Submission No 101

INQUIRY INTO OPERATION AND MANAGEMENT OF THE NORTHERN BEACHES HOSPITAL

Organisation: Plenary

Date Received: 25 July 2019

Plenary

INQUIRY INTO THE OPERATION AND MANAGEMENT OF THE NORTHERN BEACHES HOSPITAL

Portfolio Committee No. 2 – Health

July 2019

TABLE OF CONTENTS

1. INTRODUCTION

Plenary thanks the committee members for the opportunity to provide a submission to the Legislative Council's *'Inquiry into the operation and management of the Northern Beaches Hospital'*. Our submission is focussed on the following Terms of Reference: (**g**) the merits of public private partnership arrangements for the provision of health care; and (**h**) any other related matter.

Plenary Group is a specialist developer and financial sponsor of public infrastructure. Our extensive infrastructure portfolio spans health infrastructure, schools, defence housing, and rail and road PPP assets. Given our extensive experience and knowledge of infrastructure and the PPP sector we believe we are can provide constructive and insightful feedback to the Inquiry.

Public Private Partnerships (PPPs) have been successfully utilised by Australian Governments to deliver a range of infrastructure assets, including and excluding operational services (known as clinical services in the health sector). The procurement method has robust and proven policy benefits, with both major political parties utilising the model during their terms of Government. Like Design and Construction (D&C), Alliance and other contract methods, the PPP is not a privatisation method and is considered a political agnostic procurement model.

The fiscal and policy benefits of the PPP model have been demonstrated in a number of independent studies. These studies have demonstrated that PPPs deliver superior cost outcomes over traditional procurement and superior time outcomes, with PPPs significantly more likely to be completed ahead of time. These studies have shown that PPPs outperform traditional procurement from a cost perspective by 10-15% and from a time perspective by 25-30%.

While Plenary does not have full detailed access to the contracts between the State and the Northern Beaches Hospital owner, summary documents available on the NSW Treasury website and the media releases of the NSW Government and Healthscope, reveal that the Northern Beaches Hospital was opened on time and on budget, which is consistent with the finding of various independent studies that highlight the strong performance of PPP assets.

When considering the private sector services to be included in health PPPs, Governments have the following options: (1) design & construction and maintenance of hard infrastructure; and (2) design & construction and maintenance of hard infrastructure and clinical services. Each option will have merit on a case-by-case basis.

There have been many instances of PPPs including operations and many instances that have excluded operations. In the health sector, hospital PPPs that have included clinical services are Joondalup Hospital (WA), Mildura Hospital (Vic.), Port Macquarie Hospital (NSW) and the Northern Beaches Hospital (NSW). Hospital PPPs that have excluded clinical services are Royal North Shore Hospital (NSW), the Newcastle Mater Hospital (NSW), the Casey Hospital (Vic.) and the Victorian Comprehensive Cancer Centre (Vic.).

Our view as owners of hospital PPP assets that do not include clinical services and as past bidders on hospital PPPs that include clinical services, is that Health PPPs can successfully exclude or include clinical services depending upon the asset. Ultimately the decision to include or exclude clinical services must be determined on a case by case basis by Government experts who consider the entire portfolio of health assets that serve the community.

Our analysis below demonstrates that regardless of the decision to include or exclude the clinical services in the PPP, the fiscal and policy benefits, with respect to on-time delivery and appropriate risk transfer to the private sector, remain.

Plenary Group

Plenary is an independent long-term investor, developer and manager of public infrastructure. Plenary brings a hands-on approach which embraces finance, planning, design and construction and asset

