

# BRISBANE'S FUTURE

Brisbane has an exciting future if we go by the proposals currently approved and others loosely planned over the next 20-30 years from now. In this final section we will take a peek at what's ahead of us starting with building developments and moving towards road and public transport infrastructure.

We'll start with two stunning iconic building projects. The first is the Brisbane Skytower currently approved and in its early stages of construction to become Brisbane's tallest tower at 90 stories with a public restaurant not too far from the top. The next project we'll look at are the two tender bids for Queens Wharf. The Echo bid includes a riverfront building that has been designed in an arc with a full length sky deck on top similar to the Marina Bay Sands Casino in Singapore.

We'll next look at three projects currently underway in the City—300 George St (which includes an 82 story residential tower and 32 story 5 star hotel), Broadway on the Mall redevelopment and the redevelopment of the RNA Showgrounds site with many residential towers.

We'll take a look at the government's Kurilpa master plan dubbed as Southbank II before looking at a few exciting concept proposals offered by private firms as part of a Council ideas festival which includes proposals for the Howard Smith wharves near the Story Bridge (a combined recreational and mildly residential precinct including a lift and staircase to the top of the New Farm cliffs), the Gabba Bolt (a pedestrian bridge starting in the treetops in the Gardens to the top of the Kangaroo Points near the main lookout supplemented by a lift on the Kangaroo Point side), City Reach (a proposal to transform the river edge from the Gardens around to the Riverside Centre), Petrie Terrace (a proposal to link the Roma St Parklands with the Barracks and Caxton Street in Paddington) and a great Central Station upgrade proposal.

After that we'll look at a few proposals from the BCC master plan of 2005. No-one really knows how many of these proposals will see the light of day and be given the green light and funding to go ahead. A key feature of the 2005 BCC master plan was a proposal to sink the Cultural Centre bus station a level and connect it with a bridge to Adelaide Street which would free up Victoria Bridge and allow the pedestrian unfriendly level where the bus station is now to be upgraded to something more positive and pedestrian friendly. Another proposal involves attempting to connect the Riverside Centre better with Elizabeth Street where the giant fig tree is. We look at one other proposal in that master plan for Central Station which better connects Spring Hill with the City and creates a new park space above the station. We take a brief look at the Campbell Newman North Bank plan and one suggestion from the City Council's River Edge Strategy Plan for an adventure activity like a flying fox from Kangaroo Point to the Botanic Gardens.

Moving out of the city, we'll look at various developments on the northside and western suburbs, most of which have already been approved. Some of those developments include the Albion Mill development, Alderley Square, the massive riverside development at Hamilton known as Northshore, the Brisbane Airport Corporation's master plan, "The Milton" and "Grace on Coronation" which are two transit oriented developments next to Milton and Toowong railway stations putting high density residential buildings right next to public transport.

We'll then cross the river to look at projects on the Southside such as the new Southbank riverside restaurant, the last residential complex to go up on Grey Street behind Southbank, "The Boulevard" (another massive transit oriented development at Buranda near both the Buranda rail station and busway station) and a brief look at the Greater Springwood master plan from the Logan City Council.

After those building developments we then begin to look at public infrastructure and transport. We begin with my proposed pedestrian connections in the City and then look at proposals for bridges and river crossings including my own proposals followed by plans for expanding the City Cat network.

After bridges we then look at road infrastructure starting with Campbell Newman's Road Grand Plan for Brisbane which started with his initial 3 tunnels (north-south tunnel, western tunnel, west to east tunnel) and expanded to include tunnels from Toowong to Everton Park, from the Airport Link to Everton Park and then a freeway from Everton Park to Gympie Road at Carseldine where it becomes freeway using the government-owned NW transport corridor. I am a strong proponent of the latter two. I would also like to see the NW transport corridor used for a railway line in between a new freeway (like they have done with a couple in Perth). To finish road infrastructure we look at other government proposals on other government-owned transport corridors such as the Western bypass from Ipswich which includes the Kenmore bypass. I then give my top ranked infrastructure projects.

Following road infrastructure we look at public transport infrastructure starting with the BaT Tunnel, a bus and rail tunnel under the Brisbane River needed to help expand the number of rail services and deal with the Victoria Bridge bus bottleneck. We'll look at new railway lines proposed by the State Government in its Connecting SEQ 2031 plan such as the Petrie to Kippa Ring (Redcliffe) line currently under construction, Alderley to Strathpine along the NW transport corridor, Salisbury to Flagstone and Ipswich to Ripley.

We'll then take a look at a Centenary rail proposal I found on an internet rail forum which is quite intriguing that, as part, includes a subway proposal from Toowong to Bulimba and Hamilton, not unlike that floated by the Bligh government some time back.

Light rail is gaining popularity with the success of the Gold Coast light rail and we'll look at the possibility of the return of trams in Brisbane.

To conclude with we'll look at what I believe will become a public transport revolution in the next 20-30 years—a NASA developed public transport system called SkyTran which is effectively a high-speed cable car network that is zero emissions, very energy efficient with very low running costs and is about 1/10th the cost of any other competing public transport system to install per kilometre. Strap yourself in for an exciting glimpse into our possible future.





One project that I am very excited about to see completed is the Brisbane Skytower between Mary and Margaret Streets which will become Brisbane's tallest building at 90 stories. The building was originally going to be called Vision before the Global Financial Crisis in 2008 put an end to the project. The site was sold to new owners who have modified the plan but retained the intended height of 90 stories. It will be a mix of residential and high-quality hotel and will include a restaurant in one of the top stories.

