

Dear Premier

Please find attached the Smart State Council working group report on
Smart Cities: rethinking the city centre

The report presents a vision of Brisbane as a centre piece for the Smart State. It notes the extraordinary development potential inherent in the broader city centre of Brisbane and highlights the urban planning challenges that need to be overcome to realise this potential, including a clear need for the State Government and Brisbane City Council to work together. The report suggests that by acknowledging and meeting these challenges Brisbane can position itself as a leader among truly 'Smart Cities' for the 21st Century.

I commend it to you.



Professor Peter Andrews
Queensland Chief Scientist and
Chair, Standing Committee
Smart State Council

May 2007

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Published by the Queensland Government, George Street, Brisbane. Qld. 4000.

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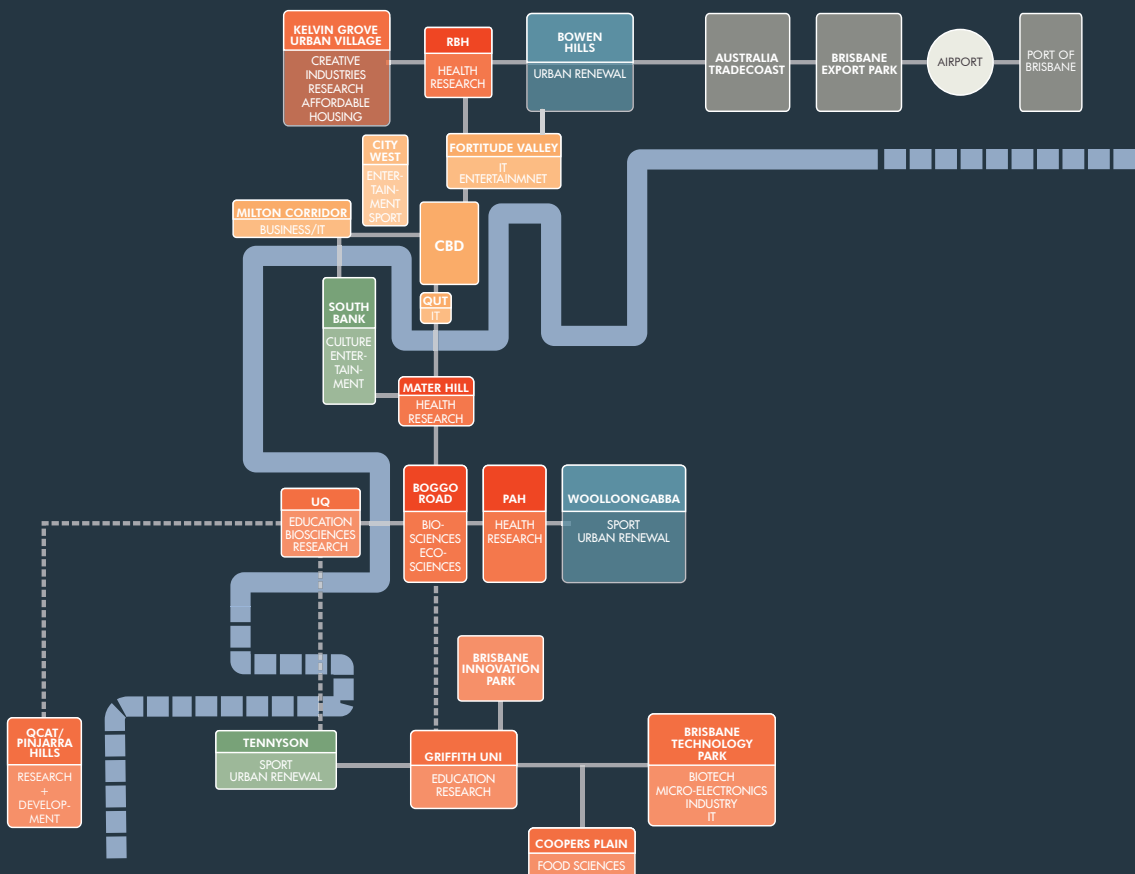
Executive Summary

Currently, population and development growth in South East Queensland is managed under the South East Queensland Regional Plan 2005-2026 which promotes both urban consolidation of the city centre and decentralisation into new urban centres in and outside Brisbane. The expectation is that Councils will prepare strategic development plans for each identified growth area.

However, in the Brisbane City Centre the Council has now identified some 30 separate growth areas, all being planned independently, some under Council and others under State Government jurisdiction, some well advanced and others yet to commence planning. This fragmented approach is unlikely to generate a 'smart city'.

This report calls for the identification of an holistic vision and structure for the city centre aimed at:

- generating public awareness and confidence that Brisbane is evolving as a smart city.
- dramatically and innovatively enhancing connectivity throughout the city centre.
- collocating residential and commercial growth with knowledge precincts.
- creating a 'knowledge corridor' through the city centre.
- manifesting connectivity in ways which will impart the city with a powerful identity integrating the knowledge economy with subtropical lifestyle.



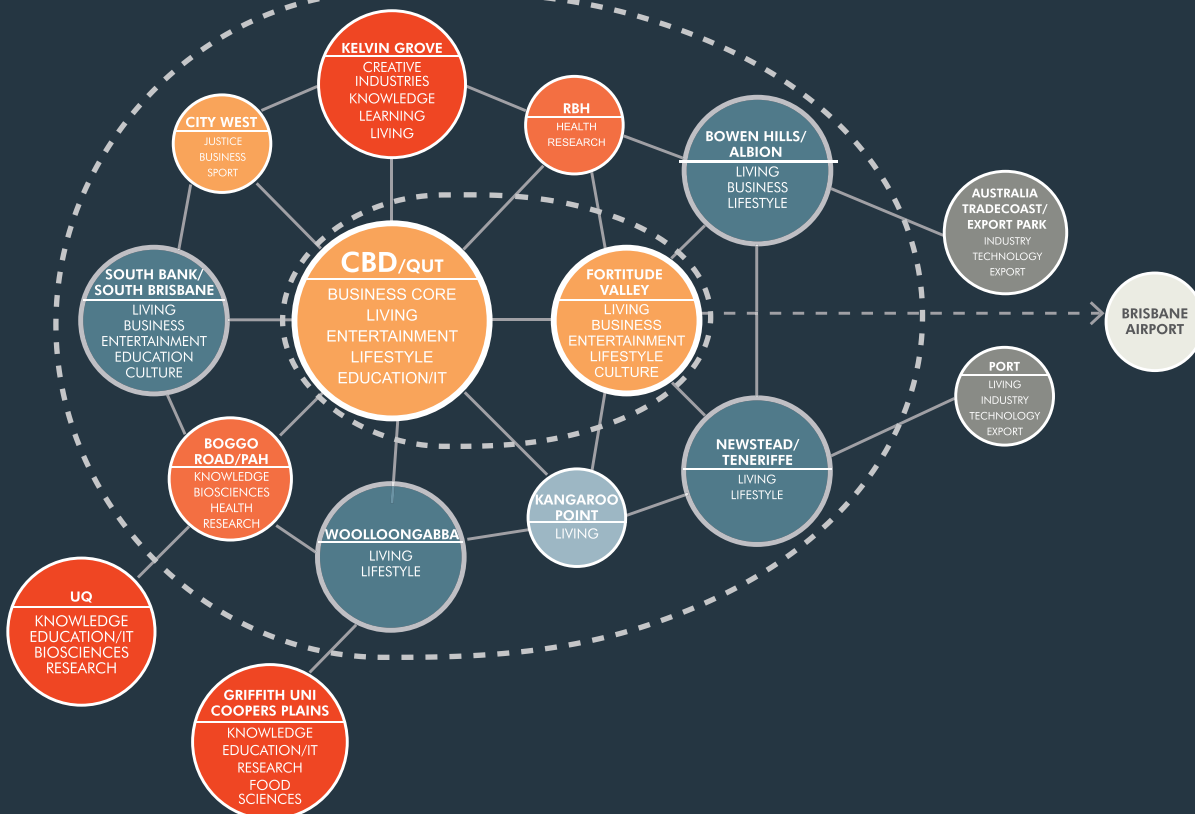
THE GEOGRAPHICAL RELATIONSHIP BETWEEN PRECINCTS IN INNER BRISBANE

STRATEGY ONE: CREATING A LEGIBLE STRUCTURE PLAN

The Brisbane city centre possesses a remarkable range of creative, cultural, educational and research precincts from which to generate a strong 'knowledge-based' economy. However, their collective presence is not well appreciated by the wider public, making it difficult to promote and communicate the 'smart state' ethos.

By translating the geographic adjacencies of precincts (shown at left) into a clear structure diagram (below), it may be possible to communicate a vision of a city centre that has a defined and purposeful structure. This diagram reveals not only the wealth of knowledge-based precincts but their direct relationships with the designated major growth precincts in the city centre. Thus it also serves as a guide as to how the city centre can be developed integrally with urban growth coinciding with the formation of a 'smart city'.

The diagram also suggests a network of interconnections between precincts which could be prioritized to create a cohesive city centre of interdependent and mutually supportive built environments.



STRATEGY TWO: UNITING DISPARATE PRECINCTS

Currently, there are approximately 30 separate urban renewal precincts all within a four kilometre radius of the CBD. Few of these are being planned to coordinate, with market pressures and different planning jurisdictions adding further complications.

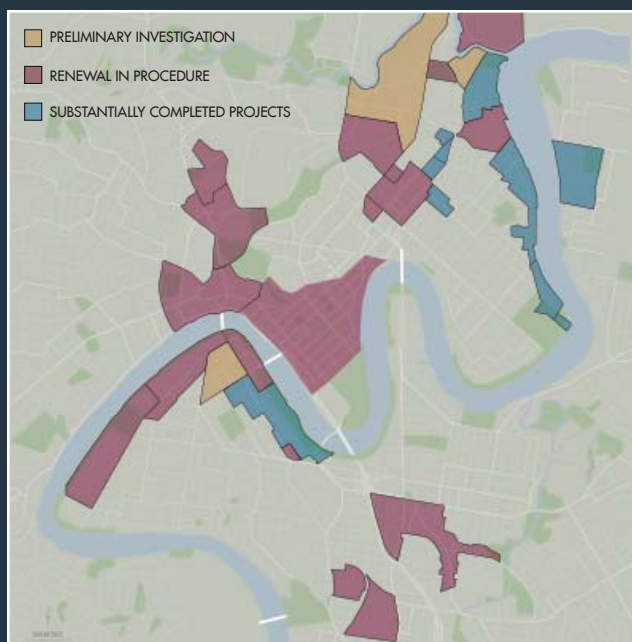
By continuing to plan city centre growth in such a fragmented way, a number of significant risks may emanate:

- Lack of integration and support between land uses.
- Poor understanding of the sustainable population capacity of the city centre.
- Failure to implement macro-environmental strategies.
- Inability to recognize new linkage potentials such as light rail.
- Lack of adequate open space for the amenity of a large future residential and working population.
- Limited ability to develop extensive affordable housing strategies.

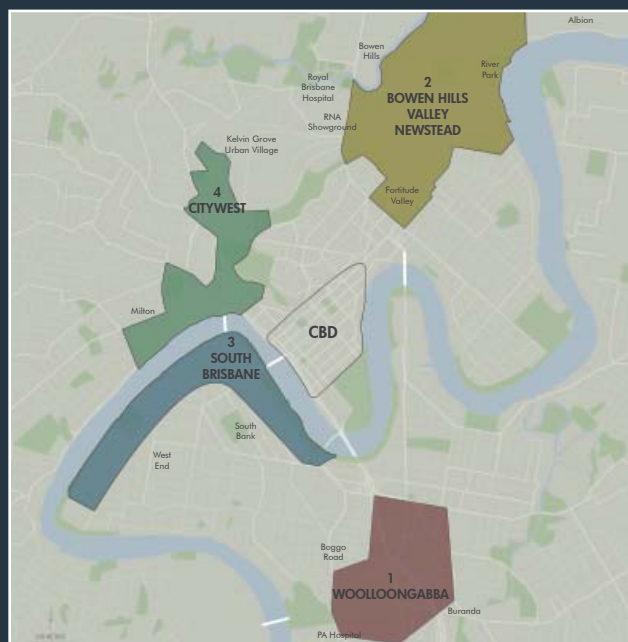
However, it is apparent that the various precincts can be considered in terms of just four **'super-precincts'** as illustrated. This approach would facilitate integrated and interdependent growth of population, workforce, lifestyle and knowledge centres. With each 'super-precinct' being larger than the CBD itself, as yet unforeseen opportunities may arise, such as potentially establishing a second CBD, and the abovementioned issues can be addressed. The proposal will necessarily entail formal partnerships between State and Council planning bodies, as well as the RNA and South Bank Corporation.

The four super-precincts are:

1. **Woolloongabba** – uniting its urban growth area with the Boggo Road / PAH precincts linking to UQ.
2. **Bowen Hills** – uniting Newstead, the Bowen Hills TOD area, Mayne Railyards, RNA Showgrounds and Fortitude Valley.
3. **South Brisbane** – uniting South Bank, the West End Riverside growth area and the 'Kurilpa' (Peel Street) growth area.
4. **City West** – uniting Kelvin Grove Urban Village / QUT with Milton and the developing north-west CBD.



CURRENT FRAGMENTED PRECINCT PLANNING



PROPOSED FOUR INTEGRATED SUPER PRECINCTS

STRATEGY THREE: CREATING DEFINITIVE PEDESTRIAN 'SPINES'

This strategy is devised to build upon existing State Government initiatives, primarily pedestrian and cycle bridges, to create dramatic connectivity through much of the city centre.

The strategy entails 3 pedestrian spines which collectively penetrate most of the areas of existing and future residential high density, the major workplace centres, the three primary city centre parks, and several educational, cultural, lifestyle and entertainment facilities.

The spines are:

1. **South Bank to Bulimba** – extending from the Goodwill Bridge via three new bridges to take in the CBD, Kangaroo Point, New Farm and Bulimba.
2. **West End to Kelvin Grove Urban Village** – extending from the Tank Street Bridge to link the West End urban growth area through City West to Kelvin Grove Urban Village and Suncorp Stadium.
3. **South Brisbane to Fortitude Valley** – resolving traffic congestion between the Valley and CBD to reinforce pedestrian linkage through Queen Street Mall with a new pedestrian river crossing to the Queensland Cultural Centre and Melbourne Street.

Together with existing lateral connections (South Bank and New Farm Riverwalk), new links such as North Bank can combine to transform Brisbane into one of the world's great walking and cycling cities, iconic of its subtropical and health-oriented lifestyle.



PROPOSED 'ICONIC' PEDESTRIAN MOVEMENT CORRIDORS



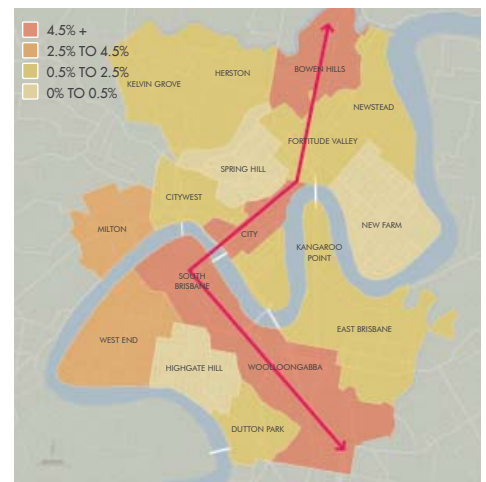
THREE DIMENSIONAL ILLUSTRATION

STRATEGY FOUR: LINKING THE CITY CENTRE BY MASS TRANSIT

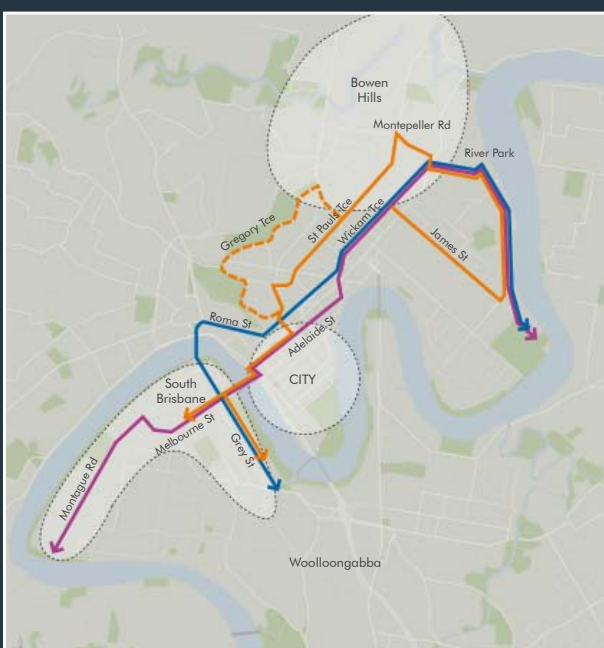
This strategy calls for an intensive new investigation of the viability of light rail to interconnect the city centre's urban growth and knowledge precincts – not as in the past based upon existing densities but on planned future densities. The accompanying diagram illustrates a range of options that would connect the city's major living, working, recreational and 'knowledge' precincts. The risk of not evaluating potential now is that urban redevelopment will occur at such a rate as to preclude its future installation. Significant benefits are reinforcement of the pedestrian network (Strategy Three) and existing rail, bus and ferry systems, fostering of new precinct interrelationships, and acting as a catalyst for development.

STRATEGY FIVE: DEFINING A 'KNOWLEDGE CORRIDOR'

The forecast future population growth in the city centre forms a 'corridor' from Woolloongabba to Bowen Hills. This corridor coincides with a 'spine' of tertiary campuses, research precincts and cultural / creative facilities that could become identified as Brisbane's "knowledge corridor". The correlation of residential and commercial development with this corridor offers opportunities for connectivity that could be both physical (e.g. light rail) and technological (e.g. IT). The proposal is to recognise the potential of this corridor and to investigate ways to reinforce its identity as symbolising the smart city.



FORECAST URBAN GROWTH TO 2021 (KPMG)



LIGHT RAIL CORRIDOR OPTIONS



"KNOWLEDGE" CORRIDOR

STRATEGY SIX: SUSTAINABILITY

The proposal is to utilise the 'super-precinct' planning process to focus upon macro-sustainability strategies that may not be apparent in the current fragmented process. These strategies should range from utilising Government and Council lands innovatively to increase housing affordability to methods of sharing water and energy between buildings. The strategy should also develop a master plan for major open spaces to enhance the network of existing open spaces.

Roma Street Parkland is a precedent of a recently created significant parkland (in lieu of development), however there is presently no major new parkland proposed in the major growth precincts of the city centre, yet the provision of such spaces will be vital in enhancing the social accessibility and amenity of the city. The 'super-precinct' strategy would allow for consideration of, for example, a high rise surround of a major park space, whereas the current independent precinct process will not.

STRATEGY SEVEN: PLANNING PROCESS

During the course of this report preparation, there have been contrasting views as to the appropriate bodies to undertake the revised planning proposal. The views range from not wanting to increase bureaucracy with new planning authorities to supporting the establishment of a single authority or four 'super-precinct' taskforces in joint State/Council partnership. It is apparent that the present process of Council teams endeavouring to plan up to 30 precincts is unwieldy and does not provide a means of integrating State lands with Council's urban renewal areas. It is necessary therefore that Government considers a range of strategies including establishing joint authorities, and including South Bank Corporation and the RNA in the relevant renewal area planning.

STRATEGY EIGHT: SMART CITY MODEL

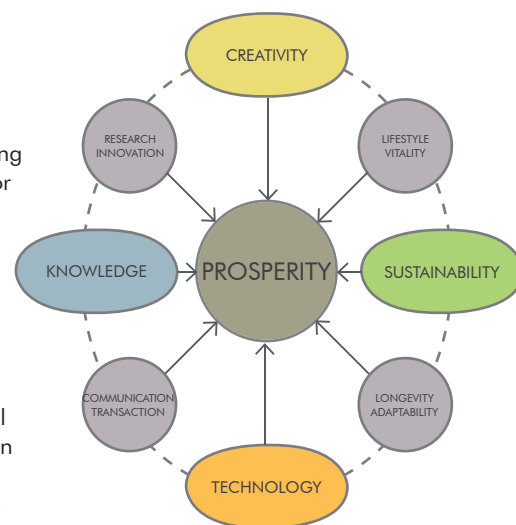
The type of analysis presented in this report could be adapted to other cities throughout Queensland. While every city has different specifics of geography, climate and land use, it is urban growth common to many which provides the opportunity for prioritising connectivity as vital to a smart city. The accompanying diagram is a simplified model for the structure of any city that functions smartly, its key drivers being:

- strong pedestrian connectivity between precincts.
- collocating 'knowledge' (research, creative industries, education) facilities with mixed use urban renewal and 'lifestyle' precincts concentrated in the city heart.
- dense compactness of development around substantial open spaces.
- intensifying existing characteristic assets which individualise each city.
- developing precinct-wide, shared environmental systems between buildings.

