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Unlocking the Cost of Incarceration

Rivergum Residential Treatment Centre, Ararat
Image courtesy of Kane Constructions

Unlocking the Cost of Incarceration

Slattery's justice team unpacks some of the critical costs and variations in approach for new prison construction.

The Victorian State Government's May 2019 budget earmarked \$1.8 billion in new spending on prisons and corrections over the next four years. Since then, a growing chorus of voices has questioned this spending, as evidence has found investment in social housing, education and crime prevention programs is more effective than imprisonment.

In addition, some media reports have highlighted the proposed expenditure per bed. The cost of the new 1,250 bed prison at Lara is estimated to be \$1 million per bed, according to media reports. In comparison, recently-constructed prisons in New South Wales (Macquarie and Hunter Correctional Centres) cost \$500,000 per bed.

While we do not dispute this cost differential, we do argue that comparing major prison projects through a cost per bed analysis can be problematic. Various factors can contribute to a high or low cost per bed and this does not always translate into value for money.

Is the cost per bed the best metric for prison construction?

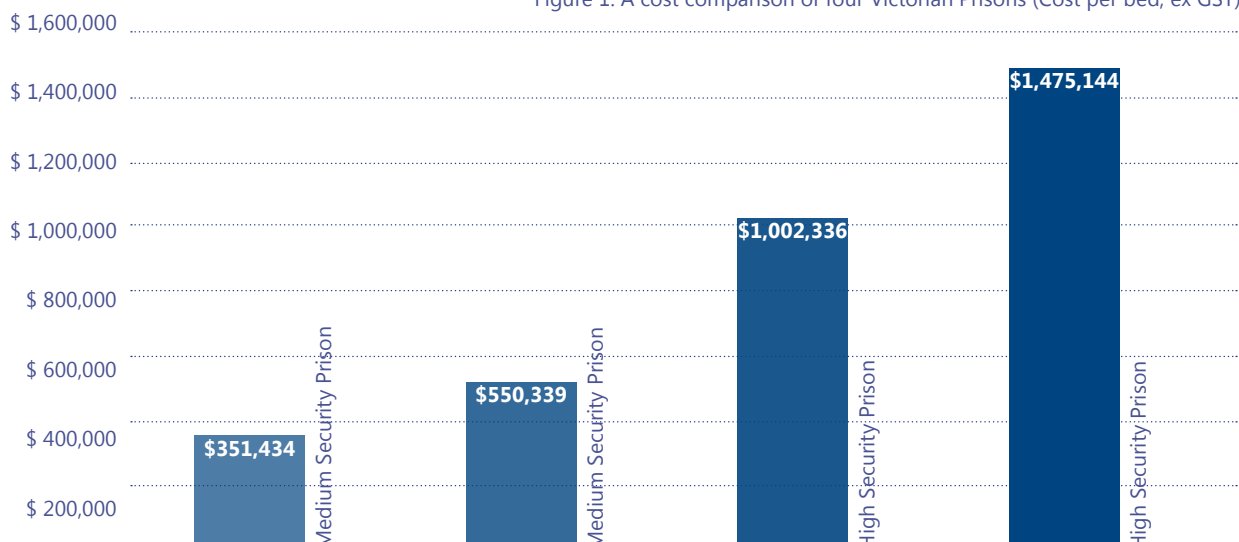
Our analysis of recent new prison construction in Victoria demonstrates the significant variation on a per bed basis, as this does not consider the unique factors and requirements that affect the overall construction cost.

The prisons analysed, which included examples with varying security requirements, proximity to metropolitan Melbourne, bed numbers and cell typology, yielded distinct variation in cost per bed.

So, what are the defining issues and cost considerations that deliver 'good spending' in new prison construction?



Figure 1: A cost comparison of four Victorian Prisons (Cost per bed, ex GST)



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Ravenhall Correctional Centre, Victoria
Artist Concept

Cell Typology

Internationally, new prison design combines innovative architecture with rehabilitative programs that support prisoner reform instead of long-term incarceration in predominantly solitary confinement.

