

Cities, Gateway Destinations and Global Competitiveness

The Promise of Central Precinct for Sydney

For Block B, 14-30 Lee St, Haymarket NSW 2000
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dexus

Executive Summary

This paper, prepared by The Business of Cities, draws on a comprehensive review of the more than 500 city performance benchmarks and metrics around the world, and more than 5 years of analysis of the present and future prospects of Sydney and Australia's cities. It observes the changing imperatives for Sydney to remain competitive, and the impacts that gateway interchange redevelopments with catalytic, capacity-enhancing, and cycle-shaping qualities can have on city performance.

The report applies these findings to the specific context of Central Station in Sydney, and in particular the Western Gateway of the Central Precinct. Using comparative city performance data and international experience, it observes the criteria and conditions in which this project can have catalytic effects for the wider Central Precinct opportunity, and in turn for the city as a whole.

About The Project

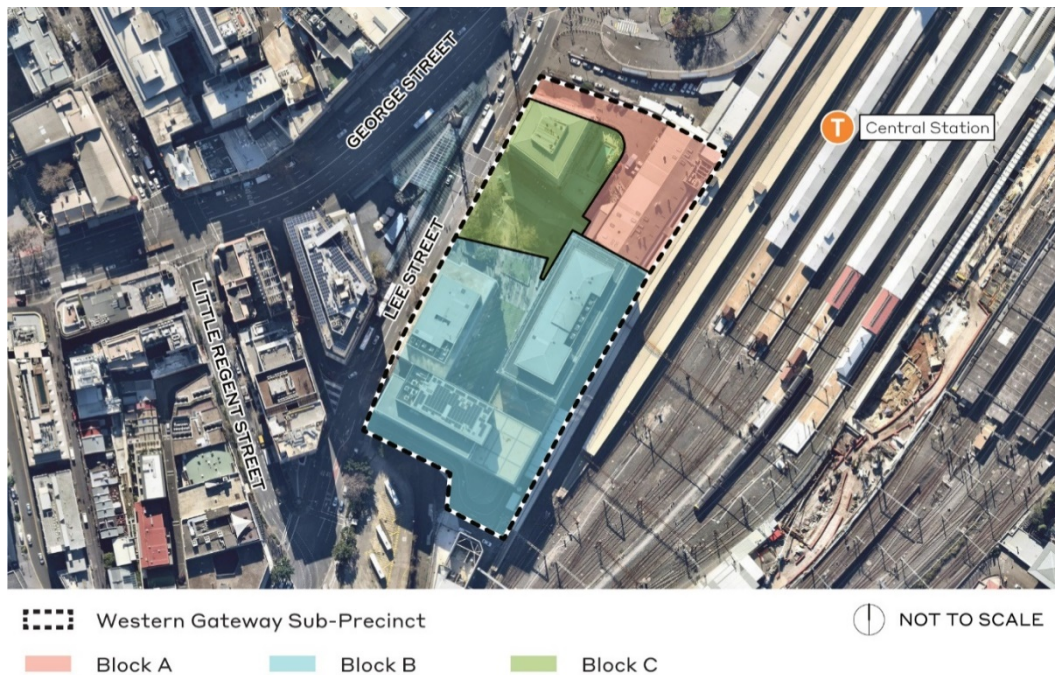
Dexus CPA Pty Ltd (Dexus) and Frasers Property Australia (Frasers Property) (the Consortium) is seeking to build *"a vibrant new business district and revitalise the face of Sydney's busiest transport interchange"* (Project Vision) at 14-30 Lee Street, Haymarket, otherwise known as Block B within the Western Gateway Sub-Precinct, as illustrated in Figure 1. In this report this project will be referred to as 'Block B'.

Figure 1: Central Precinct (White), Western Gateway Precinct (Orange shading), Block B (Red Outline)



The Western Gateway sub-precinct is made up of three landholdings as illustrated in Figure 2:

Figure 2: Western Gateway landholdings



Block A – land predominately occupied by the YHA Hostel;
 Block B – the Dexu / Frasers Property site, the subject of this report;
 Block C – land on which the Adina Hotel and Henry Deane Plaza are located.

To facilitate redevelopment of the Western Gateway sub-precinct, the existing planning controls are required to be amended. This report supports a submission to the Secretary of the Department of Planning, Industry and Environment ('the DPIE') which seeks to amend the height and density controls within the *Sydney Local Environmental Plan 2012* (Sydney LEP 2012).

The request to amend the planning controls follows the Minister for Planning and Public Spaces recent declaration identifying the Central Station Precinct as a State Significant Precinct (SSP). The Western Gateway, located within the Central Precinct SSP, is earmarked as a sub-precinct within the proposed SSP boundary for early consideration for rezoning.

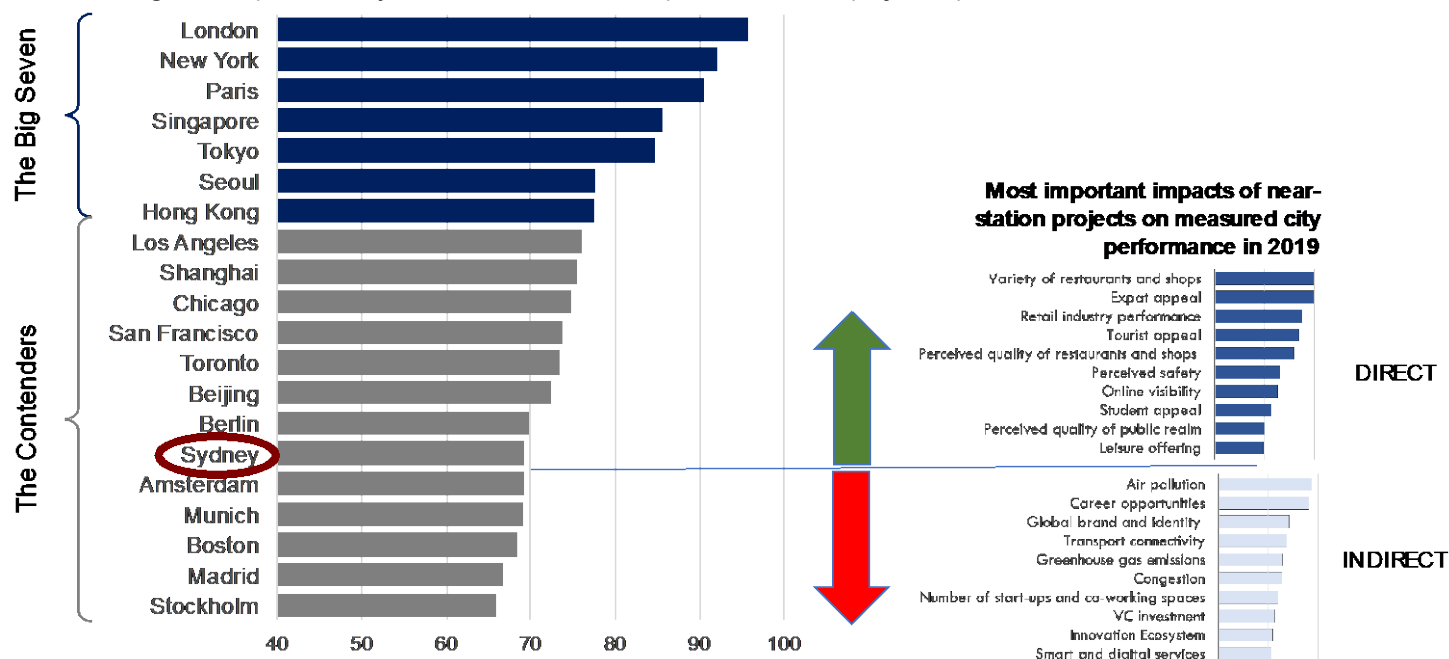
Transport for New South Wales (TfNSW) is developing a vision for the growth and development of this precinct and is preparing a Strategic Framework to guide future detailed planning of the Central Precinct. The Strategic Framework will be placed on exhibition for public comment concurrently with the rezoning of the Western Gateway.

1. Sydney and City Competitiveness

The global studies and measures of city competitiveness increasingly identify that to improve competitiveness over the medium term, cities have to improve economic productivity and efficiency while successfully coordinating growth, unlocking locations that enhance liveability and appeal, and leveraging their assets to promote the city externally.

Sydney is currently part of a high performing 'second division' of up to 15 global cities, a group that is vying to join the top tier of cities that enjoy the greatest global reach and pull.

Figure 3: Top 20 cities by all round benchmark competitiveness, and project impacts



Source: JLL and The Business of Cities (2019)

The benchmarking data shows that demand for Sydney's assets and opportunities continues to grow, its short-term destination appeal remains very high, and a surge in infrastructure investment will see the city start to redress some of its infrastructure deficits to shape and serve a metropolis growing faster than the global average.

But attention is increasingly trained on the urban quality, systems efficiency and human experience that in Sydney risk being eroded in the next cycle.

The global comparative data indicates that for Sydney to improve its global competitiveness, and maintain its edge as other Asia-Pacific cities rapidly improve, it not only needs in future a much more diversified economy hosting multiple new technology industries. Sydney also needs a more predictable and well managed commuter experience, a varied housing and labour market, leading institutions with access to a high amenity /medium density environment to commercialise world-impacting knowledge, and a magnetic visitor experience anchored by a commensurate welcome in its key gateway locations.

Many of these areas of competitiveness depend on whether Sydney's next cycle of infrastructure, precinct development and placemaking can achieve optimised levels of vibrancy, accessibility, experience, access, appeal and global resonance, including to serve the innovation economy. It requires making the most of opportunities such as Central Precinct, which have high levels of connectivity and proximity and high potential in terms of footfall, amenity, talent attraction and influence.

2. The Lessons of International Experience

Central Precinct contains Sydney's primary transport hub (Central Station), whose footfall and functions within Greater Sydney and proximity to CBD activities make it a critical precinct with very significant potential influence on Sydney's performance and perception. The Proposal for redevelopment of Block B of the Western Gateway identifies a unique

opportunity to achieve uplift for the wider precinct and contains a number of features that can contribute to Sydney's competitiveness and comparative performance (See Section 2).

Our review of the varied experience of cities among the top 30 most competitive globally highlights that many others have also recently pursued and executed development next to their major gateway interchange stations in order to integrate functions and anchor a specialised precinct or node in an under-utilised area of the city.

We detail shared experiences in precincts adjacent to **London King's Cross, Hong Kong Kowloon Station, Berlin Central Station, Vienna Central Station, Osaka Umekita, and Denver Union Station**. These projects have evolved in their own ways through 2 or 3 cycles and in each case have required an initial catalyst to demonstrate either a new level of design, vision, placemaking ambition and intensification.

The impacts achieved for their city's wider competitiveness has varied. We can observe from the precinct and city data that **the highest impact projects**:

- ✓ Have **critical mass** to add genuine capacity and act as a focal point and destination.
- ✓ Attract a significant number of globally recognised **high value anchor tenants** across cross-fertilising sectors
- ✓ Enable a substantial **quantum of new jobs** in the immediate vicinity and even more in the surrounding precinct.
- ✓ Facilitate the integration of **mobility and logistics functions** and the optimisation of station efficiency and convenience.
- ✓ Have incorporated multiple uses at scale including **retail, culture, education, hospitality and leisure**
- ✓ Have a **signature design** to achieve a distinctive sense of place, identity and inclusiveness.
- ✓ Set standards for **multi-modality and micro-mobility**, and are pioneers of new kinds of retail, shared services, and business partnerships.
- ✓ Drive new **collaborative ventures** among public and private stakeholders
- ✓ Are sequenced to achieve **maximum regeneration impact** in wider zone, enabled by seamless connections.
- ✓ Substantially increase **identity, sense of place**, familiarity, attachment and dwell time in and around the station location as it evolves into a real destination.

These characteristics will be important priorities for Block B of the Western Gateway, which appears to be well placed to fulfil all of the ingredients that enable highest competitiveness impact of the wider Central Precinct.

	London King's Cross	Hong Kong Kowloon	Berlin Central Station	Vienna Central Station	Osaka Station	Denver Union Station	Sydney Central Potential
Critical Mass							
Anchor Tenants							
New Knowledge Jobs							
Integrated Mobility and Logistics							
Highly Mixed Use							
Signature Design							
Advanced Multi Modal and Transport Experience							
Sustained Governance Collaboration							
Sequenced to Enable Maximum Impact							
Enhanced Precinct Brand and Dwell Time							
		High Impact		Medium Impact		Low Impact	

- Minimal new or additional public space
- Rely on a single or dominant use (office, retail or residential)
- Modest attention to the place porosity and linkages with surrounding district
- Small additional catchment of daily users and consumers.
- Limited focus on design and place experience
- Few mechanisms for long-term stewardship

	Main Impacts Observable in City Benchmark Performance	Project Impact on Benchmark Performance	
King's Cross, London	<ul style="list-style-type: none"> No. 4 station globally for ability to catalyse local economic development. London now places 2nd globally for no. employees in tech jobs. 	**	Initial quality of place in 1 st stage station and square established commercial confidence in a jobs hub for large tech and media corporations.
	<ul style="list-style-type: none"> Supported London's position as world No.1 for culture, shopping and cuisine. 	**	A new CBD fringe cultural and visitor hub injecting a complementary mix of dynamic uses.
	<ul style="list-style-type: none"> Improved overall city reputation from 13th to 6th between 2012 – 2017. 	*	Attractive gateway, heritage assets, and business and student functions has raised global profile to visitors, students and employees.
Kowloon Station, Hong Kong	<ul style="list-style-type: none"> 6th globally for measures of business activity. Improved 10 places to 10th for low levels of unemployment. 	**	Sustained significant % of corporate jobs & supported the evolution of Kowloon into Hong Kong's second CBD.

	<ul style="list-style-type: none"> • Big improvement in global and worker perception of city's shopping and culinary scene 	*	Component of luxury retail and restaurants has helped become a 24 hour highly visited destination.
Denver Union Station	<ul style="list-style-type: none"> • Transport hubs rated world leaders for safety (1st) and social placemaking (6th) 	** *	Attention to public space enhancement and the sensitive reactivation of Station and surrounds.
	<ul style="list-style-type: none"> • 14th fastest growing jobs market, one of most densifying jobs locations in North America 	*	Larger scale commercial office space development, \$2 bn+ of private investment, expanding the core CBD.
	<ul style="list-style-type: none"> • Sustained momentum among fastest growing innovation economies, rising from 70th to 31st since 2014 	*	1 st stage facilitated large and small tech firms to cluster subsequently in new offices in the wider precinct.
Osaka Station	<ul style="list-style-type: none"> • 9th in Asia for the overall strength of its innovation ecosystem 	**	Knowledge Capital anchor in 1 st stage helped to anchor the city's innovation ecosystem in the Umeda district
	<ul style="list-style-type: none"> • 14th globally for number of new businesses 	*	Real estate mix across space/affordability spectrum in the wider precinct has helped attract new businesses to the city
	<ul style="list-style-type: none"> • Now highly competitive for appeal of its dining (5th) shopping (5th), and arts (17th) 	*	Key new precinct destination because of intensive mix of residential, commercial and leisure uses + excellent connectivity.
Berlin Central Station	<ul style="list-style-type: none"> • No.1 for new business starts among 100 most global cities 	**	Much needed capacity to sustain momentum as Central Europe's most dynamic tech ecosystem.
Vienna Central Station	<ul style="list-style-type: none"> • Improved to the 25th most in-demand retail scene among global brands 	**	BahnhofCity has created a distinctive new retail destination in Vienna, and helped to attract multiple international retail brands

As we can see in the global case studies and the benchmark indicators, successful developments in these signature well-connected locations also translate into important and measurable local precinct effects that have been exhibited in many of the international examples:

- Local rental values outperform other city locations that rising status as a place to live and work.
- Increased footfall and visitor spend, and the expansion of the night-time and weekend inner city economy, that then raises public and private revenues.
- Step change in attraction of corporate and real estate investment.
- An improved amenity and retail offer beyond established locations.
- Rise in surveyed pride among local residents and employees
- Rising job density and effective diversification of the city's knowledge economy locations
- Effective expansion of the CBD and commercial capacity that provides flexibility for future development.
- Higher local public transport uptake and satisfaction, while containing maintenance and staffing costs

3. The potential impact of Central Precinct on Sydney's global competitiveness

No single project has the scale or capacity to solve all of a city's competitive challenges. Many such challenges are more systemic than localised. But our review of more than 5,000

indicators that are used to benchmark city competitiveness finds that developments such as the Western Gateway that can support and catalyse wider change in and around transport termini and interchanges can influence how cities perform, and make an impact on more than half (51%) of current global city competitiveness benchmarks.