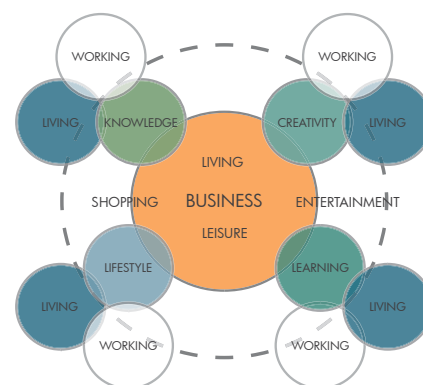
It is envisaged that this study will form a precursor to studies for each regional city throughout Queensland.

CONCLUSION

This report does not necessarily canvas all of the needs and ingredients of a smart city but illustrates that only by integrated planning can a smart city evolve. It proposes a number of radical initiatives for the city that could eventuate from a more integrated approach. Apart from generating benefits to the residents, workers and others in the city itself, the strategy provides a platform for branding Brisbane as a smart city on the international stage. This branding can both attract international expertise to Brisbane to reinforce its knowledge credentials and entice cities to utilise our expertise in shaping their cities in a world where urbanisation is the "most significant cultural, economic and environmental force shaping human society." *



A MODEL FOR A 'SMART CITY'



TRANSLATION TO A PHYSICAL FORM

* 'Solidarity for a Sustainable Future.' Earth Dialogues Forum, Green Cross International, Brisbane, 2006, P35.

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The Smart State Council was established in June 2005 as a central advisory body to provide high level advice to the Queensland Government on emerging Smart State issues and trends, and to propose measures to position Queensland to respond to challenges and opportunities.

The Smart State Council is chaired by the Premier of Queensland and comprises Government Ministers, the Queensland Chief Scientist and representatives from Queensland's business and research communities.

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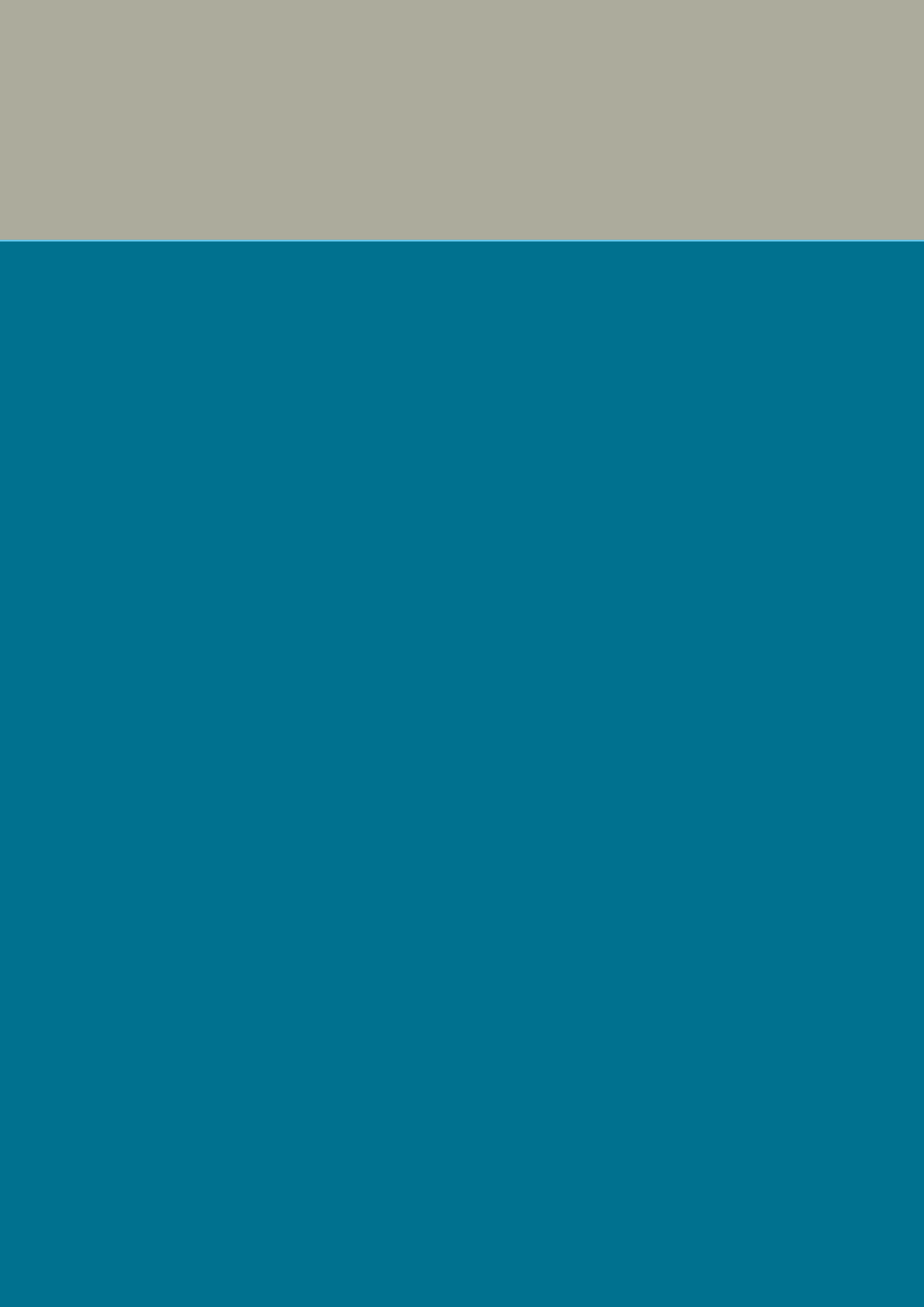
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INTRODUCTION

The aim of this paper is to propose a series of initiatives, studies and scenarios that will enable the city centre of Brisbane, Queensland's capital, to function more smartly.

It adopts the premise that a physically smarter city will provide the canvas upon which business, social, cultural and educational conditions can flourish together with improved environmental sustainability.

In order to achieve these conditions, it takes a more holistic view of the city centre's potentials than do current planning strategies, and proposes the following emphases:

A COMMUNICATIVE STRUCTURE

The paper proposes a new way of envisaging the city centre, existing and future that can pictorially be easily understood by people, in order to encourage a collective embrace of Brisbane as a smart city.

A CONNECTED CITY

In order to stimulate the spirit and reality of collaboration and partnership which typifies a smart city, recommendations are put forward for an integrated system of movement that facilitates interconnectivity which is not reliant on conventional modes.

AN INTEGRATED CITY

As the city centre comprises the city's greatest concentration of infrastructure, it is fundamental that its land is optimally utilised. Present planning strategies do not look at the potentials of the city centre holistically, rather as a series of independent growth centres. An examination of all the potentially redevelopable land is proposed in order to foresee an integrated structure which is adaptable to change but optimises the city centre potentials.

AN INCLUSIVE CITY

Residential affordability is a significant challenge for all city centres as they densify. A holistic approach to the city centre, as distinct from a 'development parcel' approach, may produce solutions not currently being perceived. In addition, multiple modes of accessibility could assist in expressing the city centre as a place of inclusivity for all people, complemented by diverse characters of its precincts.

A 'KNOWLEDGE' AND CREATIVE CITY

The Brisbane City Centre is remarkably endowed with cultural and creative precincts, and with education and research precincts, disproportionate to all other Australian and most international cities. If more widely appreciated and if better interconnected, this characteristic is a powerful base upon which to build a stronger culture of creativity and innovation throughout the community.

AN IMAGEABLE CITY

In order to attract people of vision and skill, Brisbane needs to generate an identity of the kind that is attractive to those people. Being a subtropical river city is only part of the attraction, as is having active streets and lifestyle precincts now common to most city centres. Branding Brisbane as a 'connected city', made visually memorable by the form of those connections, will cohesively the existing assets of subtropicality with the future desires for business, knowledge and social interdependency.

AN INNOVATIVE CITY

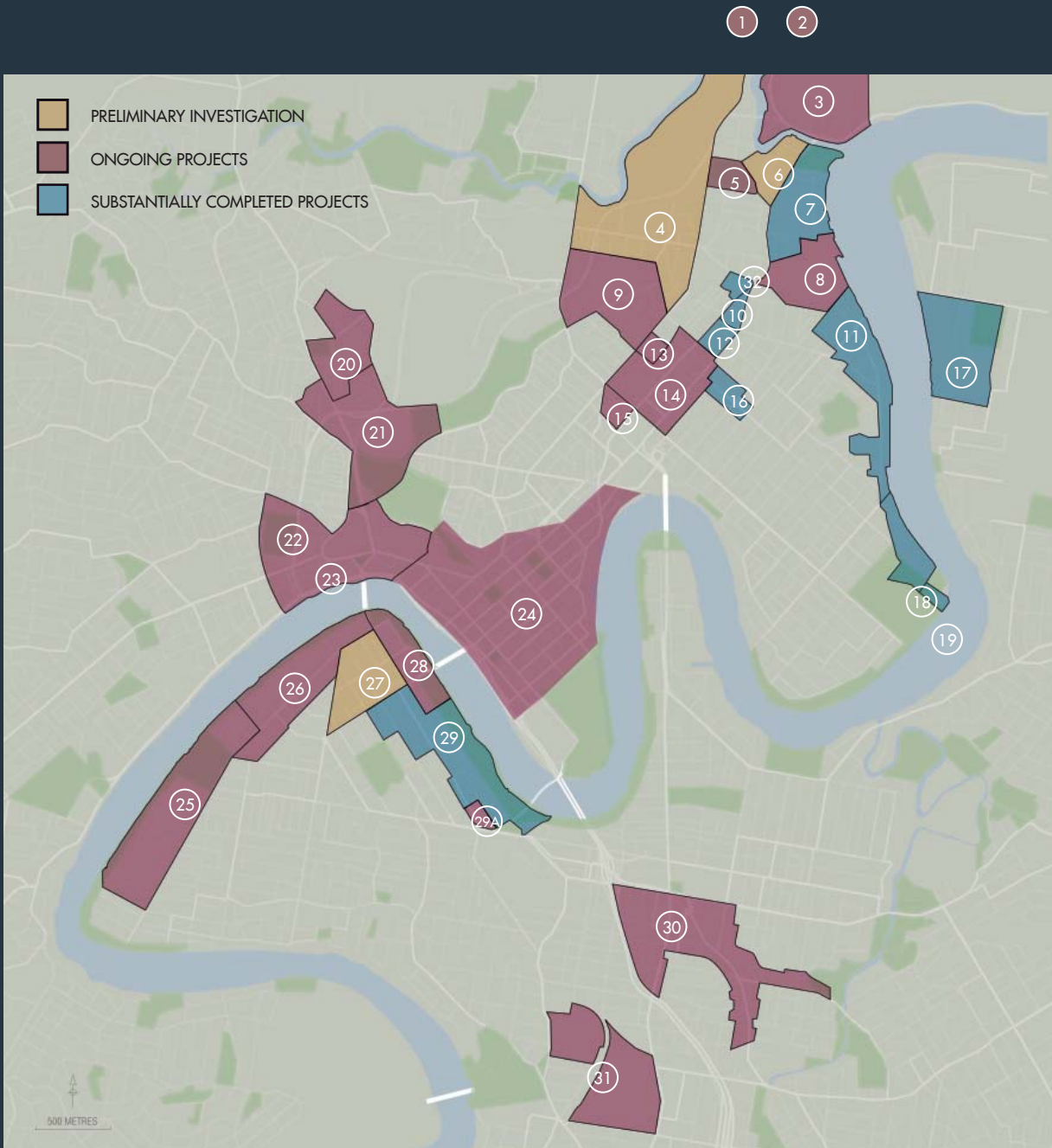
It is often stated that innovation will underpin the future economic prosperity of cities. Innovation, however, does not occur through rhetoric. It requires a widespread culture of research and interaction. It also entails a cityscape which has innovative characteristics that inspire creative thinking. Brisbane is far from displaying these characteristics. It has no cohesive plan or vision for the city centre and it frequently undertakes changes without an idea of how they fit into broader context. To be recognised as an innovative city, a rigour is needed such that individual decisions about the fabric of the city consistently form part of a larger purpose. This paper suggests a number of innovative ideas that could emanate from a city centre master plan, such as being the first city to have a defined 'knowledge corridor' or the city with the best non-vehicular accessibility in the world. Such a plan could also focus on creating Australia's most sustainable city through integrated precinct development, and lead to other innovations that re-brand our city.

A MARKETABLE 'MODEL' CITY

Each of the above characteristics are needed to generate a marketable city, not only for tourism and business attraction, but to enable Brisbane to market its services internationally and assist other cities to function more smartly. Brisbane is in a geographically outstanding position to export its knowledge to Asia, particularly those cities which share its climate. By becoming a model of the 21st Century sustainable city, Brisbane can become a source of exportable knowledge on a major scale.

The same can be said of Queensland's tropical north cities – from Mackay to Cairns – with an enormous potential to act as models for tropical Asian and other equatorial cities to acquire exportable knowledge.* To achieve this objective will require a new approach to urban planning utilising the expertise of more than the conventional team of planners and urban designers, but environmental and marine scientists, health planners, sociologists and demographers, economists and other specialists working to a coordinated methodology involving both Government and local Councils.

* This potential is also discussed in the Smart State Report: Smarter Services.



THE UNCOORDINATED ARRAY OF CURRENT URBAN RENEWAL PRECINCTS IN THE BRISBANE CITY CENTRE

- | | | |
|---|----------------------------------|---|
| 1. Albion Central Precinct (Albion Masterplan) | 9. RNA Masterplan | 21. Normanby Precinct |
| 2. Albion North Precinct (Albion Masterplan) | 10. Domaine Precinct | 22. City West Precinct |
| 3. Albion Railway Precinct (Albion Masterplan) | 11. Tenerife Woolstores Precinct | 23. Upper Roma Street Precinct |
| 4. Bowen Hills Precinct | 12. Emporium Precinct | 24. City Centre Master Plan |
| 5. Perry Park Feasibility Study | 13. Green Square | 25. West End Riverside Precinct South |
| 6. Ross Street Precinct (Structure Plan and Development Models) | 14. Valley Heart Precinct | 26. West End Riverside Precinct North |
| 7. Newstead Precinct | 15. Valley Cutting | 27. Kurilpa Precinct |
| 8. Newstead Riverpark | 16. James Street Precinct | 28. Millennium Arts Precinct |
| | 17. Bulimba Precinct | 29. South Bank Precinct a) Southbank (TOD) |
| | 18. Cutters Landing | 30. Woolloongabba Precinct Structure Plan |
| | 19. Brisbane Power House | 31. Boggo Road + Princess Alexandra Hospital Precincts (State Government) |
| | 20. Kelvin Grove Urban Village | |

1.0 BACKGROUND

1.1 PURPOSE

This report explores ways for Brisbane to be seen and experienced as the capital of a smart state – a city which both attracts creative, innovative people and inspires its existing residents. This investigation occurs at a time when cities world wide are, like Brisbane, undergoing enormous urban growth, so much so that it has been said that the “urbanization of the planet is the most significant economic and environmental force shaping human society”¹

Thus the need for cities to develop smarter strategies to manage growth has never been greater. Most of the debates revolve around issues of consolidation versus sprawl and public transport versus private vehicle mobility, and they are discussed in this section. The velocity of growth is also requiring many cities to provide immediate remedies, such as to traffic congestion, rather than long term solutions that are more sustainable.

Brisbane would be acknowledged as one of the most pleasurable cities in the world to inhabit and to visit, although it appears to be dropping in quality of life indices such as according to 2007 Mercer Quality of Living Survey which placed the city 32nd in the world and below Sydney, Melbourne, Perth and Adelaide. It perhaps relies too much on its benign climate and on its ‘life style’ precincts, such as promoted in current marketing campaigns, are insufficient assets to remain competitive. Brisbane could also be said to be undertaking immediate, conventional remedies to problems rather than innovative, forward thinking solutions. It is fast retrofitting public transport systems most often at the expense of the quality of the public realm (e.g. Melbourne Street), building vehicular tunnels and bridges – these improving mobility but also risking increased reliance upon the car as the primary means of accessibility. Necessary as they may be, they are hardly smart measures in terms of innovation.

More worrying is the fact that there exists no plan for the centre of Brisbane, other than one for the CBD prepared in 2005 by Brisbane City Council (albeit called Brisbane City Master Plan). Without such a plan, decisions can only be made on either a reactive or singular solution basis. There are some 30 precincts identified for major urban renewal within only 4 vicinities of the CBD, with no coordinated vision as to what is their combined sustainable capacity, how their dense working and residential populations will move around, nor what interrelationships might occur that could impact the city with a collective identity.

These problems are not exclusive to Brisbane, however numerous cities around the world are developing holistic strategies which entail innovative approaches to population growth in a sustainable long term way. As a precedent to conceiving strategies which are applicable to Brisbane, the following summarises the key issues being addressed worldwide and the current plans which are guiding our city’s development

1.2 PRECEDENTS AND ARGUMENTS

Most cities in the world’s developed countries have recognised that city centres are critical to get right for their cities to function sustainably.

The most prevalent issues that they address are the question of whether to allow continued sprawl or to prioritise consolidation, and the question of how to decrease traffic congestion (and its associated problems of pollution and degradation of amenity).

Consolidation Versus Sprawl

The issue of sprawl versus consolidation has elicited differing viewpoints and generated numerous studies. Arguments promoting consolidation focus on the notion of minimizing the ‘ecological footprint’² of the city, creating energy efficiency, avoiding intrusion into rural and natural environments, and facilitating new forms of public transport connectivity. On the other hand, advocates of suburban expansion maintain that there is a need to provide a diversity of living environments, especially for families that are not necessarily achievable in denser urban cores.

An example of the first view is as follows:

“Cities that sprawl are far less energy efficient than densely planned communities.... Comparative studies of residential satisfaction in low-density versus higher-density communities show that for a number of households, the relative costs of low-density living (such as the costs of running a second car, long commuting times and difficulty making child-care arrangements) outweigh the benefits. Research on the relationship between urban form and livability suggests that denser, more mixed communities tend to excel on many quality of life indicators.”³

1. Solidarity for a Sustainable Future. Earth Dialogues Forum, Brisbane 2006. P35
2. The ecological footprint is defined as the area of land and water calculated that a population needs to produce the resources it consumes and absorb its waste under prevailing technology.
3. Solidarity for a Sustainable Future. Earth Dialogues Forum. Green Cross International. Brisbane 2006. P38

“Most Americans, including most New Yorkers, think of New York City as an ecological nightmare, a wasteland of concrete and garbage and diesel fumes and traffic jams, but in comparison with the rest of America it is a model of environmental responsibility. 82% of Manhattan residents travel to work by public transit, by bicycle or on foot...If it were granted statehood, it would rank fifty-first in per capita energy use....If New Yorkers lived at the typical American sprawl density of three households per residential acre, they would require many times as much land...The key to New York’s relative environmental benignity is its extreme compactness...Barring an almost inconceivable reduction in the earth’s population, dense urban centres offer one of the few plausible remedies for some of the world’s most discouraging environmental ills. Dense cities are scalable, while sprawling suburbs are not.”

‘GREEN MANHATTAN: Why New York is the greenest city in the US’, David Owen. The New Yorker, 10/18/04

The argument continues that:

“Cities that have relied on the automobile in their planning and layout show a development pattern characterised by low density housing, dispersed employment, highly zoned land uses, poor public transport and high percentage of space taken up by roads and parking. This has led to a host of environmental problems including urban sprawl, air and noise pollution, high costs of urban infrastructure and social problems like isolation, crime and inequitable communities.”⁴

A further succinct comment is made by the British architect Richard Rogers in his book ‘Cities for a Small Planet’ with a call for increased densification:

“My own approach to urban sustainability reinterprets and reinvents the ‘dense-city’ model...dense cities can through integrated planning be designed to increase energy efficiency, consume fewer resources and produce less pollution and avoid sprawling over the countryside...The creation of the modern Compact City demands the rejection of the single-function development and the dominance of the car. The question is how to design cities in which communities thrive and mobility is increased...how to design for and accelerate the use of clean transport systems and re-balance the use of our streets in favour of the pedestrian and community.”⁵

The counter arguments to urban consolidation are difficult to find in international cities but have gained media coverage in Australia in recent years. An example in The Weekend Australian (December 10-11, 2005) reads:

“In the new millennium, what is generically understood as urban sprawl is as common to Paris and Perth as to London and Los Angeles and can be said to be the world’s preferred settlement pattern.... Research shows 85% of people who live in flats would rather live in a house. But Sydney’s planners... want to turn history and human nature on its head by stuffing an extra 1.1 million people into a few city growth centres during the next 25 years.”