I would have preferred an observation area like in the original Vision project but I am happy that it will have a restaurant that is open to the public as we do not currently have a high public viewing place in the CBD like Sydney's Centrepont or Auckland's Skytower and it is something we have badly needed. This will give a much better view towards the northern and Bayside suburbs than is currently afforded by Mt Coot-tha lookout as well as the City and inner suburbs.







**Left:** The Penthouse view looking North from the top of the Brisbane Skytower when it will be completed.

**Below Left:** The Penthouse view looking East towards Moreton Bay.

**Below:** The view of the Brisbane Skytower and the Riverside towers above the Botanic Gardens.





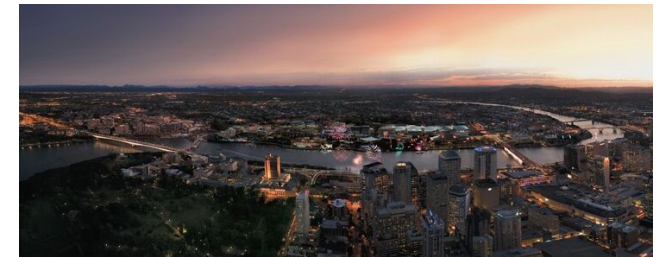


**Left:** The Penthouse view looking West from the top of the Brisbane Skytower when it will be completed.

**Below Left:** The Penthouse view looking South.

**Below Centre:** The view looking South at Twilight.

**Below Right:** The view of the Brisbane Skytower and the Riverside towers above the Botanic Gardens.

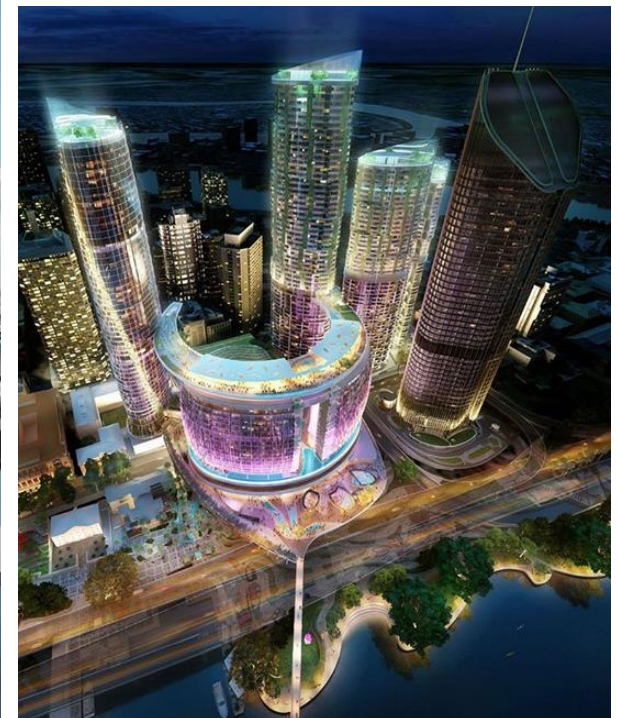
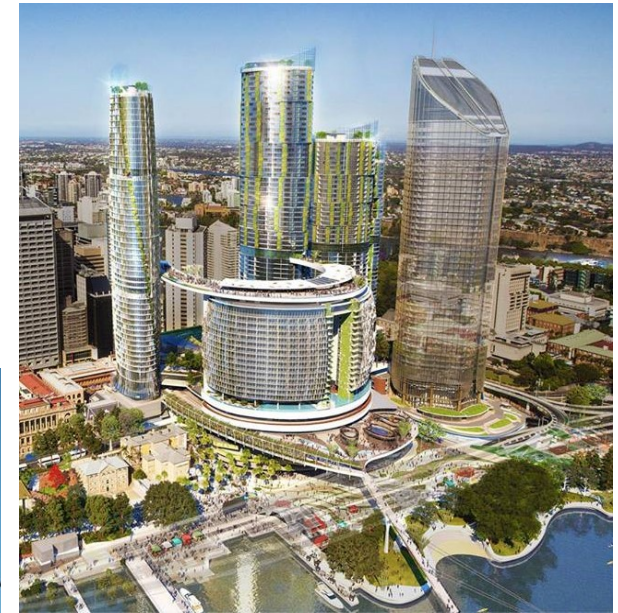




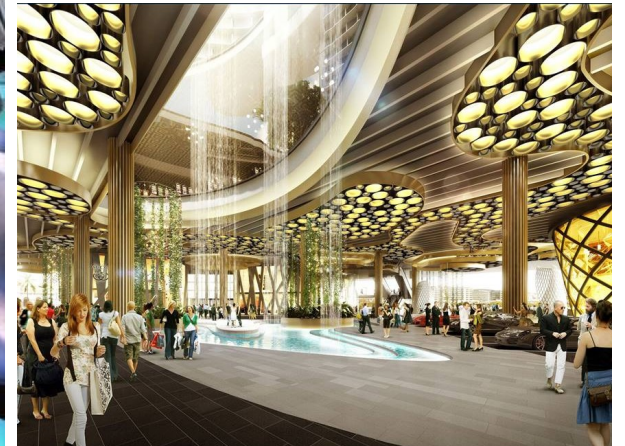
### QUEEN'S WHARF

There are two tender bids in at this time for the redevelopment of Queen's Wharf. The frontrunner, that is favoured by public polls by 4 to 1 is Echos' Destination Brisbane. The other bid is the Queen's Wharf bid from Crown and Greenland. I am definitely more supportive of Echo's Destination Brisbane bid with its arc and Skydeck that mimics the Marina Bay Sands Casino in Singapore, though I'd like to see the addition of a pool on the Skydeck like in Singapore.