Such impacts have two distinct domains (1) **direct and short-term**, due to the initial provision of improved infrastructure, public realm and other amenities, increased hosting capacity for business and jobs, and (2) **indirect and medium-term**, by enabling wider growth and precinct expansion, enhancing appeal and brand to domestic and global talent, fostering the ingredients of innovation and good density, demonstration effects for other metropolitan locations, and even increased governance co-ordination and confidence.

The combination of these direct and indirect impacts adds up to the ways that major urban re-developments can increase city productivity and competitiveness.

Data indicators used to compare top global cities suggest that gateway interchange projects have competitive effects when they:

- enable cities to optimise growth and flows in dense, otherwise constrained locations, and so improve efficiency and experience.
- help to advance and promote specialisation by supplying companies and institutions with the right environment for clustering, networks and services.
- create new assets, amenities and destinations, that expands range, choice and quality.
- improve 'magnetism' through placemaking, culture and safety by enhancing public realm.
- raise total and measured visibility, identity and reputation, among both domestic and international audiences through hosting reputable institutions, creating new iconic locations, eye-catching architecture, clever branding, and a sense of wonder – a 'wow factor'.

These effects are enabled when the first phase of development (in this case Block B of the Western Gateway):

- optimises the ability of the wider location to accommodate and optimise infrastructure and development investment, attracts potential anchor tenants, and serves passenger and user growth.
- sets standards and precedents in terms of scale, mix of functions, design, and sense of destination.

And they are optimised when the surrounding precinct (Central) has:

- a strategic location close to business and transport hubs, porous and crossed by diverse flows of foot traffic.
- capacity to accommodate significant future expansion relative to existing CBDs and sub centres, and where there is underlying business demand to drive this expansion.

Both these sets of conditions can be observed in the plans for Block B and what they enable for Central Precinct and beyond.










As such, Block B has the potential to act as the precinct catalyst that can help to address five broad areas where Sydney's competitive performance risks being eroded:

1. **Liveability** – with the lifestyle equation for younger professionals currently under strain.
2. **Innovation capacity** and the role of precincts that possess the scale and environment ingredients.
3. **Transport and infrastructure** – despite ongoing improvements, gaps in experience of transport and low smart take-up.
4. **Visitor and destination appeal** - affected by ability to manage tourism flows, invest in pathfinding and storytelling, and provide a mix to suit all.
5. **Image, brand and influence** – reliance on inherited landmarks and less elaboration of Sydney's core vision, values and cultural DNA.

What is required from an initial catalyst?

Our review evaluates the range of measurable metric effects that Block B and the Western Gateway can have (direct and indirect) on Sydney's comparative performance, using the 500+ benchmarks. We identify that **Sydney's position in performance and perception benchmarks of urban amenity, technology, precinct liveability and city appeal would be positively impacted by the quality, scale, ambition and spill overs generated by a successful Western Gateway project that enabled the wider precinct to succeed.** This impact would be achieved upon the following effects being generated in the benchmarks.

Figure 4: Indicative summary of Block B's potential to achieve benchmarking uplift

Competitiveness theme	Sydney average performance	High impact projects will achieve	Block B's potential					
					Perceived personal safety	<div><div></div></div>	+1-2% people feel safer as a result of high-quality public realm surrounding station	✓
 Concentration of high tech jobs	<div><div></div></div>	+1% of high-tech job workers and attraction of large anchor employees	✓		Walkability and bike friendliness	<div><div></div></div>	+1-2% to active transport mode share	Enable CSPP
 Retail industry performance	<div><div></div></div>	+5 new international retailers and greater confidence for retail	✓		Online visibility	<div><div></div></div>	Consistent volume of high-profile media, internet searches and reviews	✓
 Public transport experience	<div><div></div></div>	+2.5% people satisfied with public transport +1-2 places in rankings for access to multi-modal transport facilities	Enable CSPP		Global appeal and admiration	<div><div></div></div>	5-10% more likely to name Sydney as a globally appealing city	Enable CSPP
 Quality of public realm	<div><div></div></div>	1+ signature public space +1-2% satisfaction with parts of entry which impacts dwell time	Enable CSPP		City reputation for "buzz" and exciting hotspots	<div><div></div></div>	Concentration of amenities and destination character, generates media impact, visitor numbers, spend and reputation	✓

By scanning the ways in which competitiveness is measured and perceived, we find that Block B and the Western Gateway is most likely to have a positive impact on Sydney's benchmark performance if:

- ✓ It raises the capacity to host knowledge jobs and commercial floorspace in the vicinity
- ✓ It attracts international corporate tenants (tech, retail, etc) by delivering the scale, experience and high amenity setting with a widely recognised or flagship public/cultural space.

- √ It improves perceptions and expectations about ports of entry, range of amenities, commuting time, legibility and navigation, and enhance multi-modal access
- √ It has the iconic architectural and design to enhance the visibility and profile of the city, and reputation for desirable locations and interesting experiences
- √ It achieves a level of safety, experience and inter-modality necessary to shift day: night usage patterns, perceptions and dwell time by significant margins

Where projects have achieved this mix of outcomes, they have relied upon the early establishment and adoption of a comprehensive future vision. Block B of the Western Gateway has the potential to support these wider outcomes. Through its own capacity enhancing effects as well as its direct enabling of the scale, ambition and efficiency of over-station and precinct development, this project will help deliver the progress that Sydney needs.

4. The amplified effects for the whole of Sydney

When other cities have established themselves near the top of the global measures in which Sydney is competing or in areas where Sydney is experiencing a deficit, it is typically the result a combination of consistently high levels of citywide investment and provision, allied to specific locations that concentrate assets, achieve catalytic scale and gain recognition.

International experience highlights the way signature gateway projects can have an outsized impact on city success, including as recorded in performance benchmarks, by altering expectations, setting standards and triggering a cycle of citywide improvements.

For Sydney, Central Precinct demonstrably has the preconditions to achieve amplified impacts if Block B is supported as the initial catalyst. These preconditions are not only due to the distinctive scale and location of the site, the proximity to institutions and creative, technology, and professional clusters, the appetite of large anchor firms and industry bodies to locate and support the project, and the potential to achieve collaboration and discovery that can create multiplier effects and drive productivity growth. It is also because the Precinct has a unique gateway position and its timing in Sydney's growth and development and policy cycle means it is well placed to shift perceptions and encourage new ways of working and delivering major projects. This potential is not automatically translated into reality and relies on the trigger of Block B of the Western Gateway as an initial first stage to facilitate a more connected, high amenity city that concentrates jobs in the best-connected location in Sydney.

Central Precinct can achieve the following amplified impacts with Block B of the Western Gateway project providing the initial trigger:

- **City Brand and Reputation.** A project next to a major gateway can have a significant amplifying impact on a city's reputation and identity. Not only can it function as a beacon of high quality urbanism, creating media buzz as a great place that adds a new popular visitor destination. It can also help a city embody and embrace its layered identity – in Sydney's case a city that is comfortable as Australia's global stage, a city of discovery that possesses a quintessentially outdoor, brash and open lifestyle, many edges and distinctive neighbourhoods. Recent analysis has highlighted that Sydney has not yet fully developed a consensus about its cultural identity traits, not yet fully oriented towards its aboriginal history, or recognised the role of identity as a competitive differentiator and an advantage.¹ A project that is a primary gateway to Sydneysiders, Australians and the world has the potential to galvanise the city's identity through its design, scale and

character. For Sydney it can also support the development of a clearer business and innovation brand alongside the very strong visitor brand. This brand effect is achievable when the initial stage of development – here, Block B – embodies the quality, identity and aspiration of the wider precinct - Central.

- **A home for new and emergent industries.** By fostering a specialised location for an industry that does not yet have a clear identity or culture of clustering, the project then creates visibility to the presence of growth industries and can have positive effects on the confidence of talent, investors, venturers, and innovators. The location gives them a home, a focus, and access to one another. There is potential for the 1st stage trigger represented by Block B to provide that locus around which other activities accumulate in Central Precinct.
- **Demonstration and acceleration effects: raising the ambition of other projects and investors.** High impact projects raise the standards for other projects in the city, around stations and other infrastructure. They show what is possible and achievable, and raise understanding about what high amenity, higher density locations underpinned by high capacity public transport look and feel like. This potential for Central Precinct to have this effect depends on the standard set by the initial project, Block B of the Western Gateway. Then the project has the potential to expand the horizons of investors and developers, inspire others how to integrate multiple uses and cultural infrastructure, and demonstrate the collaboration dividend for projects that have become national and regional priorities. The effect can be an acceleration of quality improvement in the next cycle.
- **Creation of new mixes that drive reforms in land use policies.** The potential of an ambitious project such as Central Precinct with 24-hour attributes and elements of 'super mixed use' can be to effectively make the case for wider reforms to land use that foster a more mixed and flexible set of uses in key locations. This is very important for Sydney where the scope to add innovation economy or visitor economy activities to certain locations is vital to fulfilling the city's growth potential in coming cycles. This potential amplification relies on the multi-functionality of the 1st phase project in terms of uses and times of day.
- **Increasing density and therefore the capacity to absorb capital and improve the business case for public investment.** Augmented density in prime locations increases the potential to engage major institutional investors in Sydney, which in turn can demonstrate the private investment catalysed by public infrastructure investment. A transformative dense mixed-use project such as the Western Gateway can catalyse residential development in surrounding city centre and inner city neighbourhoods that now experience higher demand to accommodate residential space.
- **Enables the competitive performance of new and established anchors.** By enhancing the neighbourhood in which existing anchors (universities, tech headquarters) are based and by providing a unique and desirable gateway to a Central precinct into which they may in future re-locate, the Western Gateway can support the growth capacity, co-location and immersive lifestyle requirements for anchors to expand, consolidate, innovate and compete more effectively.
- **The forging of a new settlement about how to optimise projects through public transport.** Like many cities before it, Sydney has not yet achieved consensus that major development projects should be synchronised by high capacity public transport and

higher amenity transport interchanges for maximum public benefit. A project like Block B that has a very profound logistics dividend can illustrate how the symbiosis can work helps to create new levels of expectation and set in place a new model for the next cycle.

- **Inspiring confidence and changing the mental map of the city.** In some cases a catalytic project can raise public and political confidence in the future direction of the city, and implant a new notion of where the city's signature destinations are. This can have the effect of triggering new concepts about what and for whom the city is for, spreading the flows of people, and building positivity about Sydney's journey towards an 8 million person global metropolis. If Block B and the Western Gateway can be supported to become a signature location and destination for the whole Central Precinct, it can contribute to a resurgent perspective about Sydney and its urban character and future.

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1. Sydney's Global Competitiveness

What is global city competitiveness?

Over the last 10 years, leading global institutions such as the World Bank, World Economic Forum, UN Habitat and the Economist Intelligence Unit have been developing a global consensus about how cities become and remain globally competitive.

For a city to be competitive, economic productivity and efficiency must be backed up by mechanisms to coordinate growth, unlock locations that enhance liveability and appeal, achieve long-term sustainability, and leverage these assets to promote the city externally.



In the 21st century nearly every leading city in the world is experiencing growth in population and economic demand. Their competitiveness is only partly related to how much growth they absorb. The starker differences are whether city growth is managed and supported through high levels of investment and optimised infrastructure development, or unmanaged in a way that erodes productivity and the natural and built environments.

So in the international literature and performance evaluation, more emphasis is being placed on cities' ability to:

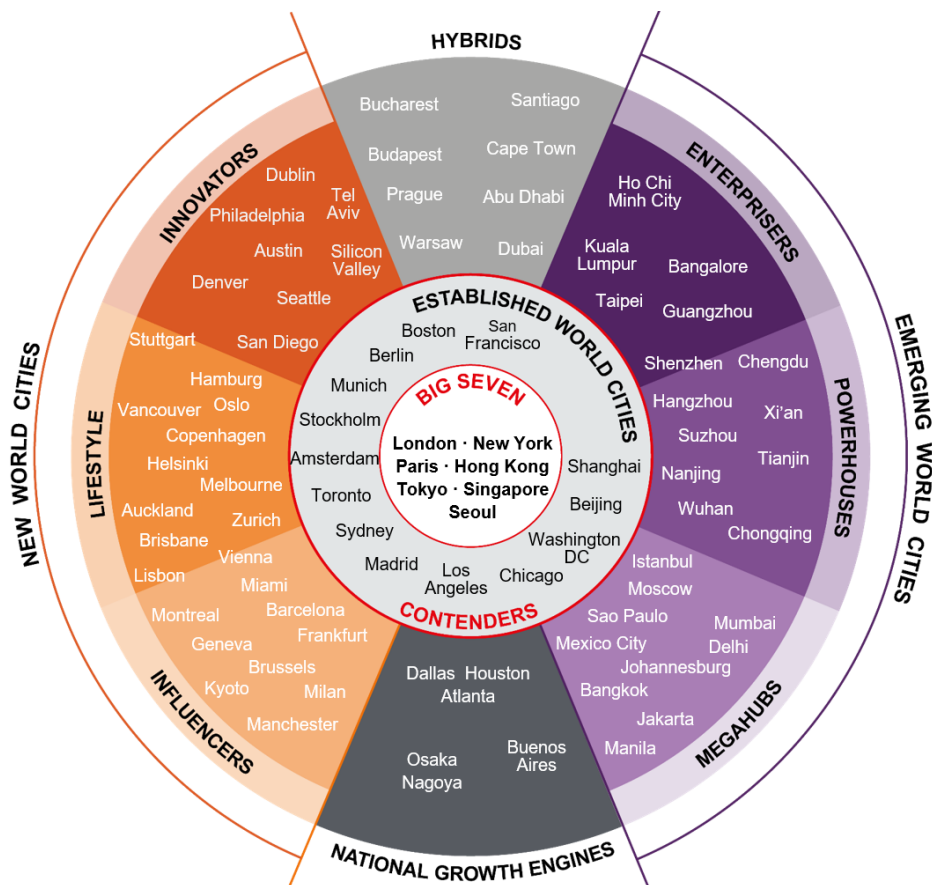
- Meet the needs resulting from new and sustained population growth.
- Recognise that growth is here to stay and adopt a new proactive paradigm of planning and ambition that accounts for this.
- Grasp the opportunities that arise from an increasingly globalised system of trade and investment and seek ways to participate in sectors that are increasingly traded globally.
- Address investment deficits resulting from institutional weakness and lack of coordination at different levels of government.
- Adjust and evolve to changing perceptions about existing patterns of development and employ innovative approaches to new problems.

What does this mean for Sydney?

Global benchmarks reveal sharp insights for metropolitan cities like Sydney, that have special advantages and assets and are currently on the cusp of rapid change.

In 2019, the most comprehensive and influential global benchmarks across all of the major themes of city competitiveness confirms that **Sydney is still part of a high performing 'second division' of up to 15 global cities**. These cities are acquiring more functions as business and visitor 'gateways' to their whole region, are establishing the confidence of global talent and investment capital, and competing to develop more specialisations that require clustering. They are vying to join the top group of cities that have the most mature global functions, and enjoy the greatest global reach and pull - London, New York, Hong Kong, Singapore, Seoul, Paris and Tokyo (see Figure 5).

Figure 5: Typology of global cities and world cities. Source: JLL and The Business of Cities



In the context of this group of 'Contenders' many of the signs are positive for Sydney. Its population is growing faster than most. Demand for Sydney's assets and opportunities continues to grow. The brand still remains magnetic. 'Catch up' infrastructure investment is now in train. Metropolitan Sydney is taking shape, with an inspiring new Metropolitan Plan.

Sydney is currently on a voyage from 5 million to nearer 8 million people in metropolitan population, and is growing faster than almost any other advanced region in the OECD. Demand for Sydney's assets and opportunities - from global corporates, capital, students, talent, visitors and others - is also on the up, buoyed by its magnetic brand, a surge in infrastructure investment, and a longer-term pipeline for growth.

At the same time Sydney's cycle of rapid growth and the intensity of global competition at this rarefied level exposes gaps in the city's real competitiveness.

How does a city in Sydney's position maintain and improve global competitiveness?

The global data and experience indicates that for a city now seeking to improve their global competitiveness, and in Sydney's case become part of an enlarged 'Top 10' of most established global cities, progress across the following attributes are required:

A highly diversified economy with competitive edges in multiple knowledge industries, especially new industries fuelled by advanced and exponential technologies.	Efficient connectivity between key job and residential locations, a high quality commuter experience, and easy access to a varied housing market, labour supply and lifestyle choices.	World-class higher education and research institutions with the reputation and environment to incubate world-class talent and world-impacting knowledge.	A magnetic visitor experience that includes a high quality gateway welcome, multiple locations to enjoy, iconic landmarks, and appeal to multiple types of short and long-term visitor.
A high amenity medium density urban fabric that fosters great placemaking and the proximity to host and fuel the innovation economy.	Ability to attract leading global corporate and decision-making HQs that confer leadership, influence and soft power.	A balanced brand that tells the world the city is 'good at everything', and not only good for some customers or experiences.	'Through cycle' consensus on the key priorities and the demonstration projects that can be delivered elsewhere, to address challenges and deficits.

