Kinley Station value analysis: An assessment of the potential revenue and funding benefits from the delivery of a train station Final Report

Intrapac Property

February 2020

Disclaimer

This preliminary assessment is not intended to be read or used by anyone other than the intended user.

We prepared this preliminary assessment solely for Intrapac Property, HBI Lilydale and their related entities in accordance with and for the purpose set out in our engagement letter. In doing so, we acted exclusively for Intrapac Property, HBI Lilydale and their related entities and considered no-one else's interests.

We accept no responsibility, duty or liability to:

- anyone other than the intended user in connection with this preliminary assessment
- the intended user for the consequences of using or relying on it for a purpose other than that referred to above.

We make no representation concerning the appropriateness of this assessment for anyone other than Intrapac Australia. If anyone other than the intended user chooses to use or rely on it they do so at their own risk.

This disclaimer applies to the maximum extent permitted by law and, without limitation, to liability arising in negligence or under statute and even if we consent to anyone other than the intended user receiving or using this preliminary assessment.

Contents

THIS PAGE IS INTENTIONALLY LEFT BLANK

Executive Summary

Value Advisory Partners has been engaged to prepare a strategic assessment of the benefits and value created and potentially captured in relation to a proposed new station on the existing Lilydale rail line. The focus is on assessing two options for a new train station at Kinley and the different opportunities and potential development outcomes that could be delivered. The assessment involves an identification of the main benefits and the beneficiaries, along with a qualitative and quantitative assessment of the value that would be created and potentially captured.

This assessment compares a 'no station' (Base Case) option with two station options which include the duplication of the Lilydale rail line between Mooroolbark and Lilydale:

- Project Case 1 - "Future station" option - this means the station is planned for in conjunction with the planning scheme amendment, but with an uncertain physical delivery timeframe.
- Project Case 2 – "Guaranteed station" option – as in Project Case one, but with a clearly set-out timeframe for the delivery of a station, allowing for a higher density residential outcome.

The Project Cases consider a range of place-making initiatives and development opportunities that could be facilitated and delivered as a result of the core station elements and service delivery.

Value Advisory Partners finds that committing to a future station at Kinley (Project Case 1) could unlock opportunities for new development and create value within the surrounding catchment to a gross value of $534 million. This compares to the commitment to delivery of a station by 2025 (Project Case 2) which is assessed to unlock further value of approximately $792 million. On this basis, Project Case 2 would deliver a superior outcome on a gross basis compared to Project Case 1. In both cases, this value is additional to any value created through the redevelopment under a no station scenario.

In addition to this measured value, the development of a transit oriented development would be important to the success of the wider precinct and deliver a number of qualitative benefits, including a more walkable community, with a greater range of housing options. Additional retail and food and beverage offerings, as well as servicing public transport patrons and residents, would also service students at the Box Hill Institute (Lakeside) Campus. In turn, the new commercial and retail properties would help to provide better quality amenity and complement the Yarra Ranges Council's strategic plans.

A summary of the key benefits of the provision of a new Kinley Station location over a 'no station' option:

- 500 commuter car parks provided on Intrapac land within the Kinley development
- A mixed use centre with up to 11,000 sqm of commercial space and 19,400 sqm of retail space
- Up to 1,400 new jobs.

Value to beneficiaries

A high-level assessment of the value that would accrue to beneficiaries within the investigation area and that could potentially be captured from the delivery of each of the Project Cases showed there would be multiple beneficiaries under each scenario.

The biggest difference between 'no station' and 'with station' options is that under both Project Cases 1 and 2 the wider Yarra Ranges community would be a major beneficiary, including students as a sub-set of the community. This is attributable to improved accessibility to employment, education and amenity.

Builders and developers would benefit from the increase in built form outcomes, both in the Transit Oriented Development area as well as in the surrounding areas, through densification of the residential and proposed mixed

use areas. The benefit to builders and developers would be greater in Project Case 2 ($683M) than Case 1 ($444M), ostensibly from the greater number of dwellings and GFA that would be delivered at the TOD.

Residential property owners in the surrounding area would benefit in value uplift to land from access to increased amenity, services and transport. Greater value would accrue with the 'with station' (Project Case 2); option due to the earlier amenity and access from the station than the 'future station' option (Project Case 1).

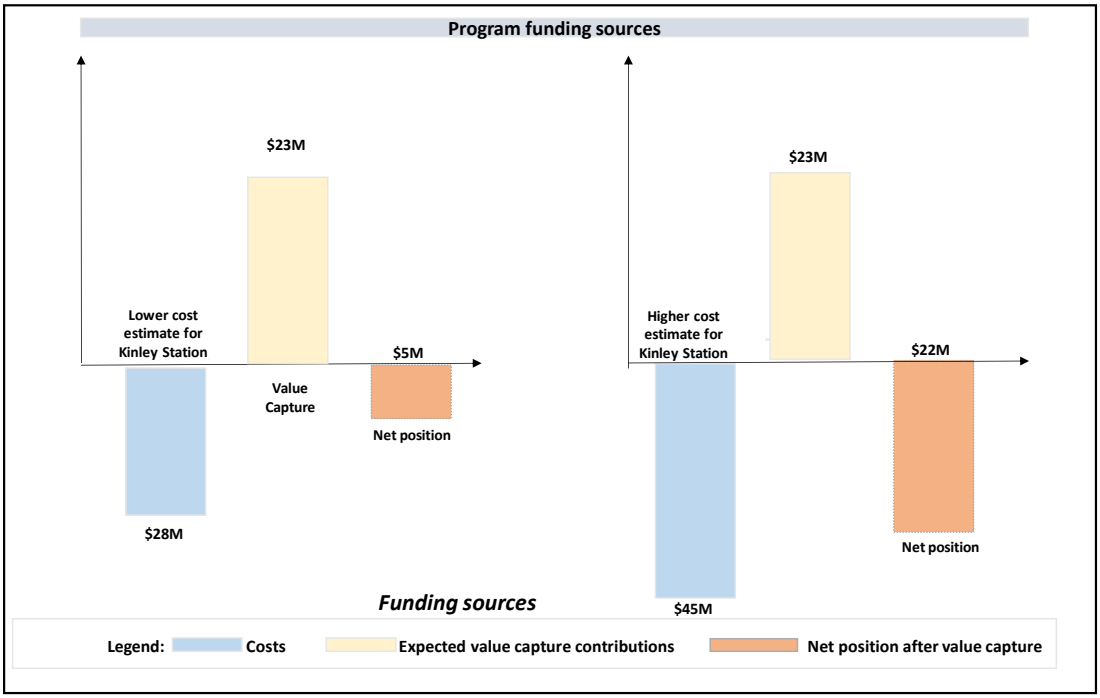
Public Transport users would benefit from reduced travel delays and greater safety and amenity as well as from delivery of 500 new commuter car parks.

Government would be a major beneficiary through increased tax revenues and also in a policy sense, through the delivery of improved transport, housing and employment outcomes within the Kinley development and the wider investigation area and delivery of additional commuter car parking.

Revenue and funding benefits

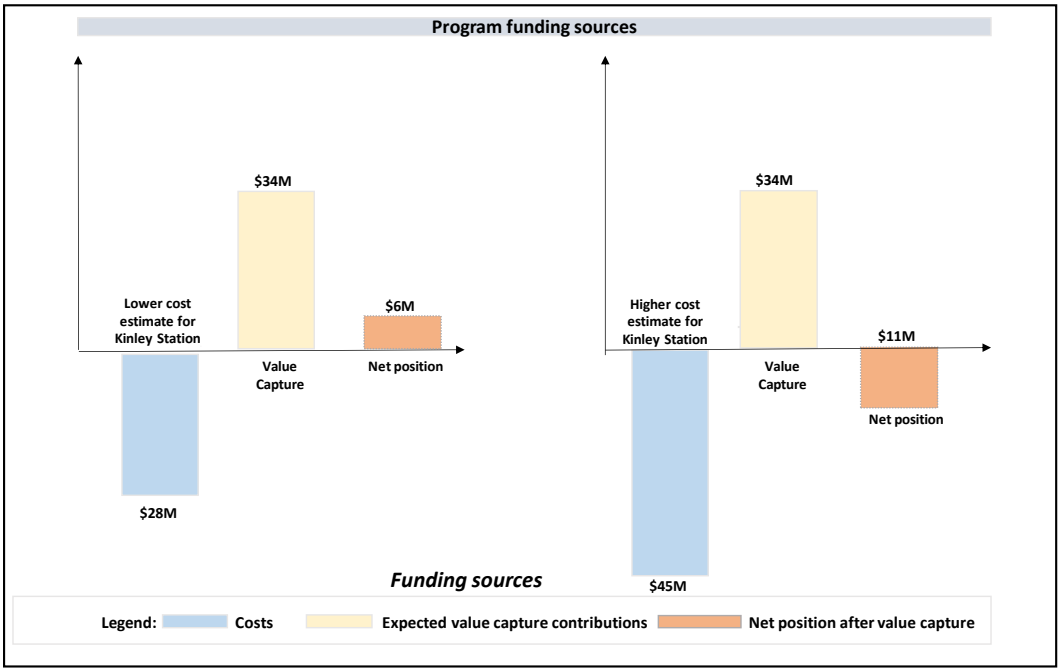
Our analysis finds that $23 to $34 million value (NPV) could be captured and applied to the cost of delivering the station. Under Project Case 2, a station at Kinley could be delivered at no net cost to Government. It presents government with an innovative and affordable approach to the delivery of infrastructure and would demonstrate the benefits of the Victorian Value Creation and Capture Framework.