Citing the Chicago architecture historian Robert Bruegman, the writer claims:

“a minority cultural elite is still trying to impose its narrow interpretation of urban living as the kind of life lived by people in apartments in dense city centres that contain major high brow cultural institutions.”⁶

Patrick Troy, emeritus professor at the ANU Centre for Resource and Environmental Studies is quoted as saying: “The idea that you can reduce the size of a city by doubling its density doesn’t take into account the way people live or that only about a quarter of the area a city occupies is taken up by the places where people sleep.”⁷

4. Solidarity for a Sustainable Future. *ibid.* P37
5. Richard Rogers. *Cities for a Small Planet.* Faber and Faber. London. 1997. P32
6. Deborah Hope. ‘Even Sprawl Finds Its Defenders’. *The Weekend Australian*, December 10-11, 2005. P26.
7. Patrick Troy. Quoted in Deborah Hope. *Ibid* P26
8. Brendan Gleeson, ‘Decision Time’. *The Courier Mail*, April 10, 2006. P24.
9. Bernard Salt, in ‘South Bank: Brisbane’s Icon’, 2007, P2
10. Brendan Gleeson. *ibid* P24
11. South Bank: Brisbane Icon. P15
12. South East Queensland Regional Plan. 2005-2026. P7
13. Brendan Gleeson. *ibid.* P24
14. Sandy Peacock, in ‘South Bank: Brisbane’s Icon’.
15. Sandy Peacock. *ibid.*
16. Saskia Sassen. *Why Cities Matter.* *ibid* P38
17. Professor Ed Blakely, ‘Smart Growth: New Urbanisation’s Latest Incarnation’. *The Planning Report*, July 1008.
18. Professor Ed Blakely, Keynote Address, Sydney Futures Forum, May 2004.

Another argument is made by Brisbane's Professor Brendan Gleeson, Director of the Urban Research Program at Griffith University, who wrote:

"Australians love cities and continue to place their faith in them as pinnacles of social and economic opportunity. But many have lost faith in Sydney, especially young families. Recent demographic data show these households fleeing Sydney in rising numbers."⁸ The demographer Bernard Salt wrote in the April 2007 publication *South Bank: Brisbane's Icon* that Brisbane "is a fast-growing capital city flanked to the north and south, not by bleak industrial cities, but by places of suburban aspiration."⁹

The arguments between advocates for urban consolidation and suburban growth do not necessarily, however, preclude the possibility of both. Brendan Gleeson, for example, does not challenge the need for consolidation, stating: "Higher density urban redevelopment must occur to accommodate growth but it must be well-designed and accompanied by high-quality, social infrastructure."¹⁰

In the 'South Bank: Brisbane's Icon' publication, Bernard Salt is quoted stating "The shift from suburbia to city has been as evident in Brisbane as it has in other Australian capital cities,"¹¹ and he notes that by 2008/09, it is likely that the innermost suburbs of Brisbane will contain more people than similar suburbs in Melbourne if recent growth rates are maintained.

Supporting this prediction, the South Bank publication cites population trend data that Brisbane's population is forecast to grow at an average annual rate of 1.8% over the 16 years to 2021 as compared with Melbourne with 1.0% and Sydney with 0.8%.

Further support for urban densification is given in the South East Queensland Regional Plan which estimates that "by 2026, one and two person households are expected to account for around 60 percent of all households. This compares to around 50% in 2001. This trend will impact upon housing projections and types of dwellings required."¹²

The above-mentioned observers of Brisbane's growth patterns each nominate the city centre's increasing urban sophistication as a fundamental reason for its future prosperity and vitality. Brendan Gleeson wrote, for instance "Forget the climate. It's not our greatest strength. Most Australian cities have good climates. Our region's attractiveness derives not from sunshine but from perceived family livability and from a recognition that we've been prepared to change and mature."¹³

In relation to the ability for the Brisbane city centre to consolidate yet maintain its quality of life, Sandy Peacock, Creative Director of Clemenger, wrote: "While Brisbane's inner city is growing rapidly, it is not doing so at the expense of lifestyle. A number of development sites within the 5km radius already offer a combination of parkland, riverside views and urban café society. Approximately 12% of the inner-city area is dedicated green space"¹⁴, and it is further commented that "Future growth capacity in the Brisbane inner-city is not restricted as it is in Melbourne by industrial sites or by natural barriers like the harbour in Sydney."¹⁵

Broader arguments exist that consolidation of city centres is vital to attracting the types of people and businesses necessary to prosper economically, for example:

"The density of central places provides the social connectivity that allows a firm or market to maximise the benefits of its technological connectivity."¹⁶

Professor Ed Blakely, currently Executive Director for Recovery Management of the City of New Orleans, and formerly Chair of Urban and Regional Planning at the University of Sydney, also associates urban consolidation with social and economic vitality, using the term 'smart' as descriptor:

"We are an urbanising world and an urbanizing society. Simply trying to stop this urbanisation won't get us anywhere; we must be smart about it.... we are trying to develop a different form of urban living with a new mixture. We have had real trouble trying to figure out what density level is appropriate for particular urban areas....In essence we have to figure out a new built form that is sensible."¹⁷

He advocates for a more interdependent city centre form than has been traditionally adopted:

"We have to look at ways to rearrange not just our physical planning and land maps, but to rearrange our hospitals, our schools and other infrastructure that heretofore were just a service infrastructure, but now may be the catalyst for the development of new industries and new industrial opportunities."¹⁸

The weight of expert opinion strongly favours the development of clearer, more compact cities, reducing environmental impacts and enabling improved integration of uses, technological and physical connectivity, and more vibrant social interactivity. Although there remains the need for suburban lifestyle, as is facilitated by the South East Queensland Regional Plan 2005-2026, the dominant future households will comprise of singles and childless couples, reinforcing the desire for greater compactness and the need for new housing typologies in the city centre.

Public Transport Versus Car Transport

Over the last decade, Brisbane has sought to improve mobility by both improving public transport and private vehicle accessibility. The former is focused on dedicated busways, the latter on shifting vehicular through-movement around the CBD. This is evident in the creation of the Inner City Bypass, and the current construction of the North-South Tunnel and the Hale Street Bridge.

The risk of this increased mobility is that it will encourage more people to rely upon the private car, thus merely deferring the problems of congestion to a future decade. Another concern is that, in shifting traffic away from the CBD, it will congest the wider city centre or create divides between the areas where future urban renewal will be most dense.

Unlike Brisbane, many cities have called a halt to increasing traffic mobility as a way to solve long term congestion. The two trends are towards installing mass transit systems and tolling vehicular access to the whole city centre, as for example:

"London...has had to reinvent itself as a city which accepts increased density, with taller buildings and new housing stock to accommodate more than 800,000 new residents over the next 15 years...Following the lead of Singapore, London has addressed one aspect of this issue by introducing a congestion charge for private vehicles entering the city centre. This initiative has not only noticeably reduced traffic volumes and air pollution but has also been linked to increased investment in and use of public transport infrastructure and the creation of high quality public spaces."¹⁹

Singapore is also equally well-known for the efficiency and attractiveness of its mass rail system (MRT), and many cities have sought to induce commuters onto public transport through not just the provision of light rail but its design quality, such as Portland, USA and Bogota, Colombia:

"Bogota today stands out as a perhaps unexpected best-practice case of egalitarian urban transformation...the city administration introduced the effective and efficient Transmilenio Rapid Bus System...and built a network of cycleways, public parks and urban plazas that have changed the way the majority of over 6 million inhabitants come to and move around their city."²⁰

In Australia, the trend to light rail or other form of mass transit system has generally been ignored, other than in Melbourne with its historic tram system. However, there are signs that this resistance is changing, with Sydney's Lord Mayor announcing in April 2007 the intention to develop an at-grade light rail corridor through the Sydney CBD and into the city frame.

Over the past decade Brisbane has invested heavily in its dedicated busway system to reduce reliance on car travel with significant success. It is also in the process of constructing tunnels in order to reduce congestion of traffic moving through the city centre. The Inner City Bypass and the CityCat Ferry system have been other key strategies.

The Brisbane City Centre Master Plan promotes in addition the extension of Brisbane's heavy rail system into the Central Business District as well as across the river to and beyond the future growth area of Woolloongabba. It also recommends investigation of the feasibility of a light rail corridor extending from Newstead through Fortitude Valley and the CBD to South Brisbane, potentially linking to the University of Queensland.

The Brisbane City Centre Master Plan thus recognises that a range of alternative public transport systems are needed to facilitate accessibility to and within the city centre if automobile dependency is to be reduced, and the Plan regards these measures as being essential to not only interconnect the growth areas but to enable revitalisation of areas afflicted by traffic dominance.

Immediate Versus Long Term Solutions

Two different characteristics typify the development of urban centres over the past four decades worldwide.

The first has been to increase vehicular mobility. This is evident in Brisbane in the construction of the riverside expressway in the 1970s, and more recently the Inner City Bypass, and the current construction of the North-South Tunnel and Hale Street Bridge. Simultaneously with these has been the installation of dedicated Busways and the Citycat Ferry system to increase public transport patronage.

The impacts upon the quality of the public realm are, however, not often well-resolved. The riverside expressway has long scarred the interface between city and water, however the busway system is leaving its own damage such as to Melbourne Street, and the Inner City Bypass, Hale Street, and potentially the Hale Street Bridge, sever precincts through the city centre. There is thus an evident discord between mobility planning and urban design.

While Brisbane, however, has been developing ways to increase vehicular mobility, other cities have shifted direction to reduce automobile accessibility, not only to Central Business Districts but to whole city centres. Some have placed tolls on private vehicle access, others have developed innovative forms of mass transit, recognising that building roads and tunnels will not provide long term solutions.

19. Richard Burnett. City-building in an age of global urban transformation. Cities-Architecture and Society. Marsilio Edition, Venice, 2006. P19

20. Richard Burnett. *ibid.* P15

It is apparent in some instances that the urgency to install public transport systems as well as new vehicular carriageways has not necessarily resulted in improved urban environments. The Inner City Bypass for example fulfils an important vehicular role but also forms a barrier around the city centre. The Melbourne Street Bus Station at South Bank has long been criticised for its impacts on the public realm. A future issue may be the impact of the Hale Street Bridge on south Bank and its connectivity with West End.

The second major trend has been urban renewal of redundant industrial land, especially along waterfronts, with an emphasis upon tourism attraction to boost economies. A particular focus has been on creating iconic cultural buildings to express creative identity. Baltimore and Boston were among the earliest to transform urban waterfronts, with Baltimore being the template upon which Sydney's Darling Harbour was based.

However, apart from a few exceptional cases, these types of strategies have not generated enduring value to a city:
"An economy oriented to entertainment, tourism and 'creative' functions is ill-suited to provide upward mobility for more than a small slice of its population.....a successful city must become home not only to edgy clubs, museums and restaurants, but also to specialised industries, small businesses, schools and neighbourhoods capable of regenerating themselves for the next generation."²¹

An example of a city which sought to transform its economy through the building of a cultural icon is Spain's Bilbao which constructed the Guggenheim Museum. Many cities have followed the trend, from Los Angeles (a similar building to the Guggenheim) to Milwaukee, and Manchester to Valencia. The problem results that the specific identity sought is diluted when every city does the same thing.

What few cities have yet developed is a strategy to transform a whole city centre into a memorable icon consisting of linkages between several places and attractions. In Brisbane, these could include South Bank, the Queensland Cultural Centre, the Brisbane Powerhouse, the Creative Industries Precinct at Kelvin Grove, the city centre university campuses, and the three outstanding parklands – New Farm Park, the Botanic Gardens and Roma Street Parkland.

That is not to say there should not be new places of interest created, but a recognition of an opportunity to generate an identity based upon interrelationships rather than piecemeal developments, as Richard Burnett wrote in "Cities: Architecture and Society" for the 2006 Venice Biennale: "Many big city mayors are implementing important urban reforms that will enable their cities to be more competitive in the global economy and smarter producers of knowledge and culture....cities in the 21st century should increasingly recognize their roles as centres of tolerance and justice....They should reduce their impact upon the global environment by embracing dense and compact development and

they should foster a landscape of greater complexity and integration between people and spaces".²²

Brisbane has a significant opportunity to develop an identity as a city of creativity and knowledge based upon its richness and connectivity between its cultural, research and learning centres, as is discussed in Section 3. This opportunity, however, will rely upon a united vision and method between the State Government and the Council not evident at present.

Section 3 of this report also examines the current planning processes relevant to Brisbane and, without detracting from them, makes suggestions as to how we can take advantage of our burgeoning economic and population growth to generate an identity that differentiates Brisbane nationally and internationally. This will require a highly coordinated planning structure, without which critical opportunities may be foregone.

1.3 THE SOUTH EAST QUEENSLAND REGIONAL PLAN 2005-2026

The South East Queensland Regional Plan, and the accompanying Infrastructure Plan and Program 2006-2026, are the Queensland Government's primary strategies to manage population and employment growth in the region.

The Plan's idyllic vision for South East Queensland is described as follows: "By 2026, South East Queensland is a region of inter-connected communities, with excellent accessibility and an efficient public transport system. At its heart is Brisbane, State Capital and subtropical world city. Surrounding the capital, the region contains a number of large urban areas separated by open space and many small to medium-sized towns and villages, each with its own character and identity. It is a region characterised by choice and diversity, with mountain ranges and hinterlands, the Bay and islands, extensive beaches, parks, bush and farmlands."²³

The Plan advocates for:

"a move toward a more compact urban form with higher densities in select areas [which] would reduce travel demands, thereby reducing energy usage and emission of pollutants. It could also improve levels of accessibility and have fewer detrimental impacts on the region's environment and natural resources. It would help to protect the region's rural production and regional landscape from urban encroachment."²⁴

21. Joel Kotkin. The City. Random House, New York. 2005. P134

22. Richard Burnett. *ibid.* P15

23. South East Queensland Regional Plan. P9

24. South East Queensland Regional Plan. P8

Map 9 – Regional activity centres network – Greater Brisbane and the Western Corridor



The Plan seeks to accommodate the majority of regional growth in existing urban centres and in urban growth areas that it identifies as being within Greater Brisbane, Sunshine Coast, Gold Coast, Western Corridor, Toowoomba, Beaudesert and certain rural communities.

Regarding Greater Brisbane, it states that:

Greater Brisbane provides significant opportunities for urban consolidation, particularly through infill and development of areas with good accessibility to activity centres and public transport.

Under the guidance of the Government's Office of Urban Management, the Plan requires each local government in South East Queensland to prepare a Local Growth Management Strategy (LGMS) by 30 June, 2007.

Each LGMS is required to show how dwelling targets are to be met, and to identify and plan how growth is to occur in transit-oriented communities, regional activity centres, greenfield areas and redevelopment sites. A regional activity centre is described as "a concentration of business, employment, research, education, services, higher density living and social interaction", of which the Brisbane CBD is described as the Primary Activity Centre.

A key aspect of the planning strategy is the application of Transit-Oriented Development (TOD) principles to the regional activity centres, with the aim of creating denser communities around public transport hubs. In the Brisbane city centre, TODs are nominated for Bowen Hills, Albion, Woolloongabba, Buranda, Milton and Park Road in areas within a 600-800 metre radius of a transport node. They are to incorporate densities of 30-80 dwellings per hectare or greater, facilitate strong intermodal transport connections, walking and cycling links, and a mix of housing types and affordability.

The Plan notes that the Brisbane city centre is developing a pattern of knowledge precincts including Herston (medical research), Kelvin Grove (creative industries and health research), Milton and Fortitude Valley (ICT), Boggo Road (science and technology) and the redeveloped South Bank Institute of TAFE. Around these precincts are noted Toowong (iLab incubator), the University of Queensland (Institute for Molecular Bioscience, Queensland Brain Institute, Australian Institute for Bioengineering and Nanotechnology), and Indooroopilly Longpocket (natural resources research). Further afield, it cites the research and commercialisation precincts at Griffith University Nathan Campus, Mt Gravatt Research Park, Brisbane Technology Park at Eight Mile Plains and Coopers Plains (health and food sciences).

The South East Queensland Infrastructure Plan 2006-2026 defines the infrastructure needs to implement the Regional Plan and seeks to ensure coordination in the planning and service provision by relevant State agencies and Government-owned corporations such as Queensland Rail. It outlines projects for transport, water, energy, information and communication technology, and social and community infrastructure such as for health, education and sport.

The majority of planning and research experts interviewed in relation to this paper were supportive of the South East Queensland Regional Plan. Brendan Gleeson of Griffith University noted that it has been a remarkable achievement in a short period of time to set a growth direction for the region.

Some of the urban researchers interviewed, such as Professor Bob Stimson of the University of Queensland, expressed concerns that the SEQ Regional Plan promotes western corridor development over coastal development where the centres of employment already exist. Others took a contrasting view and were concerned that more coastal development will result in urban coastal sprawl. Professor Peter Spearritt of the University of Queensland sums up this view by commenting that "only tiny portions of the coast are preserved in national parks or coastal reserves. Small towns have been swallowed up by linear urbanisation from Noosa to the Tweed River and beyond."²⁵

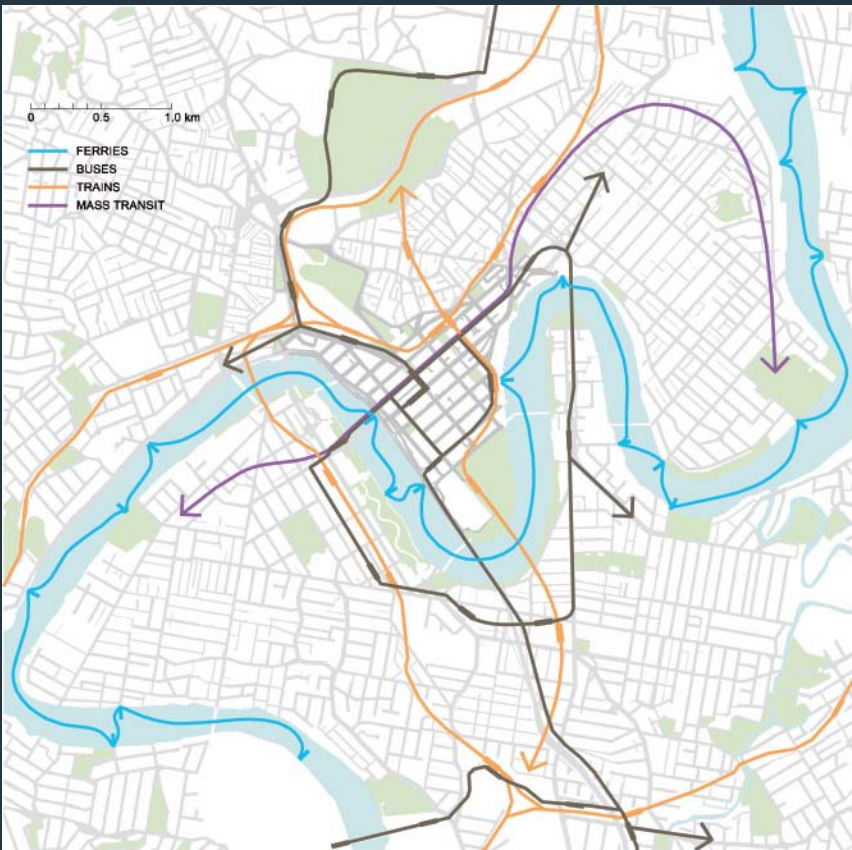
All commentators however, believed that the city heart of Brisbane is of vital importance in accommodating population and employment growth, noting that it is of concern that there is a lack of coordination in current planning methodologies.

Several believe that there is too great a burden upon Council to plan a large number of TODs and other urban renewal precincts simultaneously, particularly with the speed of current development. Comments were also made that much of the redevelopable land in the city centre is in State Government ownership and thus is not being considered by Council in its planning strategies. All interviewees regarded that traffic and transport infrastructure planning tends to overwhelm other priorities such as the quality of the urban environment and environmental sustainability.

25. Peter Spearritt, introduction to public lecture. Centre for Critical and Cultural Studies, University of Queensland, April 19, 2007.



THE BCC BRISBANE CITY MASTER PLAN STUDY FOR A HIGH DENSITY BRISBANE CBD



THE BCC BRISBANE CENTRE MASTERPLAN STUDY FOR AN INTEGRATED MOVEMENT NETWORK INCORPORATING LIGHT RAIL.

1.4 BRISBANE CITY CENTRE MASTER PLAN 2006-2026

The Brisbane City Centre Master Plan 2006-2026 was prepared by Brisbane City Council to set “the strategic direction for the future development of the city.” Despite its name it is primarily a plan for the Brisbane Central Business District with some recommendations for a wider city frame area.

The Master Plan acknowledges its role as part of the South East Queensland Regional Plan in which the Brisbane CBD is identified as the Primary Activity Centre of South East Queensland, and it notes that: “on current trends residential use is projected to rise by 2026 from 15% to nearly 40% of the overall market. In the same time, commercial markets will more than double by quantum as opposed to percentage.”²⁶

The principal recommendations of the Master Plan with respect to the ‘city frame’ are concerned with connections and transport, including:

- a mass transit (light rail) corridor from Newstead-Teneriffe through the CBD to South Brisbane.
- a separate bridge from Victoria Bridge which links buses and light rail to South Bank and the south-east busway system.
- an underground heavy rail line which links Spring Hill through the existing Central Station to Dutton Park and Woolloongabba, simultaneously providing new stations in CBD areas currently inaccessible to rail.
- transfer of through-traffic movement away from the CBD into the surrounding frame area with strategies including developing the Hale Street Bridge, locating carparking stations outside the CBD, and decreasing carriageways in the CBD as part of a one-way loop system.