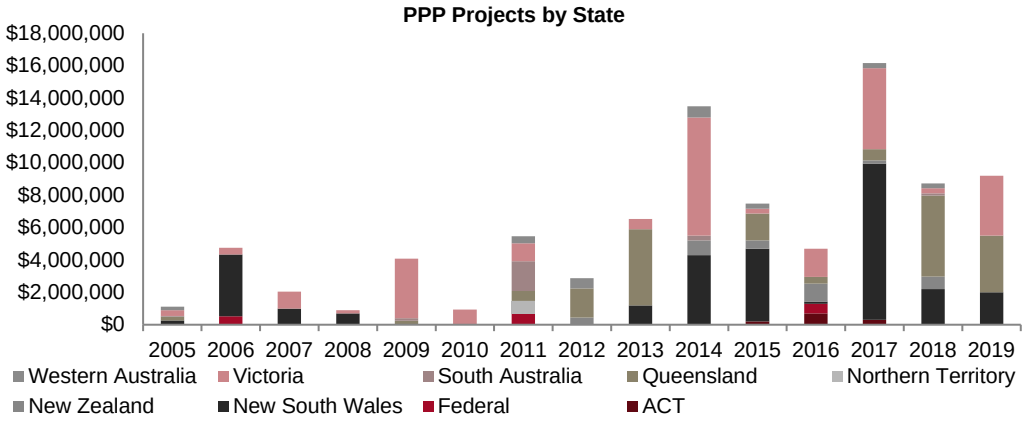
management and operations. Plenary has a solid track record of creating innovative, sustainable solutions for governments globally, with 47 projects across Australia, Canada and the US over a diverse range of sectors including health, education, defence accommodation and transport, with a total project capitalisation in excess of $33bn. Our local teams draw on shared global expertise to engage with clients and partners in every stage of a project.

Plenary brings a unique model to the delivery of public infrastructure modelled on becoming a genuine long-term partner to Government in the delivery of public infrastructure. Plenary's long-term investment and active management model serves the Australian infrastructure market. By retaining long term equity in its PPP projects, and actively managing those projects, we become direct partners with Government agencies and with each public infrastructure operator.

2. PUBLIC PRIVATE PARTNERSHIPS

Background

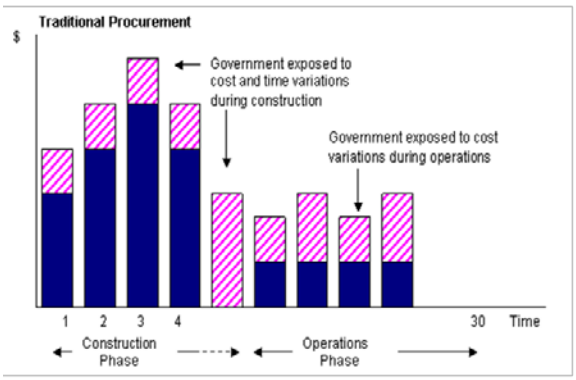
Public Private Partnerships have been utilised by both the Federal Government and State Governments across a range of infrastructure sectors, both with and without operations.

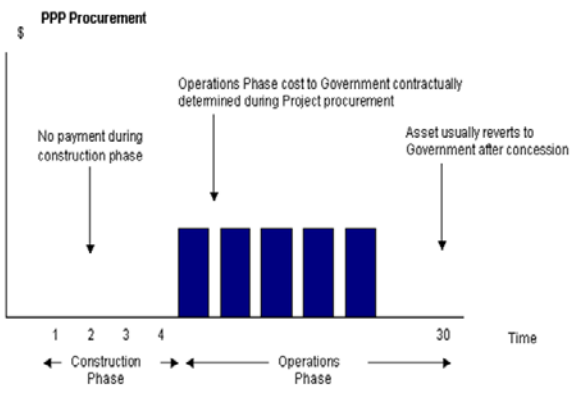


The Public Private Partnership (PPP) model is an effective procurement method that strikes a balance between value and risk transfer from the State to the Private sector.

PPP differs from traditional turnkey design and construct contracts. The PPP model passes the obligation and risk to the Private sector on design and construction performance, long-term maintenance performance and where included, operational performance. In traditional design and construct contracts, the State is exposed to cost and time variations during construction and operation. Cost blowouts and time overruns through the construction period are seen in traditional procurement processes at a much greater prevalence than PPP contracts as evidenced in the independent studies that are documented below.

In contrast to traditional procurement, the State's obligation to pay for the PPP only commences after the private sector has met the construction acceptance criteria, the maintenance performance level Key Performance Indicators (KPIs) and where relevant, operations performance level KPIs. Effectively, the State only commences payment once it receives an asset that is fit for purpose and ceases payment should the asset fail to perform. The PPP model provides Governments with significant cashflow and budget certainty, in contrast to traditional procurement. Stylised payment profiles are documented in the diagrams below.