Figure 1: Potential revenue and funding benefits of providing for a future train station at Kinley (Project Case 1)



Source: Value Advisory Partners

Figure 2: Potential revenue and funding benefits of delivering a train station at Kinley (Project Case 2)



Source: Value Advisory Partners

Recommendations

1. The planning scheme for the precinct include provision for a future station at Kinley as part of an integrated transport and land use plan to optimise the opportunities and benefit from the government's future investment in the rail infrastructure.
2. The State commits to a program and timing for the delivery of the Kinley station and rail duplication to improve accessibility and mode share to mass transit and lack of commuter car parking in the corridor.
3. The relevant authority apply Victoria's Value Creation and Capture Framework to capture some of the value that would be created from the delivery of a new station at Kinley as a means of raising revenues towards the cost of the project.
4. Further detailed analysis be undertaken to confirm the results of this initial strategic assessment and to evaluate the merits of each opportunity as part of an integrated programme.

1 Introduction

1.1 Purpose

Value Advisory Partners has been engaged to prepare an assessment of the potential revenue and funding benefits in respect of the delivery of a train station at Kinley. The focus is on assessing two potential options for a new train station at Kinley and the opportunities and potential development outcomes that could be delivered.

This analysis assesses the values attributable to a range of opportunities and the likely beneficiaries and potential for those beneficiaries to contribute to the funding of the station infrastructure. The potential for the delivery of a Transit Oriented Development with a mix of residential, commercial and retail property uses associated with the timing of delivery is a significant consideration.

1.2 Background

New station at Kinley

Intrapac purchased the former Lilydale quarry site in 2016. The 163 ha redevelopment includes a first stage that has planning approval which is being delivered. Intrapac is now preparing a Planning Scheme Amendment for the balance of the site with a development plan that contemplates the delivery of a potential future train station. As part of this process, Intrapac has and plans to further engage with government and other key stakeholders to present the benefits of delivering a new station for the community as part of the redevelopment of the precinct.

The provision of a new station on the Kinley site and the timing of its delivery would be important for the planning in terms of guiding future development outcomes for the site.

Future growth on the Lilydale line is constrained by a single track between Mooroolbark and Lilydale. Rail duplication would enable further line extensions as well as allow for increased services on the line.

Transit oriented development opportunity

Intrapac has identified the opportunity to deliver a Transit Oriented Development (TOD) to be integrated with the proposed station and the provision for onsite commuter car parking. The proposal would present superior strategic planning and urban design benefits to a "business as usual" development, creating an opportunity to deliver a new vibrant residential mixed use community connected to transport and employment, consistent with State and local government policy objectives (*Plan Melbourne* and Yarra Ranges' *'Vision 2020 By Design'*).

1.3 Scope and limitation

The task of the engagement is to:

1. aggregate revised information and update current value creation and capture outputs, based on revised data (supplied by Intrapac) and in consultation with Intrapac; and
2. provide an analysis of the net financial impact to government from the delivery of a Kinley station after considering costs, revenues and potential value capture options.

Results are presented in a form that is aligned with the Victorian State Government's Value Creation and Capture Framework and guidelines for a Strategic VCC Plan.

The scope of the assessment is limited to an analysis of the potential opportunities that:

- Could be associated with a new station options and rail duplication
- Are proposed for the master plan on the Intrapac land

- Could be delivered by other land holders and developers within the investigation area
- Could be delivered by State or local government.

Specifically excluded from this scope of requirements is analysis of:

- The detailed quantification of the value created from the opportunities
- Any assessment of the transport user and operator benefits of the rail options
- The detailed quantification of any potential value capture revenues, including detailed analysis of potential value capture mechanisms
- Broader network impacts as a result of the different transport opportunities, i.e. outside the investigation area
- Broader economic impacts, such as tourism, GDP, jobs, etc.
- Comprehensive stakeholder consultation and engagement.

In addition, the following limitations apply:

- Uncertainty regarding the timing and full extent of government interventions in the Precinct to facilitate land use change and public transport infrastructure
- The analysis involves several assumptions as to the delivery timeframe of key transport and infrastructure that may change where planning has not yet been finalised; discount rates; etc. (See Appendix C)
- The period of assessment has been defined as 2019 – 2049
- An assessment of costs related to the delivery of non-transport opportunities has not been undertaken.

1.4 Need definition

There is a need to improve public transport connectivity to major retail, employment, education and health nodes and to provide non-road based transport options within the Yarra Valley Ranges area. While there is a suburban rail line to Lilydale station, there is no station between Mooroolbark Station and Lilydale Station, a length of 4.7km. The line here is also single track and so the frequency of the service is lower than between Mooroolbark and Ringwood. This service gap discourages use and patronage.

Further, this lack of accessible mass transit connectivity is resulting in a heavier reliance on road-based transport modes with a result that the Lilydale corridor is experiencing increasing levels of congestion during the peak. This is true for road transport along the main arterial roads, with buses also caught up in the congestion (*Source: Draft Yarra Ranges Council Integrated Transport Strategy 2020-2040*). The Government is investing in a grade separation of the highway at Lilydale as part of its plan to ameliorate this congestion, however, it is yet to commit to the rail duplication and delivery of a station at Kinley.

Reliance on road-based transport is also resulting in parking stress within the corridor and at stations along the Lilydale Line as far as Mooroolbark and Croydon as commuters from outside the rail catchment areas seek to park and take the train towards the city for work.

Congestion issues pose dis-benefits to a range of beneficiary groups, including travel time delays and unreliability, safety concerns, reduced effective accessibility, impacts on productivity or time at home.

Given Kinley's strategic significance as a growth precinct in a part of Melbourne's outer east that is constrained for growth, and the problems that have been identified here, it is important to understand the positive benefits of the rail duplication and the commitment to a new station at Kinley.

1.5 Planned and delivered changes for the Lilydale line

Level Crossing removal

The level crossings at Manchester Road, Mooroolbark and Maroondah Highway, Lilydale will be removed by building a rail bridge over the road in both locations. Two new elevated stations will be built at Lilydale and Mooroolbark as part of the project. Both level crossings are scheduled to be removed by 2022. Additionally, the new stations are expected to provide for a duplicated line between Lilydale and Mooroolbark.

Commuter car parking

There is strong demand for the limited car parking spaces along the Lilydale line, particularly at Lilydale and Mooroolbark. This parking shortage is becoming chronic, with commuters, workers and shoppers all competing for car parking. Station car parks are full early in the morning (*Source: Draft Yarra Ranges Council Integrated Transport Strategy 2020-2040*). These pressures have a spillover effect by forcing commuters up the line to stations like Croydon or further afield. The lack of commuter car parking supply and a suburban rail station servicing the area would also impact housing and population growth in Yarra Ranges.

The issue of commuter car parking shortage is one that is widely recognised and resulted in the Andrews Labor Government (November 2018) committing $150 million for a Car Parks for Commuters Fund, to build over 11,000 new spaces at rail stations across the state. This commitment built on the 10,000 new and upgraded commuter car parks delivered 2014 to 2018.

Although off-street paid parking and on-street free parking in the area will support demand of visitors and workers, commuter car parking will be beyond capacity, with all spaces occupied by early morning during weekdays. The State Government recently committed to extending the Mooroolbark Station car park. The Federal Government is also funding commuter car parking upgrades at Croydon, Mitcham and Ringwood (Commonwealth Parliament House of Representatives, Adjournment Debate 14 February 2019).

While these initiatives would provide additional commuter car parking to take immediate stress off stations along the Lilydale Line, there is potential for an additional 500 car spaces to be created at the Kinley Station. This would significantly rebalance parking supply and demand in the region.