But as Sydney embarks on this journey, it also faces fresh challenges about how to manage and optimise growth in demand and improve in a number of areas. Other cities – including Singapore, Seoul and Hong Kong in the Asia Pacific, and Munich, Berlin, Stockholm in Europe, and Boston, Miami and Los Angeles in North America - are making rapid progress, and Sydney risks being overtaken.

The previous three years of our Benchmarking Sydney work for the Committee for Sydney identifies that Sydney still maintains its status as one of the most competitive cities in the Asia-Pacific and the most competitive city in the Southern Hemisphere. As it grows it can combine the agglomeration advantages of the biggest and most established cities with the lifestyle and appeal of the best medium-sized cities.

But even as Sydney continues to top some of the charts of global "loveability", attention is increasingly trained on aspects of urban quality, efficiency and experience that risk being eroded in the next cycle.

Many of these areas of competitiveness depend on the ability of Sydney's next cycle of infrastructure, development and placemaking to achieve maximum levels of vibrancy, accessibility, experience, access, appeal and global resonance, including to serve the innovation economy.

How is global competitiveness measured and compared?

In 2019 there are more than 500 benchmarks that measure global city performance and competitiveness. These include indices, reports and measures produced all around the world by major universities, intergovernmental bodies, think tanks and corporate leaders. They are all adapting their methodologies and definitions to fit new circumstances.

These benchmarks focus on all aspects of city competitiveness. This includes investment attraction, infrastructure platform and economic specialisation, but also quality of life, career opportunities, sustainability, destination brand and appeal, governance, affordability, and the natural environment. In other words, how cities manage their assets, and whether there is broad commitment to address weaknesses, are all becoming priority questions in the benchmarking of city competitiveness.

There has also been rapid growth in the number of benchmarks that measure perception, such as satisfaction with public transport, access to amenities, expert perceptions on city lifestyle, and global citizen perceptions of the best cities in which to live, do business and stay. Placemaking, walkability, vibrancy, and access to high quality workspace and amenities, are all more influential in the way competitiveness is measured and compared.

How do transformation of gateway interchange locations influence global competitiveness?

In metropolitan cities, gateway locations and surrounding redevelopment projects can be important to their all-round measured competitiveness because:

- They enable cities to record more and denser growth through intensified redevelopment
- They advance and promote specialisation by adjusting the eco-system and supplying companies and institutions with the right clustering, networks and services.
- They create new assets, amenities and destinations that impact both qualitatively and quantitatively.
- They can result in improved outcomes for quality, placemaking and safety
- They help cities to increase their total and measured visibility, identity and reputation.

Over half (51%) of the global city competitiveness² benchmarks relate to factors that can be influenced by large transformation projects at or near transport interchanges (see Figure 6).³

Figure 7 identifies 30 factors in order of how frequently they are measured in global benchmarks. On this basis a project such as Block B of the Western Gateway will have most impact on Sydney's global benchmark performance in terms of its impact upon the city's number and variety shops and leisure facilities, transport connectivity, public realm, and expat and student appeal. But it will also impact upon several other areas, ranging from crime levels and perceived safety to overall retail industry performance and visitor spend.

Among the indirect impacts, the project will have the most impact on air pollution, career opportunities, global brand and identity, and transport connectivity and congestion.

Figure 6: The major factors of global city competitiveness.

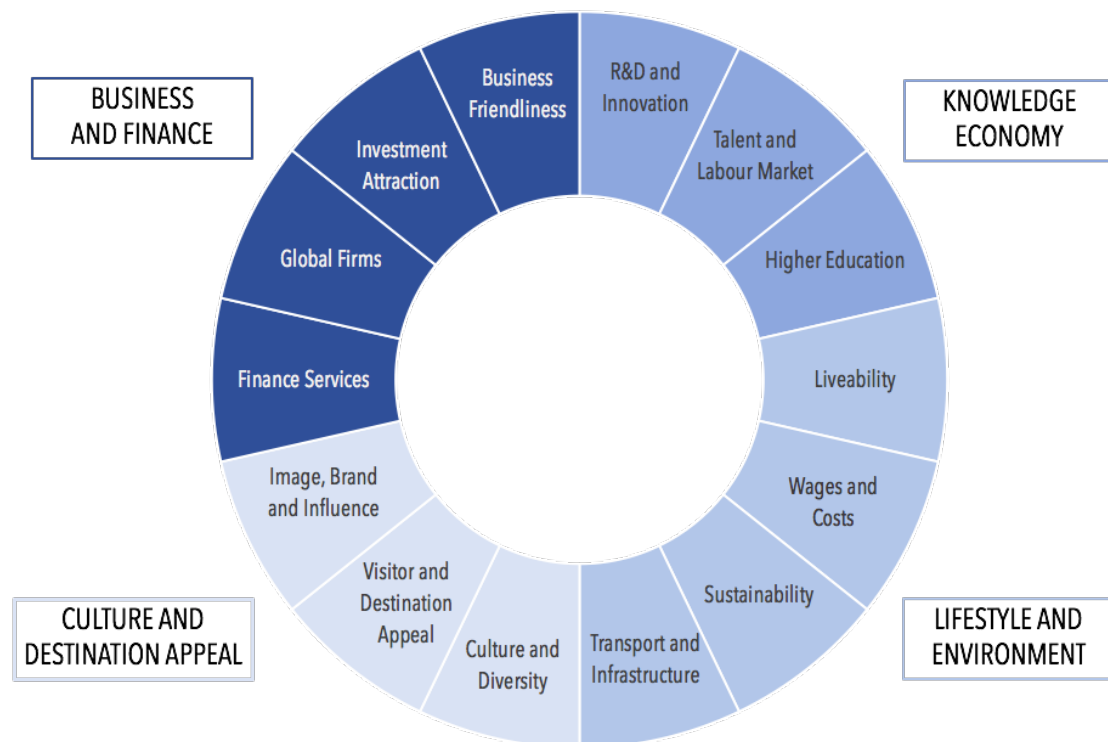
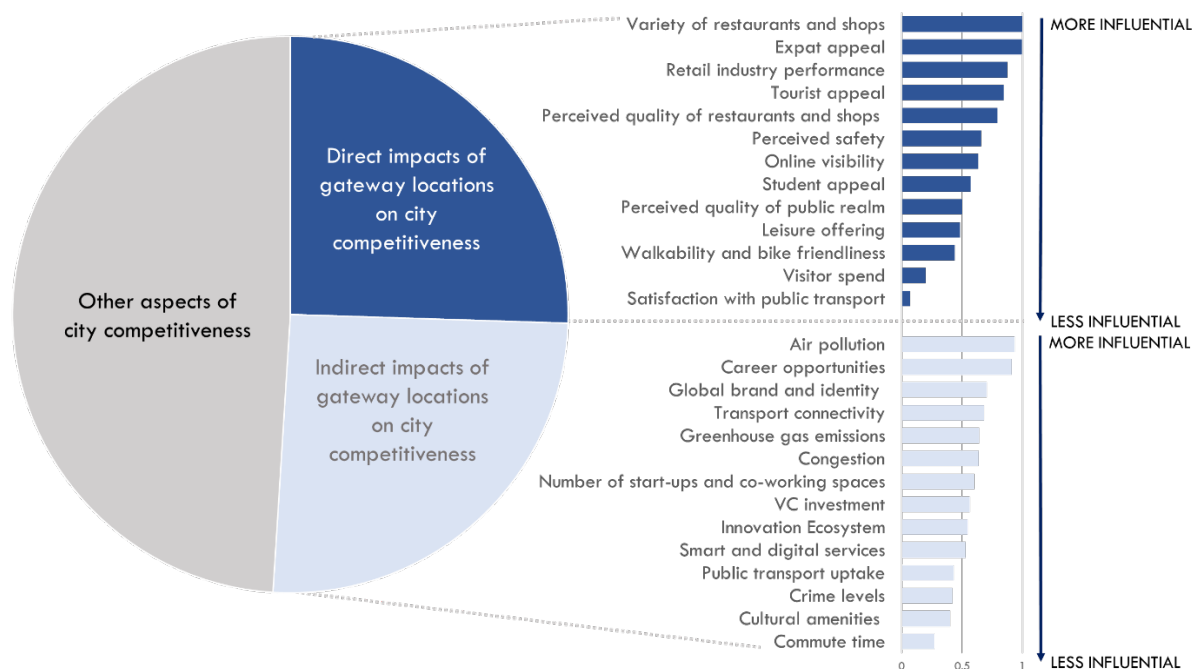


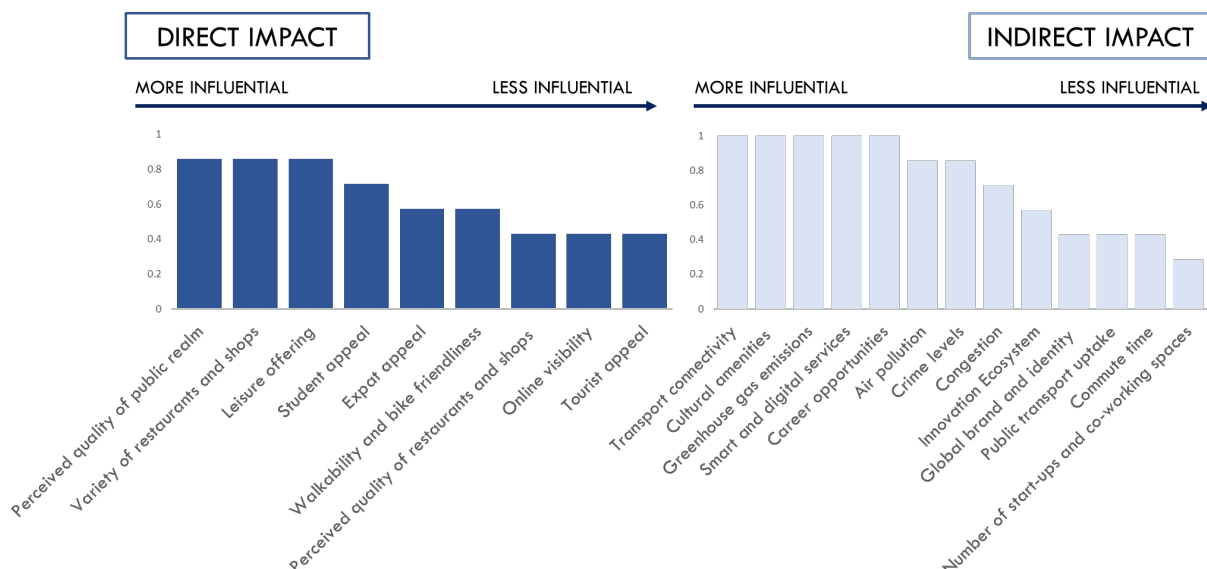
Figure 7: Direct and indirect impacts of gateway location projects on city competitiveness, in order of presence and influence, across all recent global benchmarks*



Source: The Business of Cities. *Relative to variety of restaurants and shops (score = 1), which is the most frequently measured competitiveness factor on aggregate across all global benchmarks relating to transport-oriented development projects in the past 2 years (March 2017 - March 2019).

Looking only at the most globally influential benchmarks, we can see that the impacts register on the themes of leisure offering, the perceived quality of the public realm and the uptake of smart and digital services (see Figure 8).

Figure 8: Direct and indirect impacts of gateway locations on city competitiveness, in order of presence and influence, across all globally influential benchmarks*



Source: The Business of Cities. *Relative to transport connectivity (score = 1), which is the most frequently measured competitiveness factor on aggregate across the most globally influential benchmarks relating to transport-oriented development projects in the past 2 years (March 2017 - March 2019).

Sydney's competitive imperatives and the role of good growth and development

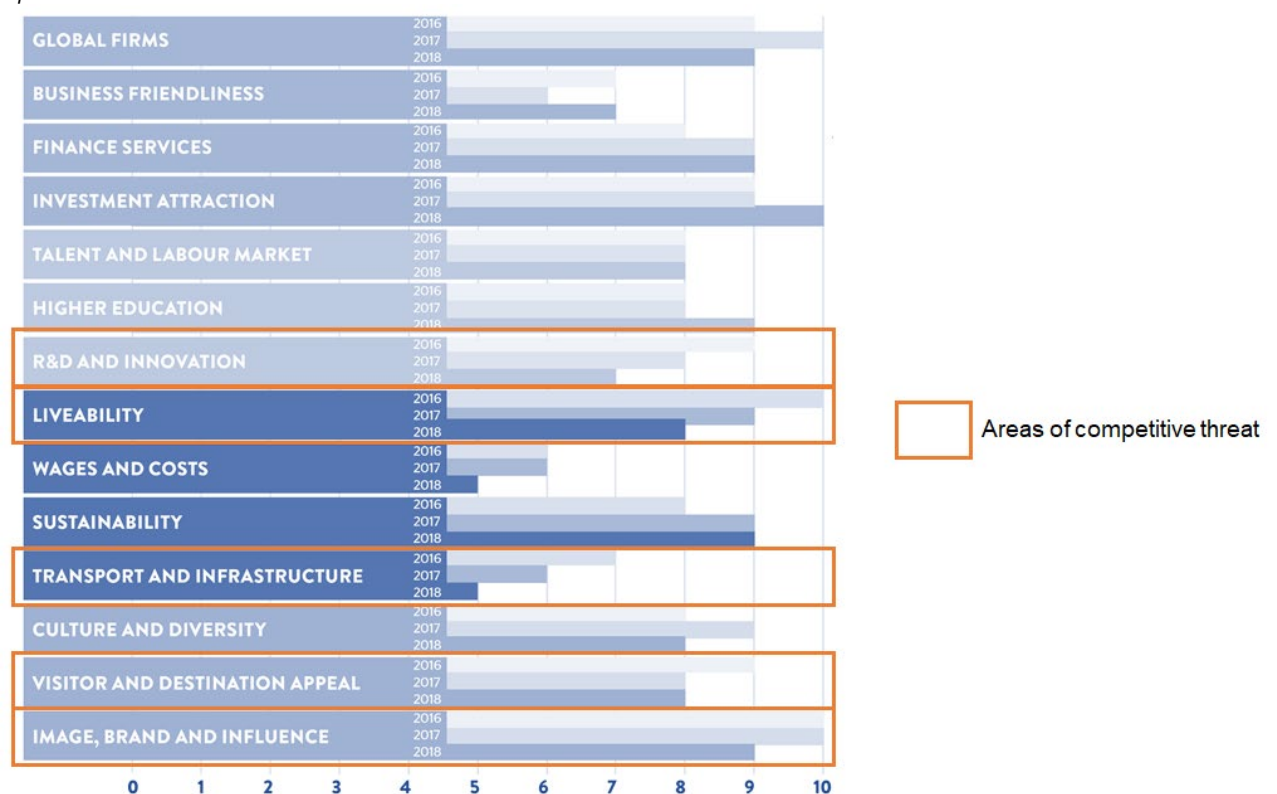
Our ongoing work analysing Sydney's global competitiveness has identified five broad areas where the city's competitive performance risks being eroded as other cities with similar assets and specialisations have made more rapid progress (see Figure 9). Over the last 3 years we have observed declines in overall performance in these areas across the major indices that evaluate cities.

The 5 areas are:

- Liveability
- Innovation capacity
- Transport and infrastructure
- Visitor and destination appeal
- Image, brand and influence

All 5 are areas where successful transport interchanges and surrounding precinct development can have measurable effects on Sydney's performance, and in turn support improved overall standing in the world of cities.

Figure 9: Areas of competitive threat in Sydney's global competitiveness, identified in 2018 Sustaining the Advantage report



Source: The Business of Cities.



Traditionally an area of advantage, across all global benchmarks Sydney has fallen from 3rd to 8th among its peer global cities for liveability, because of:

- Other cities have made more progress in developing the **quality of their public realm**. Sydney records a below average performance for pedestrian friendliness and walkability, including to

and from places of work. This has translated into perceptions. In the major measure of the overall perceived quality of the city's natural and built environments, it has declined from 3rd globally in 2016 to 17th in 2018.

- Limited access to the **next generation of in-demand lifestyle amenities**, including co-working spaces, work and non-work gyms. and vegan restaurants. Sydney now consistently ranks in the bottom 25% of cities globally for these measures.
- **Costs of rents, housing, business space and everyday goods** have risen faster than by global standards. Sydney is now the 3rd most unaffordable housing market in the world.

Sydney still possesses many liveability fundamentals - such as high levels of personal well-being and safety – but the benchmarks point to a fraying liveability equation - particularly for young professionals seeking a high amenity, high affordability work-play lifestyle that favours access to recreation, vibrancy, and quality interaction.



