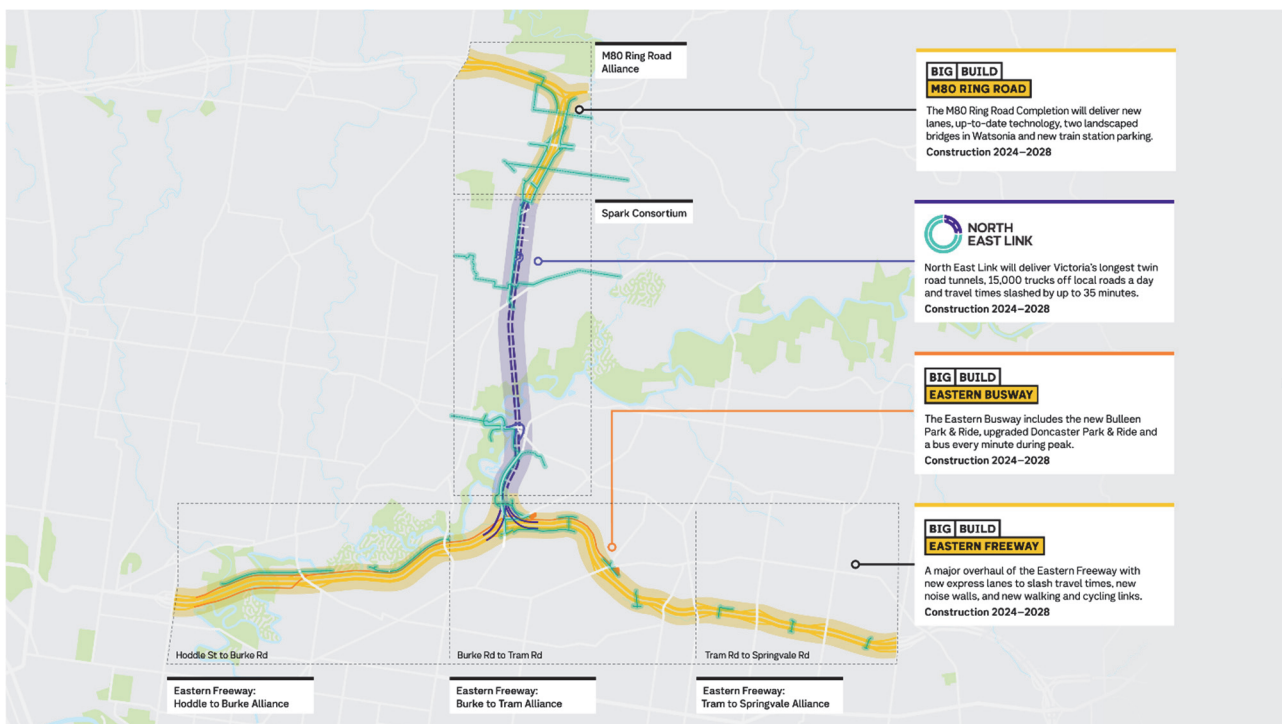
The NEL is a very large and complex initiative with many technical challenges. There are 2 major program components:

- the Primary Package
- the state and freeway packages.

All packages interface with live road environments, established neighbourhoods, community, recreational and educational facilities, and environmentally sensitive locations.

VIDA and DTP are managing 3 separately funded projects within the state and freeway packages.

Figure 2: NEL package routes



Source: Victorian Infrastructure Delivery Authority.

Project status

Red, Amber and Green (RAG) status

The criteria we used for this RAG assessment can be found at the end of this case study. The ratings apply to:

- North East Link – Primary Package (Tunnels) and State Tolling Corporation (Greensborough)
- North East Link (State and Freeway Packages) Eastern Freeway Upgrade (Springvale to Hoddle)
- North East Link (State and Freeway Packages) M80 Ring Road Upgrade (Greensborough)
- North East Link (State and Freeway Packages) North East Link Connections (Bulleen/Watsonia).

Figure 3: Entity self-assessment compared to VAGO assessment

	Scope	Cost	Time	Benefits
Entity self-assessment	Green	Green	Green	Amber
VAGO assessment	Green	Green	Green	Amber

Note: Entity self-assessments were made in the specific project survey. Based on the information VIDA provided and survey responses, there is not enough baseline data to measure benefits, VAGO assessed benefits as amber.
Source: VAGO.

Cost, time and scope performance

The central package’s main PPP works are underway. The Eastern Freeway Upgrade and M80 Ring Road Upgrade has also started.

The remaining 2 Eastern Freeway sub-packages (Burke to Hoddle and Tram to Springvale) are still in the market.

The projects expected to be complete by quarter 2 2028–29 are:

- Primary Package (Tunnels) and State Tolling Corporation, TEI \$14.03 billion
- Eastern Freeway Upgrade (Springvale to Hoddle), TEI \$5.71 billion
- M80 Ring Road Upgrade (Greensborough), TEI \$3.82 billion
- North East Link Connections (Bulleen/Watsonia), TEI \$2.64 billion.

An earlier \$200 million early works package prepared the corridor for the main works and relocated key utilities. It also purchased property and cleared required land.

Risks and emerging pressures

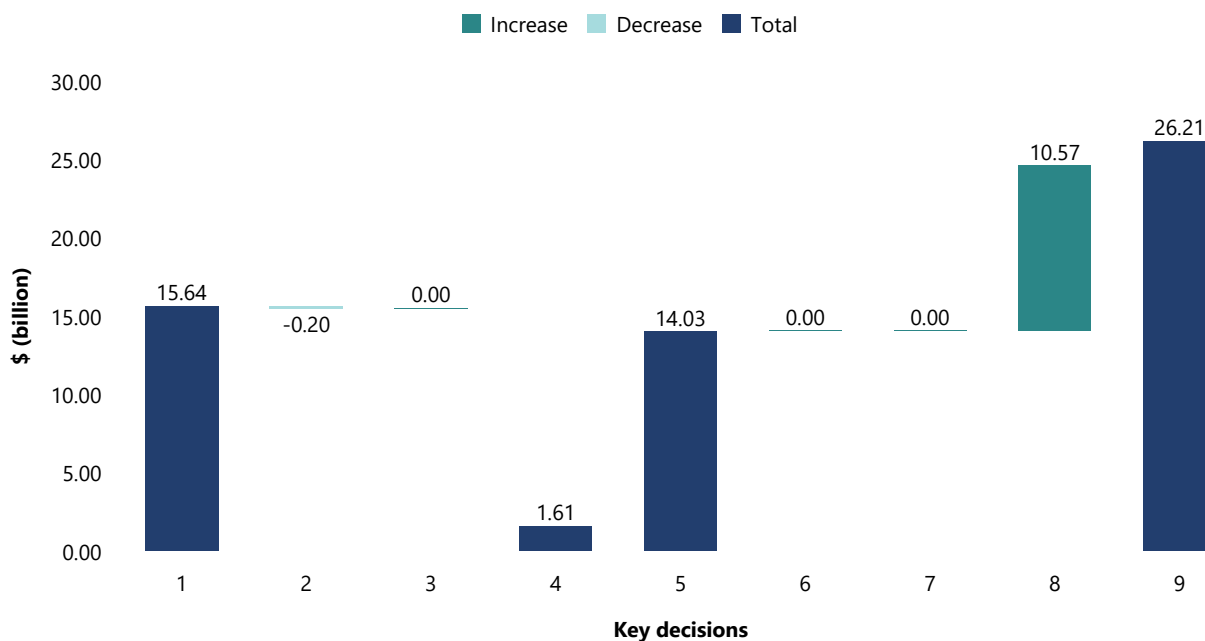


Tunnelling is an inherently risky activity. Unknown future issues could impact the primary package’s cost, time and progress.