1.6 Dependency of vehicles for transportation

Dependency on private vehicles for transportation and for journeys to work (JTW) is currently at high levels across areas of Lilydale, Mooroolbark and Chirnside Park. Vehicles make up 76 per cent of all journeys to work, with only an average of 6 per cent of residents opting for Public Transport or Active Transport (refer Table 1). The lack of station commuter parking and lack of suburban train stations/services within the catchment may all be contributory reasons leading to higher vehicle dependency than the metropolitan average.

Opportunities created by a new station at Kinley have the potential to shift mode share towards public transport and active transport, as existing and future catchment of residents would have more direct access to metropolitan train services within the investigation area (see map in Section 2.2), where walking and cycling 1-2 kilometres would be a viable option and decrease dependency on private vehicles.

A new Kinley Station would also be on the doorstep of the Box Hill Institute (Lakeside) Campus. It creates an opportunity to reduce the current percentage of staff and students using private vehicles to access the campus. Reduced parking demand could free up land creating opportunities for the reuse of some parking land for the construction of new TAFE buildings, including student accommodation.

Table 1: Journey to Work percentages of different modes in different areas along Lilydale Line

Method of Travel	Lilydale	Mooroolbark	Chirnside Park	Kilsyth	Montrose	Mount Evelyn	Average
Train	6.6%	8.5%	5.4%	5.7%	5.0%	4.9%	6%
Car – as driver	71.0%	71.1%	72.4%	73.2%	71.3%	72.9%	72%
Car – as passenger	4.1%	3.9%	4.7%	3.4%	4.3%	4.1%	4.1%

Source: Cardno, Lilydale Quarry Urban Renewal Development Kinley Train Station Patronage Estimate

Analysis by Cardno (October 2019), *Lilydale Quarry Urban Renewal Development: Kinley Station Patronage Estimate*, forecasts that the average daily patronage at a new Kinley Station would be between 2,500 and 3,000, due primarily to the higher density population within walkable proximity to the proposed train station.

1.7 Policy and community support

The rail duplication and station would address key policy objectives of the Victorian Government as outlined in its strategic document *Plan Melbourne:*

- Improve access to jobs across Melbourne and closer to where people live
    - Support the development of a network of activity centres linked by transport (Policy 1.2.1)
    - Plan for new development and investment opportunities on the existing and planned transport network (1.3.2)
- Creating a city of 20 minute neighbourhoods
    - A 20-minute neighbourhood can create a more cohesive and inclusive community with a vibrant local economy—reducing social exclusion, improving health and wellbeing, promoting a sense of place, reducing travel costs and traffic congestion, and reducing carbon emissions across the city as a whole. (Direct 5.1)
- Keeping up with the growing transport needs of the city
    - Congestion and overcrowding is already an issue on parts of the road and public transport network, particularly at peak times.
- Create pedestrian and cycling friendly neighbourhoods
    - Priority should be given to pedestrian movements in neighbourhoods and amenity improvements. Continuous, high-quality walking routes need to be developed and streets need safe, pleasant and attractive walking routes. (Policy 3.3.1)
    - Urban renewal sites should offer high levels of amenity and connectivity and integrate into surrounding neighbourhoods (Policy 1.3.1)

2 Investigation area and options considering delivery of a station

2.1 Introduction

Three options are considered as part of this high-level value analysis:

1. Kinley redevelopment with 'no new station' (Base Case)
2. Project Case 1 - "Future station" option - this means the station is planned for in conjunction with the planning scheme amendment, but with an uncertain physical delivery timeframe.
3. Project Case 2 – "Guaranteed station" option – as in Project Case one, but with a clearly set-out timeframe for the delivery of a station, allowing for a higher density residential outcome.

The analysis considers the station options taking an integrated transport and land use perspective. This means that in addition to each transport option the analysis considers other proposed and potential opportunities that could be delivered as part of each Case. The investigation area is the area identified that would be influenced by the delivery of the transport infrastructure and encompasses the identified opportunities. For example, the proposed rail infrastructure can be disaggregated into its constituent elements and categorised as transport opportunities. This would facilitate other amenity, commercial or development opportunities which could be delivered in addition to those transport opportunities. In particular, the new denser resident base would in turn need to be serviced by additional retail and commercial opportunities, or additional community infrastructure. Delivery of these opportunities would be dependent on planning approvals, with further detailed design and cost assessment occurring at a future stage of project development.

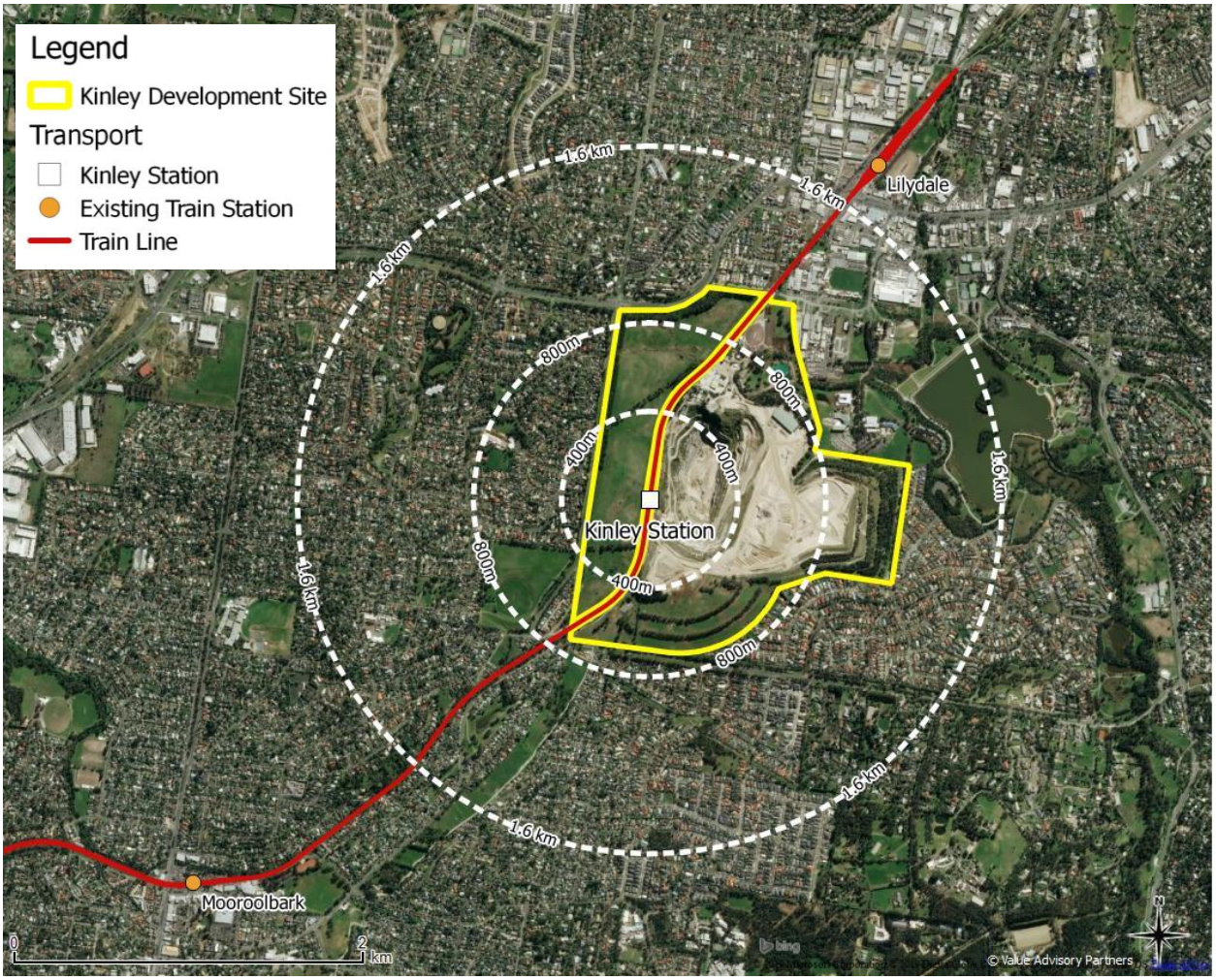
2.2 Investigation Area

For the purpose of the analysis the investigation area is defined as the area that would be impacted by the delivery of a new metropolitan train station at Kinley. A radius of up to 1,600m from the core of the potential station locations marking the area to which value uplift could be attributed. There would also be user beneficiaries and benefits generated beyond this to a radius of up to 2.35km (see Cardno Report). While some general commentary may be made regarding these the main focus of the analysis will be within the smaller investigation area identified in Figure 3 below.