Comprising of 4 towers as per the Crown proposal the riverfront building has been designed in an arc with a full length sky deck on top similar to the Marina Bay Sands Casino in Singapore. This allows Echo to deliver a number of alfresco style bars and restaurants in the sky, sure to be a local tourist attraction. Additionally Echo's current Treasury Casino and Hotel will be converted into a department store and Ritz-Carlton Hotel. Echo promises to deliver a water park for families, river walk open plazas. Echo however proposes to build into the river similar to the ill-fated North Bank Proposal, delivering more open and lively spaces while also activating the river currently cut off by the riverside expressway.











This is Crown's proposal for Queen's Wharf. The only part of its proposal where it is superior to Echo's proposal is with the pedestrian bridge. The bridge designs are on par but Crown's proposal includes a waterfall which is a great looking feature. It would have to draw its water from the river so it would have to be able to filter out the muddy sediments better than the ill-fated Silver Jubilee fountain. The Brisbane Development website in comparing the two bid proposals states:

"Crowns proposal appears to be inspired after the Crown Melbourne consisting of a large podium for the casino with associated uses and four high-rise towers...Even from these preliminary proposals it's clear that Crown provides a Melbourne solution for Brisbane while Echo provides a Brisbane solution for Brisbane.

"While Crown appears to have shoehorned its Crown Melbourne into the Queens Wharf block, Echo has delivered a tailored solution for Brisbane. Additionally, Echo having control of the current Treasury Casino will allow for transformation of the existing heritage buildings and created an integrated precinct from Queen Street to QUT."







### **300 GEORGE STREET**

300 George Street is a development on the old Law Courts site bordered by George, Adelaide and Ann streets and North Quay. It will include 3 buildings. The tallest will be a 262 metre, 82-storey residential tower on the corner of North Quay and Adelaide Street. It will become Brisbane's second tallest building when completed.

It will also include a 182 metre, 39-storey office tower on the corner of George and Ann streets and a 121 metre, 32-storey five-star hotel tower on the corner of Ann Street and North Quay. The tower will be occupied by W Hotels and will include 305 hotel rooms, presidential & executive suites, health spa with pools. A retail shopping mall, that will include a master ballroom, conference facilities and retail stores is proposed underneath the towers on the first three floors.

Demolition of the old court buildings is completed and construction work set to commence in 2015 with an estimated completion date of late 2017.



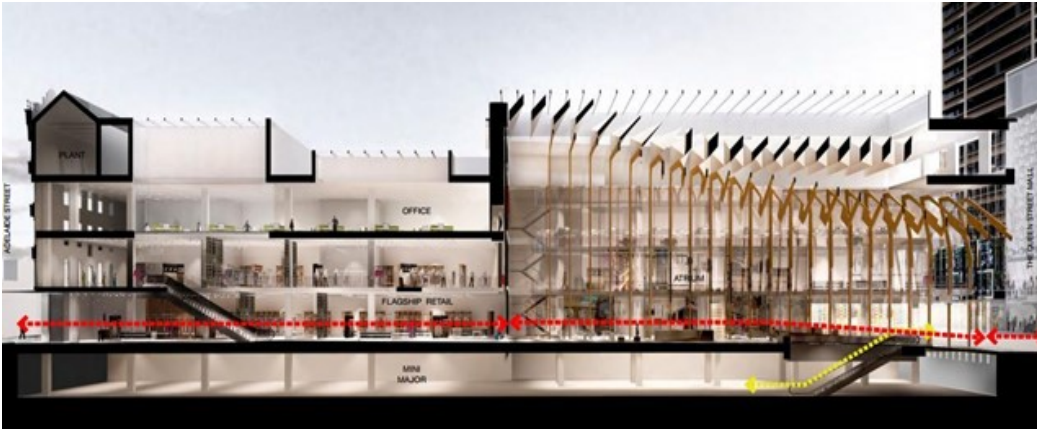


## BROADWAY ON THE MALL REDEVELOPMENT

Broadway on the Mall is currently under construction with a massive redevelopment which will see a complete restoration of the Queen Street shopping address.

Designed by John Wardle Architects, the transformation features a four-level high atrium, inspired by traditional European arcades.

The proposal also includes space for a two-level flagship store, surrounding speciality retailers and an open plaza.





## **RNA SHOWGROUNDS REDEVELOPMENT**

The Exhibition Showgrounds is a large section of property that takes up a good portion of Bowen Hills near the City. While the annual “Ekka” show in August still draws big crowds (though down in recent years) it has lost a lot of income from exhibitions and conventions to the Brisbane Convention Centre. Given the valuable property it holds, the RNA has decided to sell off close to half of the site for high-rise residential development.

It is currently under development and when completed the site will look like the animated views from the promotional video these screenshots were taken from. Campbell Street, on the RNA side, will have high-rises all the way from the eastern end to Bowen Park. The south-east side will also have high-rises. This will reduce the area of the annual Ekka show, particularly where the animal stables are.

The main showground, pavilions and sideshow alley all remain as part of the Ekka. With all this extra money for selling off so much of this valuable property the RNA should be able to drop the price of getting into the Ekka which is terribly overpriced at the moment.

The only improvement I can see to what will remain of the Ekka is the new covered grandstand where Machinery Hill is. It is sad that this historical ground doesn't have a major sporting tenant anymore. I used to enjoy going there when the Brisbane Bandits were based there before their move to Newmarket.

The QRL has wanted an inner city boutique ground, particularly for hosting the Queensland Cup grand final. If they can't come to terms with the QRU for Ballymore then the Ekka showground could be an option to consider for the Queensland Cup preliminary final and grand final. It does have lights as well (not shown in the animation). Temporary stands could easily be brought in on the Gregory Terrace side of the ground.