VIDA has risk registers for each NEL project and conducts a monthly cost risk analysis against approved funding. It also has a risk management policy, plan and procedures. Risks are escalated at both a package and program level.

The remaining 2 freeway alliance packages have not been awarded yet, so it is not yet clear whether recent industry-wide cost pressures will lead to further project cost increases.

Figure 4: Budget changes to the North East Link (aggregate)



Legend

Key decision	Date and detail
1	2019–20 BP4: original TEI (known as North East Link)
2	2021–22 BP4: TEI decreased (known as North East Link from Greensborough)
3	2022–23 BP4: TEI TBC as procurement is finalised for State and Freeway Packages
4	2022–23 BP4: residual TEI for North East Link
5	2022–23 BP4: TEI reported for Primary Package (Tunnels) under State Tolling Corporation
6	2023–24 BP4: TEI TBC as procurement is finalised for State and Freeway Packages (Greensborough)
7	2023–24 BP4: No change in TEI for Primary Package (Tunnels)
8	2024–25 BP4: TEI increase and now reported under State and Freeway packages
9	2024–25 BP4: Current TEI (State and Freeway Packages and Primary Package)

Source: VAGO.

Variance analysis

A \$10.57 billion TEI increase for the state and freeway packages was confirmed in the 2024–25 state Budget.

VIDA told us this cost increase was to pay for higher than expected contract costs arising from procurement activities.

Some of this price increase was due to the government’s decision to make the main tunnels northern approaches longer and to redesign a railway bridge near Watsonia Station, which changed the technical and safety requirements.

The government assessed that these costs were necessary to improve the future asset. The design changes also align with the overall project’s environment effects statement process recommendations.

Industry capacity and supply chain pricing volatility also increased costs.

Environment effects statement

A detailed assessment of a proposed development’s potential environmental impacts. It usually involves extensive technical studies by project sponsors, as well as public submissions and expert panel hearings and examinations.

Impacts of scope and other changes

VIDA does not clearly document impacts from project changes in its public reporting. However they are well-documented and reported internally every month.

Project working groups can escalate unresolved issues to the responsible minister. There are no examples of this happening to date.

Key funding stakeholders

Stakeholders

The Victorian Government signed a \$11.1 billion agreement with the Spark consortium to build an availability PPP for the primary package. The Spark consortium will also provide operations and maintenance services within designated project boundaries for 25 years.

STC was established under the *North East Link Act 2020* to manage and operate the NEL. STC has formally transferred primary package construction oversight responsibility to VIDA. A ministerial direction specifies the roles each party must play in the project.

VIDA’s Major Roads Projects Victoria team is overseeing the PPP tunnels construction phase and all the state and freeway packages construction.

The 4 NEL packages have a mixed funding source. The Australian Government originally contributed \$1.75 billion to all aspects of the program, then allocated a further \$3.25 billion across the 3 non-PPP projects. The state Budget papers are not specific about how much of this Australian Government funding is allocated to each package.

Figure 5: Funding allocated to each project component

Project component	TEI
Primary Package (Tunnels) and State Tolling Corporation	\$14.03 billion ¹
Eastern Freeway Upgrade (Springvale to Hoddle)	\$5.71 billion ²
M80 Ring Road Upgrade (Greensborough)	\$3.82 billion ²
North East Link Connections (Bulleen/Watsonia)	\$2.64 billion ²
Total:	\$26.2 billion

Note:

1. This TEI includes the \$11.1 billion availability PPP contract signed with the Spark consortium to deliver the Primary Package and other costs associated with managing VIDA and STC’s Primary Package delivery operations, including procuring and delivering a toll collection capability. This package’s TEI also includes financing costs, with the total costs related to the PPP to be funded by road user tolls collected by STC on behalf of the state. This project package includes a share of the Australian Government’s \$1.75 billion contribution in the 2024–25 Federal Budget. This Australian Government contribution occurred in 2018.

2. This project package includes a share of the Australian Government’s \$1.75 billion contribution in 2018. Another \$3.25 billion was announced in the 2024–25 Federal Budget, which was after the 2024–25 Victorian Budget so it was not disclosed due to timing.

Source: VAGO, using VIDA and Budget data.

Project benefits

Benefits VIDA told us it believes that principal benefits expected from the project, such as reducing travel times and truck volumes on local roads, are likely to be delivered.

Some other expected benefits will need more specific baseline data to be measurable. VIDA advised that this data will be finalised after contracts are awarded for the final 2 freeway upgrade packages. These types of benefits will require a longer-term measurement horizon, especially in regard to attributing any positive economic changes from the new roads.

It is not clear which agency is best placed to measure longer-term economic benefits. Some benefits in the benefit management plan (BMP) are allocated to the former head of the previous project office and have not been updated to reflect governance and delivery arrangements that have changed since VIDA was established.

DTP and VIDA should review and update the BMP, as well as consider in more detail how some of the less tangible economic benefits can be measured.

Governance and assurance

Governance and assurance The governance arrangements for the main tunnelling works are well-described and typical for this type of PPP project. This includes use of an independent reviewer and environmental auditor. These roles ensure that the physical works are delivered according to expected design and timelines, as well as within required environmental performance parameters.

VIDA is overseeing the PPP and the 4 freeway upgrade alliances. This allows a unified project team approach and integrates VIDA's wider governance and assurance processes. VIDA has extensive experience in managing PPPs and alliances across its various project offices.

All packages are listed as high value high risk projects and attract more scrutiny and oversight from the Department of Treasury and Finance (DTF). To date, VIDA has done the expected gateway steps and project assurance reviews, with any relevant recommendations implemented or under consideration.

Procurement approach

PPP model The primary package is being delivered as an availability PPP with an incentivised target cost regime that applies to costs incurred during the design and construction phase.

The rationale and value for money considerations for the PPP component is publicly documented in the DTF project summary. This includes information on design outcome, cost, value for money, public interest considerations and probity.

The Burke to Tram section of the Eastern Freeway upgrade, Southern portal connections and M80 upgrade are being delivered via alliances. VIDA told us that it considers the alliance model offers more value for money and better risk management during delivery.

The final 2 freeway packages (Burke to Hoddle and Tram to Springvale) of the Eastern Freeway upgrade are now in the market and will also use an alliance model.

Better practice

Better practice



There was evidence that VIDA has put in place several better practice and innovative approaches. This includes:

- formalising and allocating roles between VIDA and STC to demarcate and focus on each entity's roles and responsibilities
- using a mixed procurement strategy to best harness market capacity and manage risks appropriately and dynamically
- efficiently buying up affected properties, allowing for orderly property consolidation and early land clearance along the route
- using an early works package to relocate or protect utilities or make road modifications and prepare sites for the main tunnelling activities
- bringing forward quick wins, such as the new Bulleen bus interchange, as well as renovating and enhancing community sporting facilities.

VIDA told us it collects and analyses lessons learnt from project delivery and procurement, problem solving and resolving issues, and dealing with community and stakeholders.

VIDA said it has a lessons learnt register guided by its lessons learnt framework. Each NEL package has a champion to document and share lessons.