The boundaries of the investigation area are approximately:

- North Melba Avenue and the Maroondah Highway
- West Before Manchester Road
- East The Ridge Road, Bella Vista Way and the Lilydale Lake and park.
- South Larbert Road

Figure 3: Kinley investigation area



Source: Value Advisory Partners

2.3 'No station' at Kinley (Base Case)

The 'no station' scenario establishes a base case of "business as usual". Under this scenario it is assumed that for the nominated period of analysis (to 2049) there would be no new station between Mooroolbark and Lilydale stations, with the current single track operating between the two stations. The Base Case assume there would be a level of change with baseline growth, both demographic and employment, including planned or budgeted investment and initiatives that are in the public domain or available in state or local government (Yarra Ranges Council) budget papers.

2.4 Provision for a future station at Kinley (Project Case 1)

Committing to the provision in the planning scheme for a future station without specifying a year characterises Project Case 1. Under this scenario, the Transit Oriented Development would deliver fewer residential dwellings and the station would have a later (nominated as 2030) delivery as being the only differences to Project Case 2.

As the market would only respond to committed infrastructure delivery, this may have an impact on the ability to deliver the residential outcomes in the time frame provided for. Importantly, under this scenario commuter car parking would be identified on the plan but not be delivered before delivery of the station.

The key elements of the master plan in Project Case 1 include the following:

- Townhouses and apartments (and other medium density dwellings) – 3,031 dwellings
- Commercial office (11,080sqm GFA)
- Mixed retail (25,604sqm GFA)
- Open space
- Sustainability measures
- Retail and commuter car parking (820 spaces) (see Figure *4***Error! Reference source not found.** below).

2.5 'With station' integrated with a transit oriented development at Kinley (Project Case 2)

Project Case 2 envisages delivery of a new station at Kinley and a Transit Oriented Development delivered by 2025. The cost of delivery of a station has been assessed for Intrapac at around $28 million (2018$) (not including the cost of rail duplication).

With the delivery of a new station there is potential to progress a master plan with greater density that is centred around the transit infrastructure.

Similarly, but not included in the analysis, it is envisaged that delivery of a new station could facilitate a new or amended master plan for the Box Hill Institute (Lakeside) Campus.

2.6 Value creation mechanisms

For this analysis 27 opportunities and actions are identified that would create value associated with a new Kinley station and the duplication of the rail line between Mooroolbark and Lilydale.

These opportunities were identified as part of an earlier analysis and could be delivered by a number of parties, including Intrapac, the Victorian Government, Yarra Ranges Council and other private or community providers. Further development of the opportunities through engagement with a wider group of stakeholders would be recommended at a later stage. A planning scheme amendment is required to provide for a station and the land use change to allow for increased development outcomes.

The main initiatives identified for creating value are:

- New rail duplication, with a new station at Kinley
- Active transport enhancements (e.g. to and through the Kinley development and to the Box Hill Institute (Lakeside) Campus)
- Bus service enhancements
- Design through enhancements to improve the environmental performance and amenity in the Kinley development
- New residential, commercial and retail development opportunities
- Delivery of new community infrastructure
- New commuter car parking.

Figure 4: Kinley Masterplan showing commuter car parking opportunities

2.7 Summary of the Project Cases

Table *2* (below) summarises the key transport elements for each Case as well as the impact areas for the identified opportunities. Further discussion of the opportunities for value creation is provided in the following section.

Table 2: Summary of station options for Investigation Area

Case	Description	Major impact areas
Base Case	**"No new station between Lilydale and Mooroolbark"** • Establishing a base-line as a means for comparing each option. • Current and projected population and employment growth within the Investigation Area.	• Continued of shortage of commuter car parking in the Lilydale corridor due to commuters coming to "end of the line" • Rezoning master plan with reduced housing and amenity outcomes at Kinley • No impact on changes in mode share • Increasing congestion in area from reliance on road-based transport mode • Lower density residential outcome more similar to the surrounding area
Project Case 1	**Provision for a future new train station at preferred location within the Kinley master planned development** • Provision for station made in the Planning Scheme amendment approving the master plan. • Provision for rail duplication between Mooroolbark and Lilydale • Assumed delivery at 2030 or 2035.	• Mixed lower, medium and higher density residential outcome at Kinley • New pedestrian and cycle infrastructure • Provision for commuter car parking
Project Case 2	**New train station delivered at preferred location within the Kinley master planned development** • New Kinley Station delivered by 2025. • Rail duplication between Mooroolbark and Lilydale • Direct rail access to Ringwood and through to Melbourne CBD	• Improved services on Lilydale Line – particularly during the peak • Transport oriented development with higher density residential outcomes site • Mixed use outcomes in Kinley town centre • 500 commuter car parking spaces. • New access road to existing residential area east of • New pedestrian and cycling infrastructure

Source: Value Advisory Partners

3 Assessment of the potential revenue and funding benefits of the project options

3.1 Introduction

This updated assessment of value created and potential value that could be captured has been completed based on documentation provided by Intrapac and changes to the timing and mix of residential development that could be realised by a Kinley Station as described in Project Case 1 and Project Case 2. The value creation and capture analysis provides an initial assessment of the potential value uplift and value capture revenues (compared to a Base Case of 'no station') for a 30 year period of 2019 to 2049, discounted to give a present value (PV). All results in this section represent the total value created for the 30 year period.

The following factors were identified as being out of scope for this assessment:

- A *detailed* analysis of the value created from the opportunities identified
- Valuation of individual opportunities
- Consideration of detailed cost estimates to construct project cases and opportunities

It is also important to note that the development uplift assessed represents estimates the gross amount of the additional gross development value created, prior to deduction of all land, construction and design/development costs, taxes and GST.

Table 3: Summary of analysis performed

Analysis performed	Description of analysis	Benefits analysis
Value uplift to residential properties	The provision of amenity from the enhanced transport and other opportunities would add value to the surrounding residential properties through better rail access and enhanced connectivity. Referencing similar analysis for other projects, the value is quantified at a high level and discounted according to timing and proximity to the opportunity.	• Increased transport, connectivity and retail, community and other amenity for residential property owners
New development in the Kinley town centre and surrounding community	Using projected GFA for the town centre and the projected value of potential new development (residential uplift in the Kinley and Mooroolbark/Chirnside communities) over the period of assessment. This is discounted to present value.	• New residential, commercial and retail, properties available to be developed

Source: Value Advisory Partners

3.2 Dwelling and population outcomes

Intrapac has prepared a new (medium density) Master Plan to house up to 7,600 people (averaging 2.36 person per dwelling - source: Ethos Urban) in 3,031 dwellings and a retail and commercial town centre, with provision of a

future station at the centre of the Kinley development. Master plan outcomes are in addition to the current Phase 1 delivery of 191 lots which total 3,222 lots. Early delivery of a station would potentially allow a higher density target of approximately 4,002 dwellings (high density). A 'no station' outcome would deliver a low density development of around 2,190 dwellings, but without the retail amenity or ongoing jobs (Table 4).

Provision and delivery of a station would yield a significant 1032 to 1812 additional dwellings. This has implications not only for housing a greater population (at least 1,880 people), but also in delivering greater housing choice, to suit a range of households and incomes living in the Yarra Ranges municipality, through providing a larger proportion of medium density and apartment dwellings.

Table 4: Residential uplift from station options

	Low density	Medium density	High density	Total Dwellings
Base Case	1,031	1108	52	**2,190**
Project Case 1	1,020	1589	613	**3,222**
Project Case 2	1,072	2013	918	**4,002**

Note: Totals include delivery of 191 lots as part of Phase 1.
Source: Intrapac Property

3.3 Value analysis outcomes

Three levels of analysis are included in this assessment:

- Value uplift to beneficiaries of a proposed new Kinley Station and TOD
- Value uplift from development enhancements arising from the rail extension initiatives around a new Kinley Station (new development that would not otherwise happen without the new rail infrastructure)
- Further opportunities to create value that could be added to the rail program or delivered by other parties, assessing the value uplift of these further opportunities to the beneficiaries (eg pedestrian/cycling paths, community infrastructure)

3.4 Total value created by station option

The proposed future station at Kinley (Case 1) could unlock opportunities for new development and community amenity within the TOD and the surrounding walkable catchment to a gross value of around $534 million. This compares to the 'with station' (delivering a station earlier) (Case 2), which is assessed to create value of approximately $792 million. Case 2 would deliver a superior outcome on a gross basis compared to Case 1, delivering an additional $160 million in value. Further, $23 to $34 million could be captured and be available to contribute towards funding the station at Kinley.

If the 'future station' option was pushed out to 2035 this would reduce the value created from$534 million to $527 million and the potential value captured to $22 million (assuming no change to sales rate and prices).