Benefits of the PPP procurement method

The key principles of a successful PPP are:

i. appropriate risk allocation, which promotes the private sector to form considered and value for money decisions
ii. whole of life solution taking into account the construction phase and the maintenance and operation phase. That is, the design and construction in a PPP considers and prices how much the asset will cost to maintain over the medium and long term (eg 20+ years)
iii. price certainty for the State, with the payments made by the State to the private sector fixed and a reduction to these payments where performance standards of the asset are not met

Under the PPP model, given an appropriate allocation of risk, the State can receive price certainty and maximum risk transfer. The private sector takes the fixed time and price risk on delivery with the State only making fixed payments once the asset is completed and is meeting relevant KPIs. Any cost increases during delivery do not impact Government budget allocations and the State can secure certainty of funding over the operations phase (for example the 20+ year concession term) to ensure that asset standards are met.

In addition to the on-budget/on-time risk transfer for PPPs, Governments also typically transfer design cost risk, maintenance and refurbishment obligations over the full operating term and the obligation to meet the required standards which ultimately supports better services and public outcomes.

The transfer of whole of asset life cost risk encourages an efficient upfront design and achievement of cost efficiencies through innovation during the project term, which deliver operational benefits and ensure a focus on high quality outcomes. The PPP model requires a whole of asset life approach to D&C, Facilities Management (especially the constant maintenance of an asset to ensure it is maintained in working condition) and Lifecycle replacement (major refurbishment), brought together in a single Private Sector entity. The approach is designed to achieve value for money over the term of the PPP.

PPPs provide certainty through integrating the full design, construction, maintenance and lifecycle spending into a regular payment ensuring maintenance and lifecycle expenditures for a hospital cannot be overrun by new budget priorities when spending allocations are undertaken and ensuring that the public assets do not deteriorate earlier in their lifecycle than they should.

After the construction period, the payments made during the operation period of the asset are subject to KPI / performance requirements, with payments only made to the owner of the PPP only when the prespecified standards of the asset are met. This promotes and incentivises the asset owner to actively monitor, report, and manage the project outcomes. PPPs are generally associated with superior operating performance and high customer satisfaction, relative to D&C projects which have a specific focus on the delivery phase only.

A further benefit of PPPs is that the State will have a single project counterparty which will take all whole of life obligations and eliminate the interface risk for Government.

Superior Cost and Time Performance of PPPs

There have been several independent Australian studies demonstrating the superior cost and time efficiency of PPPs over traditional procurement[1]. In a study by the University of Melbourne and Allen Consulting Group, Public Private Partnerships were found to outperform traditional Design and Construction procurement methods from a cost perspective by 10-15% and from a time perspective by 25-30%.

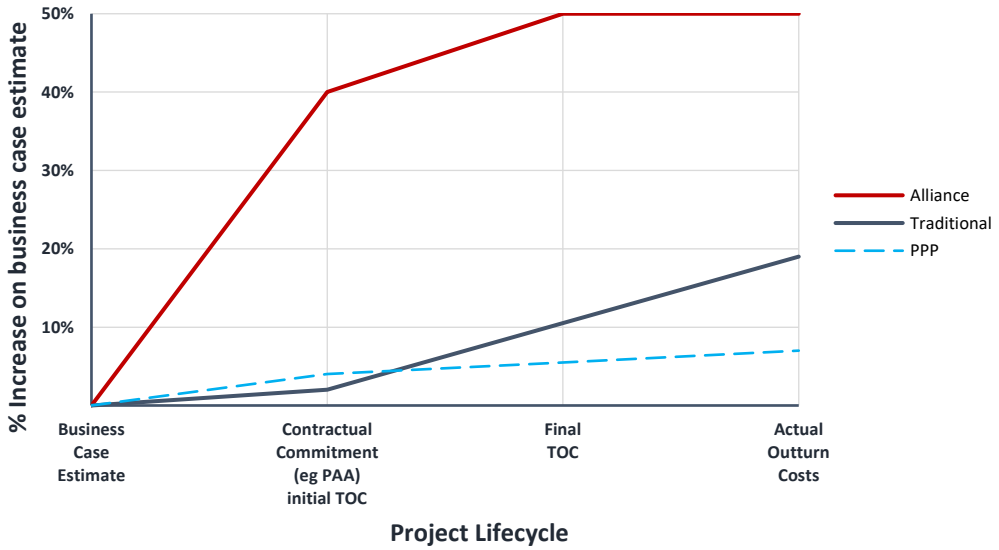
[1] Performance of PPPs and Traditional Procurement in Australia, Allen Consulting Group, University of Melbourne, November 2007

The study *In Pursuit of Additional Value: A benchmarking study into alliancing in the Australian Public Sector* undertaken by the University of Melbourne and Evans and Peck[2], found that for the final asset capital cost relative to the original Business Case cost estimates, Alliance actual capital costs increased by ~50% from the initial estimate, D&C by ~20% and PPPs by 5-10%.