The global benchmarks Sydney indicate that the city's excellent higher education and knowledge production institutions have not been translated into strong commercial outcomes. This is linked to a fall in the relative quality city's environments for collaborative innovation and the appeal to researchers. Sydney's innovation economy, which is an essential job creator for the next economic cycle, is therefore less well developed:

- Sydney still does not feature in the top 20 in many of the most globally influential benchmarks of innovation, and places outside the top 50 cities globally for the level of VC investment.
- Despite a growing number of startups, Sydney does not yet boast a critical mass of globally influential innovative tech firms relative to other cities - particularly other 'contender' cities such as Amsterdam, San Francisco and Toronto.

These factors point to the importance of Sydney developing its whole innovation ecosystem requirements. A key element of this is the role of innovation precincts that possess the scale and quality public realm to drive co-location, interaction and collaboration.



As Sydney experiences 'catch up' investment in its transport system, performance benchmarks observe the improvements being made in other cities' systems. Sydney had fallen behind in terms of the density and coverage of stations and the overall cost and reliability of public transport, relative to other cities.⁴ In addition:

- Sydney is behind in softer measures of **transport experience and satisfaction**. For example in measures of citizen satisfaction with the city's key ports of entry, including airports and major train stations, Sydney ranks 50th out of 100 cities.
- The low reputation of public transport interchanges is one factor in why Sydney has become **more congested more quickly** than other peer cities, that has increased by more than 10% over the past 8 years.
- Other cities have made more rapid progress on strengthening their **technology base and smart systems**. Sydney has slipped behind in terms of implementing public Wi-Fi hotspots and strengthening access to high-speed broadband, and now lags all leading cities in the Asia-Pacific except for Melbourne and Tokyo for citizen awareness and uptake of smart apps.

International assessment comparisons of transport and infrastructure have not yet caught up with the recent surge in investment. But even though this spending is likely to produce a 'catch-up' effect in Sydney's recorded performance relative to the top-ranked cities, the gaps in the experience of transport will hold back its comparative progress.

VISITOR AND DESTINATION APPEAL

2016
2017
2018

Sydney maintains a very strong appeal as a global destination, but global benchmarks have identified that:

- Sydney's performance in the leading measures of **visitor experience** has declined, partly due to a drop relative to other cities in cultural experience and access to amenities. Sydney has fallen from 10th in 2016 to 15th in 2018 in one key measure, and has been overtaken by many of its closest contenders, such as Chicago, Madrid and San Francisco.
- Sydney is home to fewer **international retailers** than many of its most comparable 'peer' cities, and has been held back by a lower perceived variety of retail shops compared to other cities.
- Sydney has faltered in measures relating to the perceived **quality of its major attractions**, museums and destinations, and to expert perception of the city's culinary and nightlife scene.

These results partly reflect the magnitude of improvements made by other cities - particularly their ability to manage tourism flows, invest in pathfinding and storytelling, and provide a mix of opportunities and amenities to suit all types of visitor. They also reflect that Sydney is not yet optimising the value or experience of its cultural assets, or using enough of its key locations to promote creativity and placemaking to complement the 'events and bed-nights' model of the visitor economy.

IMAGE, BRAND AND INFLUENCE

2016
2017
2018

Finally, the global benchmarks also point to ways in which these factors, and other experiences and brand associations, mean that Sydney's unique identity and reputation has seen a slight drop in recent years. For example:

- In the major measure of online visibility and reach, Sydney has fallen from 11th globally in 2016 to 30th in 2018, overtaken by Barcelona, Chicago and Miami.
- Measures suggest Sydney is regarded as a global leader among beauty seekers, transient visitors, baby boomers and retirees, but is not as well regarded for its smartness, hospitality, nightlife or vernacular.
- The city's online social media reach in terms of the number of tweets that reference the city or its locations and neighbourhoods is low relative to other cities

The benchmarking data suggests that affection for Sydney and pride in the city's scenic and natural assets remains very high. But the city risks its identity and purpose in the 21st century becoming ambiguous. Sydney's brand identity is limited by a high reliance on inherited assets and landmarks, and relatively little expression of Sydney's core vision, values and cultural DNA across the wider set of precincts and places.

Summary

Block B of the Western Gateway has the potential to act as the precinct catalyst that can help Central Precinct address five broad areas where Sydney's competitive performance risks being eroded: the lifestyle equation for younger professionals, innovation capacity, transport experience, visitor and destination appeal, and city image.

Sydney's position in performance and perception benchmarks of urban amenity, technology, precinct liveability and city appeal would be positively impacted if the Western Gateway to the interchange is supported to provide the quality, scale, ambition and spillovers to enable the wider precinct to succeed.

2. The Block B Proposal and Central Precinct

The project in question constitutes the Western Gateway for Central Station, Sydney's primary transport hub and part of an area of Sydney that is experiencing significant change and intentional renewal and reimagining. Compared to comparable locations in other leading global cities, most indicators suggest that the precinct surrounding Central is currently underperforming and negatively perceived, and that it is at an earlier stage of its cycle of redevelopment and reinvestment. Like in other established cities, the precinct it is part of serves many kinds of user, has multiple landowners, complex interdependencies, and competing timelines, all of which requires careful management and opportunities for alignment and integration.

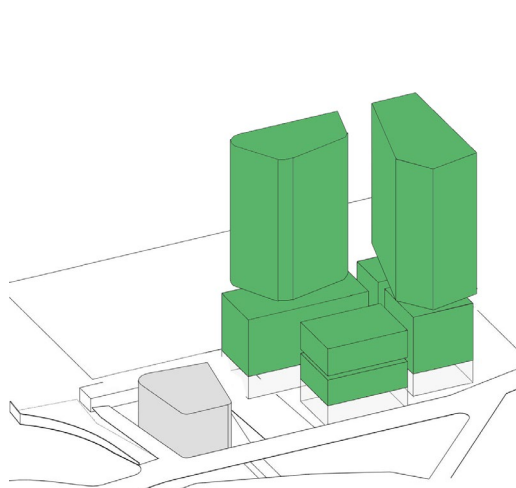
The Proposal for redevelopment of Block B (14-30 Lee Street) reflects a commitment to achieving a location that epitomises Sydney's civic and workplace ambitions for the future, and unlocks the potential of the surrounding precinct.

From an international perspective tracking the evolution of major infrastructure and development projects in prime and strategic locations of top global cities, we can observe that this Proposal is distinctive both because of the inherent assets and the ambition and intentions of the redevelopment.

Firstly this project benefits from and leverages some key inherited advantages:

First, it has **proximity** to a Sydney CBD that is the largest corporate decision-making hub in the Southern Hemisphere, a centre that is fundamental to the growing Greater Sydney metropolis and to an Australia in transition. The project is at the southern point of Australia's long-term centre of business and specialised services, and the country's biggest business brand, cradle of future industries, magnetic gateway, and a pace-setter for a more innovative metropolitan nation. This proximity is not only in terms of distance but also in terms of the location's excellent linkages to multiple road tunnels, pedestrian walkways and a Goods line, easy walking distance to numerous educational institutions and recreational facilities, and its position at the base of a walkable spine connecting North and South CBD. With the CBD centre of gravity moving southwards, this means that Block B and the Western Gateway is right in the middle of Eastern Sydney's largest opportunity for growth, investment, development and repositioning over at least the next two cycles.

Second, it is the Western gateway to a **station** that has unique links nationwide and across Greater Sydney, including forthcoming Sydney Metro, and local light rail systems, and excellent and fast links to one of the Southern Hemisphere's busiest and most well connected airports. The project's Proposal also commits to much improved multi-directional pedestrian connections to existing and proposed TfNSW infrastructure. Due to its role in servicing metropolitan expansion, Central's hub role is growing strongly and is forecast to host more than 50% more passenger exits and 100% more interchanges up to the mid-2030s. As such the project is located next to one of the most pivotal single interchange stations among any of the top global cities.



The proposal also contains a number of features that are relevant from the perspective of Sydney's competitiveness and comparative performance.

1. **Vertical workspace that acts as a beacon for the Innovation and Technology Precinct.** Two sculptural 25-floor towers can house 15,000 workers in quality office space aimed at tenants operating at the interface of technology and innovation. With a substantial total floor area, the proposed towers feature office design spec intended to match some of the leading examples in America's and Europe's top cities, including in the wide informal warehouse structure of The Factory site. The two proposed towers themselves in effect extend the CBD skyline; their heights, peaks and orientations take into account their wider position and context in the city, multiple points of view and local building styles, and they also include a vertical green spine accessible from the workspace.
2. **Commitment to long-term efficiency and demand management.** In a complex evolving and multi-functional site the Proposal seeks to ensure and maintain transport and access options at street level as well as provide the essential below ground infrastructure to ultimately support future significant Over Station Development. An Integrated Distribution Facility intends to provide a single more efficient logistics system that can also serve adjoining activities. Substantial space is allocated below ground to support waste management, storage, vehicular and emergency functions. A masonry escarpment will develop the visual and physical links to the future OSD site. As such the Proposal is taking into account 35+ years of future population growth and transport demand and building in capacity accordingly.
3. **Precinct awareness and contribution.** The Proposal takes responsibility for its potential contributions to a critical location in central Sydney and identifies opportunities to provide functions that will support the wider precinct to function more smoothly and sustainably. This

includes the development of shared assets such as a shared basement that can service adjacent lots for storage, bike transportation and other logistics. The Proposal also expresses impact considerations such as the sunlight access needs of Prince Alfreds Park. More broadly the project identifies the importance of close partnership working with New South Wales government agencies and adjoining landowners and occupiers such as Atlassian and Toga.

4. **An appealing mix of amenities.** Alongside the core office component the Proposal identifies an activated ground floor lobby and retail space providing services and amenity for tenants. A 45 metre garden podium on top of the masonry ground plane will contain retail, civic and commercial options, as well as providing break out and recreation space. The Hall is a proposed area that can host a range of retail and commercial offerings, and also support uses such as performances, markets, art installations and events. The lower level retail aims to service workers in the towers and the general public. Meanwhile The Workshop will provide a 3 storey mix of adaptable retail and commercial spaces. The amenities are proposed to be strongly integrated and permeable within a coherent overall experience.
5. **A landmark for south CBD.** In a context where Sydney's central landmarks are primarily distributed across the northern and coastal edges of the CBD, this project proposes to establish a landmark destination by ensuring the interface of the urban square helps it to connect North and South CBD, and is activated through design features and consideration of movement and natural light. At the top of the towers, the Lanterns also aim to act as beacons of the destination, demonstrating the quality of public realm and the aspiration of the wider precinct.
6. **Attuned to the location's DNA.** The proposed ground plane finishes and architectural detail consider the site's past and the layered character and heritage of the surrounding area. The brick square, steel bridge, brise-soleil façade, and perforated steel floor plates, are other examples of linking with the industrial and technology DNA of the rail location and Sydney as a whole, in terms of the project's emphasis, design, materials and language.
7. **Relatable design and vernacular.** The Proposal has sought out many opportunities to make the site permeable with multiple entry points and visual sight lines. It features facades facing Lee Street and Henry Deane Plaza that are designed to interface with the street and the square as well as the future OSD site. The street wall is proposed to balance the variation of heights of surrounding buildings facing Railway Square.
8. **The human experience.** Observing the attributes of other stand-out projects in other global cities, the Proposal is mindful of street level experience and the appetite for the daily commuting and workplace experience to incorporate active public realm, natural character, use of stairs and light. The Proposal recognises the opportunity and obligation for the public spaces to be celebratory, optimistic, and places of knowledge exchange.
9. **Planned for multiple cycles and purposes.** In a context where global cities find that the needs of users in their prime spaces are growing and changing quickly along with the pressure to intensify uses throughout the 24 hour and seasonal cycles, the Proposal looks to build in flexibility in design to support future pedestrian and business demand. Public functions are organised across the lower levels in a way that can allow for functions to adapt and foster an atmosphere that is dynamic, fresh and constantly changing.
10. **A benchmark for others.** The Proposal is attentive to the recent success stories in Sydney and other cities domestically and internationally, and expresses the ambition to create a civic space and workplace that is forward-thinking, inspiring and a powerful signal of the journey that other locations in Sydney can go on.

The features of the Proposal indicates that Block B has clear prima facie potential to deliver significant long term public benefit and economic benefit, compounding and augmenting the public and private investments happening in and around Central Station.

Block B is part of the 24 hectare Central Precinct, a State Significant Precinct which Transport for NSW (TfNSW) is exploring opportunities to revitalise and reinvigorate. The Central Precinct Renewal Program (CPRP) represents a commitment to expand Sydney's CBD southwards, create new multi-functional public spaces and connect to nearby neighbourhoods. The Programme is aimed at Central Station and surrounding public rail lands, Goulburn Street Car Park and the Western Gateway that includes Block B. The CPRP also aims to provide the creative space for the wider Sydney Technology and Innovation Precinct, which itself eventually aims to accommodate 25,000 additional innovation jobs.⁵

By supporting the wider precinct to perform well the Block B Proposal incorporates attributes that can also register in terms of impact on Sydney's wider competitiveness and attractiveness. In the following sections we review this potential in more detail by analysing the impact and lessons of other comparable locations.

3. The impact of keynote developments around Gateway Stations: Global Experience in Leading Cities

In many other of the 30 most competitive cities in the world, projects in the immediate vicinity of central gateway stations have been completed in the last decade. In this section we review the ambition of six projects in London, Hong Kong, Berlin, Vienna, Osaka and Denver (Figure 10).

Figure 10. Global map of station redevelopment case studies.



These projects vary in their approach and ambition but they have been selected as they share many factors which make them analogous to the redevelopment of the Western Gateway of Central Precinct. Each project has seen:

- The redevelopment of major rail termini or interchanges which already demonstrate impact in the local and city-wide economy
- Location at the edge of an expanding CBD, or an anchor to a 'second CBD'
- Proximity to under-performing neighbourhoods with low value retail and low dwell time

- Creation of new or additional public space adjacent to the station
- Mixed use development next to the station site (office, retail, residential)
- Collaborative ventures that include public and private stakeholders



**King's
Cross
London**



**Kowloon
Station
Hong Kong**



**Central
Station
Berlin**



**Central
Station
Vienna**



**Osaka
Station
Osaka**






**Union
Station
Denver**



Table 3: Summary of Observed impacts on City Competitiveness

	London King's Cross	Hong Kong Kowloon	Berlin Central Station	Vienna Central Station	Osaka Station	Denver Union Station	Sydney Central Potential	Success Factors
Critical Mass	Medium Impact	High Impact	Medium Impact	Low Impact	High Impact	Medium Impact	High Impact	<ul style="list-style-type: none"> ✓ High built density adjacent project ✓ 100,000+ GFA ✓ Capacity to host multiple tenants and industries
Anchor Tenants	High Impact	High Impact	High Impact	Medium Impact	High Impact	High Impact	High Impact	<ul style="list-style-type: none"> ✓ Ability to host large office, hospitality and retail tenants ✓ Connectivity edge for firms with pan-regional labour force ✓ Identity as a premier business location
New Knowledge Jobs	Medium Impact	Low Impact	Low Impact	Low Impact	High Impact	Medium Impact	High Impact	<ul style="list-style-type: none"> ✓ Ecosystem of large tech firms & SMEs ✓ Variety of office space and proximity to knowledge anchors ✓ Desirable spaces to socialise
Integrated Mobility and Logistics	High Impact	High Impact	High Impact	High Impact	High Impact	High Impact	High Impact	<ul style="list-style-type: none"> ✓ New pedestrian and cycle routes ✓ 360 degree porosity with multiple neighbourhoods ✓ Discreet reworking of logistics
Highly Mixed Use	High Impact	Medium Impact	Low Impact	Medium Impact	High Impact	Low Impact	High Impact	<ul style="list-style-type: none"> ✓ Active zoning for mixed use ✓ Integration of green and built spaces ✓ Blended uses not confined to specific zones
Signature Design	High Impact	Medium Impact	Low Impact	High Impact	Low Impact	High Impact	High Impact	<ul style="list-style-type: none"> ✓ Emphasis on urban quality, open spaces, public realm ✓ Sensitivity towards heritage assets ✓ Fully integrated with character of surrounding districts
Advanced Multi Modal and Transport Experience	High Impact	Low Impact	Low Impact	High Impact	High Impact	Low Impact	High Impact	<ul style="list-style-type: none"> ✓ Provision of shared active transport ✓ Local bus services ✓ Supporting infrastructure for e-vehicles
Sustained Governance Collaboration	High Impact	Low Impact	Low Impact	Medium Impact	High Impact	High Impact	High Impact	<ul style="list-style-type: none"> ✓ Multiple levels of government and transport provider share long-term vision ✓ Mechanisms for collaboration between public and private landowners and major stakeholders. ✓ Shared financing or management of certain pooled precinct functions.
Sequenced to Enable Maximum Impact	High Impact	High Impact	Medium Impact	Medium Impact	High Impact	High Impact	High Impact	<ul style="list-style-type: none"> ✓ Consideration of station's role in precinct development from outset ✓ Phased development scheme ✓ New infrastructure and amenities timed to arrive close to development
Enhanced Precinct Brand and Dwell Time	High Impact	Low Impact	Low Impact	Medium Impact	Medium Impact	High Impact	High Impact	<ul style="list-style-type: none"> ✓ Rehabilitation of underutilised land with enhanced visual appeal ✓ Integration of retail, leisure, culture and entertainment uses ✓ Quality street furniture and urban design

High Impact  Medium Impact  Low Impact 

The case studies highlight that among the world's most competitive cities, redevelopment in and around their signature rail stations varies in terms of the:

- Vision
- Scale and density
- Balance of uses
- Nature of precinct activation
- Nature of professional opportunities
- Partners and funding sources
- Spill over effects
- Tenant attraction
- Permeability of project area
- Local impacts
- Improvement of public realm
- Subsequent construction activity

Shared Lessons Observed about Optimisation of Project

Critical Mass

The most successful projects have managed to create critical mass of jobs, customers and activities in the immediate station vicinity, by optimising transport flows, building scale. Many of the initial projects have GFA of 100,000m² to underpin precinct development many times that size. This scale provides the floorplates and capacity to attract and host multiple tenants and industries. From the international locations reviews, with average GFA is well above 100,000m², the wider precinct was able to achieve a substantial office space share of 42%, and attract at least five major Anchor Tenants.