## KURILPA MASTER PLAN

The Brisbane City Council has unveiled its draft master plan for Kurilpa which provides a framework for transforming more than 25 hectares of land and 1 km of river frontage to create a world class riverfront destination featuring accommodation, public space, cultural facilities and culinary experiences.

Key aspects of the new plan include a major new cultural facility (museum or gallery), new high frequency public transport route, urban playground running underneath the Merivale Bridge viaduct, a new city cat terminal, park, riverfront amphitheatre, closure of Riverside Drive to pedestrianise and expand existing parkland and increased building densities to cater for Brisbane's fast growing population.





Transformative Areas

# HOWARD SMITH WHARVES

Our vision for Howard Smith Wharves is for a world class river's edge destination offering an authentic experience of our river city, our natural assets, our food, our events, our architecture and our outdoor lifestyle. Together, the landscape and the development of a riverside recreational precinct present an iconic and contemporary revitalisation of one of the last undeveloped riverfront locations in Brisbane's CBD. The site offers a rare opportunity to mix economic development and provide significant parkland whilst protecting the city's heritage.

We imagine a place where the contemporary overlay embraces and celebrates the heritage fabric and geological features. The master plan strategies began with the reinstatement of the historical wharf line, creating a 460m long wharf and adding 6800m<sup>2</sup> of site area. Locally, the precinct will provide a variety of safe and attractive connections with existing spaces and movement networks to the CBD, Fortitude Valley and New Farm.

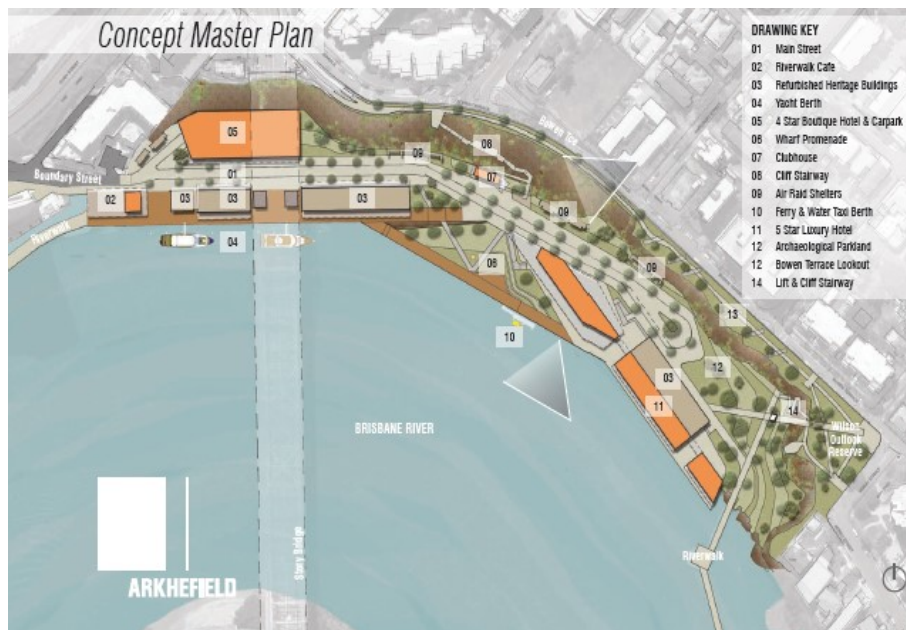
The creation of the Wharf Promenade and Archaeological Parkland as significant new public spaces forms the centrepieces, providing a focus for the precinct. The Wharf Promenade is deprogrammed and offers a robust setting in which a variety of social and cultural activities might occur. On sunny days it is filled with locals and tourists alike enjoying the city views and the range of recreational and dining experience on offer. Throngs of people can be seen sitting on the terraced banks, picnicking in the parkland as well as continuing along the wharf connecting into the city along the Riverwalk or Fortitude Valley via the cliff stairs.

Active pedestrian focused frontages, verandas and outdoor rooms edge the Main Street, Wharf Promenade and Archaeological Parkland promoting an engagement with the public domain. The form of the buildings respects and reinforces the dynamic landscape settings and are positioned to maximise land for public purpose. What were once disused impenetrable industrial structures, the refurbished sheds breathe a new lease of life through subtropical adaptive reuse. Locating the majority of the commercial realm of the hotel development from the river's edge allows the community to own the river and public space, whilst maintaining uncompromised views and active frontages for the hotel guests.

Together, all of these experiences come together to make an iconic place, a place full of post card moments.



This is currently just a concept proposal but likely to go ahead when the Council has the funding to make it happen. This area needs to be enhanced and beautified with such a project. What is also needed, and addressed by this proposal, is a lift and staircase from the top of the Cliffs to the base where the start of the Riverwalk is which I really like in this proposal which I hope gets the go ahead soon.





## GABBA BOLT

This is a concept proposal that has not been approved.

I like this proposal. It is a good location for a pedestrian bridge without spoiling the view of the Kangaroo Point reach of the Brisbane River.

The walk through the treetops on the Gardens side is a great idea. Putting a lift at the Kangaroo Point side is good for cyclists wanting to cross at this location and for those of us less enthusiastic when it comes to a steep stair climb.

Additionally, the extra height of it, being level with the top of the cliffs makes it an excellent place for photography and vantage point for the Riverfire fireworks.



The Gabba Bolt is not just a bridge! It is a pedestrian and cycle network that will connect and catalyse the Woolloongabba and CBD growth hotspots.

The link draws on the existing character and assets of the City. It incorporates an exhilarating tree-top walk through the City Botanic Gardens that is likely to become a tourist attraction. The lift at Kangaroo Point Cliffs will allow all users to access and enjoy the dramatic views of the city and river, encouraging activity throughout the day and increasing security.