Critically, the Master Plan seeks to ensure that high density and tall buildings are restricted to the existing CBD peninsula, by limiting height outside the CBD and by eliminating height restrictions all together in most of the CBD. No strong justification is given for this limitation, and it raises a number of significant issues:

Demand and Availability

The CBD peninsula is already being challenged in its role as the core ‘primary activity generator’ of the city by commercial development occurring in Fortitude Valley and South Brisbane. Consequently, Council is considering permitting heights up to 20 levels in these adjoining precincts. The need to expand the CBD domain has been caused by the fact that much of the existing CBD has been built out by residential towers and by increasing demand for large floor plate offices conducive to new workplace practices for which sites are too expensive or unavailable in the CBD.

Environment

The Master Plan principle of a compacted, high-rise CBD is at odds with another major Master Plan intent to preserve the city’s subtropical character. The proposed infilling of remaining CBD sites by buildings of potentially unlimited height will impact upon existing attributes of sunlight penetration and openness that currently express subtropical identity.

Traffic

The Master Plan proposes locating future carparking in the frame area around the CBD along with discouraging through-traffic by creating dual one-way traffic loops in the CBD. These proposals may have the effect of diminishing the public amenity of the wider city centre precincts.

Opportunities

Had the Master Plan been formulated for the whole city centre, it may have generated different concepts such as for a second or ‘satellite’ CBD through Fortitude Valley and into the Bowen Hills area where there is at least the equivalent area to that of the CBD available for redevelopment, and which is positioned between the CBD and the massive airport development precincts.

The potential shortcoming of preparing a CBD Master Plan independent of the TOD area plans for various city centre precincts is a lack of integration and of a broader vision.

Exacerbating these issues is a ‘separation’ between areas for which the State Government is responsible and for which Council is responsible to plan. This separation is particularly evident in the two largest growth areas – Woolloongabba and Bowen Hills – and thus further restricts the potential for integration. Recognising this concern, the Master Plan recommends establishment of a joint taskforce. Rather than the current system of Council preparing growth management plans under the guidance of the Government’s Office of Urban Management, placing enormous stress on the Council’s capacity, a joint taskforce should be formed to ensure integrated, concurrent planning of all precincts including the CBD.

26. Brisbane City Centre Master Plan 2006. Brisbane City Council. P21

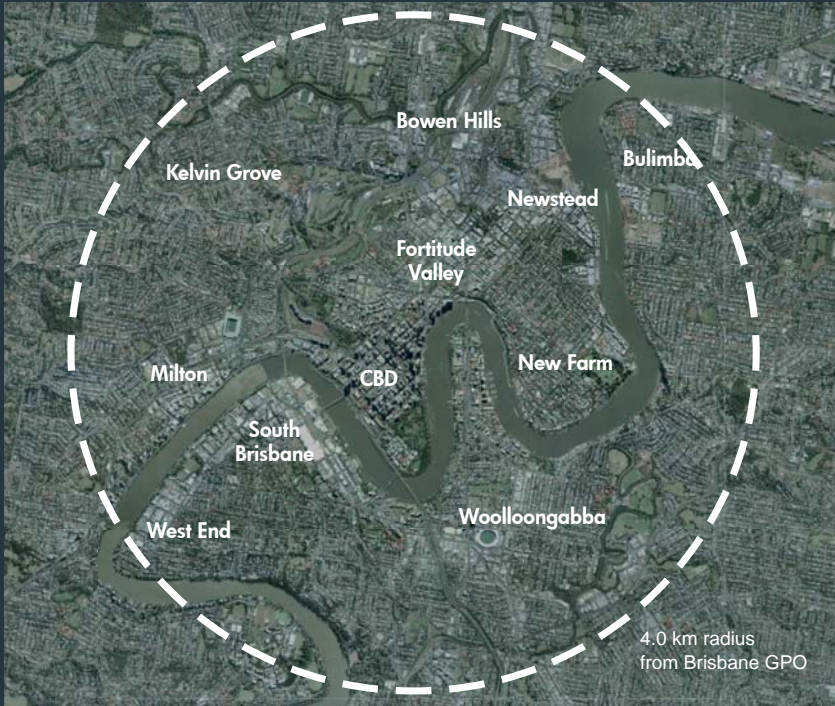


DIAGRAM 1: BRISBANE CITY CENTRE

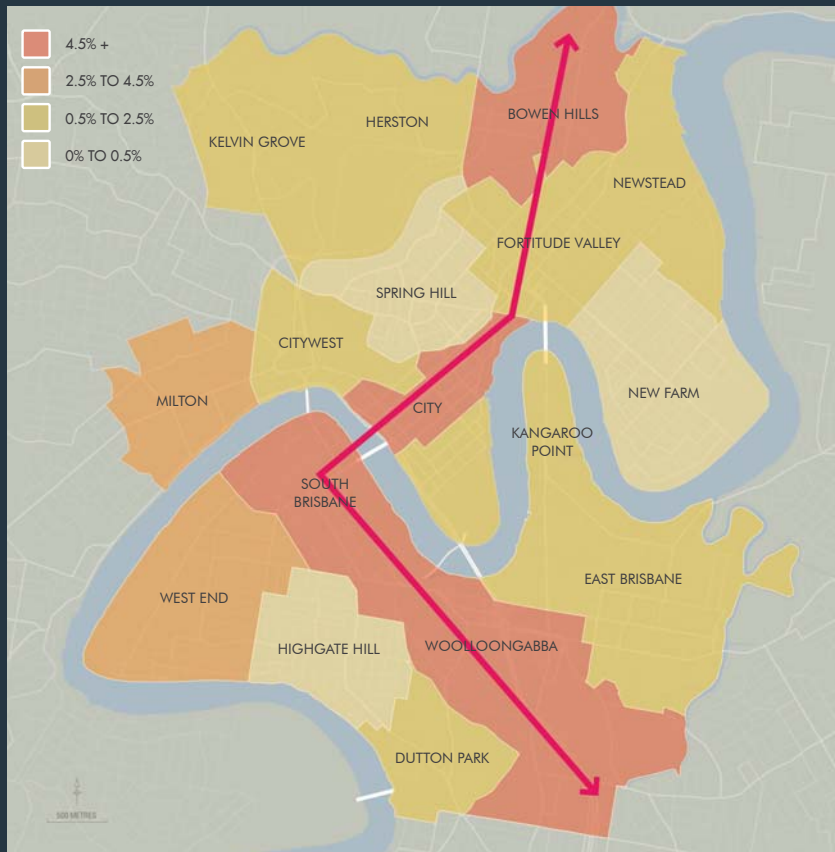


DIAGRAM 2: PERCENTAGE POPULATION GROWTH BY STATISTICAL LOCAL AREA (2006-2021)

Source - KPMG Property Advisory Services; National Institute of Economic Research; Population Information Forecasting Unit

2.0 DEVELOPMENT PATTERNS IN THE CITY CENTRE

Although the city centre does not have a precise definition, a reasonable approach would be to include the primary urban growth areas identified in the South East Queensland Regional Plan. This realm extends from Albion and Bowen Hills in the north to Woolloongabba in the south and from Bulimba in the east to the University of Queensland in the west. Generally it describes an area inside a 4 kilometre radius of the Brisbane GPO.

This area is illustrated on the accompanying **Diagram 1**.

2.1 GROWTH PATTERNS

Diagram 2 illustrates the predicted population growth areas across the city centre, according to KPMG Property Advisory Services National Institute of Economic Research.

These areas broadly correspond with the major urban growth areas identified in the South East Queensland Regional Plan with the exception of the north CBD area. Bowen Hills, South Brisbane and Woolloongabba are each areas described as Transit Oriented Development precincts (TODs) in the Regional Plan.

The areas that are not anticipated to grow substantially are those with substantial historic housing such as Highgate Hill, Spring Hill and New Farm. The relatively higher growth prediction for West End is attributable to its riverside redevelopment rather than to the remaining area which largely comprises 'character' housing.

CBD and Fortitude Valley / Newstead growth is expected to be moderate largely because development has already occurred, however the Fortitude Valley / Newstead area may change due to current Council consideration of increasing density provisions.

Herston, Kelvin Grove and East Brisbane are also regarded as having moderate growth potential due to limited redevelopment site availability, although Kelvin Grove Urban Village still has extensive capacity with its program of affordable housing.

The forecast major growth areas – Woolloongabba, South Brisbane, City North and Bowen Hills – each have extensive areas of redevelopable sites. They are also the primary growth areas described in the South East Regional Plan, for which Brisbane City Council is preparing urban renewal strategies for dense redevelopment. These areas are characterised by accessibility to rail stations.

The diagram illustrates that another form of transport connection could be of value travelling from the southern end of Woolloongabba through South Brisbane, across the Council's proposed Adelaide Street Bus Bridge and through the CBD to Fortitude Valley, Bowen Hills and Newstead. Such a connection would not only collect major residential precincts but the areas anticipated to experience the highest workplace growth.

The South East Queensland Regional Plan does not make an assessment of the growth capacity of the city centre, and refers only to a population increase in the order of 200,000 people for Greater Brisbane to 2026. However, without an assessment particular to the city centre it will be difficult to develop plausible strategies for public transport, environmental sustainability and other critical needs.

An examination of the city centre as a whole reveals that there are potentially some 400 hectares of redevelopable land, some 4 times the area of the Brisbane CBD. At relatively high density of 150 persons per hectare, the city centre could accommodate 60,000 new residents by 2026, approximately $\frac{1}{3}$ of the total forecast for Greater Brisbane. To date, it does not appear that any global assessment has been made for city centre growth capacity, based upon expected redevelopable land, and thus such an assessment is urgently needed.

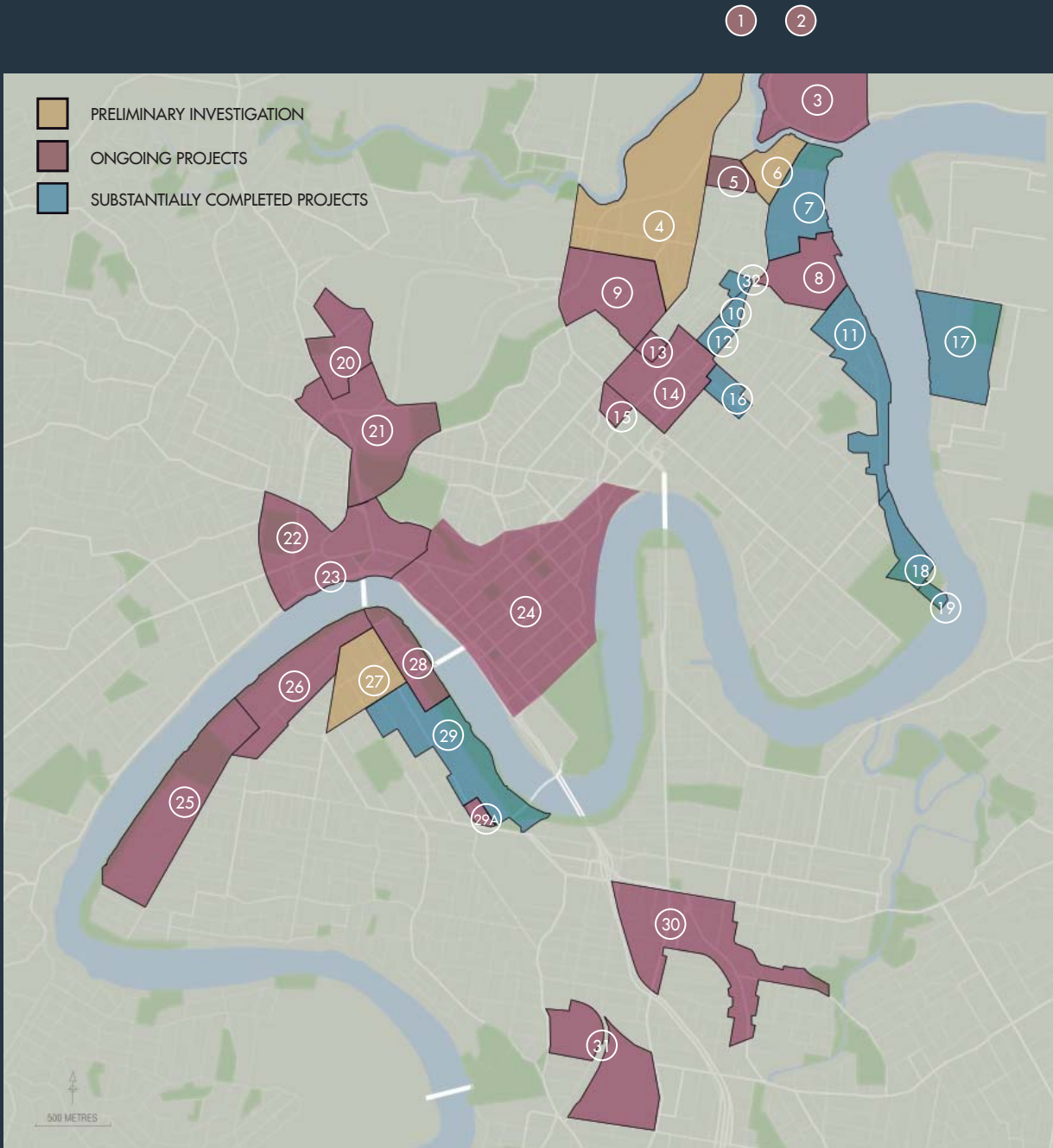


DIAGRAM 3: URBAN RENEWAL PRECINCTS IN THE CITY CENTRE

- | | | |
|---|----------------------------------|---|
| 1. Albion Central Precinct (Albion Masterplan) | 9. RNA Masterplan | 21. Normanby Precinct |
| 2. Albion North Precinct (Albion Masterplan) | 10. Domaine Precinct | 22. City West Precinct |
| 3. Albion Railway Precinct (Albion Masterplan) | 11. Tenerife Woolstores Precinct | 23. Upper Roma Street Precinct |
| 4. Bowen Hills Precinct | 12. Emporium Precinct | 24. City Centre Master Plan |
| 5. Perry Park Feasibility Study | 13. Green Square | 25. West End Riverside Precinct South |
| 6. Ross Street Precinct (Structure Plan and Development Models) | 14. Valley Heart Precinct | 26. West End Riverside Precinct North |
| 7. Newstead Precinct | 15. Valley Cutting | 27. Peel Street Precinct |
| 8. Newstead Riverpark | 16. James Street Precinct | 28. Millennium Arts Precinct |
| | 17. Bulimba Precinct | 29. South Bank Precinct a) Southbank (TOD) |
| | 18. Cutters Landing | 30. Woolloongabba Precinct Structure Plan |
| | 19. Brisbane Power House | 31. Boggo Road + Princess Alexandra Hospital Precincts (State Government) |
| | 20. Kelvin Grove Urban Village | |

2.2 URBAN RENEWAL PRECINCTS

Diagram 3 illustrates the large number of urban renewal precincts in the city centre based upon mapping produced by Brisbane City Council.

Some of these precincts are substantially complete, however the majority are precincts which are yet to be commenced or are in early development stages. In a number of areas, urban renewal planning is only just being commenced.

The pattern of urban renewal precincts broadly corresponds with that of the predicted population growth pattern previously illustrated in **Diagram 2**.

The combined area of precincts described as either 'preliminary investigation' or 'ongoing projects' is in the order of 640 ha, compared to the area of the existing CBD of approximately 100 ha. Even taking account of the fact that some areas are not 'greenfield' development precincts, that is, those areas which contain existing buildings unlikely to be redeveloped, the growth potential of the city centre is vast.

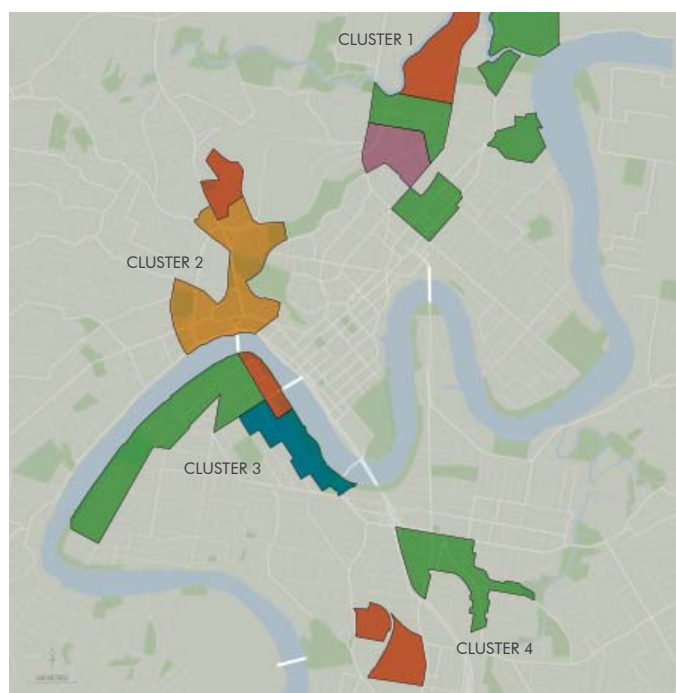


DIAGRAM 4: PLANNING RESPONSIBILITIES OF URBAN RENEWAL PRECINCTS

The precincts which have the most development potentials in terms of existing or possible land availability are the Albion Precincts (1-3), Bowen Hills Precinct (4), Newstead Riverpark (8), West End Riverside Precincts (25,26), and the Boggo Road / Princess Alexandra Hospital Precincts (31). However, several other precincts have substantial redevelopment potential dependent upon master planning outcomes including the Fortitude Valley (13, 14), the Peel Street Precinct (27) and the RNA Showgrounds (9), the latter being separately master planned by the RNA.

The diagram illustrates that there are four major clusters of future development which could be viewed as integrated precincts rather than as separate exercises as is occurring at present. These clusters are:

1. Bowen Hills – Valley – Newstead – Albion
2. Kelvin Grove Urban Village – Normanby – City West – Roma St
3. West End – South Brisbane – South Bank
4. Woollongabba – Boggo Road – Princess Alexandra Hospital

However, such an integrated planning approach is hampered by different jurisdictions, as illustrated in **Diagram 4**, including Council, State Government, South Bank Corporation and the RNA. Thus, a more manageable strategy is to form coordinated State Government/Council bodies for each of the four clusters, and include South Bank Corporation and the RNA in their respective clusters.

This strategy is likely to produce better integrated outcomes, at least for the four clusters, with the easier ability to devise connectivities between the clusters than by the present fragmented approach. The cluster strategy may also present opportunities not currently identified such as the prospect of creating a new CBD and of creating significant parkland shared between precincts.