Table 4: Comparative Data

	Adjacent Commercial Project			Wider Precinct		
	Project	Project GFA (m ²)	Project FAR*	Precinct	Precinct GFA (m ²)	Precinct FAR
King's Cross, London	Pancras Square Office Development	102,000	3.3	King's Cross Central	743,000	2.9
Kowloon Station, Hong Kong	International Commercial Centre	275,000	24.5	Union Square	1,700,000	12.6
Vienna Central Station	ÖBB HQ	46,000	7.1	Belvedere Quarter	130,000	5.2
Berlin Central Station	Central Station Retail and Office Development	175,000	1.8	Europacity	891,000	2.2
Osaka Station	Grand Front Osaka	567,000	15	Umekita	1,100,000	4.5
Union Station, Denver	Union Station and Adjacent Developments	54,000	2.3	Union Station District*	655,000	4.7

*Calculated using GFA of all developments.

Anchor Tenants

Projects that are catalytic for their wider precincts and for city performance tend to have the scale and quality of real estate to accommodate multiple anchor tenants with global presence and reputation. These are served by a mix of retail and recreational uses, and rapid connectivity to the core CBD. The location's brand or identity also acts a pull to these anchors. By assembling this mix of core occupiers, a project supports citywide performance in terms of economic vitality and global reputation.

Table 5: Comparative Data on Wider Precinct Development

	Purpose	Mix of Uses	Anchor Tenants Attracted	Signature Design and Public Realm
King's Cross, London	New cultural and tech district that expands from CBD	Office: 56% Residential: 24% Retail: 11% Culture/Education/Hospitality/Leisure: 9% ⁶	Global firms: Google, Havas, Universal Records Institutions: UAL, Camden Council ⁷ , Francis Crick Institute	Sensitive heritage reuse, bold station concourse, family-friendly Granary Square
Kowloon Station, Hong Kong	Intensify 2nd CBD, underpin emerging cultural district	Residential: 56% Office: 21% Hospitality: 15% Retail: 8%	Financial Institutions: Morgan Stanley, ICICI Bank, Deutsche Bank, Shinhan Bank, Credit Suisse, ING Asia Pacific	High-density mixed-use towers, focal recreational gardens and plazas
Vienna Central Station	Integrate rail terminals and build new commercial hub	Office: 45% Hospitality: 19% Residential: 18% Retail: 17%	Public Services Organisation: ÖBB (national railway company) Financial Institutions: Erste Group, Bank Austria, BUWOG	Architecturally ambitious station redesign, seamless integration with surrounding districts using placemaking
Berlin Central Station	Activate unutilised land near cluster of government institutions	Office: 57% Residential: 34% Retail: 5% Cultural: 3%	High Value Corporations: Total, KPMG, PwC, 50Hertz Hospitality: InterCity, Steigenberger, Meininger	Public waterfront and parkland access, iconic design of commercial office spaces
Osaka Central Station	Anchor multiple phases of precinct regeneration	Office: 56% Retail: 19% Residential: 16% Hospitality: 9% ⁸	Retail Flagships: Zara Home, Muji, Actus, Keyuca Technology: Panasonic Hospitality Anchors: Intercontinental	Intelligent repurposing of former rail assets, bustling central plaza
Union Station, Denver	Sensitive reimagining of heritage terminal and new mixed use zone	Residential: 47% Office: 31% Retail: 13% Hospitality: 9% ⁹	Technology Firms: Slack, Udemy, Strava, Facebook Finance: Firstbank, Funding Circle, Deloitte Retail: VF Corporation	Actively zoned mixed-use, pedestrian routes and high amenity spaces, multiple vibrant plazas

New Knowledge Skills

The successful and competitiveness-supporting projects enable a substantial quantum of new jobs in the immediate vicinity and even more in the surrounding precinct, to accommodate larger tech firms who anchor a local ecosystem of SMEs, start-ups and entrepreneurs. These are often also integrated with co-working and incubator spaces and access to quality cafes, bars, restaurants and shops.

Integrated Mobility and Logistics

The leading projects observed facilitate the integration of mobility and logistics functions and help to optimise station efficiency, convenience and onward travel. Common features in the 1st phase are pedestrian walkways and cycle lanes in multiple directions, and the well managed consolidation of logistics capabilities to enable large gateways to run smoothly without adding to surface level congestion.

Highly Mixed Use

Successful precincts adjacent to major rail gateways accommodate multiple uses including retail, culture, education, hospitality and leisure, and this is made possible by 1st phase development that is multi-functional and able to sustain population needs for 18 hours a day as a destination.

Signature Design

The most catalytic projects benefit from a signature design that help achieve a distinctive sense of place, identity and inclusiveness, and a reputation as one of the examples of place-enhancing station redesign in its city. This usually has included substantial investment in public realm, shared open spaces and plazas, and sensitive restoration of heritage assets, and alignment between the design and the story of the precinct.

Advanced Multi-Modal and Transport Experience

Across the 6 examples, it is clear that high competitive standards are being reached in terms of multi-modal and micro-mobility access. In particular the 1st phase of the development successfully enables active transport, bicycle docking stations and other charging facilities, as well as clear pathfinding in and between complex station environments. Some of these projects also are pioneers of new kinds of retail, shared services, and business partnerships. There is a culture of experimentation embedded.

Sustained Governance Collaboration

In certain cases these strategic development projects are helping to drive new collaborative ventures among public and private stakeholders, including shared visioning statements, co-creation of masterplans, and shared financing or responsibilities.

Sequenced to Enable Maximum Impact

The competitive effect of gateway projects is influenced by the timing relative to other infrastructures, amenities and locations. Clear phasing, consideration of a station's role in wider precinct development during early stages, and recognition of what public and private investment will be needed when, has been a factor in the locations optimising the scale and dynamism that underpins competitive performance.

Table 6: Impacts in local area

	Daily Footfall	Land Values/Tax Revenues	Transport Experience and Multi-Modality	Industry /Innovation Performance
King's Cross, London	480,000	Local house price increase of 136% since 1 st phase (2x London average), commercial values risen by 56% since 2016	5 electric vehicle charging ports, 2 bike sharing docking stations (50 bikes)	New technology and innovation precinct, expansion of London's CBD
Kowloon Station, Hong Kong	-	Integrated Elements shopping arcade major source of MTR rental revenues.	Airport check-in facility	Scale to attract HQs of global financial institutions, helped establish Kowloon as second CBD
Vienna Central Station	145,000	Land value in wider district rising steadily approximately 3% p.a.	600 car parking spaces, 3 bike garages, electric bike charging ports, 2 bike sharing docking stations	1 st phase encouraged corporate HQ relocation of several leading banks and insurers
Berlin Central Station	300,000	Wider precinct recording highest residential value growth rate in Berlin in (outside of CBD): +11% in most recent year	50 bicycle storage spaces in 1 st phase ¹⁰	Share of offices let by global corporates (31%) far exceeds Berlin average (7%)

Osaka Station	800,000	Umekita now has highest land values in Osaka, growing 7% year on year	Umegle Bus stops at 12 locations in the precinct, 15 rental bikes, 15 electric bikes ¹¹ and six car parking zones	Mixed commercial and retail hub, which has attracted start ups (Knowledge Capital) and luxury retailers
Union Station, Denver	100,000	The average home cost in LoDo reached double the city average by 2016 ¹²	New multimodal transport hub: 22-gate bus facility, train and light rail in the station, 13m passengers annually use free downtown bus service	Flexible office space attracting a mix of corporates, technology firms and start-ups

Currency conversions based on average exchange rate in stated year.

Enhanced Precinct Brand and Dwell Time

Successful precincts benefit from a 1st phase where the public realm, retail and entertainment offer substantially increases the notion of identity, sense of place, familiarity, attachment and dwell time in and around the station location as it evolves into a real destination.

Case Study: King's Cross Station, London

Station and Adjacent Commercial Project		Wider Precinct	
Duration of Development	2005 - 2016	Duration of Development	2010 – 2020
Density of Adjacent Development (FAR)	3.3	Density of Wider Precinct (FAR)	12.6
Daily Footfall	480,000 (KX + St. Pancras station) 33,000 specifically to shop	Public Realm	7000m ² public plaza 40% dedicated to open space
Retail Component	49,300m ²	Connectivity Benefits	1st phase improved transport entrances; new pedestrian concourse, walkability

The redevelopment of King's Cross station has helped to transform its surrounding neighbourhood from a transport hub through which people moved and rarely stayed, into a global destination that people want to visit, live and work in.

The quality and sequencing of development fostered a brand new innovation and technology precinct that effectively expands London's main CBD, significantly adding to the stock of the city centre's Grade A office space. It has also enhanced the global reputation of the city.

Analysis shows King's Cross has widely outperformed other redevelopment locations in London, because of:

- An adherence to a clear set of 10 principles for achieving a unique 'sense of place'.
- The emphasis placed on sensitive design, accessibility and long-term stewardship from the outset of the project.
- The strong focus on securing positive social outcomes.¹³



Figure 11. King's Cross Station.

Background and Context

The redevelopment of King's Cross station and surrounding neighbourhood began in 2005, to improve an under-performing location experiencing petty crime, building disrepair, poor passenger flow management, and low destination quality.

The 1st phase synchronised station restoration with staged renewal of signature heritage assets. The station created a new concourse that provided passengers with three and a half times more space than the 1970s concourse it replaced.¹⁴ The concourse had more shops and restaurants, and a new 2nd storey to enable passengers to escape the commuter rush.¹⁵ It contained over 2800m² of retail space across 27 units,¹⁶ a new 7000m². public plaza with improved entrances to the underground network, 19 new trees, and an area dedicated to public art.¹⁷

The redevelopment was a key catalyst in the carefully sequenced regeneration of the precinct, including 7 new Grade A office buildings on Pancras Square, immediately next to the station.¹⁸ 130,000m² of office space was delivered in the 1st phase.¹⁹ To date, the project has attracted more than £2.2bn in private investment.²⁰

Now nearly complete, it is delivering more than 700,000m² of floorspace. 40% of the land is dedicated to open space.²¹ The projected breakdown of floorspace by use category will be 56% office, 24% residential, 11% retail and 9% culture/education/hospitality/leisure with a projected footfall split of 40% visitors, 27% workers, 20% residents and 13% students.²² The project has a very strong commercial focus with 30,000 workers, but also includes a housing component of 900 new homes (325 affordable) and 750 student rooms.²³

Impacts of the Wider Precinct Redevelopment

Shorter term	Longer term, larger scale impacts
Higher passenger dwell-time and satisfaction. Following completion of the project, the 2012-13 FY retail spend doubled to over £40m, 12m of 176m annual users come to shop. ²⁴ By 2016, King's Cross had an average catering spend per visit of £27 – 84% higher than the inner London average – and since the	The number of jobs has increased by 50% in 5 years, compared to 18% London-wide, and knowledge employment has increased by 65%, compared to 22% London-wide. To date, the redevelopment has supported over 10,000 jobs and over £600 million in GVA per year. ²⁶

new concourse opened, passenger satisfaction has increased by one third, to over 95%. ²⁵	
Surge in high value corporate tenants. There are already 8,500 employees working in the redeveloped commercial spaces, 94% in offices. ²⁷ Anchor tenants include Google (69,700m ² Universal Music, Havas Media and Louis Vuitton, and Facebook (55,700m ²). ²⁸ By completion, King's Cross precinct will be home to 316,000m ² of office space across 18 new and refurbished office buildings.	Transformation of public realm driving footfall and citywide interest. The 2 nd phase has delivered 50 new buildings, 3 new public squares, 6 redeveloped parks and gardens, and 20 new streets. ²⁹ In total, over 55,750m ² of public realm improvements have already been delivered. There has been a 57% increase in since 2014, now exceeds 7.5 million annually. ³⁰
Vastly improved retail and amenity offer. The project is on track for 46,500m ² of shops, restaurants and bars, including 24 restaurants and 160 retail shops. ³¹ Coal Drops Yard – an experimental retail space offering 9,300m ² of shops and restaurants – houses high-end fashion labels such as Fred Perry and Paul Smith, and Samsung now anchors the development with a new 1,900m ² 'digital and creative playground.' ³²	Local economic impact: The project is set to generate £1.4 million in council tax annually once soon completed. ³³ Commercial values increased from £24 per m ² in 2011 to £36 per m ² in 2016. ³⁴ Since 2004, residential values have increased by 138%. ³⁵ At the scale of the King's Cross Central Impact Zone, house prices have increased at a rate double the London average.

Impacts on City Competitiveness

Main Impacts	Effects and Spillovers	Contribution to City Competitiveness
Global Brand and Identity	<ul style="list-style-type: none"> Demonstration of the role of a station redevelopment project in reinvigorating railway lands with a complementary mix of dynamic uses. 	<p>The initial stage of cultural infrastructure, heritage renewal, business and student functions has contributed to:³⁶</p> <ul style="list-style-type: none"> Improved overall city reputation from 13th to 6th between 2012 – 2017.³⁷ 5th to 1st for student friendliness from 2015 to 2018.³⁸ No. 1 for attractiveness of culture, shopping, cuisine and nightlife.³⁹
Quality of the Public Realm	<ul style="list-style-type: none"> Top class 1st phase design and mix of users has contributed to the distinctiveness and positive perceptions of the precinct's quality. 	<p>The growth in local economic activity and the quality of public space has helped London to perform:</p> <ul style="list-style-type: none"> Top 15 for the levels of social placemaking and safety within transport hubs⁴⁰ 6th station globally for ability to sustain ridership, mix of uses, placemaking and contribution to economic development of surrounding neighbourhoods.⁴¹
Career Opportunities	<ul style="list-style-type: none"> Strong commercial focus has expanded London's CBD and it has become a key employment and productivity node for the city 	<p>The appeal to large tech and media corporates has helped London to:</p> <ul style="list-style-type: none"> Perform 2nd globally for number of employees working in knowledge intensive tech jobs.⁴² Improve from 47th – 38th based on 'millennial' workforce's perceptions, despite rising citywide concerns about affordability.⁴³
Innovation Ecosystem	<ul style="list-style-type: none"> Appeal to innovation firms seeking proximity, quality commercial space, nearby recreational uses, and talent. 	<p>By expanding the number of innovation jobs, King's Cross has helped London to:</p> <ul style="list-style-type: none"> Perform within the top 5 across studies measuring innovation activity, R&D and the start-up environment since 2014.⁴⁴

Case Study: Kowloon Station, Hong Kong

Station and Adjacent Commercial Project		Wider Precinct	
Duration of Development	Kowloon Station: 1994 - 1998 ICC: 2002 - 2010	Duration of Development	2000 - 2010
Density of Adjacent Development (FAR)	24.5	Density of Wider Precinct (FAR)	12.6
Daily Footfall	30,000	Public Realm	New open plazas, walkways and gardens
Retail Component	83,000m ²	Connectivity Benefits	Major business hub 22 minutes from International Airport, pedestrian routes.

Kowloon Station is the anchor to a new high density residential and retail '2nd CBD' destination in a wider hub of global financial and tech HQs and major cultural precinct, on the former land of the Kai Tak International Airport. The station was constructed as part of the addition of a new subway line and an airport express link to the new International Airport.