However, Australian prisons, particularly in Victoria and NSW where demand is greatest, are far more traditional with a few notable exceptions (such as the newly-opened Rivergum Residential Treatment Centre near Ararat). Australian prisoners are usually confined to their cells from mid-afternoon until the following morning. During the day, prisoners tend to work in laundries, kitchens or farms to service the prison or private enterprise.

Victorian prisons (including Ravenhall, Melbourne Remand Centre Expansion and Lara) incorporate a traditional design approach, including individual or shared cells housed in the wings of an accommodation unit.

Officers are housed in a central location which allows them to deal swiftly with inmate unrest. While this design optimises safety and security, this cell typology is expensive due to increased electronic and architectural security measures required to maintain order.

In contrast, Macquarie and Hunter Correctional Centres in NSW have embraced a new approach to maximum security design. There are still secure barriers and anti-climb fences alongside more than 600 CCTV cameras that are monitored by a central command and a 24/7 immediate action team to manage violent situations (McNab, 2019). Rather than singular cells, the design includes 25-bed dormitories which are observed from an upper tier by corrections staff. The dormitories include individual 'pods' with a bed, desk and television which Channel 7's crime editor likened to "an aircraft's business class pod on steroids". Showers, toilets, kitchenettes and telephones are shared within the dormitory. Prisoners are also occupied in work programs for 12-hour stretches.

This new type of prison model delivers beds quickly without jeopardising safety and security. The cost of a dormitory style unit is inherently lower due to shared amenities and the non-cellular nature of the beds.

In some prisons, doubling and tripling the number of beds where infrastructure and ancillary spaces already exist has minimised the overall cost per bed, whilst increasing capacity. However, this contributes to increased risk and is problematic for both staff and prisoners due to overcrowding and a lack of timely access to support services and programs. Such conditions have led to strikes and riots in both NSW and Victoria, generating millions in unplanned additional costs.

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Security Level

While each of the prisons examined in this paper are maximum security, the security level of a prison plays a big part in the cost per bed. This will be driven by each prisoner's grading and categorisation, including the crime they committed and the level of danger they pose to others. It will also be contingent on the design and layout of the facility, as highlighted in the previous section on cell typology.

Considerations include:

- Electronic security requirements
- Building fabric robustness
- Fence/wall specification and height
- Officer requirements
- Increased ancillary spaces

New builds versus Expansions

New build prisons will always incur far greater costs than a prison expansion.

Prison expansions require far less additional ancillary spaces such as gatehouses, kitchens, recreation spaces and buildings where prisoners are employed or receive training. In addition, infrastructure works such as car parking, access roads and services connections, may already be in place. This can bring down the cost per bed markedly.

In the case of Hunter Correctional Centre, the new prison was an expansion of the existing Cessnock Correctional Centre. This meant that the site was 'infrastructure ready', which reduced the cost per bed.



Site Conditions

Site conditions influence the total end cost of any project. Prison projects often sprawl across more than 50 hectares of land, which means site conditions can have a significant impact on cost per bed.

Considerations include:

- **Civil works:** Prison sites are rarely flat, and sites that appear flat to the naked eye can still require extensive civil works to reach the required levels for construction.
- **Rock and contamination:** Should rock and contamination be encountered, costs can be considerable to mitigate risk associated with latent conditions.
- **Water management:** Due to the size of the sites, and in some cases a lack of stormwater infrastructure, considerable funds are required for the management of water, including culverts, retention basins and tanks.

Costs associated with these works vary considerably from prison to prison and can therefore contribute to a varying cost per bed.

Locality

The remoteness of a new prison can make a considerable contribution to the facility's cost per bed.

Considerations include:

- **Services infrastructure:** Lack of mains infrastructure requires connection to the local township, in some cases many kilometres away.
- **Site access:** Land clearing and new roads may be required.
- **Design requirements:** The prison may require officer accommodation or greater carparking.
- **Trade costs:** Reduced availability of subcontractors and materials in regional locations can inflate pricing.
- **Builders' preliminaries costs:** Regional locations may require the head contractor or other contractors to include unique items in their price such as staff accommodation or increased site amenity.

New prisons built close to major metropolitan areas are not as influenced by the above issues.

Marrngoneet Correctional Centre, Lara

A Growing Population and Cost for Governments

Australia has seen a surge in the number of people in custody over the past decade, driven in part by population growth and in part by tougher bail, sentencing and parole laws. In fact, more than 43,000 people are either in custody or in remand awaiting trial.