⁹ See for example *Understanding Productivity Trends*: Australian Treasury Economic Roundup (2006)

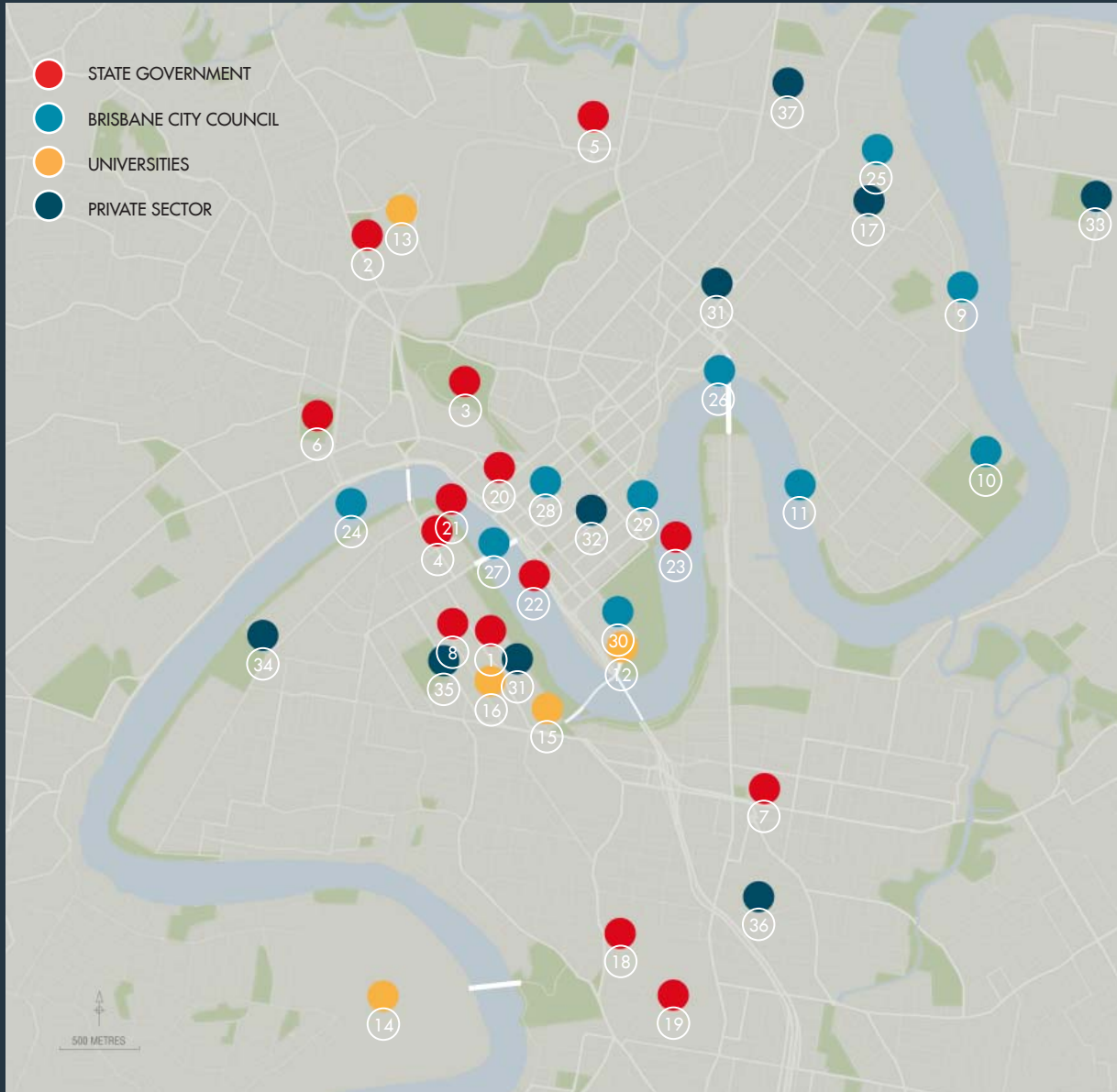


DIAGRAM 5: DRIVERS OF CITY CENTRE GROWTH

EXISTING PROJECTS

- 1. South Bank
- 2. Kelvin Grove Urban Village
- 3. Roma Street Parklands
- 4. Millennium Arts Precinct
- 5. Royal Brisbane Hospital Redevelopment
- 6. Suncorp Stadium
- 7. Gabba Cricket Ground
- 8. Brisbane Convention + Exhibition Centre
- 9. Newstead-Teneriffe Riverfront
- 10. New Farm Powerhouse
- 11. Riverwalk
- 12. QUT Gardens Point Campus
- 13. QUT Kelvin Grove Campus

- 14. University of Queensland
- 15. Griffith University South Bank Campus
- 16. South Bank Institute of TAFE
- 17. Newstead-Teneriffe

PROPOSED PROJECTS

- 18. Boggo Road Knowledge Precinct
- 19. Princess Alexandra Hospital Redevelopment
- 20. Queensland Place Redevelopment
- 21. Tank Street Pedestrian Bridge
- 22. North Bank
- 23. Kangaroo Point Pedestrian Bridge
- 24. Hale St Bridge
- 25. Newstead River Park

- 26. Howard Smith Wharves
- 27. Adelaide Street-South Bank Busway Bridge
- 28. King George Square Redevelopment
- 29. Eagle St Underground Railway Station
- 30. Gardens Point Underground Railway Station

STUDIES

- 31. Fortitude Valley Urban Renewal
- 32. Brisbane City Centre Master Plan
- 33. Bulimba Urban Renewal
- 34. West End Riverside Urban Renewal
- 35. South Brisbane Urban Renewal
- 36. Woolloongabba Urban Renewal
- 37. Bowen Hills Urban Renewal

2.3 DRIVERS OF CITY CENTRE GROWTH

Historically, the city centre has evolved with a strong Central Business District Core, an inner city frame of low-medium density housing, and industrial and commercial development along the river and other transport corridors. This pattern is typical of many cities, although most have much denser residential frames than is created by traditional Queensland timber houses.

In the past twenty years, there have been dramatic changes in the composition of the city centre. High density living in and around the CBD, and the spread of office development beyond the CBD has blurred the CBD boundaries across the river.

As shown in **Diagram 5**, the State Government, Brisbane City Council and the Universities have been responsible for major shifts in land use, many of these acting as catalysts for private sector development.

State Government

Many of the State Government-led developments have acted as catalysts for private sector urban renewal, as well as being significant in themselves. They include:

- **South Bank** which, following World EXPO '88 was initially a leisure park but has since the mid-1990s developed into a major residential, retail, office and educational precinct extending into South Brisbane.
- **Kelvin Grove Urban Village**, undertaken with QUT comprising creative industries, educational and science buildings together with a major 'lifestyle' shopping precinct and extensive public housing, and acting as a catalyst for office and residential development.
- **Roma Street Parklands** which has facilitated development of a large residential precinct and acts as a catalyst for potential redevelopment of the Roma Street Station precinct.
- **Boggo Road Knowledge Precinct** which is planned to incorporate private and public sector research facilities, office, residential and retail development, linked by Busway to the University of Queensland.
- **Princess Alexandra Hospital Redevelopment** which is the centre of a large redevelopment precinct adjoining the Boggo Road precinct and offers extensive urban renewal opportunity through to Ipswich Road.
- **Queensland Place Redevelopment** which will form a cohesive justice precinct, stimulating urban renewal of the Citywest precinct and the streets between Roma Street / George Street and the riverside expressway.
- **Millennium Arts Precinct**, comprising the Gallery of Modern Art and the State Library Expansion, encouraging commercial development around Peel and Melbourne Streets, with the proposed **Tank Street Pedestrian Bridge** adding further stimulus.

Other significant redevelopments have been **Royal Brisbane Hospital**, the city centre's major sporting venues – **Suncorp Stadium** and the **Gabba Cricket Ground**, and the **Brisbane Convention and Exhibition Centre** currently being expanded.

Planned future developments which would act as strong catalysts for further change are **North Bank** alongside the riverside expressway and the **Kangaroo Point Pedestrian Bridge** linking the CBD across the river to the Kangaroo Point peninsula. North Bank in particular has the potential to enliven the CBD's cross-streets and to form a reciprocal relationship with South Bank.

These projects illustrate that Government has instigated over the past decade an extraordinary range of developments which have occurred across the breadth of the city centre. Some of these, such as the Millennium Arts Precinct, Tank Street Bridge and Queensland Place developments, form interconnections that will have a significant effect on the structure of the city. However, there could be further interconnection opportunities available if all of the initiatives were mapped and new potential linkages identified.

Brisbane City Council

Brisbane City Council's focus has been on public transport infrastructure and the urban renewal of the New Farm peninsula, with current emphasis upon the CBD. Council is currently active in preparing urban renewal strategies for growth areas identified in the South East Queensland Regional Plan, including Woolloongabba, Bowen Hills, Albion, Milton and South Brisbane (Kurilpa). Council has also prepared Local Area Plans for areas of development demand such as West End Riverside, and has initiated studies for the urban renewal of Fortitude Valley

Installation of the **Busway system** has been by far the major physical change, incurring considerable alteration to the fabric of the city centre. **The Citycat Ferry System** has required less alteration and it serves the different purpose of linking riverfront precincts within the city centre.

The Inner City Bypass was installed primarily to induce traffic movement around rather than through the CBD, as should the **Hale Street Bridge**. However, these vehicular corridors also have the effect of 'bisecting' city centre precincts by traffic. The **North-South Tunnel**, and other proposed tunnels, will carry traffic further away from the city centre.

Through its Urban Renewal Task Force, Council initiated and managed the vast urban renewal of the **Newstead-Teneriffe riverfront** over the decade. A major success of this project has been the recycling of Brisbane's historic woolstores into residential apartments. The development of the 18 hectare **Newstead River Park** is that last portion of the project however its developers have been seeking density and height relaxations in consideration of the South East Queensland Regional Plan's intent to densify the city centre. Like the West End Riverside precinct, this precinct is not located close to a major public transport node – the basic requirement of a TOD precinct under the SEQ Plan – and thus it could be argued that a new form of public transport, such as light rail, would be warranted to serve these areas.

Significant developments undertaken by Council in the New Farm peninsula include the **Brisbane Powerhouse** conversion to a performing arts centre and the floating **Riverwalk** to the CBD. This walkway is proposed to feed into a redevelopment of the **Howard Smith Wharves** under the Story Bridge. Thus Council has played a parallel role to that of the State Government in its development of cultural and pedestrian movement facilities.

Council has a strong current focus on enhancing the CBD's public amenity with a series of major actions proposed, including:

- The **Adelaide Street-South Bank Busway Bridge**, which will enable removal of the bus ramp from Queen Street at Brisbane Square.
- The **King George Square Redevelopment**, associated with installation of the new central busway station.
- An **Eagle Street narrowing** for increased pedestrian domain to result from a redirection of traffic in the CBD into one-way loops.
- New **Underground Railway Stations** at Eagle Street and Gardens Point.
- A **Mass Transit Corridor**, recommended as light rail extending through Adelaide Street to New Farm and West End.

While a number of the abovementioned projects are being undertaken in partnership with the State Government, or with State Government participation, there is considerable disjunction between several of the State and Council undertakings. For example, the urban renewal responsibilities in Woollongabba are divided along Ipswich Road yet the two sides offer significant development potential. The TOD strategy for Bowen Hills is difficult for Council to optimise without an evaluation of the future potentials and integration possibilities of adjoining land such as Mayne Railyards and the RNA Showgrounds.

Currently, the TOD strategies are being undertaken at different times and on a precinct-by-precinct. It has been acknowledged by some Council officers that there may be benefit in the State Government and Council establishing a joint authority or taskforce to undertake a more integral analysis of the city centre than is presently occurring.

Universities

Like Boston, Brisbane is one of only a few cities in the world with a university campus in its CBD yet Boston's identity has been largely based on its character as a 'university city.'

The Brisbane city centre has a remarkable range of tertiary education facilities in its realm, including QUT's Gardens Point Campus and Kelvin Grove campus, the University of Queensland and its tertiary facilities at the major hospitals, and Griffith University's South Bank campus. Recent developments include the Kelvin Grove Urban Village expansion of the QUT campus, and the transformation of South Bank Institute of TAFE into a new multidisciplinary campus.

These campuses not only reinforce Brisbane's potential identity as a knowledge-based city but have been catalysts for surrounding developments such as for student housing. The QUT Gardens Point campus was a major generator for developing the Goodwill Bridge, linking students to South Bank and South Bank Station.

As discussed in the preceding sections, a strategic analysis of the potential relationships between education campuses and other research precincts in the city centre could strengthen the smart state identity of the city and reveal connectivity possibilities not otherwise apparent.

Private Sector

The private sector has often responded to 'catalyst' developments and master plans generated by the State Government and Council. Examples include:

- the massive housing uptake in Newstead-Teneriffe stimulated by Council's urban renewal strategy.
- the commercial, residential and retail revitalisation of South Bank resulting from the 1996 Master Plan to expand South Bank beyond its parkland.
- the Fortitude Valley and Newstead retail and lifestyle precincts responding to release of Council land and the Master Plan linking Fortitude Valley to New Farm.



Brisbane Powerhouse, New Farm Park



Newstead River Park Master Plan



Roma Street Parklands + Residential Development



Kelvin Grove Urban Village

Preparation of Local Area Plans for transit-oriented development around the city centre railway stations, with taller heights and higher densities than are permitted elsewhere, will stimulate unprecedented commercial and residential growth within the city centre. This trend will establish for the first time a polycentric form of city centre in contrast to the traditional pattern which has been heavily CBD-focused.

However, market forces and demand have been at least as responsible for a dramatic transformation of land use patterns over the last two decades as Government / Council initiatives. The principal changes have been:

- Residential development inside the CBD which has also led to major retail growth, but at the expense of available land for future office development conventionally associated with the CBD.
- Residential renewal of redundant industrial land including at Newstead and across to Bulimba, with emphasis currently shifting into the West End Riverside precinct as well as to internal sites in South Brisbane, Woollongabba and Bowen Hills.

As dynamic as the residential resurgence in the city centre has been, it has since 2000 been accompanied by an unprecedented wave of office development growth in both the CBD and the wider city centre. While this resurgence responds to low vacancy rates, the key characteristic is the demand for campus-style medium rise offices offering large floorplates and providing workplace flexibility. This trend has been responsible for much of the non-CBD development, with suitable sites for larger buildings being either unavailable or too expensive in the CBD. Relatively easier vehicular accessibility than to the CBD, collocation with public transport nodes, and the presence of adjoining retail 'lifestyle' precincts, also play a role in attracting businesses away from the CBD.

There would appear to be a case for not endeavouring to regulate retention of the CBD as the business heart of the city, as proposed by the Brisbane City Council's Master Plan, but to allow the CBD to extend along the Melbourne Street / Queen Street / Eagle Street / Wickham and Ann Street spine, as is occurring through development supply and demand. A less CBD-focused strategy could offer a number of benefits including reduced traffic congestion and preservation of sunlight penetration essential to the image of a subtropical city.



DIAGRAM 6: EXISTING PARKS + ATTRACTIONS OVERLAID WITH POSSIBLE STRONG NEW MOVEMENT SYSTEM

- ① — Tank Street + Pedestrian Bridge Spine Linking West End, Southbank, Roma Street Parklands + Kelvin Grove Urban Village
- ② — Lineal Series of Pedestrian Bridges Linking South Bank to the CBD, Kangaroo Point, New Farm + Bulimba
- Possible Other Pedestrian Bridges in Future
- Ⓐ Brisbane Powerhouse Arts Centre
- Ⓑ Millennium Arts + Cultural Centre
- Ⓒ Suncorp Stadium
- Ⓓ Future Northbank
- Ⓔ Griffith Arts Campus

3.0 KEY CITY CENTRE STRENGTHS + OPPORTUNITIES

There would be many differing opinions as to the key strengths of the Brisbane city centre. Over the past decade, marketing campaigns have tended to emphasise its relaxed lifestyle and more recently its nightlife. However, these attributes are not unique to Brisbane nor are they characteristics that necessarily identify a 'smart' city.

While people experience certain places that can be said as being synonymous with Brisbane such as South Bank, it is perhaps a series of collective places that is most distinctive but not well realised, yet could be more appreciated if a more legible structure of connections were made between them. Three of these collectives are:

- **The parks and recreation venues**
- **The educational and knowledge facilities**
- **The cultural facilities**

The combined qualities of these collectives could form the basis of portraying a dynamically smart city, integrating lifestyle, cultural and intellectual progressiveness.

3.1 SPACES + CONNECTIONS

Diagram 6 illustrates the areas of major parkland and recreational environments which together comprise 12% of the city centre area. In addition to these spaces are many publicly accessible waterfront paths and cycleways, and the Brisbane City Centre Master Plan describes a number of proposed additional pedestrian and cycle links. The State Government has been responsible for creating cross-river links, such as the Goodwill Bridge and the soon-to-be-built Tank Street Bridge, and it has proposed a CBD-to-Kangaroo Point pedestrian and cycle bridge.

Creating further connections beyond these initiatives could strongly identify the Brisbane City Centre as the world's outstanding subtropical city, emphasising health and fitness as well as outdoor lifestyle. Strategies which could be evolved based upon the development of initial facilities include:

West End to Kelvin Grove Urban Village

The Tank Street Bridge will link the new Gallery of Modern Art precincts across to the CityWest precinct, and in so doing can connect the South Bank parkland to Roma Street Parkland through Queensland Place. This corridor could however extend through to Kelvin Grove Urban Village via the Normanby precinct, linking also with the proposed over-railway walkway to Suncorp Stadium. This corridor has the potential to become one of the most significant urban developments in the city, not only connecting recreational and sporting venues, but major areas of residential and employment growth, in particular South Brisbane to Kelvin Grove.

South Bank to Bulimba

The Goodwill Bridge connects South Bank to the Botanic Gardens as well as to QUT and the CBD. Installation of the Kangaroo Point Bridge could however begin a journey that extends across to New Farm Park and to the Hawthorne / Bulimba waterfront. The value of this corridor would not only be recreational but would interconnect areas of high density living with several cultural facilities and workplace destinations in the CBD and South Bank. The creation of such a corridor could serve as a basis for locating future attractions to reinforce its role in the movement dynamic of the city centre.

South Brisbane to Fortitude Valley

This corridor should be the city's dominant pedestrian spine linking the heart of West End through Queens Street Mall to the Valley Heart. However, it is diminished by the Melbourne Street Bus Station and by confusion of traffic lanes between the CBD and the Valley. The Brisbane City Centre Master Plan proposal to underground the Bus Station should thus be investigated. The CBD / Valley nexus should be addressed as a matter of priority by reducing traffic lanes to create a wide pedestrian realm along the Centenary Place edge into Ann Street.

Lacking in the open space framework of the city centre is a strategy for the areas of urban renewal focus, in particular Woolloongabba and Bowen Hills where there is scant parkland to serve future residents and workers. Current planning of these precincts does not take into account an overall strategy of open space linkages and parklands which could reinforce Brisbane's subtropical identity and public amenity.

Creating an open space network across the city centre would require a different approach to the present one of independent urban renewal precincts and a joint State Government / Brisbane City Council undertaking.

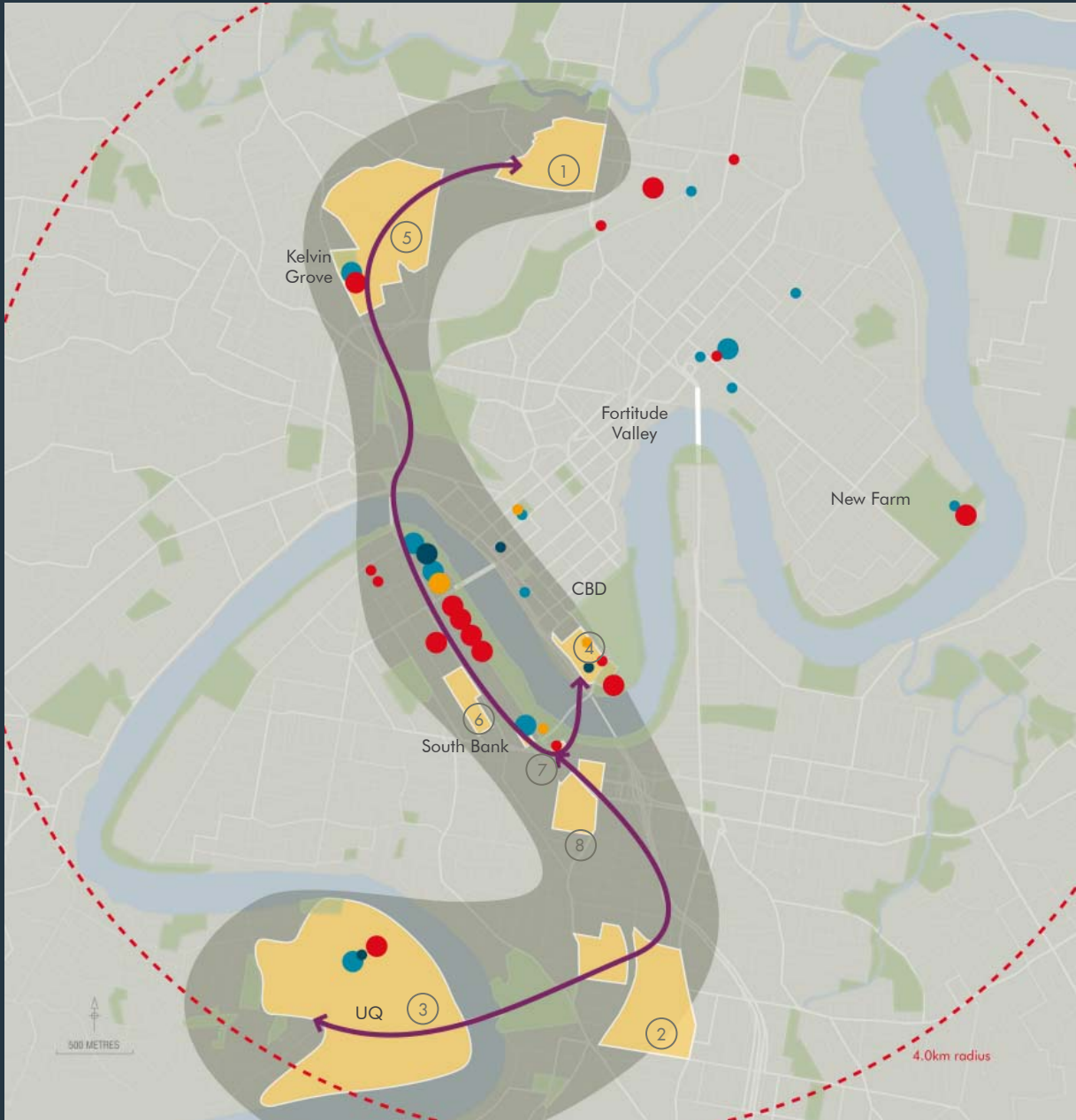


DIAGRAM 7: BRISBANE'S POSSIBLE 'KNOWLEDGE' CORRIDOR

- | | | |
|--|---|--|
| ● MUSEUM | 1. Royal Brisbane Hospital Precinct | 4. QUT Gardens Point |
| ● LIBRARY | 2. Boggo Road Biosciences + Princess Alexandra Hospital Precinct | 5. QUT Kelvin Grove |
| ● PERFORMANCE SPACE | 3. University of Queensland | a) Creative Industries Precinct |
| ● ART GALLERY | a) Institute for Molecular Bioscience (IMB) | b) Institute for Health and Biomedical Innovation (IHBI) |
| KNOWLEDGE PRECINCTS | b) Queensland Brain Institute | 6. Southbank Institute of TAFE |
| "KNOWLEDGE" CORRIDOR | c) Australian Institute for Bio engineering and Nanotechnology (AIBN) | 7. Griffith Film School |
| — LINKAGE POTENTIALS | d) Sustainable Minerals Institute | 8. Mater Hospital |

3.2 KNOWLEDGE + EDUCATIONAL FACILITIES

The Brisbane city centre is remarkable for its wealth of tertiary education and developing research facilities, most created in the past decade.