The quality veloway system will provide a critical cross-river link allowing cyclists to avoid the current circuitous and potentially dangerous route through the Gabba to the CBD. Light pervades the design concept, creating a safe and legible route that will stimulate the night time economy on both sides of the River. Use of solar array technology for many of the lit elements would ensure that sustainability values are incorporated in the design whilst enabling an interesting lighting design that will act as a landmark, enhancing Brisbane's night sky.

AECOM is proud to present this idea as part of Brisbane City Council's Ideas Fiesta



**BRISBANE CITY CENTRE**  
TRANSFORMATIVE IDEAS



This idea is currently just a concept proposal at this stage.

It is a plan to invigorate the riverfront along Eagle Street where Eagle Street Pier and the Riverside Centre are today. I do like the pool that extends into the river like the famous pool at Bondi Beach.

# CITY REACH

A NEW RIVER EDGE FOR THE CITY





WE SHALL EMBRACE THE RIVER. WE SHALL CELEBRATE THE RIVER.

OUR CBD WILL NOT TIMIDLY RETREAT FROM OUR GREATEST ASSET. WE WILL MAKE THE RIVER THE SIGNIFICANT, CITY SCALED PLACE EMBLEMATIC OF AN URBANE AND CULTURED RIVER CITY.

Brisbane is facing the challenge of what it means to be an internationally significant River City - on a river that will from time to time, flood.

Our city river edges are either inaccessible freeway troll habitat, or disjointed, miserly pathways hemmed by pool fencing, which we timidly occupy.

The city reach is an opportunity to create a unified, significant occupation of the river edge for the CBD...

... A move from a defensive occupation to a contemporary, optimistic, celebratory, profound urban place, which will become the emblematic city space to express Brisbane's confident offer to the world.

Let the City embrace the river with a generous, people oriented, city scaled, urban river edge - A New City Reach for Brisbane.

## 1. CBD River

Town Reach is the only part of the river where the CBD touches the water



## 2. Urban Promontories Edge

Queen and Edward St define the CBD river edge each with a new 'Urban Promontory'



## 3. Strong River Edge

Between these promontories and new urban edge is made - strong, bold, unified, public, generous Brisbane's Circular Quay



## 4. Three Layers

Upper level - City Edge,  
Lower Level - Edge Promenade (the Reach)  
Water Level - the river proper



## 5. The New River Edge

20m wide x 700m long  
urbane river edge, shops,  
restaurants, bars - public,  
accessible, flood enabled,  
big city space



## 6. Connected

The city streets are brought to the river and celebrated!  
The fine grained connective tissue of laneways and linkages are enhanced stitching the city to the river.



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IS PROUD TO PRESENT THIS IDEA AS PART OF  
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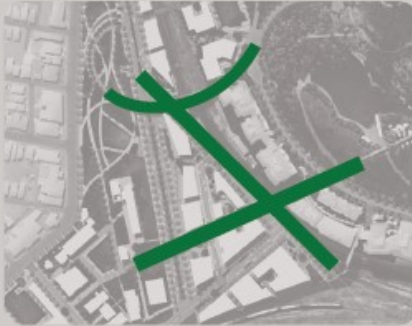
This idea is currently just a concept proposal at this stage. I think it is a great proposal and I believe that there should be a pedestrian bridge connecting the Roma Street Parklands with the Barracks at Petrie Terrace and the restaurant/club district along Caxton Street.

## transformative project PETRIE TERRACE





# Bridging the Gap



## CONNECTIONS

Join Roma Street Parklands with its edge of apartments across the railway land to Hardgrave Park and Petrie residential development areas and Victoria Barracks.



## EXTENSION OF CITY

Create a new mixed use precinct to the North over the existing rail corridor (as Federation Square) and release 20 ha of development sites.



## BRIDGES AS A JOURNEY

Celebrate a series of experiences, which connect communities together, showcase vistas and provide memorable community legacy.



## PARK CONNECTION

Connect Roma Street Parklands to Hardgrave Park and the Barracks.

- Bringing people together
- Multifunctional and multi-use
- Pedestrian & cycle friendly
- Community activation
- Revitalise Hardgrave Park



## CELEBRATE STREETS

Reveal vistas to city, George Street and the landmark St Bridget's church on Red Hill. There is magic in great streets.

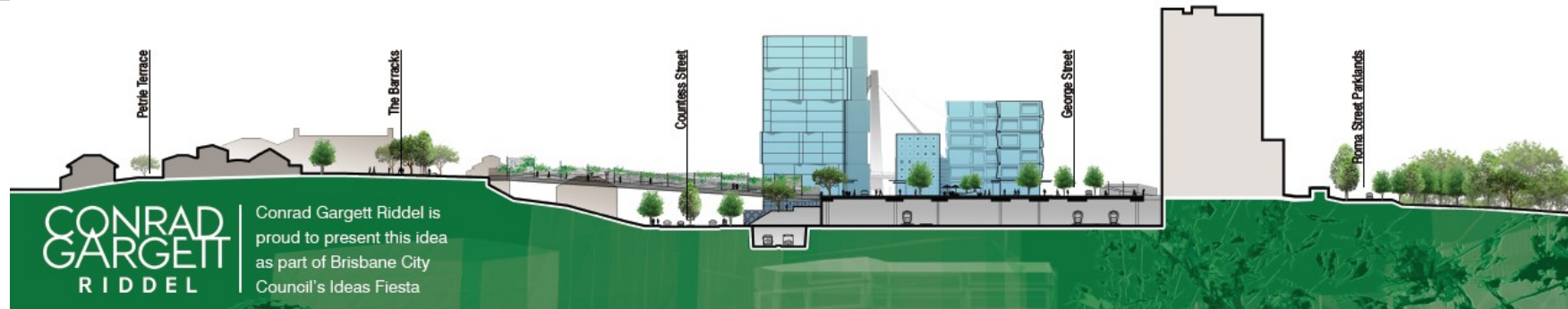
- Joyful & utilitarian
- Entertaining
- Open to all
- Public memory
- Community and social interaction



## UNLOCK THE HERITAGE

Reveal and activate the heritage of Victoria Barracks, the railway and Petrie Terrace.