Table 5: Gross Value Created and Captured ($M NPV)

Case	Value that would be created ($M)	Potential value to be captured ($M)
Project Case 1 – Future Station	534	23
Project Case 2 – New station at Kinley	792	34

Source: Value Advisory Partners

In addition to this measured value, the development of the TOD would be important to the growth of the wider area and complement the growth of the Box Hill Institute (Lakeside) Campus by further activating the area and

increasing the number of people living and working there. The new retail and food and beverage offerings, as well as servicing public transport patrons and residents would also service the students at the Lakeside Campus of Box Hill Institute. In turn, the new commercial and retail properties would help to provide better quality amenity and complement the Yarra Ranges Council's strategic plans.

It is important to note that a Base Case "no rail station" scenario is unlikely to be value neutral. The Base Case would not address the critical issues identified earlier in Section 2. There are significant gaps in the mass public transport network in the immediate corridor. This impacts the public transport accessibility to the TAFE (Lilydale station is more than 1.1km) – as well as meaning a lack of connectivity for those who live between Mooroolbark and Lilydale. The Base Case would leave the over reliance on road-based transport unchanged with road users facing unreliable journey times due to increasing congestion, which is only projected to increase over time. Further, there is already a shortage of car parking (particularly commuter car parking) in the region and this is projected to worsen with potential repercussions for economic activity, transport patronage growth and general accessibility. The value of these dis-benefits have not been assessed but are important considerations to the case for a new station at Kinley.

3.5 Value created by benefit (for VCCF value category)

The impact of the provision/delivery of a station at Kinley would be its unlocking of commercial opportunities (Project Case 1 and Project Case 2). In addition to the residential development, a greater population density would support the creation of additional retail and commercial floor space. The potential commercial opportunity unlocked would amount to $390 million in Project Case 1 and $639 million in Project Case 2.

Table 6: Value created by VCCF ($M, NPV)

	Project Case 1 Future Station	Project Case 2 With new station
Improving Accessibility	$71	$79
Increasing Asset values	$12	$13
Unlocking commercial opportunities	$390	$639
Enhancing Public Safety and Amenity	$13	$13
Protecting and enhancing the environment	n/a	n/a
Increasing social capital	$47	$48
Total	**$534**	**$792**

Source: Value Advisory Partners

In both Cases the delivery of the train station provides improved accessibility to public transport and connectivity with services and amenity benefits that are valued by the existing residents (at the date of the station delivery in approximately 2030 and 2025, respectively). This is assessed at $71 million and $79 million respectively. This value would include accessibility to improved pedestrian and cycling infrastructure that could occur if a higher density development occurred. The additional value created under Project Case 2 is due to a higher population receiving the benefit of the new station earlier.

These outputs reflect the values under the Victorian Value Creation and Capture Framework.

3.6 Value to beneficiaries

This analysis focuses on two main beneficiary groups that would benefit from the delivery of a station at Kinley, namely local residential property owners and developers/builders.

Builders and developers would benefit from increased built form outcomes, both in the Transit Oriented Development area as well as in the surrounding areas, and through potential densification of the residential areas

to a gross amount between $444 and $683 million (Table 7). The benefit to builders and developers would be greater in Case 2 ostensibly from the greater number of dwellings that would be delivered at the TOD. It is important to note that the value to developers/builders represents a gross amount of the additional development value that would be created, prior to deduction of all land, construction and design/development costs, taxes and GST, and is not a measure of profitability or direct capacity for making contribution.

Residential property owners would benefit in value uplift from access to increased amenity, services and transport. This would be greater with the earlier delivery of the proposed station at Kinley $109 million (Case 2) compared to $90 million from later delivery (Case 1) (Table 7).

Table 7: Gross Value Created by primary beneficiaries ($M NPV)

Case	Value that would be created ($M)
Project Case 1 – Future Station	
Developers/Builders	444
Residential property owners	90
Project Case 2 – New station at Kinley	
Developers/Builders	683
Residential property owners	109

Source: Value Advisory Partners

While not quantified in this assessment, beneficiaries would not be confined to property owners and developers, but would extend to include public transport users, road users, employers and employees, and active transport users, as well as government (local and State) from the delivery of the station at Kinley. These beneficiaries and the associated benefits would include:

The Community would be a major beneficiary, in particular students and employees as major sub-sets of the community. This is attributable to improved accessibility to employment, education and improved amenity.

Public Transport Users would benefit from reduced delays and greater safety and amenity, and accessibility to commuter parking (assumes also rail duplication allowing greater frequency of services).

Public Transport Operators would benefit from increased patronage on the Lilydale Line.

Government (local and State) would be a major beneficiary, through tax revenues, but also in a policy sense, through the delivery of Plan Melbourne outcomes – eg improved transport, greater utilisation of public transport, and provision of amenity that would encourage walking and local travel; housing close to employment; greater choice and diversity of housing outcomes within the Kinley area. For further detail on potential value capture benefits see the section of Value Capture below.

3.7 Potential value capture to contribute to the cost of the Kinley Station

The delivery of the Kinley station could be funded (at least in part) through a value capture strategy, applying the Victorian Government's Value Creation and Capture Framework.

The outcomes of our analysis shows that Project Case 2 – earlier delivery of a station at Kinley - would have the most significant amount of potential value capture opportunities, amounting to $34 million that could be potentially captured by Government to cover the estimated cost to deliver a train station at Kinley (based on estimates of station cost supplied by Intrapac). It is important to note that this would not include the costs of rail line duplication, which is assumed to be delivered under all cases as part of necessary and already identified network development enhancements. It would only be under a scenario where Intrapac wanted to bring forward the delivery of the rail line duplication that it could be part of the Kinley development uplift consideration.

Table 8: Value Captured by mechanism ($M NPV)

Case	ICP	Special Rates	Stamp duty	Total
Project Case 1 – Future Station	2	7	14	23
Project Case 2 – New station at Kinley	3	8	23	34

Three potential mechanisms are identified:

- Stamp Duty – this is the main mechanism and is confined to an assessment of stamp duty paid on the first sale of all **new additional residential and commercial property created** as a result of the station being delivered. That is, the purchasers of those properties that have a nexus to the delivery of a train station would contribute to the funding of the station. This is currently administered by State Government and would act as a passive mechanism, in that the mechanism already exists and would automatically collect the revenue from development uplift. This mechanism has been applied here as a one-off charge on new residential, commercial and retail development over and above what would be collected in the Base Case.

- Infrastructure Contributions Plan – this is a new mechanism that replaces the former DCP (Development Contributions Plan) deployed in relation to new developments and that would be charged on a per square metre basis or per unit basis for all new development delivered. A Supplementary Levy can be implemented to pay for State infrastructure, but this has not been used in Yarra Ranges Council. This could be administered by the local council. The ICP is a potential mechanism that would require specific government approval to be able to collect revenues and would likely be applied in the Base Case irrespective of the delivery of a station. In this scenario the ICP mechanism would be a passive mechanism. The assessment considers the ICP as a one-off charge and would be paid by the developer of residential, commercial and retail development over and above that that would be delivered in the Base Case as a contribution to a proportion of the train station construction costs. This would represent additional potential revenue that would not have formed part of the initial calculations (under a Base Case scenario). The rates used in this assessment are conservative and could be increased. It is also noted that the intent of the ICP mechanism can also be captured through alternative means such as Section 173 agreements given the unusual circumstance of having a single proponent for the Kinley redevelopment.

- Special Rate – this would be a supplementary rate collecting revenues from surrounding existing property owners (from the time of delivery of the rail infrastructure) that would receive an uplift in their land value as a result of their proximity to the new train station and associated services and amenities of the transit oriented development. This would be an active mechanism, which although provided for in legislation, currently has not been used by the State as a value capture mechanism. It would require specific government approvals to be able to be used as a value capture mechanism to collect revenues. This mechanism is recurring has been applied for the study period to 2049.