Tertiary Facilities

Within the city centre are campuses of each of the major universities, including:

- University of Queensland – The main St Lucia campus as well as schools within the major public hospitals.
- Queensland University of Technology – The Gardens Point campus and the Kelvin Grove campus expanded into Kelvin Grove Urban Village.
- Griffith University – The Queensland Conservatorium of Music and the Queensland College of Art.

In addition to these is the redevelopment of the South Bank Institute of TAFE into an innovative tertiary education precinct.

The extent of tertiary campuses in the city centre rivals many cities seeking to portray smart city credentials such as Singapore. It does not however appear that such a concentration of learning environments as exists in the city centre has entered the public psyche. Together with the proposed 'knowledge' precincts such as being developed at Boggo Road and Princess Alexandra Hospital, Brisbane has the ingredients to portray world identity as a 'knowledge city'.

Knowledge Precincts

The Boggo Road Sciences Precinct and the Kelvin Grove Urban Village are highly significant projects that can embody the character of a 'knowledge-based' city. Both are physically associated with university campuses. In addition to these are major research centres at the Royal Brisbane Hospital, Princess Alexandra Hospital and Mater Hospital.

Combined with the new research centres at the University of Queensland, these facilities have the potential to be communicated as a distinctive collective that embodies the 'smart' city.

Diagram 7 illustrates the possibility of defining a 'Knowledge' Corridor through the city centre which also includes the majority of cultural facilities. This corridor could be reinforced by locating any future educational, research or creativity facilities within the corridor.

3.3 CULTURAL FACILITIES

Only twenty years ago, Brisbane's cultural life was represented alone by the Queensland Cultural Centre which is still one of the unique clusters of cultural facilities in the world. The recent development of the Gallery of Modern Art and the State Library Redevelopment has powerfully reinforced this characteristic.

However, over the past decade the city centre has developed a rich diversity of cultural venues which is remarkable. They include:

- Brisbane Powerhouse Centre for the Live Arts in New Farm
- Judith Wright Centre for Contemporary Arts in Fortitude Valley
- La Boite Theatre in Kelvin Grove
- The Arts Museum at the University of Queensland and Queensland University of Technology.
- The Dell Gallery at Queensland College of Art

Also rapidly evolving are clusters of private galleries that form an additional layer of cultural precincts particularly in Ann and Brunswick Streets in Fortitude Valley, and others are emerging in the Melbourne Street South, Brisbane and Vulture Street, Woolloongabba.

On their own Brisbane's cultural elements may not rival in impact iconic developments such as Melbourne's Federation Square or the Sydney Opera House, however seen in composition with the tertiary cultural education facilities such as Creative Industries at Kelvin Grove and the new arts – focused South Bank Institute of TAFE, the city centre of Brisbane could do more to promote its intensity of cultural facilities.

The greatest deficiency has however, been the loss of cultural facilities in the CBD, such as Festival Hall, where market forces have prevailed. The availability of Government land along William Street or, if it proceeds, in North Bank, should be considered for a significant cultural facility. This facility could be a "cultural tourism gateway" building that has been previously considered by Government for Roma Street Parkland, or a ' Queensland Design Centre' such as is being currently considered by Government.

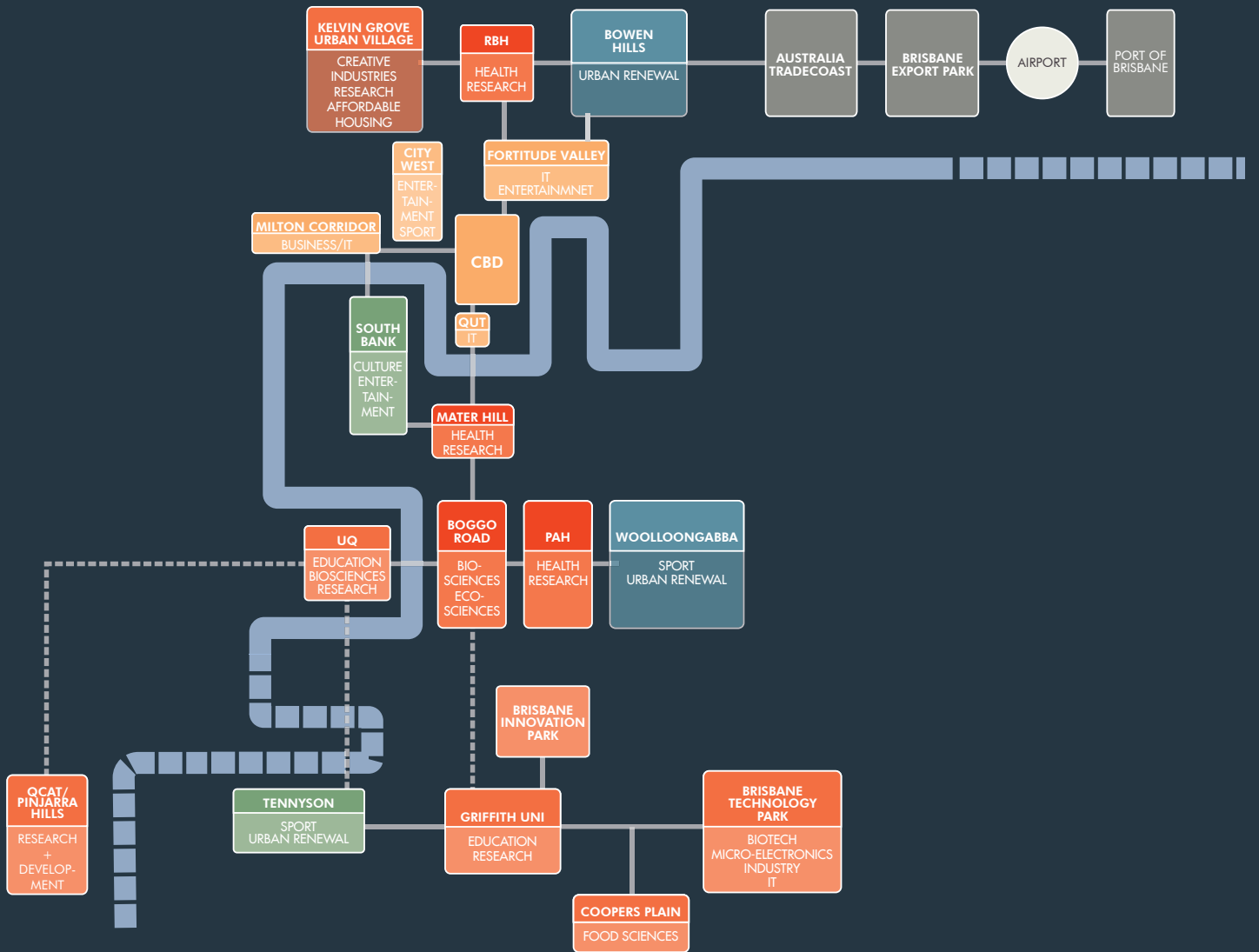


DIAGRAM 8: GEOGRAPHICAL RELATIONSHIPS BETWEEN PRECINCTS

4.0 SMART CITY STRATEGIES

4.1 DEFINING A SMART CITY CENTRE

The preceding sections describe the emerging growth patterns and some of the key characteristics of the Brisbane city centre that could be coordinated to reflect a smart city.

There is, of course, no precise definition of a smart city, however the following are suggested objectives derived from the preceding analyses:

Integral Structure

A smart city has a strong and collectively embraced structure giving its people confidence in its future, and constantly developing to reinforce each of its parts.

Connectivity

A smart city centre is one in which movement between precincts is not dependent on private vehicle travel, and instead there are multiple public transport, pedestrian and cycle options.

Compactness

A smart city centre optimises the use of available redevelopable land, facilitating a density of living and working environments that capitalises upon existing city centre infrastructure, offers choices of living affordability, and provides adequate open space and leisure environments.

Knowledge + Creativity

A smart city centre thrives upon knowledge and creativity, attracting people and businesses which will help to drive the economic vitality of the city from its heart.

Diversity

A smart city centre is diverse in character and scale, is accessible and attractive to people from all cultural and socio-economic backgrounds.

Affordability

A smart city centre ensures that there is a wide range of dwelling types and sizes, and which avoids gentrification of its precinct causing exclusion of families, people on lower incomes, and people who might otherwise be marginalised.

Heritage

A smart city centre conserves the heritage upon which its identity is founded, while imparting currency to its utilisation.

Flexibility

A smart city centre does not limit its potential but facilitates responsiveness to changing needs and demands while providing the infrastructure that enables future needs and demands to be accommodated.

Environmental Sustainability

A smart city centre employs precinct-wide strategies for energy, water and waste efficiency, setting clear targets and monitoring performance, as well as regulating minimum ESD standards in all developments.

Design

A smart city centre fosters a culture of innovation and excellence in the design of public infrastructure and buildings as well as in the design of buildings for business, living and lifestyle.

Engagement

A smart city centre is one in which there is wide agreement on the directions in use and form of the city centre, opportunity for its people to participate in decision-making, and continuous communication regarding the changes taking place to enable people to participate.

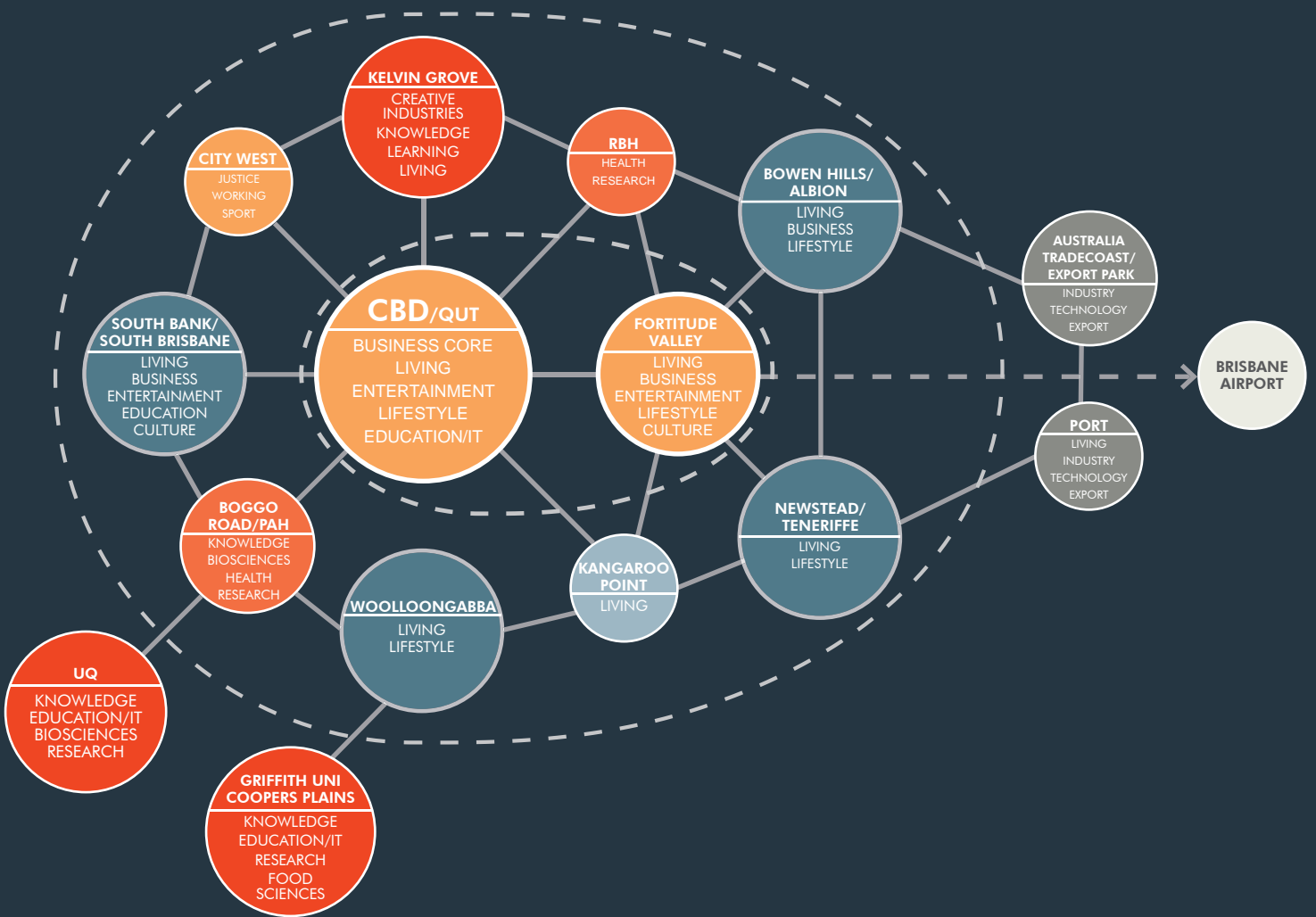


DIAGRAM 9: THE EMERGING BRISBANE CITY CENTRE STRUCTURE

“The enormous complexity of cities today means that the demands on their infrastructure are relentlessly challenging. Not only are the ‘basic’ needs of transport, housing, water and energy under strain, but new demands for effective communication make the supply of, for example, broadband and electronic networks an increasingly important element of infrastructure provision. To cope with these challenges, many cities are adopting an integrated approach to their urban planning. Rather than planning for the separate provision of transport and housing, for example, a more holistic view is being adopted that seeks to measure the combined impacts of different types of development. This integrated approach also means that cities are looking to establish partnerships and new forms of collaboration that allow them to deliver infrastructure requirements in new ways.”

Cities of the future – global competition, local leadership. 2007. Price Waterhouse Coopers. P5

4.2 SMART CITY STRATEGIES – DEFINING AN INTEGRATED STRUCTURE

The city centre has never been defined as having land use structure, however it is possible to convey a picture of clear pattern of land uses, particularly with respect to the current urban renewal precincts.

One reason why there has not appeared to be a structure to the city centre is the river which meanders in a serpentine form and which has been regarded as a divide between north and south.

However, **Diagram 8** (previous page) illustrates the approximate geographic locations of the precincts, combining those identified for urban renewal with established precincts, and identifying proximities to precincts outside the city centre.

Although this illustration of the city centre may not appear to identify a clear structure, **Diagram 9** indicates how the major precincts could be seen as relating to each other in a more integrated and formal way. This diagram is intended to offer an easily comprehended pattern to gain wide embrace of a potentially well integrated ‘model’ city centre.

The primary characteristics illustrated by the structure diagram are:

- **The CBD, Citywest and Fortitude Valley offer virtually the same types of ingredients, such that the Valley could be seen as a natural extension of the CBD, albeit with its own ‘edgy’ character.**
- **The major residential / commercial (that is ‘mixed use’) growth precincts are evenly distributed around the city centre – Woolloongabba, South Bank / South Brisbane, Bowen Hills and Newstead.**
- **Knowledge precincts intervene or sit directly adjacent to major mixed use urban growth precincts.**
- **The city centre thus has the potential to form a ‘polycentric’ structure comprising clusters of urban commercial / residential growth integrated with knowledge precincts.**

Most importantly, the structure diagram acts as a simple, legible communication tool for harnessing public embrace of a smart, integrated city centre.

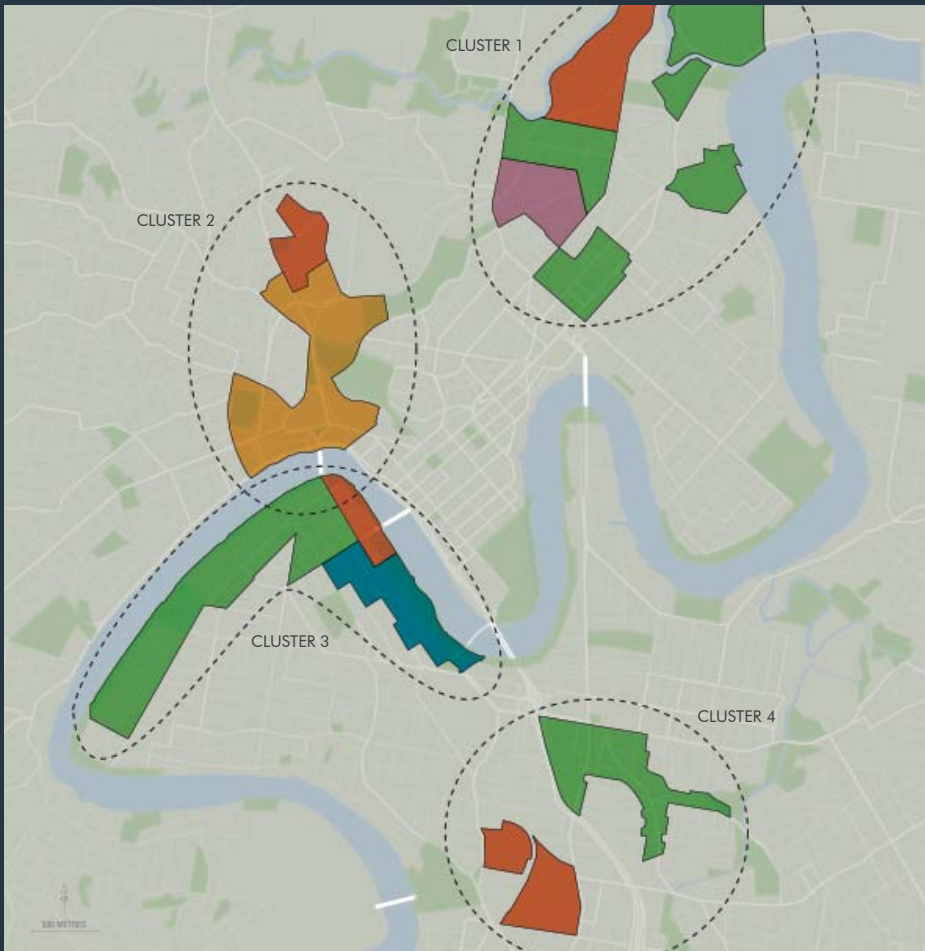


DIAGRAM 10: CURRENT FRAGMENTED APPROACH TO PLANNING THE CITY CENTRE

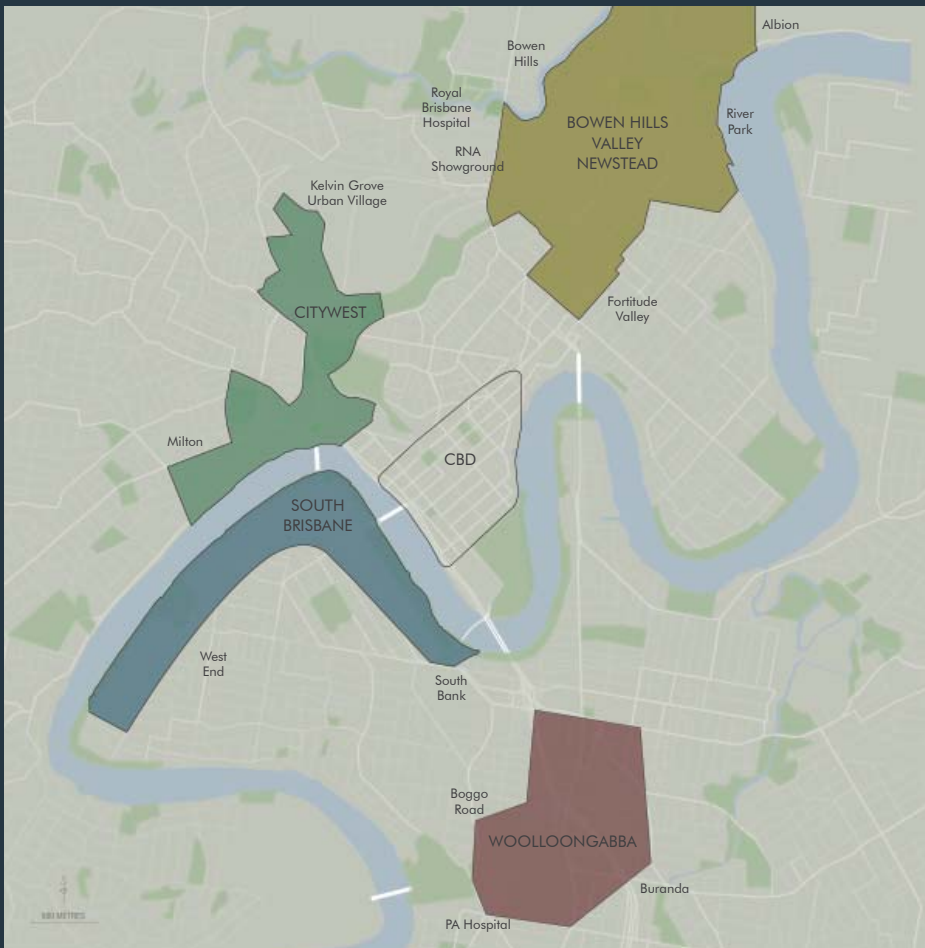


DIAGRAM 11: PROPOSED APPROACH AS FOUR INTEGRATED 'SUPER-PRECINCTS'

4.3 SMART CITY STRATEGIES – PLANNING FOUR INTEGRATED ‘SUPER-PRECINCTS’

Currently, there are over 20 urban renewal precincts in the city centre for which either Brisbane City Council or the State Government is undertaking planning studies. Many of these are being planned separately by State Government or Council, and two of these – South Bank and the RNA Showgrounds – are under different planning arrangements. Virtually all of the planning studies are being undertaken as separate precincts with little reference made to adjacencies. These precincts are illustrated in the accompanying diagram coded to the different responsibilities (**Diagram 10**).