- Adaptive reuse
- Story telling
- Protect and enhance heritage values
- Contemporary interventions
- Rediscovering history





# CENTRAL STATION TRANSFORMATIVE AREAS

This idea is currently just a concept proposal at this stage.

This idea opens up Central Station with natural light. The upper level where McDonalds is today and where you descend to the trains is relocated to a level underneath the train level but directly level with Anzac Square which is connected by a much wider connecting tunnel.

This new wide tunnel creates a wall that could be enhanced with a montage of tributes to fallen soldiers on that side where the Anzac Square War Memorial is. It's a great proposal that I hope gets the go ahead.





### **PROPOSALS FROM THE BCC MASTER PLAN OF 2005**

Below is a projected view of Brisbane from the City Council's Draft Master Plan from 2005 (10 years ago). Completed since then is the Kurilpa Bridge and the Brisbane Square Tower (minus extension over the Freeway). 1 William St is currently under construction. The other features in this projected view which are specific concepts are the three other bridges in red. Two pedestrian bridges are mooted—one crossing from the Edward Street entrance to the Botanical Gardens across to Kangaroo Point and another crossing from Dockside at Kangaroo Point to New Farm near the end of the Riverwalk.

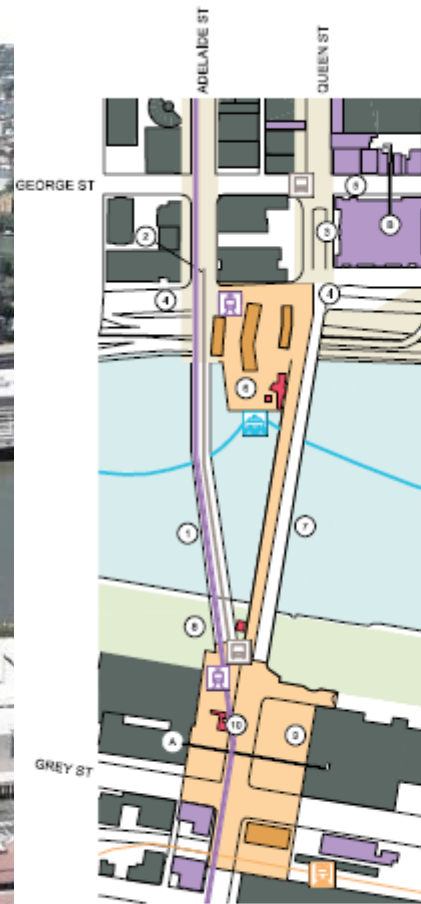
The other bridge is a bridge from Adelaide Street to the Cultural Centre bus station as part of a greater proposal to sink the bus station underground and free up the Victoria Bridge to either cars or as a pedestrian bridge. The bridge itself would be modest in cost compared to the sinking underground of the Cultural Centre bus station.

### 3D City Form Views – 2026





# Victoria Bridge



1. New bridge for mass transit and buses.
2. New Adelaide Street portal to underground bus network located to allow through movement of mass transit and cars.
3. Close existing bus portal and extend pedestrian prioritised plaza from Brisbane Square to the Treasury Building.
4. On-grade intersections designed to allow pedestrian prioritised movement towards the river and local car and public transport movements.
5. George Street traffic network reconfigured as two-way, with additional footpath spaces and pedestrian prioritised crossing from Queen Street Mall.
6. New riverside plaza extends the Brisbane Square public domain to the river, and includes buildings and uses to support public gatherings and events "with the river". This plaza should be served by the mass transit system and a new city centre ferry terminal.
7. Victoria Bridge to be enhanced as the primary pedestrian link extending from the Queen Street Mall through to West End. This will be facilitated principally through the removal of bus traffic, and the provision of high quality pedestrian spaces and routes. Enhancements of the bridge to make a comfortable and memorable journey include the provision of shade structures and small scale gathering places.
8. Portal to underground public transport network.
9. New plaza developed as a vibrant and identifiable place that serves multiple roles, including entry and events space for Queensland Art Gallery, Queensland Performing Arts Centre, Queensland Museum and Sciencentre and the river, and entry point to underground transport hub.
10. New cultural precinct busway station under new plaza, connecting to existing busway route adjacent to the Convention Centre.



This concept proposal in the 2005 BCC Master Plan is still a great idea even though part of the problem it is designed to correct will be fixed with the BaT tunnel that will provide a dedicated busway between the City and Woolloongabba Bus Station and SE Busway.

The area is a terribly pedestrian unfriendly with the Cultural Centre bus station at road level. Though very expensive, it would be great if the busway was sunk underground and connected by a bus bridge to Adelaide Street. It would free up Victoria Bridge and allow the corridor between the Cultural Centre and the West End shopping and restaurant precinct to be developed into a more connected and pedestrian friendly corridor.



# Town Reach

This concept plan is an attempt to connect the Riverside and Eagle Street Pier area better with the rest of the City as create a public domain space.

This proposal requires some changes in traffic flow. Traffic coming from the north would no longer be able to come down Eagle Street. That traffic would need to go down Queen Street and be able to turn left. In the simulated view Creek Street is two-way between Elizabeth and Charlotte Streets covering that need.

This creates a great new park area connecting the Riverside Centre directly with the island where the giant fig trees are today.