To put this into perspective, where a project was initially forecast to cost $1billion, in an Alliance procurement the cost incurred by Government would be $500m higher than the original Business Case estimate; in a D&C contract the cost incurred by the Government would be $200m higher than the original Business Case estimate; while in a PPP, the cost incurred by the Government would be $50-100m higher than the original Business Case estimate.

While Plenary does not have full detailed access to the contracts between the State and the Northern Beaches Hospital owner, summary documents available on the NSW Treasury website and the media releases of the NSW Government and Healthscope, reveal that the Northern Beaches Hospital was opened on time and on budget, which is consistent with the finding of various independent studies that highlight the strong performance of PPP assets.

Figure 1: Procurement Contract Cost-certainty Comparison



Source: In Pursuit of Additional Value: A benchmarking study into alliancing in the Australian Public Sector

Internal Plenary research has compared the final cost of delivering actual PPP projects with what is known as the Public Sector Comparator (PSC). The PSC can be understood as the net present value (NPV) of a project's whole of life costs and revenues using the most efficient and likely form of Government delivery (that is the cost of the project had the Government not utilised the PPP model).

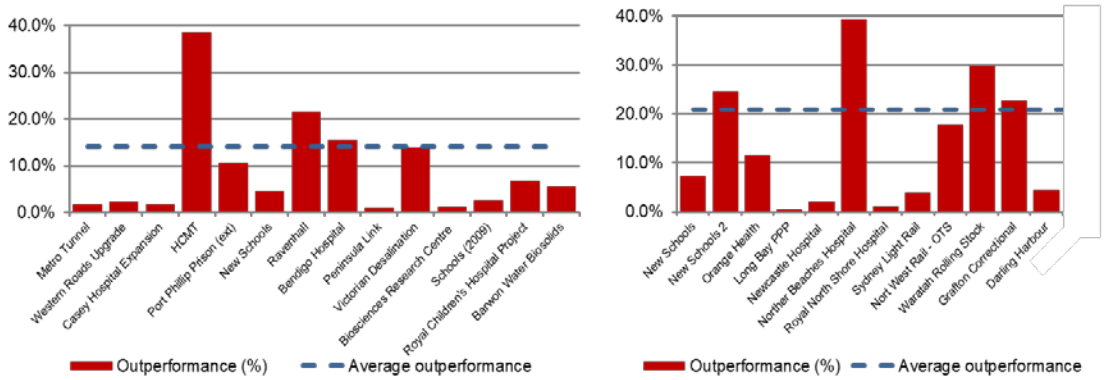
Sourcing data from the NSW Government and Victoria Government reports, Plenary have compared the actual cost of the PPP projects relative to the Public Sector Comparators. The analysis reveals:

- In NSW, PPPs have outperformed the Public sector comparator by an average of 21%, delivering Government nearly $5bn in value over 13 PPPs
- in Victoria, PPPs have outperformed the Public sector comparator by an average of 14%, delivering Government nearly $4bn in value over 14 PPPs

Given this Inquiry's focus on the Northern Beaches Hospital, it is worth noting that of all the PPPs included in our survey, the Northern Beaches Hospital achieved the highest savings level relative to the PSC, with the PPP model saving the Government $1,526m relative to how much the project would

[2] *In Pursuit of Additional Value: A benchmarking study into alliancing in the Australian Public Sector,* Melbourne University, Evans & Peck on behalf of the Inter-Jurisdictional Alliancing steering Committee, October 2009

have cost Government had Government adopted an alternate procurement model. We presume that this cost saving enables Government to invest in other critical health or public asset areas.