RAG rating definitions

Rating	Scope	Cost	Time	Benefits
Red	Current approved project scope is at risk and requires action and a decision by the government	Project is likely to be more than 20% over its current approved budget	Project is likely to be more than 6 months behind its current approved schedule	Project benefits measurement systems are not in place and baseline and progress data for project benefits described in the business case, investment logic map (ILM) or BMP is not available
Amber	Scope risks are emerging but are being managed and no action or decision is required by the government at this point in time	Project is likely to be 11–20% over its current approved budget	Project is likely to be 4–6 months behind its approved schedule	Project benefits measurement systems are immature and baseline and progress data for project benefits described in the business case, ILM or BMP is unreliable
Green	Current approved project scope is clear and can be delivered within budget and schedule	Project is likely to be 0–10% over its current approved budget	Project is likely to be 0–3 months behind its current approved schedule	Project benefits measurement systems are well developed and baseline and progress data for project benefits described in the business case, ILM or BMP is reliable and up to date
N/A				There are no tangible or measurable benefits specified in the project's business case or objective(s)

Source: VAGO.

North East Link – Toll Collection Capability project

The North East Link (NEL) is a tunnel and freeway project that will connect and upgrade the Eastern Freeway and the M80 Ring Road. The State Tolling Corporation (STC) is responsible for the toll collection capability project that will collect NEL toll revenue.

This case study looks at STC's toll collection capability project, which is funded alongside the primary construction package that is building the new road tunnels.

Figure 1: Artist's impression of a future interchange at Bulleen Road from the Eastern Freeway to the new tunnels



Source: Victorian Infrastructure Delivery Authority.

Key project data

2024–25 BP4 project name:	The Toll Collection Capability Project (TCC project ¹) is part of North East Link – Primary Package (Tunnels) and State Toll Co (Primary Package)
Previous reporting name:	<ul style="list-style-type: none"> • 2022–23: North East Link – Primary Package (Tunnels) & State Toll Co • 2021–22: North East Link (from Greensborough) • 2019–20: North East Link
Project lifecycle phase:	In procurement
Financial year when first disclosed:	2019–20
Current approved cost (TEI):	Not for publication (more than \$100 million ²)
Original approved cost (TEI):	\$15.64 billion ³ (overall project's primary package TEI)
Cost variance analysis:	N/A
Expected completion date:	Quarter 2 2028–29
Original completion date:	Quarter 4 2026–27 ⁴
Time variance analysis:	Delayed by 6 quarters (approximately 1.5 years)
Responsible (BP4) entity:	State Tolling Corporation (STC)
Delivery entity:	STC and Victorian Infrastructure Delivery Authority (VIDA) (only responsible for the tolling enabling infrastructure under the Primary Package)
Approval authority:	Minister for Transport Infrastructure

1. The TCC project is a component of the primary package and is not individually referenced in BP4. This case study specifically looks at the NEL STC and its overall responsibility for delivering and operating the TCC project.

2. The budget for the TCC project is not disclosed for publication because there is commercial sensitivity due to live procurement activity underway. The TCC project is funded within the \$14.03 billion TEI for the NEL – Primary Package (Tunnels) and State Toll Co project.

3. The original approved TEI was the initial forecast cost for the full NEL program. The TCC project cost was not disaggregated from this amount.

4. STC told us that the TCC project completion date is linked to the overall NEL program completion date because it cannot be delivered independently.

Note: BP4 is Budget Paper 4: State Capital Program. TEI stands for total estimated investment.

Project summary

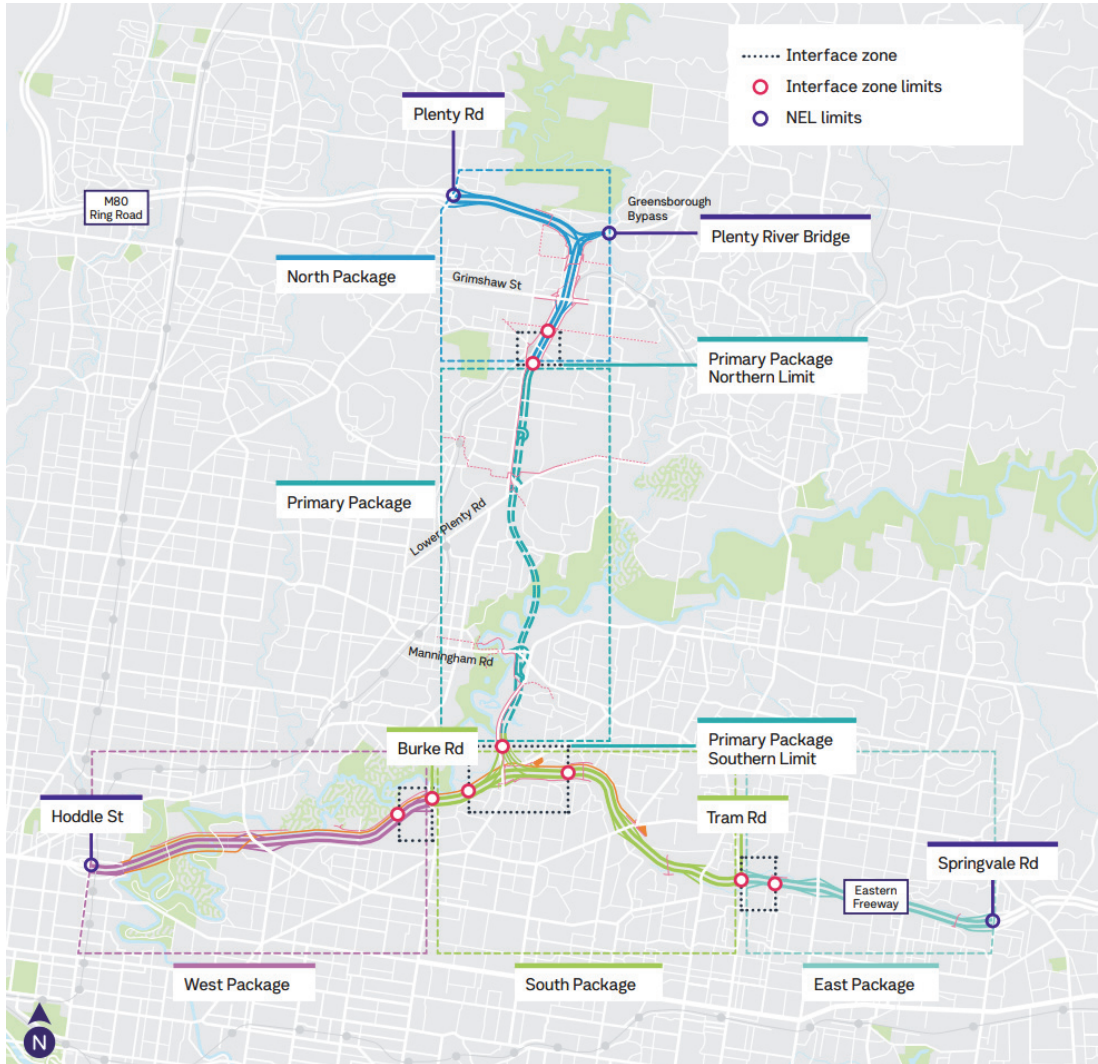
Project description and purpose The NEL will connect an upgraded Eastern Freeway with the upgraded M80 Ring Road. By building this new roads and tunnels link, NEL aims to remove 15,000 trucks from local roads a day and reduce travel time along the corridor by up to 35 minutes.

The overall NEL program has 5 packages, including the TCC project.

Figure 2: NEL program packages

NEL scope packages	Reference in 2024–25 BP4
Southern Portal	<ul style="list-style-type: none"> • North East Link (State and Freeway Packages) • North East Link Connections (Bulleen/Watsonia)
Northern Portal	<ul style="list-style-type: none"> • North East Link (State and Freeway Packages) • North East Link Connections (Bulleen/Watsonia) • M80 Ring Road Upgrade (Greensborough)
Western Package	Eastern Freeway Upgrade (Springvale to Hoddle)
Eastern Package	Eastern Freeway Upgrade (Springvale to Hoddle)
Central Tunnel Package (includes the TCC project)	North East Link – Primary Package (Tunnels) and State Tolling Corporation (Greensborough)

Figure 3: Location map of NEL project packages



Note: There was also an early works package to remove and relocate utilities and prepare the tunnelling works alignment. This was completed in 2021–22.