A different approach would be to view the precincts as four coordinated ‘super-precincts’ to be planned by joint State Government / Council taskforces. This approach would facilitate much improved integration of land use and connectivity, and could generate new visions and concepts for the city centre than the present fragmented methodology (**Diagram 11**).

The ‘super-precincts’ that would be formed by adopting this more integrated methodology are as follows:

Woolloongabba Precinct

This precinct combines the Council study area east of Ipswich Road with the Princess Alexandra Hospital and Boggo Road precincts, together with Government land around the Gabba and with a potential expansion into Buranda due to current private sector interest in its redevelopment. Seen as an integrated strategy, the precinct would unite major commercial and residential growth with research and knowledge development, and with strong educational connection to the University of Queensland. The combined precinct has clear potential to become a major sub-city centre of Brisbane.

Valley-Bowen Hills – Newstead Precinct

This precinct combines a large number of currently independently studied precincts including Bowen Hills, Mayne Railyards, RNA Showgrounds, Fortitude Valley, Newstead River Park, Albion and Royal Brisbane Hospital.

While it is recognised that certain areas, such as RNA Showgrounds, Albion Park Raceway, are being planned under owners different from Government and Council, the potential of an integrated strategy could considerably enhance the development outcomes of all parts of the precinct.

Noting that the area of the precinct is more than twice that of the CBD, it is evident that the precinct, seen in its entirety, has potential to be another major sub-city centre of Brisbane, including a significant parkland allocation.

In order to illustrate the potential of integrating these currently unlinked precincts, an example of a possible scenario for the ‘super-precinct’ is described on the following page.

South Brisbane Precinct

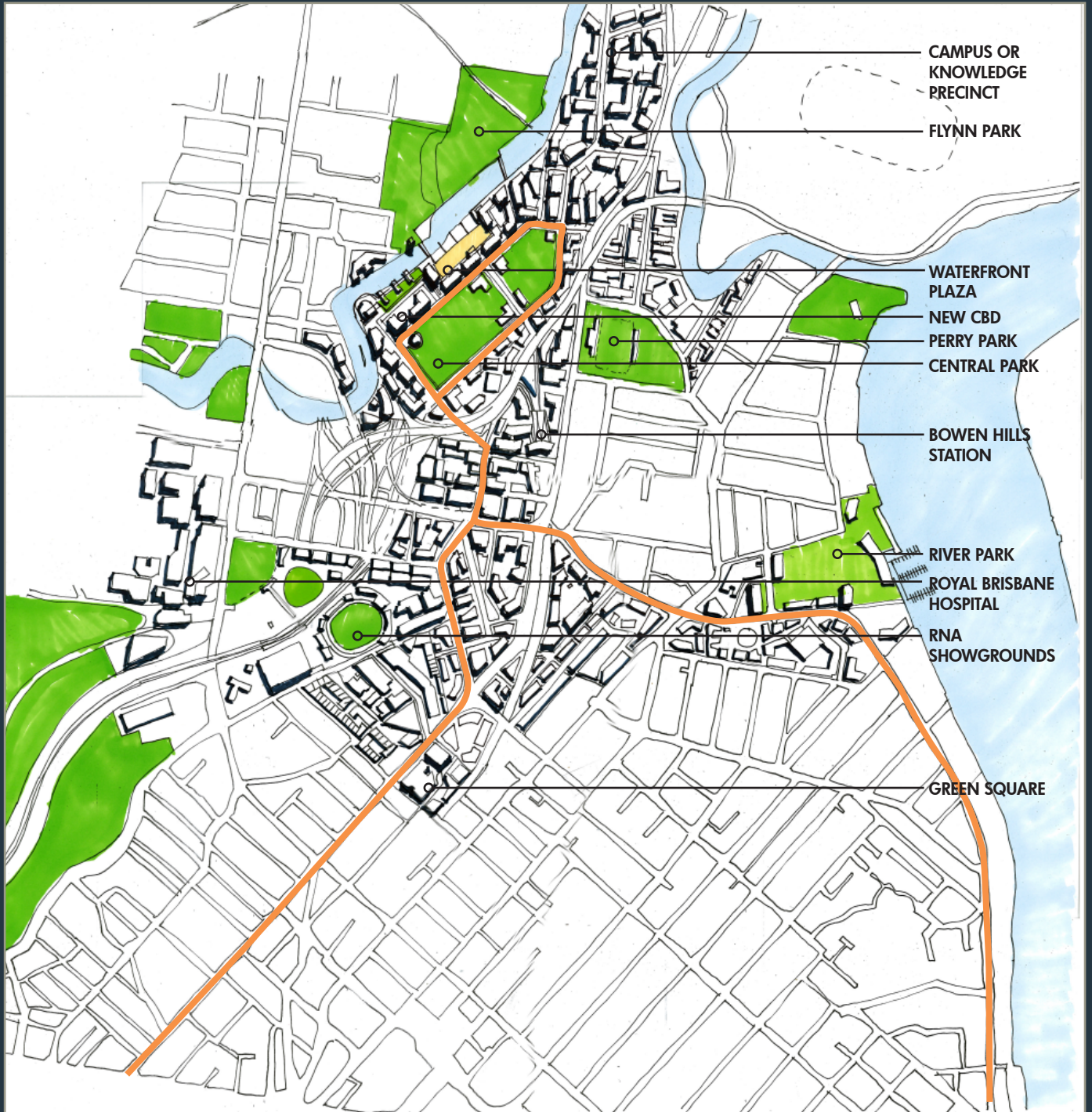
This precinct combines South Bank, the West End Riverside and the Kurilpa Precinct around Peel Street. Like the aforementioned precincts, it also combines significant commercial and residential urban growth with major knowledge-based facilities, these here including the city’s major cultural facilities and tertiary education campuses.

City West Precinct

This precinct combines several currently independently planned areas including Kelvin Grove Urban Village, the north-west CBD quarter, the major Roma Street Railyards redevelopment area and the Normanby area. It equally has the potential to integrate major commercial and residential urban growth with the knowledge precincts of Kelvin Grove Urban Village linked to QUT’s Gardens Point Campus.

The proposed four super-precinct strategy will facilitate a new conceptualisation of the city centre focussed upon integrated knowledge and urban growth towards creating a smart city centre.

The proposal will also greatly simplify future planning of the city centre, provided that Government and Council commit appropriate resources to each study area. This simplification should facilitate not only enhanced integration within the precincts but a basis for integration of the city centre as a whole.



EXAMPLE OF BOWEN HILLS AS INTEGRATED URBAN CENTRE

Uniting Bowen Hills Station (top) Precinct, RNA Showgrounds, Royal Brisbane Hospital, Newstead River Park and Mayne Railyards

 POSSIBLE LIGHT RAIL OPTION

Example Bowen Hills Integrated 'Super-precinct'

The accompanying plan exemplifies one possibility for a Bowen Hills 'super-precinct'. It unites the Bowen Hills Railway Station (TOD) precinct, RNA Showgrounds and Newstead River Park – all presently being considered as separate – and develops the Mayne Railyards as a new City Centre.

The main elements of the concept are as follows:

Mayne Railyards

Mayne Railyards has approximately 40 hectares (compared to the Brisbane CBD's 50 hectares). It is conceived as a high rise precinct around a large (8 hectare) Central Park offering cultural and recreational facilities. It is an urban waterfront development with a major waterfront plaza linked by footbridges across to the existing Flynn Oval parklands.

To the north is a new 'Knowledge Precinct', either a research precinct or tertiary campus or creative industries precinct. This precinct acts as a northern 'pole' to the super-precinct, with the Royal Brisbane Hospital acting as a southern 'pole'.

A possible density scenario would comprise 6000 dwellings providing for up to 10,000 residents, and 400,000m² of commercial space, using a notional overall plot ratio of 2:1. This compares to the current growth management strategy which anticipates only 2,000 new residents in Bowen Hills.

Bowen Hills Station Precinct

Focused upon this main city centre railway station, this precinct comprises medium-high rise office and residential buildings, and Hudd Street is a cosmopolitan shopping street.

RNA Showgrounds

The Showgrounds form a mixed use precinct of considerably higher density than is currently envisaged due to accessibility to the RNA Railway Station. The historic facilities are preserved as is capability to hold the annual Ekka show. The Showgrounds would be used for other events due to the density of residential and working population around it.

Newstead River Park

Newstead River Park is mainly as currently planned but with some taller buildings to increase the density around its large waterfront parkland. It is linked by light rail through Montpellier Road to Bowen Hills.

Connectivity and Accessibility

A new Railway Station (Mayne) provides rail accessibility in the northern "Knowledge Precinct" area, connecting it with redeveloped Bowen Hills and RNA Showground Stations. With the exception of River Park, virtually the entire super-precinct is within 400 metres of a Railway Station.

Bus services are extended throughout the precincts, with connections made under the Inner City Bypass.

A Light Rail corridor from New Farm travels through Newstead River Park and into the former Mayne Railyard precinct via Mayne Road into the Mayne Central Park precinct. Looping around this precinct it links back to the Brisbane CBD via Wickham Street.

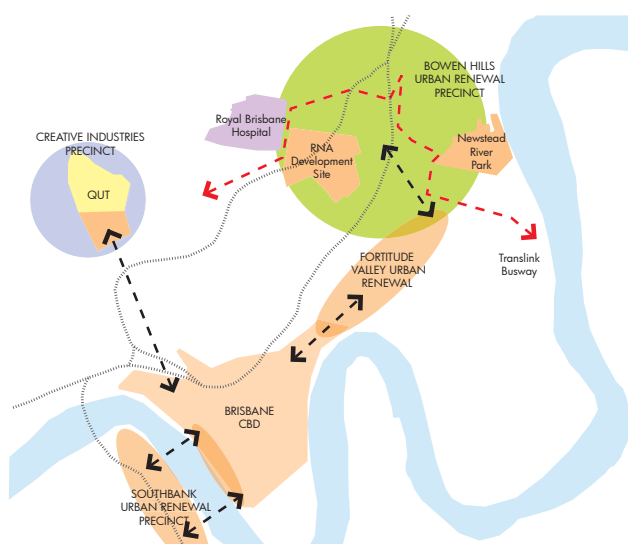
Open Space

The concept facilitates reasonably high scale development due to the creation of a significant Central Park and an urban waterfront linked to the large existing Flynn Oval parklands. A major urban waterfront plaza (1 hectare) and a series of courtyards form a linked system of open spaces throughout the precinct.

Conclusion

The concept is intended only to illustrate the potential of planning in an integrated process, facilitating mass transit connectivity, allowing creation of a major new urban parkland and urban waterfront, and developing a new 'Knowledge hub' to complement those in the other proposed super precincts Woolloongabba, City West and South Brisbane.

The new precinct accommodates all ingredients of a self-contained city centre, linked to existing major health, recreational and lifestyle precincts in proximity to it. It would be developed in stages with the last phase being Mayne Railyards. As largely new development is involved, the opportunity exists to devise a precinct-wide environmental sustainability model for urban growth, both for the city's benefit and as a demonstration of Brisbane's urban design capabilities.



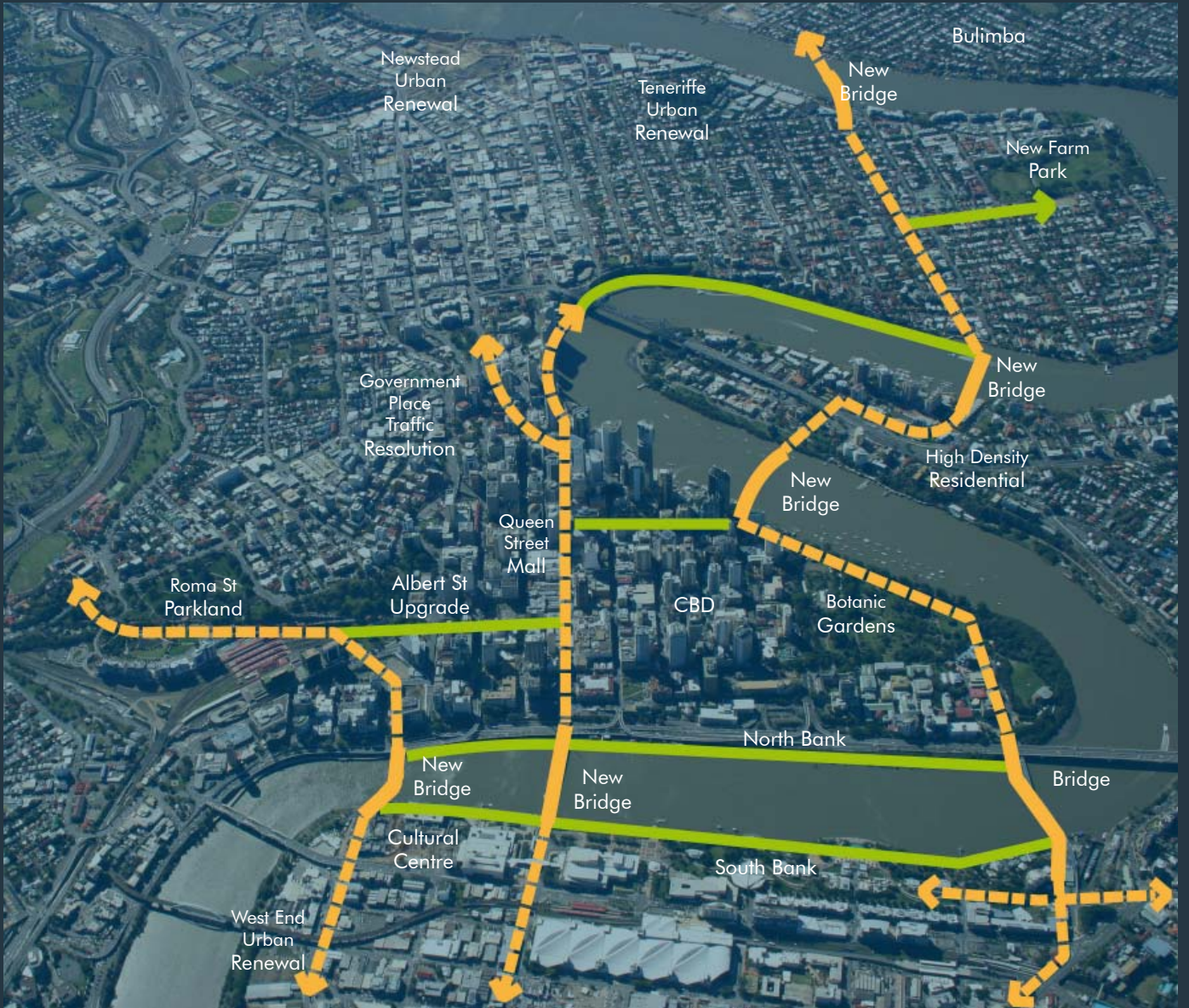


DIAGRAM 12: OPPORTUNITIES OF LINKED BRIDGES

- BRIDGES
- PEDESTRIAN LINKS

4.4 SMART CITY STRATEGIES – LINEAR CONNECTIVITY

The previous diagrams illustrate that the city centre has the semblance of a strong integrated structure and that there is a need to regard its future growth in terms of larger interconnected precincts than is currently occurring.

The creation of interconnectivity can be achieved in at least two ways – one by a mass transit system discussed in the next section, and another by pedestrian connections for which some initial infrastructure already exists or is being constructed. These are the Goodwill Bridge, the Tank Street Bridge, and Victoria Bridge for which an adjacent new pedestrian bridge is proposed as part of the North Bank development.

The accompanying perspective (**Diagram 12**) illustrates the potentials of creating three pedestrian spines that would provide pedestrian and cycle accessibility between many of the city centre's existing and future high density living precincts, the major parks and waterfront spaces, and several cultural and entertainment attractions. The spines are:

West End to Kelvin Grove

This spine utilises the Tank Street Bridge to connect the future high density urban renewal precincts of West End and Kurilpa through the Gallery of Modern Art precinct to the CBD's main growth precinct 'Citywest' and through the Queensland Place Justice Precinct to Roma Street Parklands and Kelvin Grove Urban Village. A branch of this spine is already under construction connecting to Petrie Terrace and Suncorp Stadium. This one spine would therefore link major dense residential renewal with some of the city's primary cultural, employment, recreation and educational precincts.

South Brisbane to Fortitude Valley

This spine is a natural progression of Queen Street Mall but is currently hampered by poor pedestrian environments at each end – Victoria Bridge and to Fortitude Valley. However, as Melbourne Street to Boundary Street is rapidly becoming one of the city's most vibrant 'lifestyle' corridors, it is essential that the malaise of bus, vehicular and pedestrian conflicts at Victoria Bridge is resolved. There are two current prospects for improvement, one the Council's proposed separate Adelaide Street bridge for buses and the other the North Bank scheme's proposed footbridge adjacent to Victoria Bridge.

Extending Queen Street Mall to Wickham Street, or at least prioritising its pedestrian amenity would reinforce this corridor. However, more importantly, the traffic congestion around Centenary Place has long been the CBD's worst urban blight. A radical strategy to decrease the vehicular movements in this area is essential to connect the CBD and Fortitude Valley where the CBD is already expanding.

South Bank to Bulimba

The Goodwill Bridge and the mooted Kangaroo Point Pedestrian Bridge have the potential to extend into Brisbane's most definitive movement corridor by also developing bridges across to New Farm and to Hawthorne / Bulimba. This corridor would connect three of the city's highest density residential precincts (Kangaroo Point, New Farm, Bulimba) to the CBD and through to South Bank's multiple cultural, leisure, educational and business precincts. It would also connect the city's three major parks – South Bank Parkland, the Botanic Gardens and New Farm Park.

These three corridors would enable most of the city centre to be accessed on foot or by cycle, and would be even more effective if coordinated with the river ferry terminals.

There are also existing linkages between the corridors, such as the New Farm riverwalk, and proposed connections, such as the North Bank development, which would complete this system to identify Brisbane as one of the world's great walking cities. In terms of 'smart city' strategy, the promotion of subtropical city and of health-oriented lifestyle are corollary benefits.

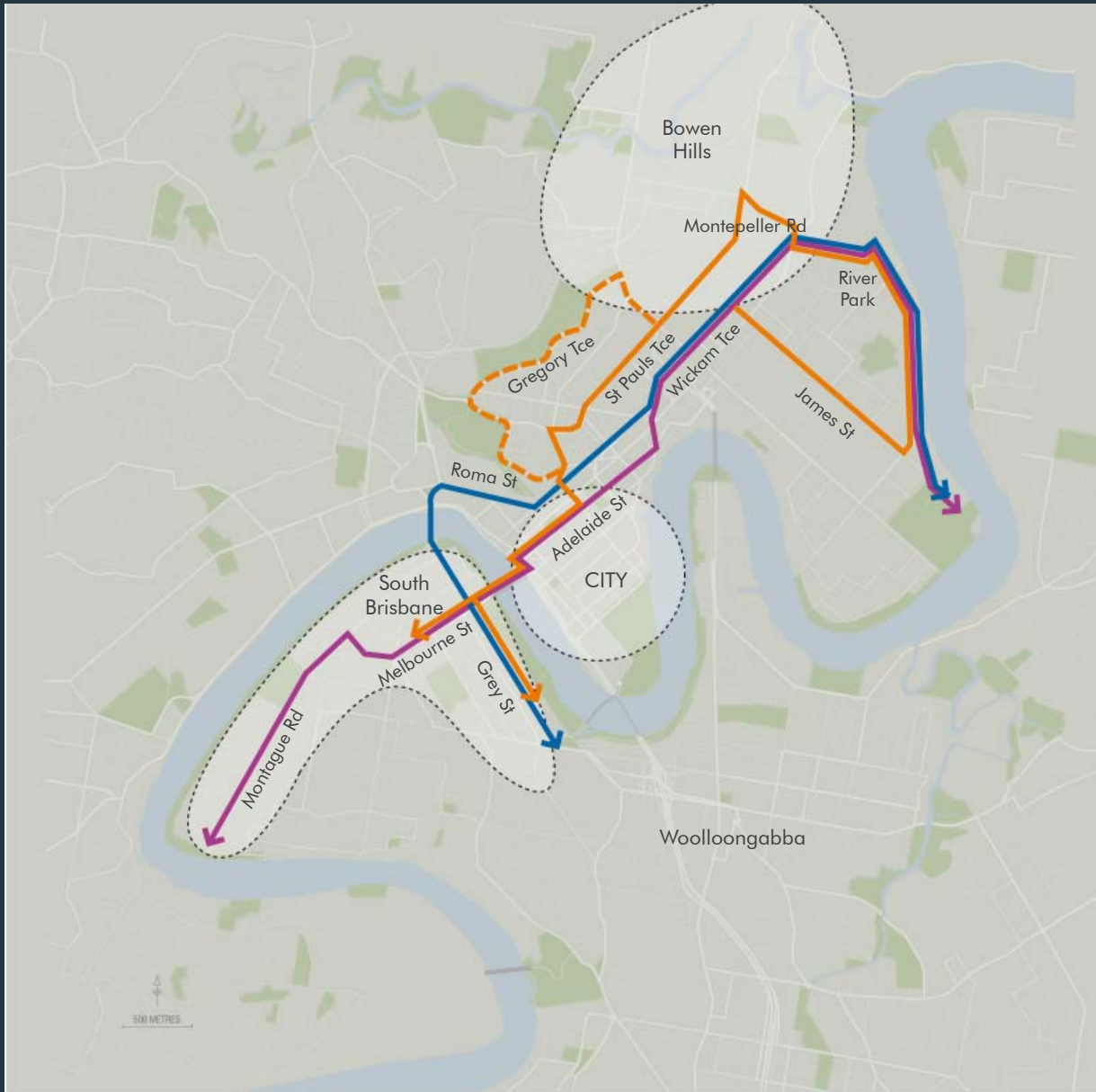


DIAGRAM 13: POSSIBLE LIGHT RAIL OPTIONS

- BRISBANE CITY CENTRE MASTER PLAN ROUTE
- POSSIBLE ROUTES
- POSSIBLE ALTERNATE ROUTES
- - - POSSIBLE ALTERNATE ROUTES

4.5 SMART CITY STRATEGIES – CONNECTIVITY BY MASS TRANSIT

It has been previously discussed that the Busway system has considerably improved accessibility to and from the CBD. While it will provide accessibility between certain precincts in the city centre, it is not fundamentally a system of interconnection.