Finally, Australian research has been supported by the findings of the Lawrence National Centre for Policy and Management at Western University in Ontario[3]. This investigation found that when comparing PPPs to traditional forms of infrastructure procurement, PPPs were generally superior because they brought a specialised expertise, due diligence and accountability mechanisms that are not possible to replicate in the public sector. The study noted that the key advantage of the PPP approach is that it facilitates bundling of end-to-end services to a single winning private entity, which in turn encourages an integrated, whole-of-life perspective to the project.

The studies above illustrate that there are material fiscal and policy benefits with regard to the adoption of the PPP procurement method to deliver infrastructure assets. These studies demonstrate that regardless of the decision to include or exclude the clinical services in a PPP, the fiscal and policy benefits with respect to on-time delivery and appropriate risk transfer to the private sector remain.

[3] The Procurement of Public Infrastructure: Comparting P3 and Traditional Approaches, National Centre for Policy and Management at Western University in Ontario, 2015

3. AUSTRALIAN HEALTH PPPS

Hospital PPPs in Australia and NSW

NSW was the first state to utilise the PPP approach to procure hospitals. The first Health PPP in NSW was Port Macquarie Base Hospital (1992) which included the core clinical services, followed by the Newcastle Mater Hospital (2005), Bathurst and Orange Hospital (2007), the Royal North Shore (2008) and most recently the Northern Beaches Hospital (2015).

The PPP procurement model in Health has also been utilised with success in Victoria, Queensland, South Australia and Western Australia. Victoria has utilised the PPP model a total of seven times, with the Casey Hospital in 2002 the first PPP hospital and has recently commenced the procurement of the Footscray Hospital using the PPP model.

In relation to the PPP model, it is worth highlighting two points. One, the PPP model has been utilised by Governments regardless of the political party in power. Two, while Hospital PPP have typically not included clinical services, clinical services have been included in a number of PPPs over the last 30 years, in NSW, Queensland, Western Australia and Victoria.

Hospital	Year*	State	Procurement	PPP Services
Port Macquarie Base Hospital	1996	NSW	PPP	Clinical
Joondalup Hospital	1998	WA	PPP	Clinical
Robina Hospital	1998	QLD	PPP	Clinical
Casey Hospital	2002	VIC	PPP	Non-clinical
Latrobe Hospital	2002	VIC	PPP	Clinical
Mildura Hospital	2002	VIC	PPP	Clinical
Newcastle Mater Hospital	2005	NSW	PPP	Non-clinical
Royal Women's Hospital	2005	VIC	PPP	Non-clinical
Long Bay Forensic and Prison Hospitals	2006	NSW	PPP	Non-clinical
Bathurst Hospital	2007	NSW	PPP	Non-clinical
Orange Hospital	2007	NSW	PPP	Non-clinical
Royal Children's Hospital	2007	VIC	PPP	Non-clinical
Royal North Shore Hospital	2008	NSW	PPP	Non-clinical
New Royal Adelaide Hospital	2011	SA	PPP	Non-clinical
Victorian Comprehensive Cancer Centre	2011	VIC	PPP	Non-clinical
Sunshine Coast University Hospital	2012	QLD	PPP	Non-clinical
Bendigo Hospital	2013	VIC	PPP	Non-clinical
Northern Beaches Hospital	2015	NSW	PPP	Clinical
Footscray Hospital	Est. 2020	VIC	PPP	Non-Clinical

Note: Year refer to year of financial close

4. HEALTH PPP CASE STUDIES

Plenary owns two Australian PPP assets in Australia (the Casey Hospital and the Victorian Comprehensive Cancer Hospital) and provides the asset management services for a further two Australian PPP assets (the Newcastle Mater Hospital and the Royal North Shore Hospital).

It has been Plenary's experience that the utilisation of the PPP model for these assets has provided the respective State Governments financial savings (with the total cost to the Government superior to the Public Sector Comparator) as well as technical and operational innovations that would not otherwise be realised if not for the adoption of the PPP procurement model.

Newcastle Mater Hospital

Newcastle Mater Hospital in Waratah, NSW, is the major cancer care centre for the Hunter New England Local Health District, delivering more than 320,000 occasions of outpatient services and in excess of 16,000 inpatient treatments per year.

It provides a 24/7 emergency department, intensive care unit, and extensive Palliative Care services. Hunter New England Local Health District's Mental Health facility and Breastscreen NSW are also located on the Mater campus.