Source: Department of Treasury and Finance (DTF).

STC was established under the *North East Link Act 2020* to manage and operate the NEL. It is a signatory to the public–private partnership (PPP) contracts within the NEL Primary Package.

The STC will fund the PPP costs from toll revenue it collects from vehicles. STC is also the designated road authority for when the new NEL tunnels open to traffic.

STC has transferred the main package construction oversight responsibility to VIDA. This arrangement is documented in a ministerial direction and a delivery agreement. VIDA is therefore responsible for fulfilling STC’s obligations under the PPP agreement while the tunnels and connecting roads are being built.

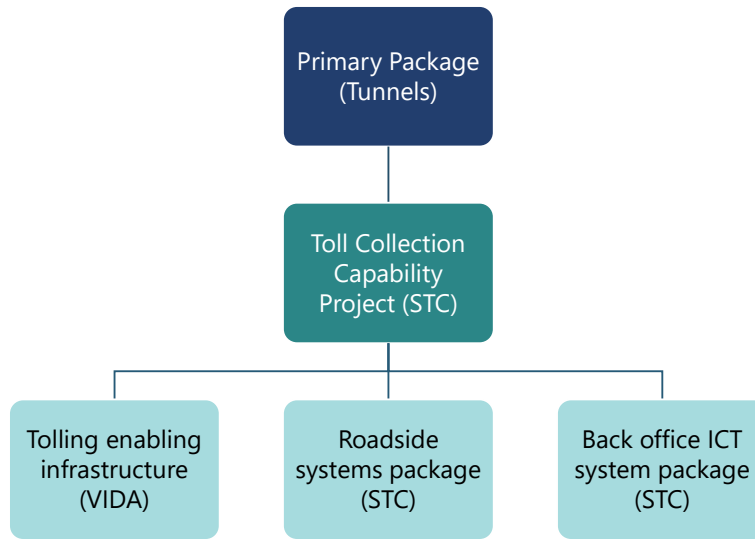
STC is responsible for ensuring the TCC project delivers infrastructure and systems to toll the new tunnels. There are 2 packages in the TCC project procurement:

- roadside systems (vehicle detection, classification and license plate images)
- back office systems (vehicle owner matching, billing, toll revenue settlement or collection and enforcement).

STC is also procuring 2 smaller technology packages to support future tolling operations.

STC told us that Spark North East Link is delivering the tolling enabling infrastructure, civil infrastructure and will install the tolling systems and equipment infrastructure. VIDA will oversee the delivery process.

Figure 4: TCC's sub-projects



Source: VAGO.

Project status

Red, Amber and Green (RAG) status The criteria we used for this RAG assessment can be found at the end of this case study.

Figure 5: Entity self-assessment compared to VAGO assessment

	Scope	Cost	Time	Benefits
Entity self-assessment	Green	Green	Green	Green
VAGO assessment	Green	Green	Green	Amber

Note: Entity self-assessments were made in the specific project survey. Based on the information STC provided and survey responses, there is not enough baseline data to measure benefits, VAGO assessed benefits as amber.
Source: VAGO.

Cost, time and scope performance

The Primary Package's current TEI is \$14.03 billion in the 2024–25 BP4. The TCC project's budget is part of the overall TEI for the Primary Package.

The TCC project's budget has not changed significantly since it was first defined in October 2021. It includes risk and contingency allocations.

The TCC project is in the development and early procurement stage and tracking according to STC's project plan.

STC told us that the TCC project delivery is scheduled for implementation from mid-2026 into 2028. STC estimates that it will be finished by quarter 2 2028–29.

Although the TCC project is a major project (over \$100 million, in line with DTF and VAGO's definition of a major project) it is not separately reported in the Budget papers.

Risks and emerging pressures



The TCC project is a high value high risk (HVHR) project. STC has completed all steps required by DTF's HVHR framework. It has had a program-wide gateway review and 2 project-specific assurance reviews.

STC has developed comprehensive planning documents for the TCC project.

The tolling working groups report TCC project risks through governance forums.

Time and cost overruns are inherent risks for technology projects. As noted in the Gate 3 review, STC could consider speeding up the procurement program and reviewing its project budget as they progress through procurement.

Impacts of scope and other changes

The impact of changes to the project is not clearly documented in public reporting. But it is well-documented and reported internally every month.

Project working groups can escalate unresolved variance issues to the responsible minister. There are no examples of this happening to date.

Key funding stakeholders

Stakeholders

The NEL – Primary Package (Tunnels) and State Toll Co (Greensborough) project's TEI includes funding from both the Australian and Victorian governments.

To date, the Australian Government has contributed \$5 billion to the overall NEL program. Of this, \$1.75 billion is for all NEL packages including the Primary Package and TCC project. The remaining \$3.25 billion is allocated to the non-tolled NEL components.

Project benefits

Benefits

The TCC project's investment logic map (ILM) references 2 project benefits:

- managing transport demand through new tolling facilities
- improving transport network efficiency by implementing intelligent transport systems.

NEL's benefit management plan (BMP) does not include any specific key performance indicators relevant to the TCC project.

There are other potential intangible benefits that are not referenced, such as developing in-house tolling technology and commercial toll road capability in the public sector.

STC told us it is planning to develop a framework to report project benefits, but it is not clear whether STC, VIDA or the Department of Transport and Planning (DTP) will measure NEL program benefits as a whole after the building phase.

Governance and assurance

Governance and assurance

STC's governance and assurance processes are well-described and typical for a PPP, reflecting DTF and national requirements. There is a 3-party relationship between the state government (represented by VIDA), STC and Project Co.

STC has various governance mechanisms in place for the TCC project. This includes a steering committee made up senior executives from DTP, DTF and STC and independent expert specialist advisors. STC will also engage an independent verifier for the TCC technology elements.

The TCC project reports through the Minister for Transport Infrastructure.

VIDA oversees and manages 5 civil works packages under the NEL program with STC running the TCC project. During construction, VIDA manages the NEL program. STC is an observer with limited decision-making powers.

VIDA's and STC's roles are clearly outlined in their joint delivery agreement. But detailed information about the division of responsibility between STC and VIDA is not public.

Procurement approach

PPP model

STC is in the early stages of the TCC project procurement. The roadside systems package is currently out to market and the back office systems package is in the planning stage.

STC assessed options for packaging and determined that procuring through separate packages would be better than a single contract. STC said this approach allows for appropriate risk management and flexibility around scope changes, as well as the potential to achieve best of breed technology solutions.

Better practice and lessons learnt

Better practice



STC has demonstrated several innovative and better practice approaches on this project.

At present, the state does not have any direct capability in road tolling technologies. Building this capability means that any technical know-how is owned and operated by the state rather than the private sector. This gives options for the public sector in future toll road developments. It also allows the Victorian Government the option to operate existing private toll roads after their PPP contracts expire.

STC told us that it conducts a lessons learnt workshop at the end of each project stage (for example, after completing an expression of interest). These workshops are documented. STC analyses lessons learnt around project problem solving, issues resolution, community and stakeholders.

STC told us it also uses a challenge group of senior and experienced external experts for key stages, such as asking them to review and give input about the TCC project's delivery case. Outcomes from the challenge group are documented for future reference by the project.