This project identifies the significant opportunity for a new intermodal public transport station for buses, rail and ferries to be developed in a coordinated manner with private development. This would result in clear benefits to the public domain and enhanced accessibility and viability of the entire precinct.

Town Reach identifies an additional network of public domain spaces that connect visually and physically with the river and interlink with the existing pedestrian network. New high density development is a key part of this project. These new spaces and development provide a continuation of the 'tower and plaza' identity and experiences that characterise this part of the city.

Additionally, a modified traffic network provides the opportunity for the Eagle Street 'fig island' to be connected to the riverside pedestrian spaces, integrating this Brisbane 'landmark' more appropriately into the public life of the city.

I think this proposal could be improved even further by sinking Elizabeth Street under the intersection with Creek Street coming back above ground where it bends into Eagle Street. This would create a pedestrian connection across Elizabeth Street where the giant fig trees are today. Add in a pedestrian crossing on Creek Street near the giant fig trees and you would then have a complete pedestrian corridor from the GPO and Post Office Square to the Riverside Centre and Waterfront Place.

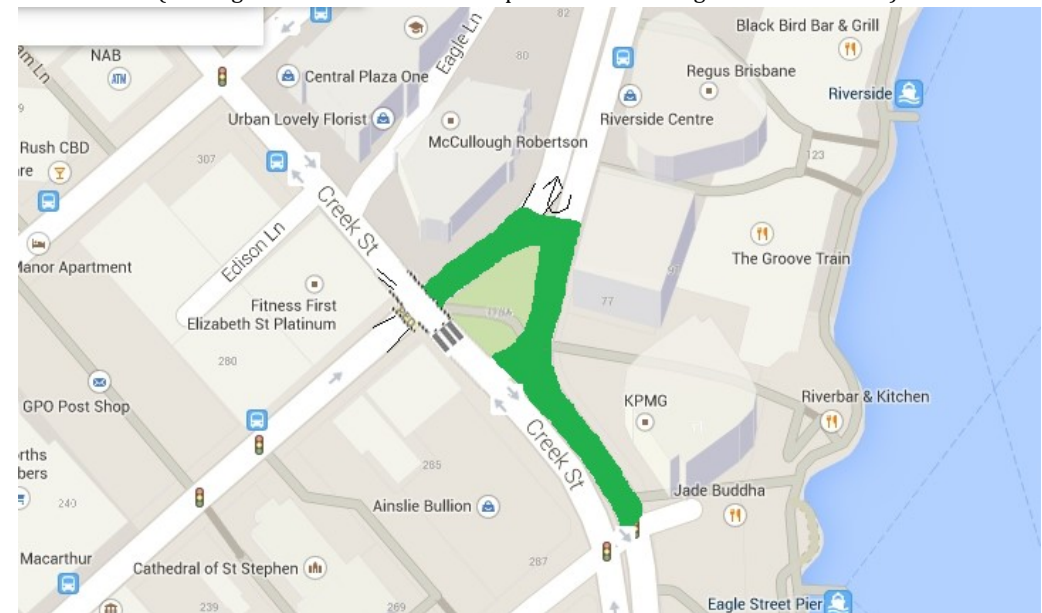
A cheap alternative to this to create a pedestrian corridor from the GPO and Post Office Square to the Riverside Centre and Waterfront Place would be a pedestrian overpass from the corner closest to the GPO above the intersection around the giant fig trees (like a treetop walk) and over Eagle Street to the Riverside Centre and Waterfront Place.



1. Road network reorganised, with Eagle Street traffic diverted around the 'fig island'.
2. New green plaza integrates the fig trees with the network of river side spaces. This reclaimed public domain has the potential for added vibrancy and activity generated through small scale art and event structures that support community activities.
3. New underground train and busway station and connected ferry terminal integrated with public domain.
4. Future development to respond to view corridors to the river from Creek Street and Mary Street.
5. Integrate the riverside pedestrian network with Market Street and St Stephens Cathedral spaces.

## TOWN REACH PLAN WITH MY AMENDMENTS

(Sinking of Elizabeth St road with pedestrian crossing over Creek Street)





# Central Station



The draft master plan *Transport strategy* proposes the integration of a new train line to Central Station and the associated reconfiguration of the road network in this vicinity.

As part of that transport reconfiguration, this project provides the opportunity for the creation of a new public space and associated development site that is integrated with this major piece of public transport infrastructure. Additionally, it provides a significant opportunity to connect Spring Hill with the core via a major public space that includes views along Creek Street to the river and Kangaroo Point, emphasising the unique natural setting of the city. It should be conceived, therefore, as a stepping, ramped set of spaces and landscapes that connects the upper Turbot Street and Spring Hill pedestrian spaces with Ann Street.

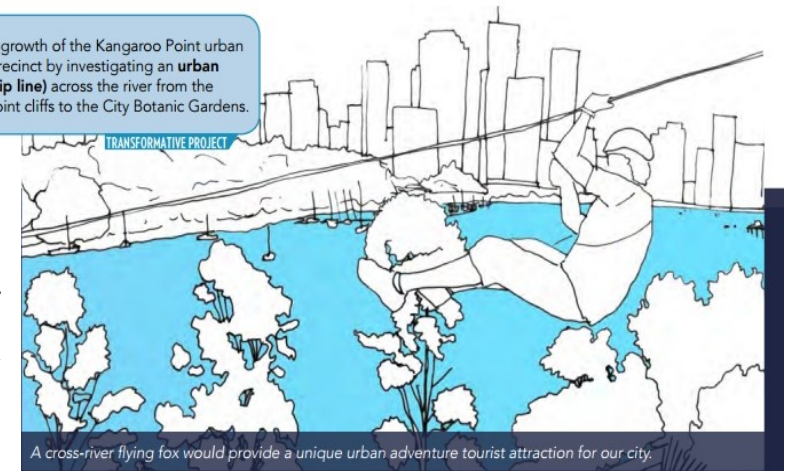
This proposal from the 2005 BCC Master Plan is a great proposal that sync well with the other concept design we saw earlier for Central Station. Adding a park area over the top of the train power lines and creating a more gentler descent from Spring Hill is a great idea.