Plenary provides SPV services to NovaCare, who is responsible for the design, construction, financing and maintenance of the hospital.

The Mater Newcastle Hospital public hospital private sector delivery cost (as contracted) was $380.5m saving $8.2m or 2.1% relative to the PSC most likely case of $388.7m.

Operational performance and innovations

Through utilising the PPP procurement model, the Government has been able to achieve operational performance benefits and innovations in performance. Below highlight a number of these innovations:

- **Blood and Marrow Transplant Environmental Cleaning (BMTEC) Project.**
  In 2013, the NSW Agency for Clinical Innovation (ACI), Blood and Marrow Transplant (BMT) Network began an Environmental Cleaning Project across fifteen NSW Blood and Marrow Transplant (BMT). These hospitals included two PPP hospitals – Newcastle Mater Hospital and the Royal North Shore Hospital – and 13 non-PPP hospitals including Westmead Hospital, the Children's Hospital at Westmead, Royal Prince Alfred Hospital, Liverpool Hospital and Nepean Hospital.
  Hospital cleanliness is a key strategy to reduce hospital-associated infections (HAIs), provide a safe environment for staff, patients and visitors, and reflects the hospital's philosophy of care and concern. BMT units were identified as Extreme Risk functional areas and required a 90% Acceptable Quality Limit (AQL) for environmental cleanliness. The Environmental Cleaning Project sought to measure and benchmark the level of cleanliness and inform quality improvements in environmental cleaning standards.
  The External Environmental Cleaning Audits 2015 identified the Newcastle Mater Hospital PPP as exceeding all hospitals and achieving a 100% audit result. The External Environmental Cleaning Audits 2016 again found the Newcastle Mater Hospital PPP exceeded all other hospitals, achieving a 99% audit result along with two other hospitals.
  The demonstrated performance of the Newcastle Mater Hospital PPP is reflected in the Hospital Operator (Calvary Mater Newcastle) 2013/2014 Review of Operations that noted that, *"A highlight for the Cleaning and Environmental Services Team occurred in October 2013 with The Blood and Marrow Transplant Network (BMT) Audit being conducted in Ward 5C. This was a clinical cleaning audit that examined not only the cleanliness of the ward down*

to minute levels, but also support systems and processes that provide the framework for the high level of cleanliness within our wards. An outcome of this audit, the hospital achieved a first place ranking of the 15 sites that were included in the Blood and Marrow Network. This was an exceptional result for our hospital".

Some further initiatives within the Newcastle Mater Hospital PPP include:

- The roll out of a cleaning audit application (ICLEAN360) introduced by the PPP provider increased cleaning times and cleaning transparency, helped manage cleaners' performance and highlighted areas for cleaner improvement. The application's focus on quality assurance ensures that the hospital's cleaning function performance is maintained at a highest levels.
- Extreme Risk functional areas average audit results consistently exceeded the Acceptable Quality Limit (AQL) target of 90%: 2014 = 95.2%; 2015 = 94.7%; 2016 = 97.4%; 2017 = 96.0%; 2018 = 95.9%; 2019 (to June) = 96.7%.
- The PPP operator introduced an Outcome Based Services Internet of Things Platform. The platform provides 24-hour a day insights into the facility equipment, ensuring maximum efficiency of the installed mechanical and electrical equipment, early fault finding and the maintenance of indoor air quality. The solution provides efficient inventory management, minimisation of asset downtime, improved costs and employee productivity, improving the life of assets across the facility.
- The PPP introduced a new cleaning chemical to manage the carbapenemase-producing Enterobacteriaceae (CPE) - a super bug becoming more prevalent in hospitals. It has worked effectively in the reduction of CPE and is now used across all wards at the hospital.

Royal North Shore

Plenary provides SPV management services to InfraShore who is responsible for the design, construct and maintenance of the Royal North Shore Hospital (RNSH) PPP Project.

RNSH is the major tertiary referral hospital for the Northern Sydney Local Health District and services the local council municipalities of Mosman, Willoughby, Lane Cove and North Sydney.

The project has realised significant improvements in facilities, more efficient and integrated hospital and health services, a dedicated research and education precinct, and the release of surplus land for the benefit of NSW Health.

The Royal North Shore Hospital public hospital private sector delivery cost (as contracted) was $1,115.6m saving $13.4m or 1% relative to the PSC most likely case of $1,129m.