The development of the station was funded and led by the government Mass Transit Railway (MTR) Corporation but the phased development of the mixed-use towers in the vicinity was led by private developers, underpinned by the International Commercial Centre.



Figure 12. Kowloon Station⁴⁵

Background and Context

Kowloon Station started serving passengers in 1998, and the phased development of the residential, commercial and retail spaces in Union Square took place between 2000 – 2010,⁴⁶ on brownfield and reclaimed land as part of a wider project to create a new urban precinct on a 130,000m² plot in West Kowloon.

The initial construction of Kowloon Station featured innovative design to optimise the subsequent potential of the precinct. The five-storey station was constructed underground, below Union Square with key exits opening out into open space in the centre of the site. The station has a floor area of 18,000m² and contains 120 shops, a cinema, restaurants and an ice rink in the Elements shopping mall

on the two upper floors. On the podium level, the station has a roof garden with open spaces and pedestrian walkways which connect the surrounding development to the entrances and exits of the station.

Scale and Ambition of the Anchor Commercial Project

The surrounding Union Square development is an example of high-density development leveraging the enhanced connectivity from the station. The 108 floor **International Commerce Centre** acts as an anchor and is Hong Kong's tallest tower.⁴⁷ It combines luxury retail and residential spaces, with finance and hospitality. The use mix is 8% retail (on 2 floors at ground level), 56% residential, 21% office, and 15% hotels

The first phase importantly secured anchor tenants such as global financial institutions Morgan Stanley and ICICI Bank, followed by Deutsche Bank and Shinhan Bank (Korea's largest) and later, Credit Suisse and ING Asia Pacific.

The rest of the land was developed in phases: large scale residential developments and two others commercial office towers and finally the International Commerce Centre, a mixed use residential, retail and commercial tower. All of the developers worked in partnership with the Mass Transit Railway Corporation on the planning and use allocation of the developments. The use mix of the entire development is:

- Residential: 608,000m², 6000 units, 40,000 residents⁴⁸
- Commercial Office Space: 232,000m²
- Hospitality: 168,000m²
- Retail: 83,000m²
- Public space: Open plazas, pedestrian walkways and gardens

Impacts of the Wider Precinct Redevelopment

Shorter Term	Longer Term, Larger Scale Impacts
Anchor tenants attracted provided significant confidence to deliver the next residential and commercial towers in close sequence, and establish the location as a genuine 2 nd CBD.	Contribution to Kowloon's anchors (finance and tech HQs, cultural infrastructure). The redevelopment has provided a focal point for the clustering of the financial sector, enabling efficient disaggregation and consolidation of functions in the city.
High footfall. The station serves over 30,000 passengers per day and Elements has a daily footfall over 180,000 customers. ⁴⁹ The initial phase of tenants helped Kowloon to establish itself as a new commercial destination in the city.	Catalyst for cultural development. Contributes to the larger regeneration of West Kowloon Cultural District, 40ha, retail, dining entertainment, residential, hotel offices, 230,000m ² open space. Performance, venues, music halls, theatres, exhibition centres. ⁵⁰
Convenience and efficiency. Reduced travel times through the level of density achieved and effective passenger flows management of large residential population. Local residents and employees are within walking distance of open spaces, green spaces and a number of amenities (e.g. retail facilities, dining, ice-skating rink, mini-cinemas).	Raises standards of other station developments in the city. Positive impact on achievability and setting standards and developing understanding about how to support projects with high capacity public transport and overcome the challenges of visibility and porosity associated with building high density development around a focal transport hub.

Impacts on City Competitiveness

Main Impacts	Effects and Spillovers	Contribution to City Competitiveness
Career Opportunities	<ul style="list-style-type: none"> Large scale of mixed use commercial, residential and retail surrounding Union Square has enabled accommodation of thousands of high value jobs and supported evolution of Kowloon as Hong Kong's second CBD 	The growth in economic activity and career opportunities in the district has helped Hong Kong to spread benefits of its business activity beyond the core CBD, and as a result perform among the top 10 cities for low levels of unemployment. ⁵¹ The project has also boosted working lifestyle for a critical mass of workers – the city has also climbed 6 places globally in studies which measure the perception of the 'millennial' workforce. ⁵²
Transport Connectivity and Efficiency	<ul style="list-style-type: none"> The design and density around the Station have helped the district to become highly efficient and admired transport hub for the city, helping to reduce city centre congestion 	By helping to anchor the West Kowloon district and spread growth beyond the core city centre, the project has helped Hong Kong to reach the top 20 globally for mobility performance and experience, and ratings the vision/leadership of urban transport authorities. ⁵³ Hong Kong is also 8th globally for the coverage and reliability of its public transport services, ⁵⁴ and public transport accounts for 88% of journeys in the city. ⁵⁵
Retail Industry Performance	<ul style="list-style-type: none"> 1st phase enabled 2nd stage mixed use towers to host luxury retailers and restaurants and become a destination for people to stay and enjoy after work, or for people to visit. 	Perceptions of the diversity and quality of Hong Kong's have improved in recent years, leading the city to become one of the world's most attractive shopping and dining destinations. The project contributes to city improving to be among the top 25 for number of highly rated restaurants (2017), ⁵⁶ and 5th most attractive shopping scene in 2018. ⁵⁷
Tourist Appeal	<ul style="list-style-type: none"> Tourist satisfaction with gateways, both from China and globally 	The project has enabled the West Kowloon transport hub and cultural district to contribute to Hong Kong becoming the most visited city in the world, ⁵⁸ and 27th for the diversity and quality of its lifestyle experiences (up 10 places from 2016). ⁵⁹

Case Study: Berlin Central Station

Station and Adjacent Commercial Project		Wider Precinct	
Duration of Development	1996 - 2006	Duration of Development	2008 – 2025
Density of Adjacent Development (FAR)	1.8	Density of Wider Precinct (FAR)	1.3
Daily Footfall	300,000	Public Realm	200,000m ² parkland, 1km of waterfront
Retail Component	15,000m ²	Connectivity Benefits	Logistics capacity; pedestrian and cycle-friendly routes to local institutions

Berlin Central Station is the city's first interchange to serve city-wide, regional and national journeys. The redeveloped Station, which is in close proximity to the city's main cluster of significant political and civic institutions, was initially anchored by Europacity, a privately-led mixed use residential, commercial and retail precinct around the station.



Figure 13. Berlin Central Station⁶⁰

Background and Context

The construction of the new €1.2 billion Berlin Central Station was completed in 2006 in the Mitte district, 3.5km to the east of the traditional economic core. The Station is near the main institutional hub of the city, including the Reichstag, the Chancellery, the Federal Ministry for Economic Affairs and Energy, and the Federal Ministry of Education and Research. It is also close to Charité University Hospital, Humboldt University and a number of cultural and leisure activities.⁶¹

The first phase of development around the project was Europacity, on a 400,000m² plot of disused land to the north of Berlin Central Station.⁶² Unlike other large scale station redevelopment projects in Germany, which are primarily retail-oriented, 58% of the total floor space in Europacity (819,000m²) is commercial office space. The subsequent area is 34% residential, 5% retail/restaurants and 3% cultural amenities.⁶³

The initial retail component attracts consumers who are not travelling because its shops and restaurants have extended hours (e.g. opens later in the evenings, longer weekend hours) unlike other retail spaces in the city. The station now hosts over 300,000 passengers each day. Connectivity in Europacity is also being achieved through a network of walkways, cycle lanes and roads.

The initial development is catalysing development of the neighbourhood's five sub-districts to create a balanced live/work district by co-locating with entertainment, arts and culture. The area is evolving its reputation and starting already to become a destination for people to intentionally visit for employees to linger and enjoy after work.

Impacts of the Wider Precinct Redevelopment

Shorter Term	Longer Term, Larger Scale Impacts
Re-urbanisation of commercial functions in central Berlin. Since 2018, 79% of all planned new build office space has taken place in the city centre, with Europacity making some of the largest contributions to the city's commercial real estate market. When complete, the district will provide over 700,000m ² of commercial office space for more than 16,000 employees. ⁶⁴	Diversification and specialisation of Berlin's precincts. Europacity is emerging as one of Berlin's most attractive and productive commercial hubs as it continues to sustain investment momentum, helping to cluster companies adjacent to large institutions and allowing more capacity for tech and software firms to cluster elsewhere. ⁶⁵

<p>Anchor for mix of activities. The connectivity achieved in the first phase of Europacity and its proximity to cultural and political institutions has helped the 2nd phase of offices to attract anchor tenants create a strong mix of medium-size German businesses (33%), global corporations (31%), SMEs (24%), public or semi-public organisations (11%).⁶⁶ Europacity has become home to three hotel chains, InterCity, Steigenberger and Meininger, which attract both business visitors and tourists.</p>	<p>Catalysed construction of residential projects in neighbouring districts. The district neighbouring Central Station is the second most dense district in the city, and the quality of amenity in and adjacent to the station has triggered high demand for additional residential space. By 2018, 20% of all new apartments under construction in Berlin were located in Mitte,⁶⁷ helping to ease some of Berlin's severe housing and office space shortage.⁶⁸</p>
<p>Public realm enhancement and green space provision. Around a quarter of land in Europacity (200,000m²) is publicly accessible parkland and there is a 1km of waterfront along the Spandauer Schifffahrtskanal.</p>	<p>Uplift to residential land values in Mitte. Demand for property in close proximity to Berlin Central Station has been rising since the initial project opened. In 2018, Mitte recorded the largest growth in residential values (outside of the CBD), rising by 11% and exceeding €5,000/m² for the first time.</p>

Impacts on City Competitiveness

Main Impacts	Effects and Spillovers	Contribution to City Competitiveness
Career Opportunities	Europacity is already catalysing jobs growth and productivity	Investment in high quality commercial real estate in close proximity to transport connections has helped Berlin to pick up momentum in terms of capacity to host jobs and start-ups. The city is now 1 st globally for number of new business registrations, ⁶⁹ and improved 20 places for employment rate. ⁷⁰
Tourism Appeal	A new mixed use quarter with hotel options in Europacity, near the city's historic cluster of government and civic institutions.	The initial project has catalysed the growth of tourism-related businesses and infrastructure to help Berlin rise to become the 36 th most visited city in the world. ⁷¹ It is also now the 11 th highest ranked city globally for the quality of its institutions, attractions and tourist infrastructure, ⁷² and has established as a top 15 global city for quality and variety of its retail, culture, food and nightlife. ⁷³
Transport Connectivity	The initial near-station redevelopment has helped to improve access to rail and subway and encourage uptake of walking and cycling in central districts.	Berlin has consistently improved in mobility indexes since 2016, from 16 th to 6 th for the overall quality of its mobility system, ⁷⁴ and now achieving an active transport mode share over 45%, putting the city nearly on a par with Amsterdam. ⁷⁵

Case Study: Vienna Central Station

Station and Adjacent Commercial Project		Wider Precinct	
Duration of Development	2007 - 2015	Duration of Development	2009 – 2021
Density of Adjacent Development (FAR)	7.1	Density of Wider Precinct (FAR)	5.2
Daily Footfall	145,000 passengers ⁷⁶ 86,000 visitors to shopping mall ⁷⁷	Public Realm	~10,000m ² public open spaces, green space and walkways
Retail Size and Share of Adjacent Development	20,000m ²	Connectivity Benefits	Pedestrian and cycle connections to Vienna Central Station and surrounding districts

In 2015, Vienna Central opened as the first station in the city to combine North-South and East-West routes throughout the city, to Vienna International Airport, throughout Austria and into neighbouring countries. The project involved the integration of two rail termini into one central station, the incorporation of retail uses and the development of mixed use residential and commercial districts in the land unlocked by the site's reconfiguration. The Station and initial precinct construction was initiated by Austrian railway operator ÖBB, and funded by over €4 billion worth of public and private investments (25% public, 75% private).⁷⁸



Figure 14. Vienna Central Station⁷⁹

Background and Context

With pressure to upgrade Vienna's rail infrastructure rising due to new logistics and transport demands for cargo rail, the expansion of Vienna International Airport and the requirement of a direct high-speed rail link to the city,⁸⁰ ÖBB and the City of Vienna agreed to create an integrated central station to maximise regional and international connectivity and trade links. The plan for the new station in Vienna became a major priority because of its potential to become a catalyst for Vienna's ambitions to become a more attractive business location, tourist destination and a better place to live.

Construction began in 2007 and the €1 billion project was financed by the ÖBB masterplan, EU rail funding and ÖBB real estate revenues. The completed Vienna Central Station and parts of the mixed-use districts opened in 2015. The final phases will be completed in 2021.⁸¹

The new station was constructed on 590,000m² of land and integrated two stations Süd and Ostbahnhof and repurposed Westbahnhof as a new retail destination, BahnhofCity.⁸² The €130 million mall contains over 90 shops and 20,000m² of floor space split over two floors. It has a daily footfall of 86,000 visitors.⁸³ It is managed by ECE, a Hamburg-based developer and property manager. The firm has fostered a diverse shopping environment through leasing arrangements with a range of retailers, including fashion retailers, travel necessities, jewellers and restaurants.⁸⁴ BahnhofCity retail fulfilled some of the strong demand for retail uses in Vienna and was almost fully leased before it opened.⁸⁵ The anchor tenant is Interspar, a subsidiary of the multinational food and retail group SPAR, and responsible for over 150 of the initial 600 retail jobs created in BahnhofCity.⁸⁶

The reconfiguration of the site catalysed by the construction of Central Station unlocked 600,000m² of brownfield land for a mixed-use commercial development (Quartier Belvedere) and a residential neighbourhood (Sonnwendviertel) with a large park (70,000m²).⁸⁷

The initial project provided a large anchor for the wider development. ÖBB consolidated its four decentralised offices in a single flagship HQ on the southern forecourt of Central Station. The HQ is located in one of the two landmark buildings constructed as part of the wider project and it is an anchor of mixed-use residential development in the wider precinct. The development cost €69 million and provides 46,000m² of gross floor area. Amenities in the building include publicly accessible shops and restaurants, conference rooms and offices, parking garage, bike storage, concierge services and security services.⁸⁸

Impacts of the Wider Precinct Redevelopment

Shorter Term	Longer Term, Larger Scale Impacts
Project improved access to city centre and suburbs. The initial project has enabled the expansion of footfall to over 145,000 passengers each day, by providing underground space for 1,110 bike racks and 630 car parking spaces. The initial placemaking efforts have helped the wider precinct district to blend in with the fabric of surrounding neighbourhoods. Two new bridges, serving pedestrians and cyclists, and track crossings to overcome the edges caused by the railway infrastructure and promote multi-directional movement and porosity across the whole site. ⁸⁹	Unlocked potential for large-scale brownfield development and the creation of a new mixed-use mixed-income urban centre. The initial development was the trigger for the realisation of the medium density residential district Sonnwendviertel, which had been prioritised for residential construction and urban renewal, now contains over 5,000 apartments (2,000 of which are subsidised) and is projected to house over 13,000 residents when it is completed in 2021. The 70,000m ² park at the heart of the Sonnwendviertel contributes to the high urban quality of the mixed housing zone.
Attracting private investment and corporate relocations. The connectivity and access to amenities has seen leading firms arrive - such as Bank Austria and BUWOG (property firm). Erste Group banking conglomerate built a corporate campus for 4,500 employees in the Quartier Belvedere with 165,000m ² commercial office space on a 40,000m ² site. ⁹⁰ Following the standards set, the ground floor of the campus has publicly accessible restaurants and a library, and a large financial education initiative.	Contribution to city's smart city and connectivity objectives. The success of the station side project has catalysed growth in one of Vienna's 'lighthouse projects' which act as strategic anchors in Vienna's urban development plan (STEP 2025) and its smart city strategy (Smart City Wien). The project has allowed the wider precinct to reach the size, significance as an international transport hub, and ability to operate as a gateway to the city. It has also catalysed a new urban centre in Vienna's expanding urban core, which is important to the city's liveability and business ambitions in Central Europe. ⁹¹
Land values in neighbouring districts are rising. House prices in Favoriten have risen consistently since the project has reached maturity, although it is still considered to be one of the more affordable districts in the city. ⁹²	

Impacts on City Competitiveness

Main Impacts	Effects and Spillovers	Contribution to City Competitiveness
Tourist Appeal	<ul style="list-style-type: none"> Reorganisation of the station has improved access into Vienna from wider city, from Austria and from cities across Europe 	The increase in the number of visitors in recent years has pushed Vienna's rankings in tourism-based metrics. It is up to 24 th most visited city in 2018 ⁹³ , and 3 rd most attractive city in the world for weekend breaks. ⁹⁴
Retail Industry Performance and Perception	<ul style="list-style-type: none"> BahnhofCity has created a distinctive new retail destination for different types of specialised retail brands 	Investment in building the diversity and quality of the retail industry in Vienna has helped it to become one of the Top 25 cities for attractiveness of the dining and shopping scene ⁹⁵ , and now the 25 th most globalised retail industry – with a growing 38% of the city's retail sector made up of international brands. ⁹⁶
Career Opportunities	<ul style="list-style-type: none"> Quartier Belvedere is starting to become a commercial hub and a destination for corporate relocations 	The attraction of high value business close to residential districts have helped Vienna to improve its business competitiveness. The city has improved 3 places for volume of workers in knowledge intensive tech jobs. ⁹⁷

Case Study: Osaka Station

Station and Adjacent Commercial Project		Wider Precinct	
Duration of Development	2004 - 2011	Duration of Development	2013 – 2027
Density of Adjacent Development (FAR)	10.3	Density of Wider Precinct (FAR)	11.3
Daily Footfall	940,000	Public Realm Added	10,000m ²
Retail Component	20,000m ²	Connectivity Benefits	Direct pedestrian and road links from Station and 5 other terminals in close proximity.