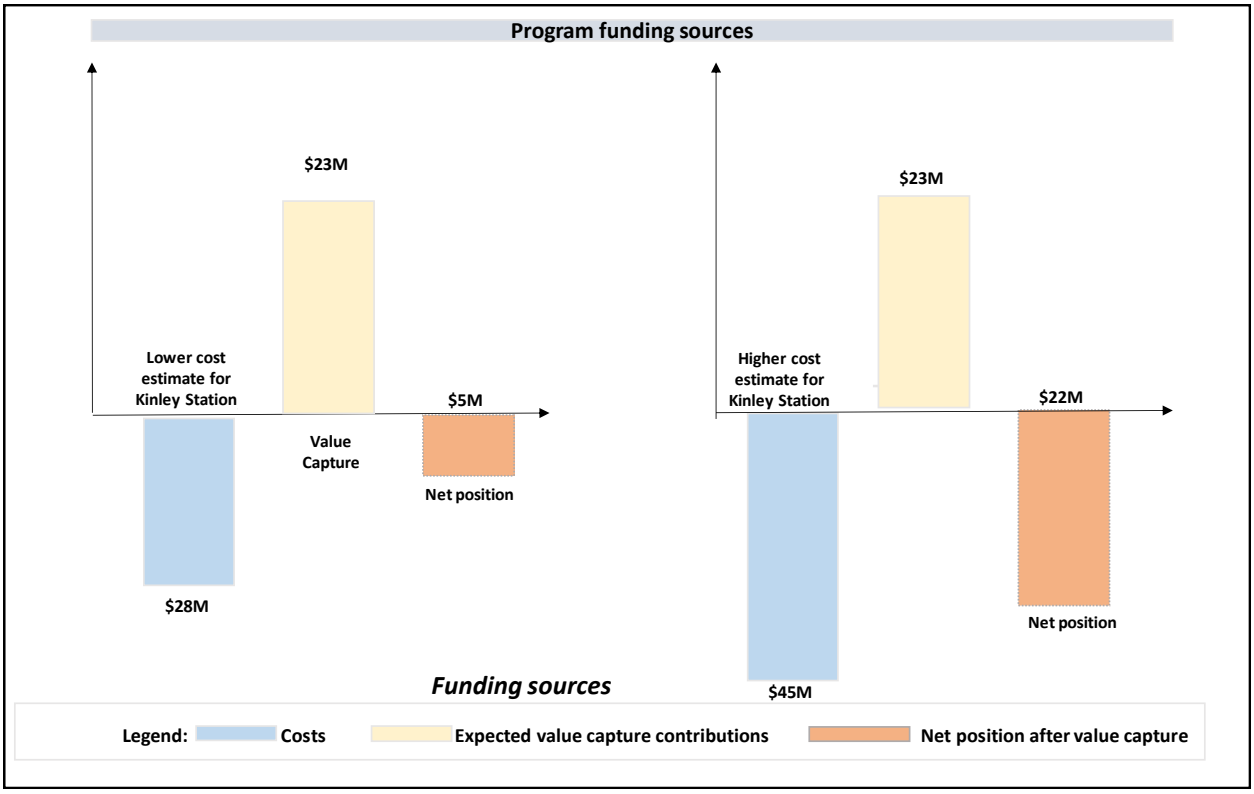
3.8 Key findings

Value Advisory Partners has completed an assessment for the benefits arising from the proposed Kinley Station and Transit Oriented Development initiatives. We have found that the earlier delivery of a station (Project Case 2) compared to provision for a future station (Project Case 1) would have the greatest catalysing effect driving growth and creating value in Kinley and the surrounding area. However, the implication is that the value created would rapidly diminish if the proposed investments were pushed out beyond 2025 and a resulting lower density residential outcome is delivered.

We have assessed the value creation opportunities in and around Kinley from the two station Case options. Results from the assessment show:

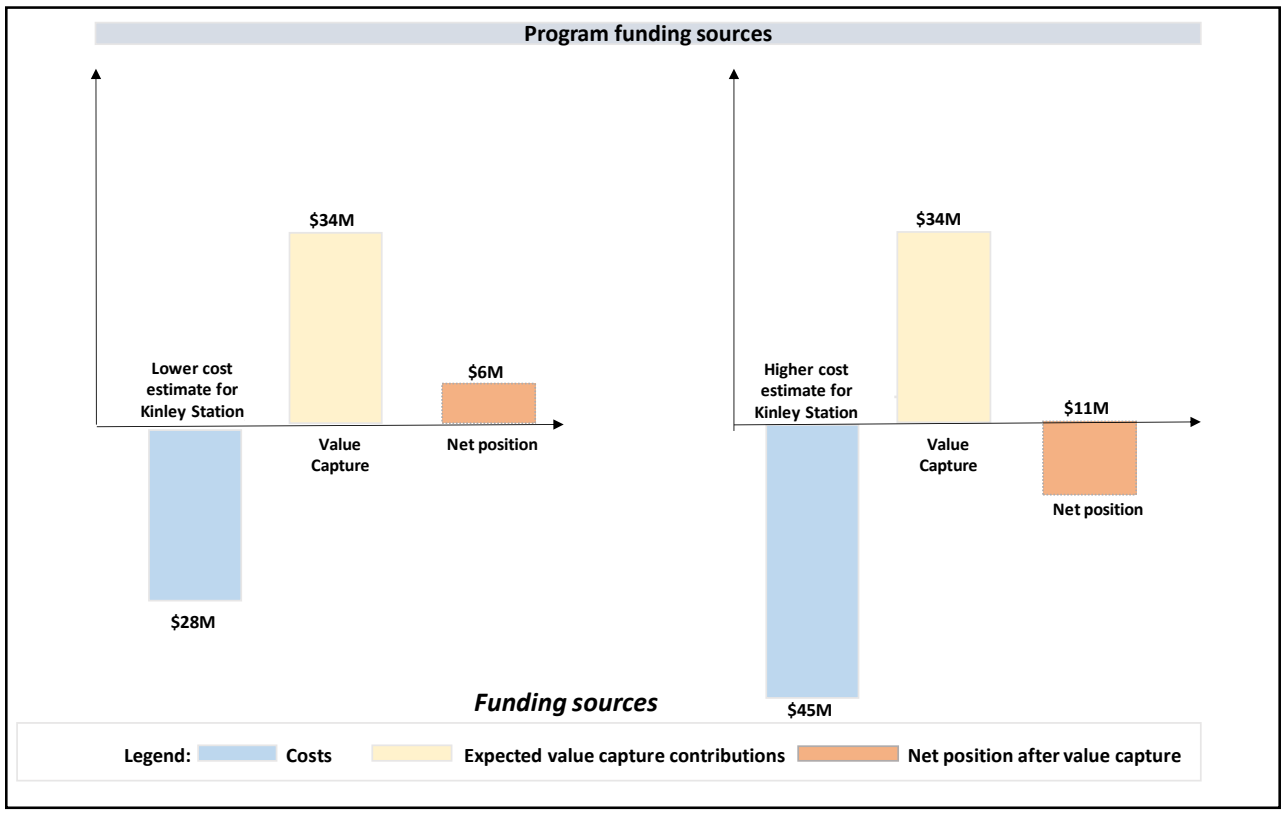
- The value created from all opportunities (for both Project Cases) would be in the range $534 million to $792 million
- The 'with station' option at Kinley would create an additional value of $158 million above the later delivery ('future station')
- Potentially $23 to $34 million in value capture would be available to contribute towards the development of the Kinley Station as per Figure *5* and Figure *6*.

Figure 5: Potential revenue and funding benefits of providing for a future train station at Kinley (Project Case 1)



Source: Value Advisory Partners

Figure 6: Potential revenue and funding benefits of delivering a train station at Kinley (Project Case 2)



Source: Value Advisory Partners

The new additional benefits would be predominantly from:

- The additional development arising in the Transit Oriented Development (TOD)
- The additional amenity created by the TOD for the surrounding residents
- The additional opportunities that have the potential to be delivered as a result of the delivery of a station and the TOD.

The main beneficiaries from the rail extension would be predominantly:

- Private builders and developers from increased development opportunities
- Residential property owners from access to increased amenity, services and transport
- Community (including students) from improved accessibility, better access to other amenities, and the delivery of new student accommodation and other educational infrastructure
- Government from delivery of policy outcomes (transport, housing and employment, commuter car parking) and increased property values and tax revenues from higher/additional property values within the catchment.

This is an initial strategic assessment that has focused on the value to the main beneficiaries and value capture. We have built-in to our value analysis an ability to adjust any or all of the following key assumptions: discount rate, mechanism rate, period of analysis (number of years), start year and whether to include/exclude opportunities. This enables Intrapac to immediately understand the impact of any changes to these variables to the value that would be created and captured.

4 Conclusions and recommendations

This assessment of the potential new Kinley station options finds that such a project would be worthwhile, creating a range of benefits to beneficiaries in the Yarra Ranges area. Value Advisory Partners also finds that delivery of the new transport infrastructure and services would enable or facilitate additional opportunities that would create further benefit/value to the community. These include the potential for a transit oriented development integrated with the station, new and enhanced active transport infrastructure and other facilitated development opportunities. Together the value created would be significant, in the range of $500 million to nearly $800 million.