Operational performance and innovations

- Through utilising the PPP procurement model, the Government has been able to achieve operational performance benefits and innovations in performance. Below highlight a number of these innovations: **The PPP facilities maintainer introduced high efficiency particulate air (HEPA) Carts** when undertaking maintenance work in the hospital environment. The carts operate by sealing and filtering air in the work area to protect against potentially harmful substances and allow work within sensitive areas of the hospital at any time, providing faster response times and greater efficiencies. As a result, maintenance work in critical areas such as theatres can be completed faster thereby allowing higher levels of facility availability.
- **Computerised Maintenance Management System**: An advanced onsite helpdesk utilises software which streamlines the management of asset, building and service activities. The CMMS system optimises efficiency, improves service delivery and reduces operational costs. Both internal PPP workshop staff and site-based contractors utilise a smartphone app that provides remote and ongoing access to the system.

- The PPP provider is presently investigating energy efficiency and sustainability initiatives such as mechanical systems optimisation (HVAC controls) and Photo Voltaic cells (solar) upgrades. Both initiatives are being investigated with NSW Health with a focus on finding the optimal solution

Victorian Comprehensive Cancer Centre (VCCC)

The Victorian Comprehensive Cancer Centre is a purpose-built centre-of-excellence for cancer research, treatment, care and education.

It is the home of the Peter MacCallum Cancer Centre, cancer research and clinical services for Melbourne Health and the University of Melbourne, and education facilities for all building partners.

Located in the prestigious Melbourne Biomedical Precinct the VCCC aimed to become one of the top 10 facilities of its kind in the world – a goal it has now realised.

The VCCC is a coming together of a number of significant healthcare partners and the creation of new networks and clusters of collaboration.

As an innovative commercial solution to future planning, Plenary delivered significant integrated future expansion capacity upfront, at no additional cost to the State, to allow for future expansion by building partners.

This project being largely reliant on bank debt for financing, the project achieved the longest tenure of bank debt of this volume in the Australian market since the GFC. And, in somewhat of a breakthrough, Plenary included local Australia superannuation funds across all levels of the capital structure.

The Victoria Comprehensive Cancer Centre private sector delivery cost (as contracted) was $1,263.3m saving $9.3m relative to the Net Present Cost of the Public Sector Delivery of $1,272.6m.

Through utilising the PPP procurement model, the Government has been able to achieve operational performance benefits and innovations in performance. Below highlight a number of these innovations:

- The IFO range toilets were adopted over traditional back to wall toilets so that the toilet could be easily removed (when there is a major blockage) without having to cut or damage the wall or floor vinyl in the process.
- A specific sensor tap for the VCCC that would pass both clinical and research requirements. The special sensor tap allows adjustment from the wall plate (with special tools), removing the need for additional access covers and removing the need to dismantle the wall plate.
- Thermostatic mixing valves were located behind the paper towel dispensers within each of the ensuites and toilet areas so that they could be easily accessed for servicing. This removed the need for hundreds of access panels within these areas.

Casey Hospital

Casey Hospital is a 229-bed hospital providing a comprehensive range of health services for the rapidly-growing communities of southeast Melbourne.

The hospital includes general medical, emergency, mental health, rehabilitation, maternity and special care nursery, surgical and ambulatory care services.

In 2017 work began on a 130,000-square-metre expansion to increase the hospital's capacity, allowing it to cater for more patients, more surgeries and more births in one of Australia's fastest-growing areas.

The original 229-bed hospital was open on 18 September 2004. The cost of the expansion of the Casey Hospital through the PPP (as contracted) was $159.9m saving $2.1m relative to the Net Present Cost of the Public Sector Delivery of $162.0m.

Operational performance and innovations

Through utilising the PPP procurement model, the Government has been able to achieve operational performance benefits and innovations in performance. Below highlight a number of these innovations:

- **Heating and cooling optimisation:** The PPP provider recent implemented the Outcome Based Service (OBS), a cloud based building management solution (BMS) focused on building optimisation through the prioritisation of maintenance activities based on impact, creating efficiencies in building performance and alignment with Key Performance Indicators (KPI'S). The BMS solution created efficiencies through both energy and cost savings and ensured that the appropriate level of the heating and cooling conditions were maintained at the hospital.