RAG rating definitions

Rating	Scope	Cost	Time	Benefits
Red	Current approved project scope is at risk and requires action and a decision by the government	Project is likely to be more than 20% over its current approved budget	Project is likely to be more than 6 months behind its current approved schedule	Project benefits measurement systems are not in place and baseline and progress data for project benefits described in the business case, ILM or BMP is not available
Amber	Scope risks are emerging but are being managed and no action or decision is required by the government at this point in time	Project is likely to be 11–20% over its current approved budget	Project is likely to be 4–6 months behind its approved schedule	Project benefits measurement systems are immature and baseline and progress data for project benefits described in the business case, ILM or BMP is unreliable
Green	Current approved project scope is clear and can be delivered within budget and schedule	Project is likely to be 0–10% over its current approved budget	Project is likely to be 0–3 months behind its current approved schedule	Project benefits measurement systems are well developed and baseline and progress data for project benefits described in the business case, ILM or BMP is reliable and up to date
N/A				There are no tangible or measurable benefits specified in the project's business case or objective(s)

Source: VAGO.

Nyaal Banyul – the Geelong Convention and Event Centre

The Nyaal Banyul Geelong Convention and Event Centre (Nyaal Banyul) and its precinct is a major development on central Geelong's waterfront. The state government expects it to be a key economic development and urban renewal driver in Geelong and support the Surf Coast and wider region's visitor economy.

The Nyaal Banyul precinct project is part of the Geelong City Deal signed between the City of Greater Geelong and the Australian and Victorian governments.

Figure 1: Artist's impression of the Nyaal Banyul public plaza



Source: Department of Jobs, Skills, Industry and Regions.

Key project data

2024–25 BP4 project name:	Nyaal Banyul Geelong Convention and Event Centre
Previous reporting name:	Geelong Convention and Exhibition Centre (GCEC)
Project lifecycle phase:	In delivery/under construction
Financial year when first disclosed:	2018–19 (as part of the Geelong City Deal) Note: The first specific reference to a GCEC is in the 2022–23 BP4 project summary.
Current approved cost (TEI):	\$449.10 million
Original approved cost (TEI):	\$139.22 million (according to the 2018–19 BP4)
Cost variance analysis:	Increased by 222.58% (\$309.88 million)
Expected completion date:	Quarter 4 2025–26
Original completion date:	Quarter 2 2022–23 (according to the 2018–19 BP4)
Time variance analysis:	Delayed by 14 quarters (approximately 3.5 years)
Responsible (BP4) entity:	Department of Jobs, Skills, Industry and Regions (DJSIR)
Delivery entity:	Development Victoria (DV)
Approval authority:	DJSIR

Note: BP4 is Budget Paper 4: State Capital Program. TEI stands for total estimated investment.

Figure 2: Nyaal Banyul lift cores under construction and site crane



Source: DJSIR.

Project summary

Project description and purpose

Nyaal Banyul will deliver a modern convention and exhibition centre and precinct on the Geelong city waterfront. The government identified Nyaal Banyul as a key project to stimulate regional economic development, improved liveability and increased visitor-driven economic activity in Geelong and its wider region.

Nyaal Banyul includes a convention and event space, a 200-room hotel, a public plaza, food and beverage offerings, underground car parking, and building and facilities management services. A range of precinct developments will surround Nyaal Banyul, such as retail and mixed-use commercial development.

The state-owned Melbourne Convention and Exhibition Trust will operate Nyaal Banyul when it opens. The project is part of the Geelong City Deal agreed between the City of Greater Geelong and the Australian and Victorian governments.

Project status

Red, Amber and Green (RAG) status

The criteria we used for this RAG assessment can be found at the end of this case study.

Figure 3: Entity self-assessment compared to VAGO assessment

	Scope	Cost	Time	Benefits
Entity self-assessment	Green	Green	Green	Green
VAGO assessment	Green	Green	Green	Amber

Note: Entity self-assessments were made in the specific project survey. Based on the information the DJSIR provided and survey responses, VAGO assessed benefits as amber because benefits measurements processes are not fully developed and baseline data to measure benefits achievement is insufficient.

Source: VAGO.

Cost, time and scope performance

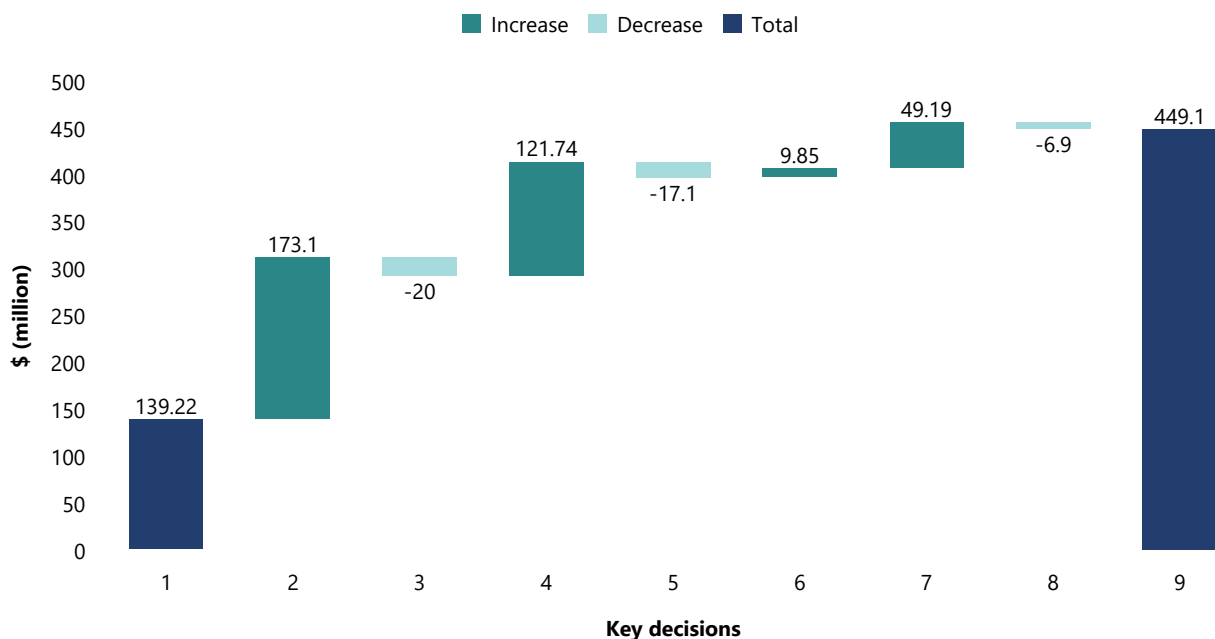
Nyaal Banyul was first reported in the 2018–19 BP4 as part of the Geelong City Deal project, with a \$139.22 million TEI. The current 2024–25 BP4 lists Nyaal Banyul as a separate project with a \$449.10 million TEI.

In 2021, the state government committed additional funds to deliver a convention and event centre through a public–private partnership (PPP), although this was not separated from the Geelong City Deal project’s TEI until 2024–25.

Public reporting on budget changes to Nyaal Banyul over time is not clear. This makes it difficult for Parliament and the community to understand the project’s performance over time.

Nyaal Banyul is currently on track against its current milestones. The site has been cleaned up and existing buildings demolished, with main construction underway. Some design work, including artwork from First Nations artists, is being commissioned.