Duplicating the Lilydale line and providing for a new station at Kinley would offer suburban rail services to an increased catchment of people living within the Lilydale and Mooroolbark area, and reduce their dependency on road based transport. This together with the provision of new station car parking at the proposed new station location would afford some relief to the current parking pressures that this dependency is generating, and reduce the pressure on Mooroolbark and other stations on the line. With an increased catchment living in proximity to a rail station, there would be potential for a mode shift from private vehicles with between 2,500 and 3,000 using the station during weekdays.

Project Case 2, the option with a new Kinley Station integrated with a transit oriented development, would have the greatest impact and create the highest value, at least $150 million more than just provision for a 'future station' (Case 1). In addition, the transit oriented development could generate up to 1,400 jobs ongoing, in a region that has a very low job to population ratio. Together, it would improve the connectivity, accessibility and amenity in the Yarra Ranges Council area, creating value for the surrounding community and a broad range of beneficiaries, making it a more attractive place to live, work and study.

Further, revenues to contribute to the cost of delivery of a new station at Kinley could be captured by Government using a mix of potential value capture mechanisms (including infrastructure contribution plans/s173 agreements, special rates and stamp duty). Value Advisory Partners' analysis finds that potentially between $23 and $34 million (Present Value) could be captured.

In short, a new rail station would enhance the opportunities for residential and employment growth within the corridor supporting local demands for a range of housing types and new jobs. Provision for a new station and range of housing densities would be integrated into the master plan and need to go through a planning scheme amendment process. Further, under Project Case 2, a station at Kinley could be delivered at no net cost to Government. It presents government with an innovative and affordable approach to the delivery of infrastructure and would demonstrate the benefits of the Victorian Value Creation and Capture Framework.

It is recommended that:

1. The planning scheme for the precinct include provision of a future station at Kinley as part of an integrated transport and land use plan to optimise the opportunities and benefit from the government's future investment in the rail infrastructure.

2. The State commits to a program and timing for the delivery of the Kinley station and rail duplication to improve accessibility and mode share to mass transit and lack of commuter car parking in the corridor.

3. The relevant authority apply Victoria's Value Creation and Capture Framework to capture some of the value that would be created from the delivery of a new station at Kinley, as a means of raising revenues towards the cost of the project.

4. Further detailed analysis be undertaken to confirm the results of this initial strategic assessment and to evaluate the merits of each opportunity as part of an integrated programme.

Appendix

Appendix A - Opportunities for value creation

Opportunities methodology

Opportunities are initiatives or investments that are planned to be delivered as part of the project and / or that would have the potential to be delivered as a result of the project to create additional value.

Each opportunity has the potential to create multiple benefits (and dis-benefits), which can be linked to multiple beneficiaries. Therefore, it is the opportunities that are important in driving the value creation equation.

To be able to present the value created in different ways, each opportunity has been categorised using two attributes:

- Project Case
- Type of value/benefit (under the Victorian Value Creation and Capture Framework)

Victorian Value Creation and Capture Framework

Following the release of the Value Creation and Value Capture Framework (VCC Framework) by the Department of Premier and Cabinet (DPC) in 2017, and updated guidelines in 2018, Value Advisory Partners has aligned its approach to categorise opportunities also according to the value types defined under the Victorian Government's framework.

Table 9: Types of value identified in Victoria's VCC Framework

Value initials	Type of Value	Detail
PC	Improving Productivity and Cost Efficiency	Level crossing removals and motorway projects improve the efficiency of the movement of people and freight across Melbourne, and potentially reduce transport costs.
AV	Increasing Asset Values	Investment in infrastructure and land development can increase the value of land and businesses in the vicinity of the investment.
CO	Unlocking Commercial Opportunities	Government regularly rezones land to enable higher value use. This can be small-scale and/or large-scale (e.g. the rezoning of entire precincts). This can create commercial opportunities for urban renewal and property development.
A	Improving Accessibility	Investment in new transport infrastructure improves access to economic opportunities (e.g. jobs and education) as well as services, housing and recreation.
PSA	Enhancing Public Safety and Amenity	Infrastructure, public land development and precinct projects can facilitate the creation of new public facilities (e.g. parks, bike paths and cultural facilities), increasing amenity for local businesses and residents. They can also increase public safety (e.g. through improved road design and reduced transport congestion).

E	Protecting and Enhancing the Environment	Infrastructure and public land development projects can facilitate environmental outcomes (e.g. climate change adaption and resilience, biodiversity and efficient energy and water use).
SC	Increasing Social Capital	Delivering infrastructure (such as social housing) and services (social services, education and health), or pursuing policy outcomes through procurement (e.g. trade apprenticeships to reduce youth unemployment), can reduce inequality and improve social outcomes.

Source: Victoria's Value Creation and Capture Framework (DPC, 2017)

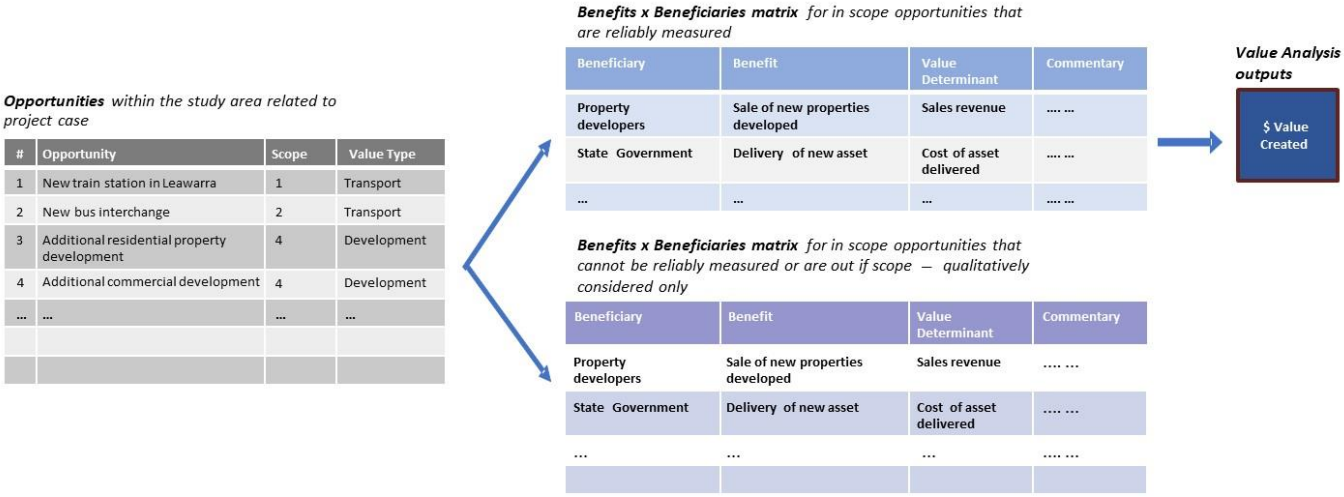
Project opportunities structure

As part of the benefits assessment we have identified benefits such as opportunities for direct and indirect employment; improved access to education, health services etc.

While these and other benefits can be identified, not all benefits may be readily quantifiable. However this does not mean that this value would not be created by the relevant project, and should remain part of consideration and may be measured with the availability of further information at a later stage of the project development. These opportunities will be considered qualitatively as part of this analysis.

To accurately capture these wider benefits we have outlined according to the structure shown in Figure 7.

Figure 7: Opportunities, benefits and beneficiaries structure (Example only)



In addition to this, the VCC Framework recognises that there are multiple value types that can be created from a project though not all will be necessarily measurable – as such some opportunities may be repeated however not measured on the basis that the value type is not measurable. For example, new parkland will improve land values as a result of residential access to green and recreational open space (VCC Framework: Enhancing Public Safety and Amenity, PSA) which can be measured. It will also deliver value in terms of supporting biodiversity and climate mitigation (VCC Framework: Projecting and Enhancing the Environment, E) which is less reliably measured and would be excluded from the analysis despite it delivering a clear value that is recognised by the Framework. This distinction will be made in the Benefits x Beneficiaries matrices.

Opportunity identification

33 opportunities are identified as part of the preliminary analysis (shown in Table 10), organised by Scope, Type and VCCF type, for each case. This list has been developed following input from Intrapac Property and other stakeholders. All opportunities are considered as being additional to the Base Case.