Osaka Station has experienced several cycles of modernisation, but its most recent redevelopment has successfully established it as the anchor of a large retail and innovation-led mixed use precinct. The project has converted a former rail yard into a thriving new commercial centre, which has helped to attract new businesses, visitors and residents to the centre of Osaka.



Figure 15. Osaka Station ⁹⁸

Background and Context

In 2003, the West Japan Railway company laid out the vision for station and precinct modernisation, observing the project's potential to raise corporate revenues, alleviate local overcrowding and bring uplift to the surrounding Umeda district, a priority innovation and urban renewal Zone, and the wider Kansai region. ⁹⁹

The first phase of the project commenced in 2004 and involved the re-design of the main terminal simultaneous to the development of Grand Front Osaka - a cluster of large-scale mixed-use residential, retail and commercial office towers in the Umekita district immediately to the north of the station, as well as the enhancement of surrounding public spaces. ¹⁰⁰

The aim was a new level 'urban quality' to improve the location's appeal to visitors and businesses, encourage investment and to support environmental sustainability. The station was opened in 2011 and the completion of first phase mixed use development followed in 2013. Grand Front Osaka is a large 70,000m² site which consists of South Gate Building (GFA: 187,000m²), North Gate Building (GFA: 295,000m²), Grand Front Osaka Owners Tower (GFA: 73,800m²) and a large public space, Umekita Plaza (GFA: 10,500m²). The Owners Tower is a residential complex, and the North and South Gate Buildings which flank Osaka Station are primarily retail spaces with some commercial office space functions.

The first phase of buildings provided the quality and flagship status to attract of significant critical mass of city-shaping functions:

- **North Gate Building** contains over 200 shops and restaurants, luxury department stores, a cinema and hotels. Anchor retailers include Zara Home, Muji, Actus and Keyuca, who have established their first west Japan flagship stores in the tower. The North Gate Building also contains the Knowledge Capital, an innovation hub which consists of offices, laboratories, showrooms and conference facilities to host exchanges between local businesses, researchers, university staff, innovators and member of the public.
- **South Gate Building** contains six floors of fashion retail stores and three floors of restaurants. It is connected to the North Gate Building through a pedestrian walkway.

This first phase triggered a second phase of private-led development of Umekita into a premier city destination featuring a major new 80,000m² park.

Impacts of the Wider Precinct Redevelopment

Shorter Term	Longer Term, Larger Scale Impacts
Unified the transport hubs across Umeda district. The project enabled pedestrian-friendly roads and walkways to connect Osaka Station and Grand Front Central to each other and to other transport hubs within the wider Umeda district.	International tourism increase. Osaka Station, which serves direct routes to cities across Japan, has helped the city to become a tourism destination for overseas visitors. The number of foreign visitors to Osaka has increased dramatically since 2013 and reached 11.1 million in 2017.
Live/work/play environment for staff. The initial project provided both convenient mobility and an emerging locus for retail, entertainment, hospitality and commercial office spaces that have helped establish the wider Umeda precinct as a leading business centre in North East Asia. This has been instrumental in attracting the new generation of employees of innovative firms that had begun to cluster.	City centre population boom. The project has enabled the wider precinct to inject life into Osaka's city centre and continue enabling the rise of city centre population, which is in turn enhancing the city's status as Japan's No.2 business city and a knowledge hub capable of generating significant innovation.
Real estate values. The Umekita district now has the highest land values in Osaka at more than 12 million yen per m ² , and is growing at a rate of 7% year-on-year. ¹⁰¹	Setting high standard of quality for future redevelopment projects. The project has become a precedent for successful public and private collaboration between the city government, the West Japan rail company and private developers.
	Improved green space provision. The second phase of the development of Umekita is set to provide a substantial publicly accessible green space in the inner city.

Impact on City Competitiveness

Main Impacts	Effects and Spillovers	Contribution to City Competitiveness
Attractive Destination for Career Age Population	<ul style="list-style-type: none"> Enabled a critical mass of residential, commercial, entertainment uses and excellent transport connectivity in Umeda, encouraging interest in the district as a living and working location 	The wider district in which Osaka Station and Umekita are located has become one of the most attractive locations for 20 – 49 year olds in Kansai. It is now consistently rated among the top 2 most attractive neighbourhoods to live in region and among leaders in Japan and North East Asia. ¹⁰²
Retail Industry Performance	<ul style="list-style-type: none"> For some global retailers, Osaka has become a more attractive destination than Tokyo to establish their flagship stores in Japan 	The perception of the quality of restaurants and shops in Osaka place it on a par with many global cities. It is now 5 th globally for performance and perception of its dining scene, ¹⁰³ strength of its shopping scene. ¹⁰⁴ In 2017 Top 5 fastest growth survey points for commercial land were all located in Osaka.
Innovation Ecosystem	<ul style="list-style-type: none"> Enabled the realisation of Umeda as a special innovation zone 	Osaka's innovation ecosystem has made visible progress in international rankings since the project completed in 2013. It is 45 th globally for ability to commercialise innovation, up by 10 places. ¹⁰⁵ and up 3 places to 12 th for global R&D expenditure. ¹⁰⁶

Case Study: Union Station, Denver

Station and Adjacent Commercial Project		Wider Precinct	
Duration of Development	2010 - 2014	Duration of Development	2010 – 2018
Est. Density of Adjacent Development (FAR) ¹⁰⁷	2.3	Est. Density of Wider Precinct (FAR)	4.7
Daily Footfall	100,000	Public Realm	3,100m ² outdoor plaza, 1,100m ² heritage building
Retail Size and Share of Adjacent Development	1,700m ²	Connectivity Benefits	Enhanced gateway, upgraded light rail and bus services and local pedestrian routes.

The redevelopment of Union Station in Denver was one of the largest of its kind in the United States. The project was part of a wider metropolitan public transport expansion scheme (FasTracks) which started in the 2000s, which transformed the old station and its surrounding rail yards in a hub with a new eight-track commuter rail facility, three-track light rail facility, 22-bay regional bus facility, 40,400m² of urban plazas and open space, and over 140,000m² of private development.¹⁰⁸

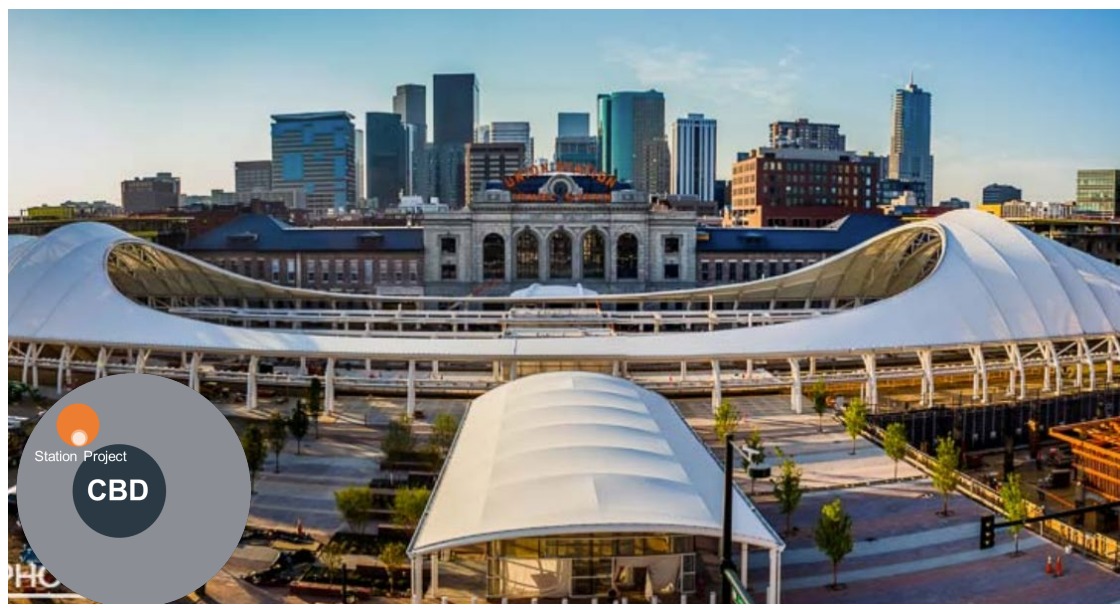


Figure 16. Union Station, Denver.

Background and Context

In 2014, Union Station opened as a new major rail hub in Lower Downtown of central Denver, Colorado, 1.5 kilometres away from the heart of the CBD. The project involved creating a multi-modal transportation network with transit oriented development (TOD), providing an improved system of regional rail, regional and local buses, intra-city light rail, as well as new cycling and pedestrian routes.

The planning and development of Union Station and the wider mixed use neighbourhood took place between 2001 – 2018 in distinct phases, each involving multi levels of government and private co-ordination. The first phase involved over-station development and two office-retail buildings adjacent. The quality of the project quickly facilitated development of 3,500 residential units and 1.5 million m² of office space and the accommodation of a tech precinct next to the CBD. Overall, the station project itself cost US\$484 million, whilst the entire Union Station mixed-use project area cost US\$1.7 million, funded by a PPP.

As part of the 1st phase, the Wynkoop Plaza in front of Denver Union Station was transformed into an active and energetic public space that functions as an important destination in its own right. It features public art, accessory uses, temporary uses, framed by the desire to create and proactively maintain an active public space and allow for a public space appropriately scaled with the neighbourhood and new on-site development.¹⁰⁹

Impacts of the Wider Precinct Redevelopment

Shorter Term	Longer Term, Larger Scale Impacts
Productive public-private and community collaboration. The development project for commuter lines (Eagle PPP) is the largest public-private partnership ever attempted on a transit project in the United States. The Station Master Plan saw unprecedented levels of public contribution and community engagement.	Investment and job multipliers. Every \$1 invested in transit infrastructure translates into \$4 injected in Denver's local economy. ¹¹⁰ Since the project outset, the neighbourhood's median household income has increased. By 2019, it had reached US\$71,470 - 29% higher than the US average.
Anchor tenants attracted by mix of uses. In 2018 alone, the district welcomed Slack Technology (cloud-based messaging services), VF Corporation's global headquarters (work and outdoor apparel brand), FirstBank (banking solutions for businesses), Funding Circle (world leading small business loans platform) and Udemy (online learning company). ¹¹¹	Distinctive vernacular and identity. Strict design guidelines and housing requirements ensured that the neighbourhood would develop a vibrant and distinct identity versus Downtown. Pedestrian scale and historic character has been a priority throughout. Denver's reputation in North America for urban feel and placemaking has grown.
Trigger for LoDo tech precinct. The renovation has spurred development and economic expansion in the vicinity of Union Station with developers adding 3,500 residential units and 1.5 million m ² of office space to the immediate neighbourhood. ¹¹²	Increased residential population and local demand. Shops, retailers and supermarkets have opened in response to the demand created by increased residential density. Growing appetite for city centre high density living.
Last mile transport and congestion relief. Project enabled a Free MetroRide commuter bus system, linked to Station, to run at rush hour to provide the 'last mile' travel option for commuters arriving into the city. The system carries more than 13 million passengers annually.	Accelerated pace of redevelopment and throughout the city. New zoning and land-use norms to provide flexibility for long-term redevelopment and evolving real estate market. ¹¹³ Project has shaped city leaders' propensity to support mixed use development in the inner city. ¹¹⁴
Building Denver's business and innovation brand. Project's enabling of the co-location of multinationals with tech tenants Strava and Facebook has created a critical mass and reputation of Denver as a diversified business-friendly New World City. ¹¹⁵	

Stakeholders recognise the impacts would have been even stronger had the initial project provided stronger multi-modal connectivity to optimise links to CBD. The project has facilitated many more rail commuters arriving from suburbs, but choices to make the last mile connection are limited, with few bicycle or light rail options, and do not run for the whole 24 hours, making trips less convenient and slower.¹¹⁶

Impacts on City Competitiveness

Main Impacts	Effects and Spillovers	Contribution to City Competitiveness
Quality of the Public Realm	<ul style="list-style-type: none"> Strong focus on community-based arts and events in the station's plazas have helped to build local identity and pride 	The attention to public space enhancement and the sensitive reactivation around Denver Union Station has helped to place the city among the best for transport experience. Denver currently places 1 st globally for the levels of safety (1) and social placemaking (6) within transport hubs. ¹¹⁷
Career Opportunities	<ul style="list-style-type: none"> Large scale of commercial office space on surrounding under-used land has added capacity for thousands of new jobs. 	The station precinct development has contributed to Denver absorbing growth to rise to the 4 th fastest growing metropolitan region in terms of employment, ¹¹⁸ 4 th globally for total employment rate, ¹¹⁹ and 1 st in the US for the number of new businesses (31 st globally). ¹²⁰
Innovation Ecosystem	<ul style="list-style-type: none"> New tech firms have become important anchors in the city's growing innovation economy 	The project provision of quality tech space has enabled Denver to sustain momentum as one of the fastest growing innovation economies – rising from 70 th to 31 st overall since 2014, ¹²¹ and moving to 8 th for the number of start-ups. ¹²²

4. The Potential Impact of the Western Gateway and Central Precinct on Sydney's metrics

In this section we examine more closely the specific impacts that the Western Gateway and Central as a may be able to have on Sydney's city competitiveness.

We focus on 10 areas where the project can support Sydney to maintain and improve its competitiveness into the next two cycles. In this section we contextualise the effects by comparing Sydney's performance to a group of 30 of the most globalised cities internationally, including Established World Cities such as London and Paris, Contender Cities such as Amsterdam and Toronto, and New World Cities such as Osaka and Denver.

The analysis is informed by our review of more than 500 global benchmarks that are used by governments, investors, businesses, planners, entrepreneurs, and inter-governmental bodies to interpret and assess city competitiveness.

We use these benchmarks to closely observe how relevant indicators are assembled, and how indicators are increasingly being developed to compare cities' performance. We then observe in what ways these performances can be impacted by 'on the ground' changes associated with gateway location projects. We also examine the reasons why other cities excel in certain measures and identify the role played by particular catalytic locations.

We review how Sydney's future competitive performance can be impacted by Western Gateway to Central, examining themes within in three overarching areas:

- Urban amenities and economy
- Precinct experience and liveability
- City appeal and identity

What we can observe from this analysis is that:

- Sydney's position in all three dimensions of competitiveness can be positively impacted by the quality, scale and ambition of the Western Gateway, because of the direct effect it can

have on the metrics used in performance and perception benchmarks, and the indirect effect on the surrounding precinct.

- Other cities have established themselves at the top of the global measures through a combination of consistent high-quality provision in these 10 areas, combined with specific locations that achieve high recognition and catalytic scale.
- Continual ongoing progress among all types of cities within Sydney's wider peer group means that a less ambitious and lower impact project will likely lead to more limited competitiveness outcomes and if knock-on effects may even contribute to a small relative decline in many of these areas over time.

We now look at each area in turn:

1. Urban amenities and economy

Competitiveness Theme	Common Example Indicator(s)	Top performing peer cities	Sydney's current average performance among peer cities (max = 10, min = 1)	What does a high impact project achieve?	Potential for HDB	Potential for project to positively impact Sydney's benchmark performance
Concentration of high-tech jobs	% of workers employed in knowledge intensive occupations ¹²³	Frankfurt London Amsterdam	5	+1% of workers employed in high-tech jobs , attraction of large anchor employers	Ability to provide minimum 5,000 new high-tech/knowledge intensive jobs (+1.5% Greater Sydney)	***
Retail industry performance	% of international retailers present, ratio of fast food outlets: restaurants	London Paris Hong Kong	3	+5 new international retailers , increased confidence among retailers to enter the market around key transport nodes	Provision of specific F&B offers not currently in Sydney, as well as premium fashion and shopping.	**
Expert perception of food & drink scene	Average expert review score of quality of service and food	Barcelona Osaka Madrid	1	Sydney 1-2% more frequently named for its distinctive and specialised food & drink provision.	Source of mid-priced unique offers and distinctive offer within wider experience.	**

Concentration of high-tech jobs

Sydney currently achieves below the global city average for the number of workers employed in high tech and/or knowledge-intensive occupations, a major element of how it competes for business and is measured in competitiveness benchmarks. A gateway location project with a high share of office floorspace is more likely to achieve the jobs, productivity, innovation, and disposable income dividends that would raise its scores in this and related areas.