Figure 4: Budget changes to Nyaal Banyul



Legend

Key decision	Date and detail
1	2018–19 BP4: original TEI (part of the Geelong City Deal, before being a convention centre)
2	2019–20 BP4: TEI increased and includes \$30 million Australian Government funding and \$3 million from City of Greater Geelong (part of the Geelong City Deal, before a convention centre was specifically disclosed)
3	2021–22 BP4: TEI decreased due to funding reclassification for other Geelong City Deal projects (part of the Geelong City Deal, before a convention centre was specifically disclosed)
4	November 2021: additional funds granted in November 2021 to deliver Nyaal Banyul as a PPP (part of the Geelong City Deal)
5	2023–24 BP4: TEI decreased due to capital expenditure reclassified as operating costs
6	2023–24 BP4: additional funding granted to meet forecast capital costs
7	November 2023: TEI increased after the procurement process ended and preferred bidder selected.
8	February 2024: TEI decreased after final project negotiations
9	2024–25 BP4: current TEI, with Nyaal Banyul now reported as a separate project.

Source: VAGO.

Risks and emerging pressures



There are no specific risks noted at this point.
The project’s independent reviewer (IR) states that the Nyaal Banyul development is progressing according to the construction program.

Variance analysis

Nyaal Banyul’s approved cost has increased when the current TEI is compared to the original 2018–19 approved cost. This cost variance is due to procurement model changes and construction market price escalations.

DJSIR told us that costs went higher than the original TEI because:

- of an overstimulated market, construction industry dynamics, COVID-19 and other geopolitical factors, which escalated pricing
- the government adopted a precinct approach and agreed to a PPP procurement model, which added lifecycle costs to Budget disclosures
- DJSIR refined the centre design to create a more fit-for-purpose facility, benchmarked against comparable centres.

Before Nyaal Banyul was separated out of the Geelong City Deal, the approved completion date was quarter 2 2022–23. The current expected completion date is quarter 4 2025–26. This is a 3.5 year increase in project duration.

Since the PPP approach was confirmed, the project has been tracking in line with contracted delivery dates.

Impacts of scope and other changes

The impact of changes to the project is not clearly documented in public reporting. But internally it is well-documented and reported every month.

Project working groups can escalate unresolved variance issues to the responsible minister. There are no examples of this escalation happening to date.

Key funding stakeholders

Stakeholders

The Nyaal Banyul project's current approved TEI includes funding from the Australian Government, the City of Greater Geelong, and the state. The Victorian Government increased its share of the Geelong City Deal to provide extra funding for the project.

The current TEI is \$449.10 million with \$30 million from the Australian Government and \$3 million from the City of Greater Geelong.

Project benefits

Benefits

The project's original investment logic map (ILM) has not been updated since 2016 and does not reflect the project's current vision and expected benefits.

The original ILM does not include expected benefits from a precinct-wide development, which includes a new hotel. The project's Gate 3 review notes that the most significant benefit identified was delivering Nyaal Banyul and offering new co-located venues and accommodation.

The benefits approach rigour was queried in the Gate 3 review. The review also notes that the ILM and benefit management plan (BMP) needs to be aligned with the updated project scope's expected benefits.

This was committed to in a gateway recommendation action plan signed by DJSIR in November 2022. DJSIR told us that this is an ongoing piece of work to be completed for the Gate 5 review after the project is approved as ready for use in 2026.

Governance and assurance

Governance and assurance In Victoria, the governance and oversight processes for PPP procurements are mature and well-defined. An IR is a key element of the project's assurance approach. The IR communicates key project observations jointly to the state government and private sector.

Nyaal Banyul became a high value high risk (HVHR) project in 2021. The Department of Treasury and Finance (DTF) has not conducted any project assurance reviews for this project. But DTF did oversee a Gate 3: Readiness for market review in August 2022 and made 12 recommendations.

DV's role as the delivery interface agency is well-described in the project and contract management plans. DV has actively participated in the required HVHR and gateway processes to date. DJSIR told us that a new memorandum of understanding has been signed to better reflect the project's current roles and responsibilities.

This project has some extra coordination and approval layers because local and Australian governments are involved via the Geelong City Deal. Because Nyaal Banyul sits within the Geelong City Deal and is delivered as a PPP (which attracts extra DTF oversight) project matters are well-documented.

Procurement approach

PPP model The government endorsed a PPP procurement in April 2022. This model was given extensive consideration in line with the broader project objectives to use the precinct as a catalyst for renewing and revitalising Central Geelong.

DJSIR said the government selected the PPP approach because it maximised a whole-of-precinct activation. It complemented the public realm improvements as well as the convention centre, with hotel, commercial, food and beverage offerings, supported by a mixed-use development to promote year-round activity. DJSIR told us that this approach could potentially capture private investment worth \$250 million.

DJSIR assessed that the PPP approach would provide value and affordability compared to the public sector comparator (PSC), which estimates likely traditional procurement process project costs. The PPP saves an estimated \$17.8 million against the PSC.

DJSIR has specific experience with the PPP model for a convention and event centre from its role in the Melbourne Convention and Exhibition Centre. The outcomes from the PPP approach are publicly documented in a project summary on DTF's website.

Better practice and lessons learnt

Better practice



The project team closely engaged with the Wadawurrung Traditional Owners Aboriginal Corporation when developing the project.

The Wadawurrung Traditional Owners Aboriginal Corporation gifted the precinct the name Nyaal Banyul, which means look to the hills. This is a positive and tangible involvement for First Peoples in a state-funded asset investment.

The project is also using a social procurement policy. DV worked with the Geelong-based Give Where You Live Foundation to develop social procurement targets and an employment scheme.

To assist with design and operational concepts, project advisors visited comparable centres (including the Darwin Convention Centre, Gold Coast Convention and Exhibition Centre and Te Pae Christchurch Convention Centre) and held detailed sessions with centre staff and designers to inform Nyaal Banyul's reference design.

RAG rating definitions

Rating	Scope	Cost	Time	Benefits
Red	Current approved project scope is at risk and requires action and a decision by the government	Project is likely to be more than 20% over its current approved budget	Project is likely to be more than 6 months behind its current approved schedule	Project benefits measurement systems are not in place and baseline and progress data for project benefits described in the business case, ILM or BMP is not available
Amber	Scope risks are emerging but are being managed and no action or decision is required by the government at this point in time	Project is likely to be 11–20 % over its current approved budget	Project is likely to be 4–6 months behind its approved schedule	Project benefits measurement systems are immature and baseline and progress data for project benefits described in the business case, ILM or BMP is unreliable
Green	Current approved project scope is clear and can be delivered within budget and schedule	Project is likely to be 0–10% over its current approved budget	Project is likely to be 0–3 months behind its current approved schedule	Project benefits measurement systems are well developed and baseline and progress data for project benefits described in the business case, ILM or BMP is reliable and up to date
N/A				There are no tangible or measurable benefits specified in the project's business case or objective(s)