In Victoria, the prison population has grown by more than 81 per cent in 10 years (to 8,110) and is expected to increase to 11,000-plus by June 2023. In the wake of several high profile crimes, including Jill Meagher's rape and murder in 2012 and the Bourke Street killings in 2017, people being held on remand has increased by 196 per cent in six years and now accounts for 38 per cent of all prisoners in the system.

In NSW, more than 13,600 people have been incarcerated over the previous 12 months, an increase of 40 per cent since 2012 and 4.2 per cent year-on-year. Queensland jails house more than 8,800 prisoners and another 4,000 beds are planned by 2023.

A disproportionate percentage of the growth in our prison population is women. Female incarceration in Victoria has grown by 140 per cent in the past decade. In Queensland, the number of female prisoners has grown by 106 per cent in 10 years. By 2023, as tougher bail laws bite, it is expected that the number of women on remand will continue to rise (by almost 60 per cent) and surpass the number of female prisoners. Analysts and advocates argue that increasing rates of incarceration directly correlates with a significant shortfall of expenditure on housing and other support services that address the underlying causes of criminal behaviour, and enable women to meet the conditions for their release on bail.

Aboriginal and Torres Strait Islander peoples are disproportionately represented in Australia's prison population, with more than 12,000 people in custody (28 per cent of the total prisoner population), of which 65 per cent were sentenced (7,794 people) and 35 per cent unsentenced

(4,231 people).

The national average daily imprisonment rate is 2,476 persons per 100,000 adult Aboriginal and Torres Strait Islander population – compared to 221 persons per 100,000 adult population for all Australians.

The cost of running Victoria's prison system is now \$1.6 billion per year, three times the running costs in 2009-10. NSW incurs similar costs. But with the prison population expected to substantially increase over the next decade, we can expect these costs to skyrocket.

Sources: ABS, 2019; Allam and Porter, 2019; Knaus, 2019; Miller and Vedelago, 2019

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Media reports have highlighted a substantial difference in cost per bed from state to state. But our analysis indicates that multiple factors influence the cost of new prisons: approach and design, methodology, location and latent site conditions, whether the project is a new build or an expansion, and the level of security required.

A vastly increased investment in rehabilitation through education, training and other social services, including social housing, drug rehabilitation, mental health and allied support may, in fact, be in the best way to reduce public spend on prisons and deliver true value for money over the long term.



Ravenhall Correctional Centre, Victoria

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About Slattery & Kaizen

Slattery is a property and construction advisory firm specialising in quantity surveying, cost management and early phase project advisory, with an outstanding history spanning more than 40 years.

We work hand-in-hand with governments, institutions and organisations as well as planners, developers, architects and design teams on a broad range of property and construction projects.

A commitment to excellence and innovation, and an ability to become an integral part of the project team has earned Slattery the trust and respect of clients and project teams alike. Slattery adds value by taking control and ownership of the cost management process from the outset. We understand the importance to drive innovation and productivity.

Slattery's Kaizen Papers focus on sharing knowledge, ideas and pertinent cost information related to our industry. Kaizen is the Japanese word for improvement, and a business philosophy that strives for continuous improvement in process. We produce papers across the sectors we work with, which are shared with our clients and made available on our website for all to view.

We invite you to explore these further at www.slattery.com.au/thought-leadership

Our Justice Team

Slattery has a strong track record in justice projects, working on numerous police stations, prisons, courts and other facilities that support community safety and enable the management of people who come into contact with correctional and allied services.

Changes in bail, sentencing and parole laws in response to serious crime and community outrage, in combination with a far bigger police force and population growth, has accelerated growth in the system at an unprecedented rate over the past decade.

Our Justice team understand the complexity of working on live sites, on low to maximum security facilities with mandatory security procedures and construction in both city and regional locations to ensure justice services can continue.

We use our knowledge of design, procurement and construction challenges and opportunities to assist our clients to achieve successful outcomes.

For more information about our Justice capability and team, please contact our National Sector Lead, Mark Cathie.

mark.cathie@slattery.com.au
+61 438 151 911