Table 10: Opportunities list included in analysis by categorisation

Opp.	Opportunity detail	VCCF Value	Case
1.	New station at Lilydale Quarry centre	A	1 & 2
2.	Duplication of rail line from Lilydale	PC	All cases
3.	Relocation (in part) of the Box Hill Institute (Lakeside) Campus onto the Kinley site near the proposed station	AV	1 & 2
4.	Additional residential development	CO	1 & 2
5.	New civic space (shared multi-purpose facilities)	SC	1 & 2
6.	New school	SC	1 & 2
7.	New commercial space	CO	1 & 2
8.	New small neighbourhood retail centre	CO	1, 2
9.	New medium neighbourhood retail centre	CO	1 & 2
10.	New retail car parking	A	1 & 2
11.	New parkland	PSA	All
12.	New recreational space	PSA	All
13.	New road infrastructure & connectivity	A	All
14.	New pedestrian and cycling infrastructure	PSA	All
15.	Increased access to small neighbourhood retail centre	AV	All
16.	Increased access to medium neighbourhood retail centre	AV	1 & 2
17.	Increased access to civic space	AV	1 & 2
18.	Increased access to schools	AV	1 & 2
19.	Increased access to recreational open space	AV	1 & 2
20.	Increased access to tertiary education facilities	AV	1 & 2
21.	Increased residential density in proximity to transport nodes	AV	1 & 2
22.	New parking at the rail station	A	1 & 2
23.	Bus interchange facility at train station	A	1&2
24.	Engage Victoria Design Review Panel for design optimisation and	PSA	1&2
25.	Procurement opportunities to achieve industry and skill	SC	All cases
26.	Increased bus services through precinct	A	2
27.	New shuttle between train station and Box Hill Institute (Lakeside) Campus	A	1 & 2

Source: Value Advisory Partners

Table 11: Opportunities list excluded from analysis

Opp. No.	Opportunity detail	VCCF Value Type	Case
1	Development of new stabling and maintenance yard at Lilydale Train Station	A	All cases
2	Increased frequency of services to Lilydale Train Station catalyses new retail development at Mooroolbark and Lilydale Train Stations	CO	All cases
3	Increased frequency of services to Lilydale Train Station catalyses new residential development at Mooroolbark and Lilydale Train Stations	CO	All cases

Source: Value Advisory Partners

Appendix B – Benefits and Beneficiary Matrix

Our quantitative analysis measures only those benefits that have a measurable value determinant that is within the project scope. This is identified in Table 12 and for which the data is available. These primarily relate to opportunities with a strong nexus to the core project – where the strength of the value could reasonably be attributed to the project or other opportunities in the area as identified in the Context Analysis (Section 3). Where the benefits are not measured, quantification would not provide sufficient rigour or confidence to implement value capture mechanisms for the quantified revenue stream, should that be required at a later time.

With greater project certainty, data or project scope a greater range of benefits may be able to be quantified. This level of analysis would occur as part of a Detailed Value Capture Plan under the VCC Framework.

Where benefits have not been explicitly quantified Value Advisory Partners has considered the qualitative impact of the benefits in the assessment. Value Advisory Partners uses its experience to understand the potential impact of the opportunities in shaping change within the Investigation Area.

Table 12: Benefits and beneficiary matrix included in analysis

Identified Beneficiaries	Identified Benefits	Value determinant	Commentary
State Government	Delivery of new assets - core	Change in asset value	The State benefits by the market providing an asset on government land with minimal funding provided. The result is new assets on Government Land. The value created would be equal to the cost to construct the asset.
	Increased state taxes from new property and existing property value uplift	Change in tax revenue	The delivery of a new station means revenues from property taxes such as stamp duty, incrementally increase (and is ongoing). Whilst other forms of direct taxation exist, only stamp duty will be measured by the project as having a direct nexus to project options.
Developers	Sale of new property for commercial development	Change in development value	The value created is equal to the full value of the commercial space created as a result of the development, which would not occur in the Base Case. The market value per GFA sqm is informed by recent sales data.
	Sale of new property for retail development	Change in development value	The value created is equal to the full value of the retail space created as a result of the development, which would not occur in the Base Case. The market value per GFA sqm is informed by recent sales data.

	Sale of new property for residential development	Change in development value	The value created is equal to the full value of the residential space created as a result of the development, which would not occur in the Base Case. The market value per GFA sqm is informed by recent sales data.
Residential property owners	Increased amenity for residential property owners	Change in property value	Improved access to amenity (for properties outside Kinley) located on the Kinley site increases the buyer preference for a property and consequently adds to the property value. This can be measured using PwC's MOVE model.
Retail and commercial property owners	New commercial car park operations	Change in business revenue	New revenue is generated from the commercial car parking. This can be estimated based on expected occupancy and indicative daily rates.

Source: Intrapac Property

Table 13: Benefits and beneficiary matrix that have been identified but not measured

Identified Beneficiaries	Identified Benefits	Value determinant	Commentary
State Government	Greater housing density in local area	Policy outcome	Project will help to deliver Outcome 2 in Plan Melbourne, which endeavours to provide high density housing close to jobs and services. The benefit is a policy outcome and has not been measured.
	Increased employment due to:	Policy outcome	Project will help to deliver Outcome 1 in Plan Melbourne, which aims to provide new jobs. This will provide a measureable income tax and payroll tax impact. This will not be assessed on the basis that a reasonable expectation of employment impact cannot be made within the scope of the analysis, in which to estimate the tax revenue.
	• enhanced activity centre	Change in Payroll Tax/Income Tax	
	• new local amenities/community assets		
	• commercial development		
	Greater utilisation of states assets	Policy outcome	Improved use of the Lilydale train line is consistent with policy – as network benefits are out of scope for this project this has not been measured.
Local Government	New rateable property and value uplift to existing residential property	Change in tax revenue	New residential or retail property would increase local rateable properties paying local government rates. This is

			not measured as relating to collection of expenses and has a nil value impact.
Business owners	New business opportunities (commercial / retail)	Change in business revenue	Increased advertising opportunities would result in improved business revenue. This is beyond the scope of the study and would not represent a material revenue stream.
Residential property owners	New properties available to be purchased	Change in property yield	There is a benefit to residents and investors looking for new properties to be purchased that meet their preferences.
Retail and commercial property owners	New properties available to be purchased	Change in property yield	Investors have new commercial and retail properties to be purchased that meet their criteria.
Public Transport Operators	Increased revenue from new advertising opportunities	Change in business revenue	Increased saleable advertising space as a result of the project. This is beyond the scope of the study and would not represent a material revenue stream.
	Improved network operations	Change in business revenue	Higher capacity and more train services on the Lilydale line could result in improved operating efficiency, and greater efficiency dividend revenue. Network benefits are out of scope for this study and have not been measured.
	Increased patronage	Change in business revenue	Mode shift and additional population would increase patronage. This would increase ticket sales revenue. This is not a transport study so the benefit is not included.
Public Transport Users	Improved connectivity leading to reduced travel times	Value of change in travel time	More frequent services would improve travel times and results in travel time savings. Network benefits are out of scope for this study and have not been measured.
	Better amenity and security for passengers	Value of change in travel comfort	Better amenity and services within the area will provide users improve comfort and safety in their travel journey. This is a qualitative change and has not been measured.
Road users	Greater access to parking facilities	Value of change in travel time	Parking facilities close to amenity could impact travel times for users travelling by private vehicle. Travel time savings are out of scope for this study and have not been measured.

	Diminishment of vehicles on roads decreasing delays	Value of change in travel time	Mode shift from road to rail would reduce traffic, thus diminishing travel times for road users. Travel time savings are out of scope for this study and have not been measured.
Employers	Access to broader employment pool	Cost of recruitment	Project would provide additional employment in a new employment area. The potential value created is uncertain and has not been measured.
		Change in employee productivity	
Employees	Access to new employment	Change in wage income	Project would provide residents access to greater number of jobs – providing greater choice. The potential value created is uncertain and has not been measured.
Public and community	Improved access and amenity for residents, workers and tourists located outside the investigation area	Value of change in travel time	There could be benefits to people in the local area through improving pedestrian and road connections through the area, improving travel times. Travel time savings are out of scope for this study and have not been measured.

Source: Intrapac Property

Appendix C - Analysis assumptions

The following assumption information has been provided by Intrapac for this updated analysis.

2018	Unit of Measure	All cases
PROPERTY PRICES		
Residential dwellings		
- low density	$ / Du	$850,000
- medium density	$ / Du	$650,000
- high density	$ / Du	$450,000
Commercial - superlot	$ / sqm	$3,065
Commercial – office core	$ / sqm	$2,350
Retail	$ / sqm	$2,990
OTHER VALUATION ASSUMPTIONS		
Property price growth (CAGR)	% p.a.	7%
Average Stamp duty rate	%	3.36% - 5.38%*
Special rate	%	0.3%
Infrastructure Contribution Plan		
Residential	$	3,300
Commercial	$ / sqm	72
Retail	$ / sqm	92
Discount rate (Present value)	% p.a.	7%

Source: Intrapac Property

List of Tables

List of Figures