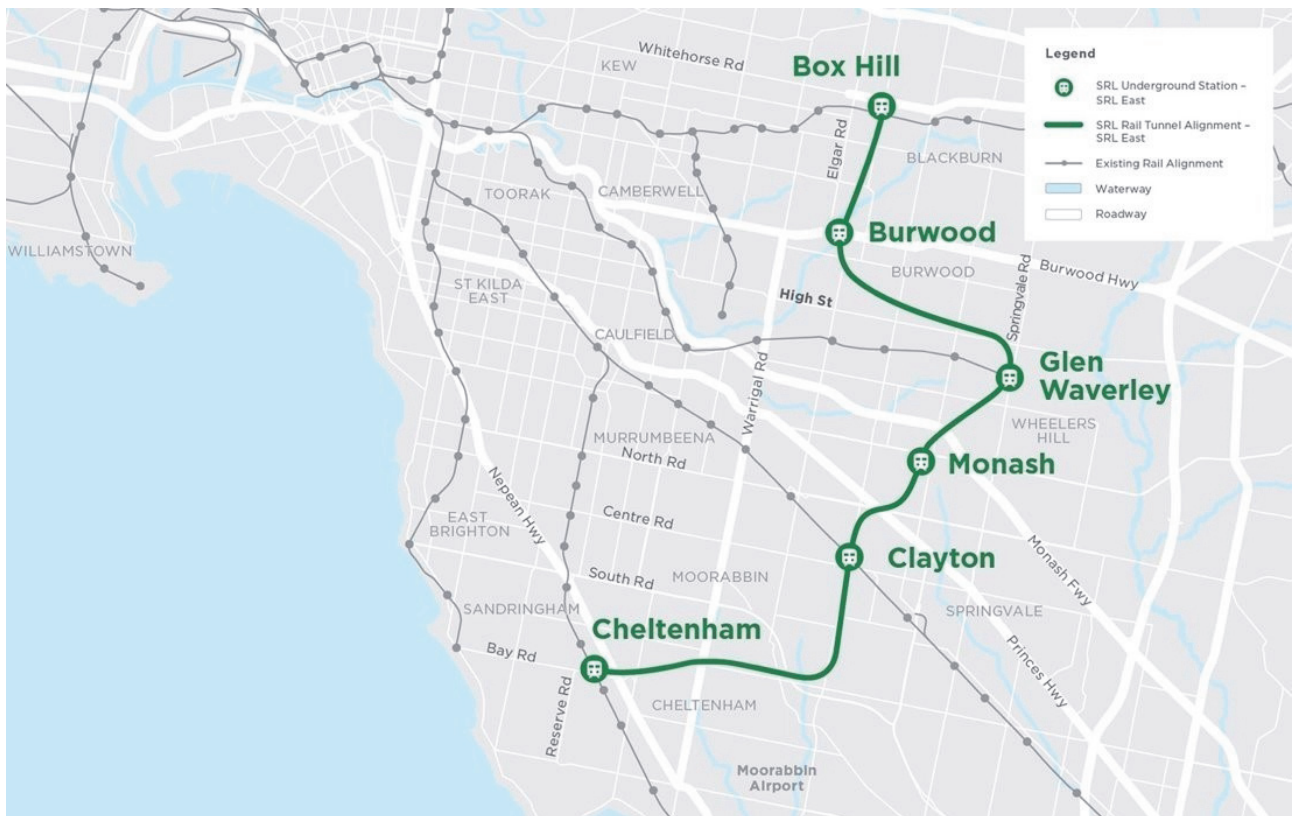
Source: VAGO.

Suburban Rail Loop East – Early Works

The Suburban Rail Loop is the government’s vision for a 90-kilometre rail line that will eventually link every major train line by a new route that goes around the city, instead of through it.

This case study looks at the early works for the first stage of the Suburban Rail Loop, known as Suburban Rail Loop East, which is being constructed between Cheltenham and Box Hill.

Figure 1: SRL East station locations



Source: Suburban Rail Loop Authority (SRLA).

Key project data

2024–25 BP4 project name:	Suburban Rail Loop East – Development, Initial and Early Works
Previous reporting name:	N/A
Project lifecycle phase:	In delivery/under construction
Financial year when first disclosed:	2020-2021
Current approved cost (TEI):	<ul style="list-style-type: none">• \$2.5 billion – according to SRLA’s survey response• \$2.37 billion – according to 2024–25 BP4
Original approved cost (TEI):	\$2.2 billion
Cost variance analysis:	\$300 million Note: The discrepancy between BP4 and survey data is \$300 million. This difference is due to an initial funding amount approved by government to plan and develop the Suburban Rail Loop. This initial amount was not specifically disclosed in Budget papers.
Expected completion date:	Quarter 3 2025–26
Original completion date:	Quarter 4 2024–25
Time variance analysis:	Delayed by 3 quarters (up to 9 months)
Responsible (BP4) entity:	Victorian Rail Track (VicTrack)
Delivery entity:	SRLA
Approval authority:	Minister for the Suburban Rail Loop

Note: BP4 is Budget Paper 4: State Capital Program. TEI stands for total estimated investment.

Figure 2: SRL site Burwood



Source: Suburban Rail Loop Authority.

Project summary

Project description and purpose

The Suburban Rail Loop is the government’s vision for a 90-kilometre rail line that goes around the city instead of through it, linking every major metropolitan train service from the Frankston Line to the Werribee Line via Melbourne Airport.

The SRL has 4 key components: Suburban Rail Loop Airport, Suburban Rail Loop East, Suburban Rail Loop North and Suburban Rail Loop West. Work on Suburban Rail Loop East has started. Suburban Rail Loop Airport is funded but currently on hold. Suburban Rail Loop North and Suburban Rail Loop West are expected to be delivered at a later stage.

Suburban Rail Loop East will connect major employment, health, education and retail destinations across Melbourne’s east and south-east. Construction started in June 2022, with trains expected to be running by 2035.

Suburban Rail Loop East’s early works package includes:

- land purchases, land consolidation and structure demolition
- minor road upgrades
- tram works
- ground improvement works and decontamination if required
- establishing construction sites
- installing underground power supply to sites

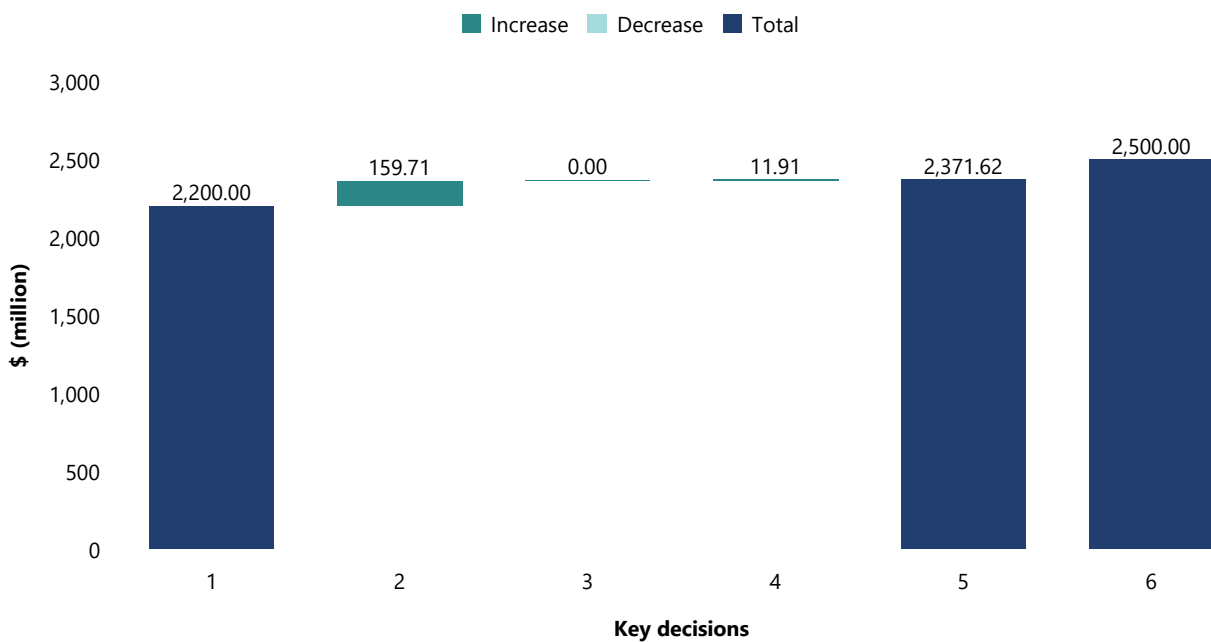
- relocating and protecting utilities, such as gas, electrical, water and telecommunication services
- constructing temporary power infrastructure
- preparing launch sites for the tunnel boring machines.