Currently, there are a number of studies in progress that aim to improve city centre bus and rail connections in the city centre, most notably, the Translink 'Bus Access Capacity Inner City Study' and the 'Inner City Rail Capacity Study'. The latter is in part a response to the Council's Brisbane City Centre Master Plan 2006.

Also promoted by the City Centre Master Plan is the prospect of light rail, suggested as a two-way linear corridor from New Farm Park up through Newstead and around through Fortitude Valley to the CBD, continuing via the Master Plan's proposed Adelaide Street Bus Bridge to South Brisbane and West End.

Such a system has been previously investigated over the past decade, based upon existing densities, and dismissed as unviable. However, these investigations did not consider the massive development now anticipated throughout the city centre. Thus a study undertaken with greater insight into future residential and working populations may prove light rail as feasible.

Light rail performs a substantially different role and portrays a different image to conventional bus and heavy rail. It has the benefit of continual visibility of its track and thus conveys an impression of certainty. It can be readily boarded and seen to be more harmonious with pedestrian and cycle movement. It is a system more suitable to interconnecting precincts and places in close proximity, and as importantly, it has become a symbol internationally of a progressive city.

The cities which have installed light rail internationally are not only large cities and include Phoenix, Portland, Baltimore and Denver in the USA, and Grenoble, Stuttgart and Linz in Europe. Even the small town of Mulhouse in France, with a population of 110,000, opened a light rail system in 2006. In Australia, the Lord Mayor of Sydney recently announced the intention to develop a light rail corridor through and beyond the CBD.

Diagram 13 illustrates a range of options which could be investigated for the Brisbane City Centre, including that indicated in the Brisbane City Centre Master Plan. The alternatives may prove equally or more useful taking into account the major forecast growth precincts.

The ability of light rail to complement and connect with pedestrian corridors as proposed in Section 4.4, and with the Citycat Ferry system, has great potential to distinguish Brisbane and to strengthen its subtropical identity.

The risk of not pursuing its potential is that urban renewal will proceed at such a rate as to preclude installation of light rail feasibility in the future. It is thus a recommendation that a light rail feasibility study is undertaken promptly and concurrently with the current Inner City bus and rail studies.

"Minneapolis's Hiawatha LRT line has been repeatedly exceeding ridership targets a decade and a half early. Success of the electric rail system has led to widespread community support for expansion, including a line connecting the city centres of Minneapolis and St Paul."

Alan S. Drake. <http://lightrailnow.org>

"Dallas Area Rapid Transit's electric light rail has proven tremendously effective in attracting new ridership and helping to revitalize both the regional transit system and the city's Central Business District. Strong local and regional support has fuelled a vigorous expansion program of both LRT and the commuter rail system."

Alan S. Drake. <http://lightrailnow.org>



Grenoble, France



DIAGRAM 14: NEW GOVERNMENT INITIATIVE TO CONSIDER THE BOGGO ROAD + PA HOSPITAL DEVELOPMENT PRECINCT AS AN INTEGRATED 'KNOWLEDGE HUB'

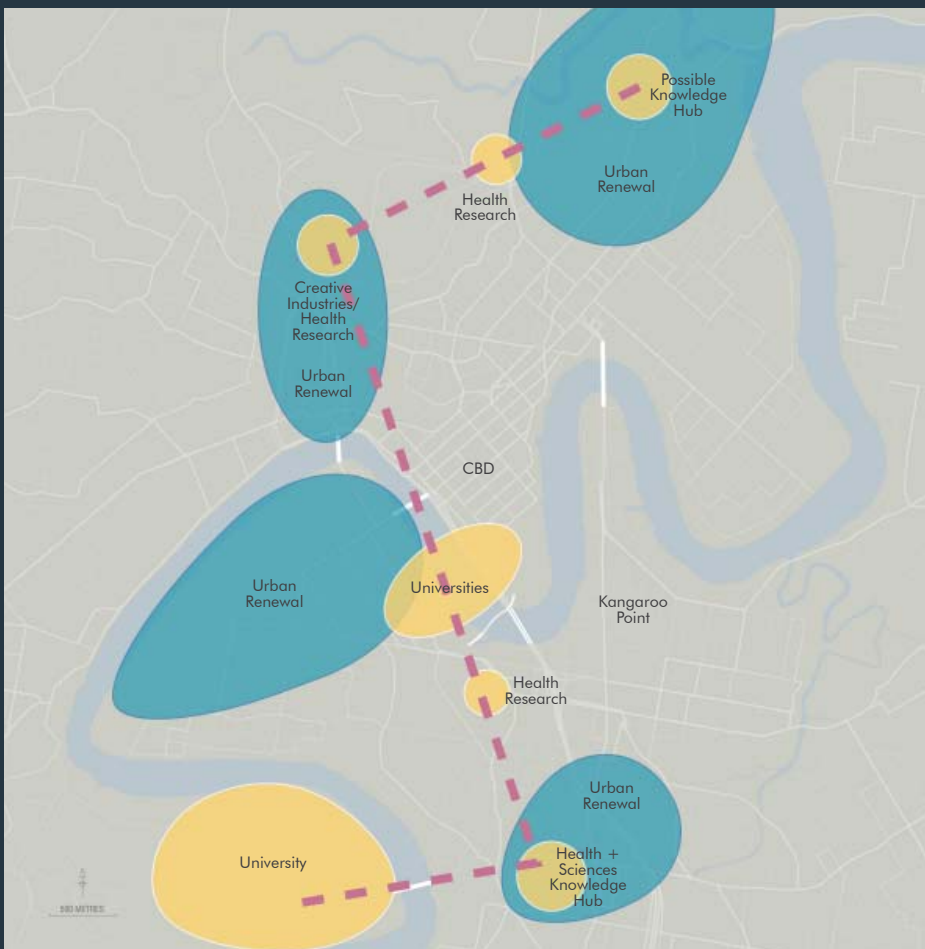


DIAGRAM 15: MAPPING THE 'KNOWLEDGE CITY'

Barcelona – City of Knowledge

*“The vision of Barcelona in 2015 is that of a city characterised by the following:
 An economy based on the development of a value-added and innovative culture depending as the growth of new industries: audiovisual, design. New uses of transport mobility. An education system that can guarantee proper training for our human resources, having notably reduced the number of school leavers by proving the social standing of teachers and increasing their participation in school administration.”*

Cities of the future. 2007. Price Waterhouse Coopers. P20

4.6 SMART CITY STRATEGIES – BRISBANE AS ‘KNOWLEDGE CITY’

As has been discussed, the Brisbane city centre has an exceptional composition of tertiary educational, research and cultural facilities continually being reinforced by new facilities. This characteristic could be successfully compared with any city in the world. However, the increasing wealth of such facilities has not yet entered the public psyche and thus portraying the ‘smart city’ in terms of the new knowledge economy lacks community engagement.

Mapping an overlay of the facilities, together with other facilities close to the city centre, could form a visual illustration of a strategised approach to Brisbane as Australia’s ‘knowledge city’. It could also inform decisions as to where future ‘knowledge’ facilities might be located, particularly if they can occur along established or new movement corridors.

In the **Woolloongabba precinct**, the State Government has begun to plan for integration of the Boggo Road and Princess Alexandra Hospital development sites, as shown in the accompanying **Diagram 14** The availability of large land parcels can create what should become known as Brisbane’s ‘Knowledge Hub’ – the centre of a network of research, scientific and technology precincts that include the University of Queensland, the Coopers Plains Food Services Precinct and Brisbane Technology Park.

The **South Brisbane / South Bank precinct** has the city’s major cultural facilities as well as the arts campuses of Griffith University and the redeveloped South Bank Institute of TAFE. With the Goodwill Bridge connecting these facilities to QUT Gardens Point, there exists a recipe for branding the city centre as Australia’s ‘Knowledge City’.

The **CityWest precinct** contains the Kelvin Grove Urban Village with its Creative Industries precincts and direct linkage to QUT Kelvin Grove. It too can therefore be branded more strongly as a major city centre knowledge precinct.

In order to optimise the prospect of having Brisbane recognised as a ‘knowledge’ city, however, communication and cooperation between the universities would need to be strengthened, and planning would need to prioritise businesses which most utilise research to be located in the knowledge precincts.

4.7 SMART CITY STRATEGIES – ENVIRONMENTAL SUSTAINABILITY

Creating a more environmentally sustainable city is a complex challenge entailing many factors, including variable factors such as water availability.

Sustainable practices can occur in many ways – in public transport with clean fuels such as is being installed in the busway system, in the design of public and private sector buildings and in the provision of adequate open space and the ‘greening’ of the urban realm (such as is exceptionally successful in Singapore). Many cities have resorted to restrictive ways to reduce traffic congestion and pollution such as London in applying a toll on vehicles entering the city centre.

It is, however, highly unlikely that the present fragmented approach to urban growth in the city centre will optimise environmental strategies. The recommended new approach of considering precincts as larger, integrated and interconnected areas provides opportunity to generate more holistic and shared environmental practices.

The following are suggested strategies to embrace environmental sustainability as an iconic aspect of the city centre:

Compactness

There are many texts commenting upon and assessing the value of condensing urban density as the most effective basis for generating sustainable urban environments, as discussed in **Section 1**. However, compactness alone does not necessarily generate environmental benefits unless it optimises connectivity without automobile travel, and unless it facilitates a wide diversity of dwelling types and affordabilities. The more dense an urban precinct is, the greater the need for large tracts of open space to facilitate leisure, social interface and fitness. Thus, strategies for densifying city centre precincts need to be prepared at a large scale, reinforcing the requirement for a more integral study of the city centre’s potentials than the current precinct-by-precinct approach.

Subtropical Character

One of Brisbane’s time-honoured assets is its subtropical character, generated by the river, extensive parklands and greenery, and the ‘Queenslander’ house. It is important that the historic parts of the city centre featuring Queenslander architecture is preserved, as Council has been doing.

However, the Council's CBD Master Plan proposal to allow the CBD to develop to unlimited height and density could be considered as a serious threat to maintaining subtropical character, casting much of the CBD into shadow as occurs, for example in Sydney.

Instead, this paper proposes density and height to be distributed across four major precincts of the city centre as well as the CBD. This strategy allows the precincts to be developed with large new areas of open space to offset and complement density – a strategy which cannot be achieved by the present process of planning multiple small precincts.

An accompanying proposal is to plan a long term open space strategy for the city centre, including two new parks and squares, new linkages and a concerted program of greening streets, buildings and transport infrastructure. This strategy has been employed in the much more urban city of Singapore to great success, and it is now widely regarded as the world's 'Garden City'.

Coordination

The proposed 'super-precinct' strategy, in lieu of the present multi-precinct strategies, could facilitate opportunities to plan shared environmental systems between many buildings. These could include centralised energy plants, and water recycling plants with shared water storage. Such a strategy will require controls and guidelines to be incorporated into the urban renewal conditions of development for both public and private sector compliance.

Transport and Movement

The construction of more pedestrian river crossings, and of a light rail system, should form key aspects of a coordinated strategy to reduce automobile movement throughout the city centre. This system should integrate walking, cycling, ferry and light rail with bus and heavy rail in a strategy to radically decrease car reliance. If not, it is likely to be inevitable that the city will at some time need to introduce congestion charges on city vehicular access as has already occurred in cities like London and Singapore.

Design Standards

One of the most remarkable shifts in the private sector development industry has been towards environmental performance of new buildings, particularly office buildings. Government and Council too have clearly prioritised environmental performance in new public and office buildings. The standards being applied to these building types have, however, not been paralleled in residential apartment buildings. It is imperative that Government and Council lead in applying a system, such as Green Star, to all new buildings, including as mentioned above the requirement to install integrated energy and water efficiency across development precincts. This strategy will require the preparation of a 'City Centre Environmental Performance Standards' to be applied to all new construction.

4.8 SMART CITY STRATEGIES – AFFORDABILITY

At present, as in most cities undergoing urban renewal of redundant inner city areas, it is proving challenging to retain affordability of housing. The consequences of diminished affordability are loss of social and cultural diversity.

Current approaches to addressing their concerns include the acquisition of land and the use of Government-owned land for public housing, such as through the Brisbane Housing Company. This approach is achieving considerable success; however it is in relatively small ways.

Another strategy being implemented in other cities is to require developers to incorporate a proportion of 'affordable' housing in new developments. Generally, this strategy is proving complex to implement due to escalating construction prices and land values, and developers' needs to optimise value.

An integrated City Centre Strategy could identify larger land parcels in Government ownership that might be set aside for innovation in the provision of affordable housing. Such innovation could include prefabricated building systems, innovative unit design solutions, and shared living environments – all being currently implemented in other countries particularly in Europe.

4.9 SMART CITY STRATEGIES – IMAGE AND IDENTITY

Brisbane's marketing campaigns have shifted over the past few years from the 'sun and water' branding to an image based upon nightlife and by inference urban maturity. Neither branding is, however, particular to Brisbane, notwithstanding that these campaigns may be highly successful. The city's wealth of festivals and events has been a significant asset, these being a mix of sports, entertainment and cultural events most notably the unique Asia-Pacific Triennial of Contemporary Art (APT).

For Brisbane to attain a smart city identity, it needs to portray images which are more distinguished from other cities than the present campaigns project. Reviewing the assets and potentials of the city centre presented in this paper, there are at least two new strong images that could be intensified:

Brisbane – Connected City

The potential of extending pedestrian bridges across several reaches of the river offers image-making which is both visual-architectural and reinforcing the ethos of a 'healthy city'. Combined with a 'new age' identity of light rail, the Citycat ferry system, and definitive pedestrian and cycle corridors, Brisbane could project a memorable image of connectivity, as for example, does Amsterdam. The locating of future cultural facilities along the pedestrian bridge 'spine' would structurally reinforce this image.

Brisbane- 'Knowledge City'

The richness of cultural, research and educational precincts in the Brisbane city centre is enormous, yet there exists little consciousness of the collective emphasis of these ingredients even locally let alone internationally. Recommendations in this paper with respect to portraying a clear structure of 'knowledge' precincts, and improving their interconnectivity, are aimed at helping to generate the critically important image of Brisbane 'Knowledge City'. This strategy would further benefit from integration with cultural and knowledge events such as the Asia-Pacific Triennial of Contemporary Art and the Brisbane Ideas Festival.

4.10 SMART CITY STRATEGIES – MULTIPLE RATHER THAN SINGULAR EXPERIENCES

Provocative as it may be, Brisbane's heart is not particularly distinctive to visit. It relies heavily upon its subtropical climate for its appeal, a climate which is becoming increasingly less certain. Other than that it has a river, some café precincts, a waterfront park or two and a surround of hills. Its new gallery is a significant attraction but galleries of modern art are found in almost every progressive city in Europe, America and China.

Melbourne, on the other hand, has become much more interesting especially through the intrigue and discovery of its laneways and the sheer extent of its street retail frontage. Its Federation Square is an enormous attraction as much for its peculiarity as its cultural content. Like Manhattan, there is a sense in Melbourne that there may be something new around each corner.

Brisbane has resisted the trend of many cities to build singular architectural monuments to entice visitation. However, it has also not developed a rich diversity of experiences across the city centre. In the CBD, the massive apartment boom has created an urban landscape with little street activity or diversity.

The Brisbane City Centre Master Plan sets out a plan to enhance several public realms throughout the CBD. It seeks also to repair certain critical spaces that have been scarred by public transport infrastructure, for example, Queen Street, Victoria Bridge and Melbourne Street, and it promotes development to activate the so-called North Bank, scarred as it is by the Riverside Expressway.

Coinciding Movement Routes with Attractions

As important as making the new connections proposed, in particular by pedestrian bridge and light rail corridors, is to plan places along them that generate intrigue and diversity of experience. It is proposed that these corridors become the framework for locating any new cultural or experimental attractions that the Government may conceive. In this framework whatever form North Bank takes, its revitalization is essential in this framework, especially in order to generate lateral pedestrian connectivity across the CBD, rather than as at present this occurring only in the Queen Street and the longitudinal streets Creek, Edward, Albert and George.

Public Art Design

The role of public art has been much debated worldwide and in a recent review by State Government. Just as Melbourne experienced vast popularity for its 'Melbourne Laneways' public art project, it is proposed that Brisbane identify a number of 'scarred' spaces for artists, architects and other designers to enhance. This proposal could entail 'pooling' some of the finances, presently applied as a percentage of public building cost, in order to create a fund for public space improvements.

The public spaces to be addressed should be mapped in particular in relation to existing and future primary movement routes. Curatorial briefs should be prepared that emphasize aspects of each place's cultural or geographic history to inform designers/artists concepts.

City of Experience

The intent of this strategy is multifaceted. It is primarily aimed at transforming the Brisbane city centre into a diverse tapestry of different experiences. By doing so, it should aim to generate wide social accessibility with works by people of different cultures. The strategy should also promote collaboration as characteristic of the process of a smart city. Lastly, it should have as a critical objective to impart individual identity to Brisbane. This will not occur by creating monumental structures as many cities have discovered. It can only occur by the agglomeration of experiences – multiplicity rather than singularity.

This proposal is reinforced by the observation of the key contributor to the Venice Biennale 2006 publication 'Cities: Architecture and Society' in her essay 'Why Cities Matter', Saskia Sassen.

"A first observation concerns a critical feature of the urban condition... vast scales juxtaposed with interstitial spaces. The cities we focus on and their emerging inter-city geographies are places of massive structures and those of semi-abandoned spaces. One instance is that of intersections of multiple transport and communication networks, where the naked eye or the engineer's understanding sees no shape, no possibility of a form, just pure infrastructure and its necessary uses... I can't help but think that artists are part of the answer, whether ephemeral public performances and installations or more lasting types of public sculpture."²⁷

4.11 SMART CITY STRATEGIES – ENGAGEMENT WITH THE COMMUNITY

The previous Smart State Report entitled 'Engaging the Community' considered ways to communicate and engage with the wider public the concepts of the Smart State. However, such a communication will be difficult to attain without visible evidence of what the term 'smart' means.

Creating a readily understandable structure plan, such as that illustrated in Section 2.1 could form a strong foundation for communicating the State's directions and priorities with respect to the city centre. Thus, when new precincts and connections are developed, they can be seen as being part of a cohesive strategy to enable the city to function more effectively. This strategy may therefore lead to a unified agreement on new initiatives based upon strong and legible Government and Council direction.

In spite of the cooperative relationships between the State Government and Council in preparing plans for urban redevelopment, it is evident that there is an exhaustive amount of investigation and planning required. The resulting pressure has resulted in the precincts being analysed and strategised independently rather than in an integrated way. There are also analyses being undertaken separately by State Government departments to those being conducted by Council, even where precincts are adjoining.

Discussions with various officers responsible for the studies support a process in which a joint authority or taskforce is formed in order to create more unified planning outcomes and to share resources in the planning process. This strategy is also supported by the working group as the optimum method to canvas ideas and develop strategies which accomplish an integrated, and by definition, smarter development strategy for the city centre.

27. Saskia Sassen. Why Cities Matter. ibid P48-9