For Sydney's competitiveness, a high impact project is one that would boost the total number of high-tech jobs by 1-2%, including by attracting large anchor employers. For example, the King's Cross station redevelopment spurred major new office development that now houses Google, Facebook, and other global media organisations. The percentage of people working in knowledge jobs has increased by 65% in 5 years, compared to 22% London-wide. This has had knock on effects of London in the metrics (see Part 3). By hosting a minimum of 5,000 additional tech workers that comprise a significant share of Greater Sydney's total, the Western Gateway can have a discernable effect on Sydney's performance in relevant indices

Retail industry performance

Sydney's retail industry performance is below the global city average in global benchmarks. Many cities improve their position when large, mixed-use gateway location projects accommodate a higher share of retail floorspace with the requisite high-quality public realm to attract new international retailers, with a knock on effect on scores for global retail reputation, increased visitor spend, and variety of shops and restaurants.

For Sydney's competitiveness, a high impact project is one capable of attracting 5 or more new international retailers, that can raise Sydney's position in the major measures by 10 places. It can also boost Sydney's metrics for satisfaction with retail offering and variety of retail stores. For example, Osaka's station redevelopment attracted Zara Home, Muji, Actus and Keyuca, and the city has now become more attractive than Tokyo for retailers looking to establish flagship stores. The Western Gateway has the potential to achieve some of this impact, with wider knock-on potential in the wider precinct if the first phase creates the sense of landmark and destination.

Expert perceptions of culinary scene

Sydney currently performs close to the bottom of its peer group for expert perceptions of its culinary scene, including in its destinations and gateways. Most higher performing cities in this category have moved on from a low-quality, fast-food/convenience type model which strengthens expert perceptions of both quality and service. Sydney's ability to catch up also depends on achieving higher average review scores at its most popular hubs, including Central Station.

For Sydney's competitiveness, a high impact project is one that would improve expert perception score by 1-2%, and attract a world top 1,000 restaurant. For example, the Osaka station redevelopment resulted in the delivery of three floors of new mid- to up-scale restaurants, helping the city to secure a rank of 5th globally for expert perceptions of its culinary scene. The role of Block B and the Western Gateway as a first impression to visitors arriving in Sydney combined with the intended distinctiveness of its amenities mean it can contribute to improved scores in this area.

2. Precinct experience and liveability

Competitiveness Theme	Common Example Indicator(s)	Top performing peer cities	Sydney's current average performance among peer cities (max = 10, min = 1)	What does a high impact project achieve?	Potential for HDB	Potential for project to positively impact Sydney's benchmark performance
Public transport experience	Satisfaction with transport; stations' hub facilities	Osaka Singapore London	3	+2.5% people satisfied with public transport experience; +1-2 places in rankings due to high access to multi-modal transport facilities	Likely rise in commuter perceptions, with 2.5% of all Sydney public transport trips passing through the plaza, and high percentage of visitors.	***
Quality of public realm	% of people satisfied with ports of entry; ability of stations to provide high quality space	Barcelona Singapore Berlin	5	1+ signature public space , plus a variety of retail, restaurant and leisure facilities; +1-2% satisfaction with ports of	Opportunity to register as top-class public space and amenity, with much improved net promoter score.	****

	with variety of amenities			entry; impacts on dwell time.		
Perceived personal safety	Perceived level of safety within the city	Osaka Munich Zurich	6	+1-2% more people feel safe walking around the city due to high-quality public realm surrounding station.	Scope to raise safety perceptions given low current perceived safety & volume of footfall in the precinct.	**
Walkability and bike friendliness	Active transport mode share	Amsterdam Paris Barcelona	4	+ 1-2% to active transport mode share	Bike parking can increase appetite of tech workforce to cycle part or all of the way to work,	*

Public transport experience

Sydney currently ranks in the bottom 3rd of its peer group for average transport experience, particularly in measures focusing on experience at stations and interchanges. Cities that perform provide seamless on-travel multimodal transport options and high permeability and accessibility. This also has knock on effects on related measures around uptake and efficiency of public transport.

For Sydney's competitiveness, a high impact project is one whose navigation and public realm around the station increases Sydney's average rank by 2 places in measures of public transport experience and increase satisfaction with public transport by up to 2.5%. For example, in King's Cross, since the station's new and expanded passenger concourse opened, passenger satisfaction increased by over one third, to >95%.

Quality of public realm

Sydney rates in the middle range for public realm quality, but measures of placemaking and place activation increasing assess gateway location projects in terms of public space, public art, green space and amenities mix. In top-performing cities, developments routinely incorporate unique design elements and stations are conceived of and delivered as anchors of mixed-use gateway districts rather than as transitory spaces.

For Sydney's competitiveness, a high impact project is one where Sydney's rank in measures of social placemaking improve by 1-2 places and satisfaction with points of entry in the city increase by 2%+. For example, in Denver a new public plaza in front of Union Station that features public art and temporary installations has helped to build a reputable neighbourhood brand, with station recently ranking 2nd globally in the major measure of social placemaking around key transport interchanges.

Perceived personal safety

Sydney's perceived safety is above average compared to peers, but concerns about crime hotspots mean its perceived safety score is 20% behind the safest cities. A sensitively designed gateway location project, with well-lit spaces, long opening hours, a variety of uses and natural surveillance-enhancing active frontages, could boost night time safety, for which Sydney's score is currently 52%.

For Sydney's competitiveness, a high impact project is would increase the percentage of people that feel safe walking around the city by 1-2%. This could then increase night-time visitor spend and active transport mode share. For example, in King's Cross, station redevelopment has been instrumental in reducing the crime rate of the surrounding area, which has had knock-on impacts on perceived safety. The crime rate nearly halved between 2003-4 and 2013-14. Given current low perceptions of Central's safety, there is clear potential for Block B and Western Gateway to contribute to significant improvement.

Walkability and bike friendliness

Sydney's current walkability and bike friendliness is rated in the 6th decile among the top 30 peer cities. A gateway location project that provides a large number of bicycle and scooters in sharing schemes and racks, an attractive public realm and new pedestrian links/bike lanes, can help Sydney to catch up to the top-performing cities in the next cycle, particularly as non-motorised transport access become more significant in the benchmarks.

For Sydney's competitiveness, a high impact project is one that helps Sydney to increase its active mode share by up to 1-2%, which could in turn reduce congestion and air pollution and lead to improved health outcomes. For example, Vienna Central Station provides space for 1,000 bicycles, has contributed to the city to more than doubling cycling mode share since 2000. This is an impact Block B could not ensure by itself but in providing the foundations for a multi-modal worker and commuter environment could catalyse adoption across the wider precinct.

3. City Appeal and Identity

Competitiveness Theme	Common Example Indicator(s)	Top performing peer cities	Sydney's current average performance among peer cities (max = 10, min = 1)	What does a high impact project achieve?	Potential of HDB	Potential for project to positively impact Sydney's benchmark performance
Online visibility	No. of stories, references and recommendations shared of city ¹²⁴	London Paris Singapore	5	Multiple and consistent coverage in high-profile media; significant increase in internet searches, check-ins, & reviews	Acclaim, winner of accolades for design, architecture & placemaking, mainstream media commentary, rise in destination desirability	****
Global appeal and admiration	% of global public who identify Sydney as a "top" city, number of visitors	Vancouver London Paris	8	High-quality amenities and unique design features provides locus for global attention; 5-10% more likely to name Sydney as a globally appealing city	Stronger gateway 'welcome' and 'first impression' across Central increases positive associations among audiences.	***
City reputation for "buzz" and exciting hotspots	Reputation of desirable locations, perceived number of interesting experiences, access to next-generation amenities	Paris London Sydney	5	Concentration of amenities, destination character, generates media impact, related effect on visitor numbers, spend and reputation	Adds Central to list of hotspot locations in Sydney's metrics.	****

Online visibility

Sydney's measured online visibility is modest as its urban assets do not generate the consistently high and stable volume of media and social media coverage compared to top-performing cities. High-performing gateway location projects would generate positive media interest, increasing the number of Facebook check-ins and Instagram hashtags as people increasingly want to be "seen" spending time in the area. In turn this contributes to increased visitor numbers and total visitor spend.

For Sydney's competitiveness, a high impact project is one whose popularity and media appeal sees Sydney achieve up to 10 place rise in major measures of online visibility. For example, Denver's successful station redevelopment has been featured in at least 5 New York Times articles, and public art installations have contributed to significant increases in the number of Instagram hashtags, in turn helping the city to overtake Frankfurt and Stockholm for total online visibility. The Proposal's ambition signals Block B's potential to achieve comparable levels of acclaim, media conversation and social media activity.

Global appeal and admiration

Sydney's global appeal remains very strong in many segments but is slightly less strong on measures of admiration, identity and reputation. A flagship gateway location project with high-quality amenities and unique design features is one of the opportunities cities have to produce iconic locations and drive global attention onto what the city stands for.

For Sydney's competitiveness, a high impact project is one that can increase the likelihood of global citizens identifying Sydney as a top-performing city by around 5%. In Osaka, the new station has helped to showcase citizens' increased confidence in the city's economic and cultural vibrancy to Japan and to the world. Western Gateway, as a primary gateway for Australia's busiest station also brings with it potential to contribute to an uplift in Sydney's reputation of this kind.

City "buzz"

Sydney's rates highly in global surveys of things to do, but less well for reputation for city entertainment, excitement and nightlife in recent years. This is shaped partly by the mix of leisure, retail and restaurant options on offer and average opening hours – which contributes to dwell time, visitor spend and footfall.

For Sydney's competitiveness, a high impact project is one that would directly impact Sydney's performance in benchmarks of visitor appeal and talent attraction, particularly among younger demographics seeking a high-amenity urban experience. For example in Berlin, the successful redevelopment of the central station has delivered new retail functions that have extended opening hours compared to other areas within the city, and as a result attract non-travelling customers that have helped to strengthen the reputation of the district as somewhere to spend time after work or at the weekends. Block B can achieve similar or even greater impacts.

Summary

The quality, reputation, variety and mix proposed by Block B, allied to its adjacency to Sydney's major transport interchange and the sequenced efforts underway in the core Central Precinct Renewal Project and the wider Technology Precinct, mean it can have small but observable effects on Sydney's performance in global benchmarks. This is especially visible in measures that focus on reputation, or that pick specific sample locations to analyse wider performance. There is a strong link between cities at the top end of the relevant benchmarks and those that have combined high citywide standards with specific flagship locations such as Central that achieve high recognition and catalytic scale.

The evidence from the global benchmarks and indicators, and the cities that excel in the measures evaluated, is that for Block B and the Western Gateway to contribute to Sydney's global competitiveness it will have to:

- Deliver a high experience, high amenity setting with a widely recognised or flagship public/cultural space.
- Achieve the scale and quality to attract international brands and tenants.
- Incorporate iconic architectural and design features that help to capture the local and international public attention, resonate globally, and demonstrate Sydney's leadership on global agendas.
- Achieve a level of safety, experience and inter-modality necessary to shift day : night usage patterns, perceptions and dwell time by significant margins

5. The amplified effects for the whole of Sydney

When other cities have established themselves near the top of the global measures in which Sydney is competing or in areas where Sydney is experiencing a deficit, it is typically the result a combination of consistently high levels of citywide investment and provision, allied to specific locations that concentrate assets, achieve catalytic scale and gain recognition.

International experience highlights the way signature gateway projects such as the Western Gateway of Central Precinct can have an outsized impact on city success, including as recorded in performance benchmarks, by altering expectations, setting standards and triggering a cycle of citywide improvements.

For Sydney, Central Precinct demonstrably has the preconditions to achieve amplified impacts. This is not only due to the distinctive scale and location of the site, the proximity to institutions and creative, technology, and professional clusters, the appetite of large anchor firms and industry bodies to locate and support the project, and the potential to achieve collaboration and discovery that can create multiplier effects and drive productivity growth. It is also because the Precinct has a unique gateway position and its timing in Sydney's growth and development and policy cycle means it is well placed to shift perceptions and encourage new ways of working and delivering major projects. This potential is not automatically translated into reality and relies on the trigger of Block B of the Western Gateway as an initial first stage to facilitate a more connected, high amenity city that concentrates jobs in the best-connected location in Sydney.

Central Precinct can achieve the following amplified impacts with Block B of the Western Gateway project providing the initial trigger:

- **City Brand and Reputation.** A project next to a major gateway can have a significant amplifying impact on a city's reputation and identity. Not only can it function as a beacon of high quality urbanism, creating media buzz as a great place that adds a new popular visitor destination. It can also help a city embody and embrace its layered identity – in Sydney's case a city that is comfortable as Australia's global stage, a city of discovery that possesses a quintessentially outdoor, brash and open lifestyle, many edges and distinctive neighbourhoods. Recent analysis has highlighted that Sydney has not yet fully developed a consensus about its cultural identity traits, not yet fully oriented towards its aboriginal history, or recognised the role of identity as a competitive differentiator and an advantage.¹²⁵ A project that is a primary gateway to Sydneysiders, Australians and the

world has the potential to galvanise the city's identity through its design, scale and character. For Sydney it can also support the development of a clearer business and innovation brand alongside the very strong visitor brand. This brand effect is achievable when the initial stage of development – here, Block B – embodies the quality, identity and aspiration of the wider precinct - Central.

- **A home for new and emergent industries.** By fostering a specialised location for an industry that does not yet have a clear identity or culture of clustering, the project can then give create visibility to the presence of growth industries and have positive effects on the confidence of talent, investors, venturers, and innovators. The location gives them a home, a focus, and access to one another. There is potential for the 1st stage trigger represented by Block B to provide that locus around which other activities accumulate in Central Precinct..
- **Demonstration and acceleration effects: raising the ambition of other projects and investors.** High impact projects raise the standards for other projects in the city, around stations and other infrastructure. They show what is possible and achievable, and raise understanding about what high amenity, higher density locations underpinned by high capacity public transport look and feel like. This potential for Central Precinct to have this effect depends on the standard set by the initial project, Block B. Then the project has the potential to expand the horizons of investors and developers, inspire others how to integrate multiple uses and cultural infrastructure, and demonstrate the collaboration dividend for projects that have become national and regional priorities. The effect can be an acceleration of quality improvement in the next cycle.
- **Creation of new mixes that drive reforms in land use policies.** The potential of an ambitious project such as Central Precinct with 24-hour attributes and elements of 'super mixed use' can be to effectively make the case for wider reforms to land use that foster a more mixed and flexible set of uses in key locations. This is very important for Sydney where the scope to add innovation economy or visitor economy activities to certain locations is vital to fulfilling the city's growth potential in coming cycles. This potential amplification relies on the multi-functionality of the 1st phase project in terms of uses and times of day.
- **Increasing density and therefore the capacity to absorb capital and improve the business case for public investment.** Augmented density in prime locations increases the potential to engage major institutional investors in Sydney, which in turn can demonstrate the private investment catalysed by public infrastructure investment. A transformative dense mixed-use project like the proposed Western Gateway can catalyse residential development in surrounding city centre and inner city neighbourhoods that now experience higher demand to accommodate residential space.
- **Enables the competitive performance of new and established anchors.** By enhancing the neighbourhood in which existing anchors (universities, tech headquarters) are based and by providing a unique and desirable gateway to a Central Precinct into which they may in future re-locate, the Western Gateway can support the growth capacity, co-location and immersive lifestyle requirements for anchors to expand, consolidate, innovate and compete more effectively.
- **The forging of a new settlement about how to optimise projects through public transport.** Like many cities before it, Sydney has not yet achieved consensus that major

development projects should be synchronised by high capacity public transport and higher amenity transport interchanges for maximum public benefit. A project like Block B that has a very profound logistics dividend can illustrate how the symbiosis can work helps to create new levels of expectation and set in place a new model for the next cycle.

- **Inspiring confidence and changing the mental map of the city.** In some cases a catalytic project can raise public and political confidence in the future direction of the city, and implant a new notion of where the city's signature destinations are. This can have the effect of triggering new concepts about what and for whom the city is for, spreading the flows of people, and building positivity about Sydney's journey towards an 8 million person global metropolis. If the Western Gateway can be supported to become a signature location and destination for the whole Central Precinct, it can contribute to a resurgent perspective about Sydney and its urban character and future.

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