Suburban Rail Loop East's Main Works packages include:

- 2 tunnelling packages
- 6 underground stations (2 packages of 3 stations each)
- line-wide systems and operations (such as rail track technologies, trains, power to run the trains, communications systems and signals).

There is also a maintenance and stabling facility being built in Heatherton.

Figure 3: Budget changes to the Suburban Rail Loop East early works



Legend

Key decision	Date and detail
1	2020–21 (no BP4 published): original TEI
2	2021–22 BP4: TEI increase
3	2022–23 BP4: no change in TEI
4	2023–24 BP4: TEI increase due to budgeted amounts being reclassified as capital expenditure
5	2024–25 BP4: current TEI
6	2024 VAGO survey response: current TEI (includes \$300 million previously approved and announced by the government for planning and development)

Source: VAGO.

Project status

Red, Amber and Green (RAG) status The criteria we used for this RAG assessment can be found at the end of this case study.

Figure 4: Entity self-assessment compared to VAGO assessment

	Scope	Cost	Time	Benefits
Entity self-assessment	Amber	Green	Green	Green
VAGO assessment	Amber	Green	Green	Amber

Note: Entity self-assessments were made in the specific project survey. Based on the information SRLA provided and survey responses, VAGO assessed benefits as amber because benefits measurements processes are not fully developed and baseline data to measure benefits achievement is insufficient.
Source: VAGO.

Cost, time and scope performance

In 2020, the government approved \$2.2 billion to fund Suburban Rail Loop East’s early works package.

Within this \$2.2 billion, SRLA provided VAGO with specific cost subcategories, such as:

- \$657 million for land purchases (including voluntary acquisition)
- \$187 million for project administration and oversight, community and stakeholder engagement and consultation, advisory and design
- \$134 million for geotechnical and other specialist advice.

The TEI increased to \$2.36 billion in the 2021–22 BP4, and then to \$2.37 billion in the 2023–24 BP4. The 2024–25 BP4 notes the current TEI as \$2.37 billion. SRLA’s survey response attested in July 2024 that the TEI is \$2.5 billion, which includes \$300 million previously approved and announced by government for wider program planning and development.

SRLA’s response to our survey states that \$875 million had been spent by 30 June 2024.

SRLA uses dashboards to measure progress against contingency, cost, risk and time. The April 2024 dashboard forecasts that the Suburban Rail Loop East early works package will finish on 1 April 2026, compared to its initial 31 Oct 2025 date. The end date in the 2024–25 BP4 is listed as quarter 3 2025–26, compared to the previous year’s estimated finish date of quarter 4 2024–25.

The Suburban Rail Loop East early works package is currently delayed by around 9 months. The package’s estimated completion date was revised to better reflect the detailed schedule of works.

Risks and emerging pressures



The Suburban Rail Loop East early works package is currently going through a pricing reset with SRLA’s contractor to factor in items that were unknown or uncertain at the time the contract was awarded. This includes unknown ground conditions and hazards and contamination at some sites, such as properties that were not comprehensively inspected due to access restrictions.

The price reset was expected to be finalised by June 2024 but is still in progress. The contractor’s inability to confidently price non-contestable utilities work is also an ongoing risk.

There is a general potential risk that the emerging time variance in the IEW package could delay the main works package. SRLA told us that it is working with the managing contractor to minimise any possible impact on other packages.

A recent Gate 4 review recommended that SRLA develop clearer contingency options in case the main works are delayed or do not go ahead. SRLA has developed a detailed contingency plan for the early works package and actions to take in each construction zone if there is a delay to main works.

Non-contestable utilities works

A phrase used by the Australian electricity, gas, telecommunications or water market, which means that works can only be performed by the utility provider, with no opportunity for market competition.

Key funding stakeholders

Stakeholders The Victorian Government is fully funding the Suburban Rail Loop East early works package.

Project benefits

Benefits SRLA outlined some benefits from completing the Suburban Rail Loop East's early works package ahead of the main works in its funding submission. Expected benefits included reducing future delivery costs and minimising community disruption during the main works package by having a construction-ready environment in place.

Many land purchases for the overall Suburban Rail Loop East project were funded in the early works phase. SRLA told us this has several key benefits because it:

- is more cost-effective to buy land earlier, since the SRL is a multi-year project, and land values rarely decrease over time
- reduces the risk of developers buying the surrounding land for their own purposes
- demonstrates tangible progress to the community and key stakeholders.

While the Suburban Rail Loop's business and investment case outlined many medium to long-term benefits, there is no obvious benefits measurement approach in place. It is also not clear which agency will measure the expected Suburban Rail Loop benefits after project delivery.

SRLA's Gate 4 review recommended that SRLA establish a mechanism to more clearly show the relationship between the Suburban Rail Loop's scope, cost and benefits.

Governance and assurance

Governance and assurance Every month SRLA records key risks, with corresponding mitigation measures.

SRLA also has a project execution plan outlining how Suburban Rail Loop East packages are delivered.

Governance mechanisms for the Suburban Rail Loop East early works package include:

- a governance framework and structured project change management process
- a project control group to review, approve and discuss changes to scope, time and cost
- steering committees, which include central agency representatives
- recurring meetings between the package director and SRLA divisions to address any issues
- updates to the Minister for the Suburban Rail Loop.

SRLA's internal audit area is currently reviewing the governance framework and change management process.

SRLA has completed all relevant review milestones required by the high value high risk and Gateway review processes that apply to the IEW package. These review points were specified in a project assurance plan approved by the Treasurer in September 2022.

Procurement approach

Managing contractor model

The early works package is using a managing contractor procurement model. SRLA chose this model for flexibility in managing evolving scope and multiple external stakeholders. The model was expected to reduce demand on SRLA resources and facilitate early third-party involvement.

While a managing contractor model allows for some risk transfer to the private sector, there is also some risk that the contractor cannot effectively price some elements (such as the utility works) until the full scope is known and costed by the works provider. This risk was identified in the Gate 4 review.

Better practice

Better practice and lessons learnt



The SRLA early works package has separate dashboards to measure progress against contingency, cost, risk and time.

SRLA has a memorandum of understanding (MoU) with the Victorian Infrastructure Delivery Authority to share specialist resources and staff with experience in similar projects. This MoU was used extensively while SRLA was established

For example, SRLA learned through the Metro Tunnel Project's Early Works Close-Out report that proactively working with various government agencies, councils, franchisees and service providers helped collaboration and supported the investment in appropriate resourcing.

RAG definitions

Rating	Scope	Cost	Time	Benefits
Red	Current approved project scope is at risk and requires action and a decision by the government	Project is likely to be more than 20% over its current approved budget	Project is likely to be more than 6 months behind its current approved schedule	Project benefits measurement systems are not in place and baseline and progress data for project benefits described in the business case, investment logic map (ILM) or benefit management plan (BMP) is not available
Amber	Scope risks are emerging but are being managed and no action or decision is required by the government at this point in time	Project is likely to be 11–20% over its current approved budget	Project is likely to be 4–6 months behind its approved schedule	Project benefits measurement systems are immature and baseline and progress data for project benefits described in the Business Case, ILM or BMP is unreliable
Green	Current approved project scope is clear and can be delivered within budget and schedule	Project is likely to be 0–10% over its current approved budget	Project is likely to be 0–3 months behind its current approved schedule	Project benefits measurement systems are well developed and baseline and progress data for project benefits described in the Business Case, ILM or BMP is reliable and up to date
N/A				There are no tangible or measurable benefits specified in the project's business case or objective(s)

Source: VAGO.