**Left:** This is the design unveiled by Campell Newman when Premier for the North Bank area in conjunction with the announcement of 1 William St (Building at back just right of centre). It still appears to be a concept proposal at this stage, though, no doubt, there will be some revitalisation like this when Queen's Wharf is developed.

**Right:** This flying fox over the Brisbane River idea was included in the Brisbane City Council's River Edge Strategy Plan. It would be a heck of a lot of fun flying across the River assuming it is safe and you don't hit any yachts or City Cats on the way across. I would love to see this idea go ahead.

Support the growth of the Kangaroo Point urban adventure precinct by investigating an **urban flying fox (zip line)** across the river from the Kangaroo Point cliffs to the City Botanic Gardens.





## ALBION MILL DEVELOPMENT

From the Brisbane Development website: “The unveiling of the \$330 million Albion Mill Masterplan has revealed a design to carefully restore one of Brisbane’s most iconic heritage landmarks, and create a vibrant inner city village, signalling a return to the ‘village’ conscience that founded cities in the first place...”

“The Masterplan will be developed over three stages, delivering a village-inspired community of residential, commercial and retail opportunities bonded together by a network of public spaces including streets, plazas and public transport. More than 2,000sqm of new open public space will be created, to be known as La Strada. “The axis formed by La Strada has been carefully aligned to pay homage to the existing historic Flour Mill building,” said Mr Kordic [FKP’s Executive General Manager].

“A vibrant mix of retail offers will line La Strada, Albion Road and Hudson Road, comprising approximately 2,500sqm. The retail mix is envisaged to feature a fresh produce market and wine emporium, restaurants, concept bakery and café, boutique stores across fashion, homewares and lifestyle and specialty services. ‘La Strada’ (or central lane) design has been inspired by traditional European towns with an active street level of shops, cafés and restaurants with apartments above. La Strada will be a shared zone for pedestrians and vehicles, creating a dynamic, fluid thoroughfare.”





### **ALDERLEY SQUARE DEVELOPMENT**

This is a great looking high density residential and retail development planned on South Pine Road at Alderley across the road from Alderley train station.

These plans and simulated views are from several years ago and I am not sure of the current status of the project and whether or not it has Council approval to proceed ahead but I am in favour of these high density residential developments near commuting hubs like this particular train station at Alderley.





## NORTHSHORE HAMILTON DEVELOPMENT

Northshore at Hamilton is the logical conclusion to the urban river renewal that began in the 1970's and 1980's after the various port and shipping docks were relocated to Fisherman's Island. In area, this is the biggest renewal project of all.

The redevelopment here began with Brett's Wharf and Portside Wharf. Northshore Park and Waterfront Residential have been completed including a City Cat terminal.

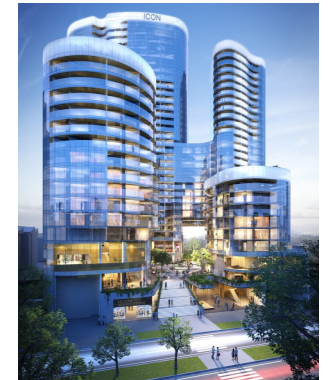
As office towers and residential apartments along with green spaces and retail areas are developed it will look wonderful.

I have worked along Curtin Road West and I know that traffic flow is going to be a major problem as there is often a lot of congestion already near the roundabout in front of Portside Wharf which will only get worse the more that is built along the river. Currently there is nothing in the plan to address this pressing problem.

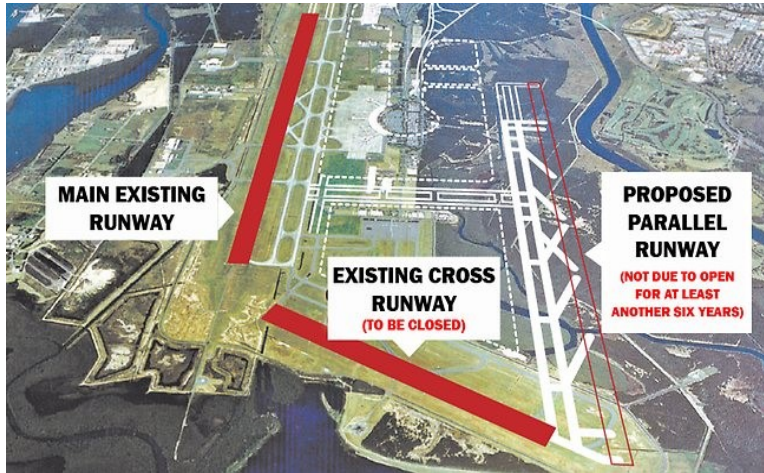




## BRISBANE'S FUTURE





**BRISBANE AIRPORT MASTER PLAN**

The Brisbane Airport Corporation has its own master plan for the vast amount of land in and around the Brisbane Airport and they wish to make it a destination in itself rather than just a place for arriving and leaving Brisbane.

There are plans for a high quality hotel and retail precinct near the international terminal. They are continuing to develop the warehouse and office precinct to the south of the airport with its close access to the airport.

The cross runway has been closed and work begun on the new parallel runway. Kedron Brook / Schultz Canal is planned to be rehabilitated and one or two major golf courses are planned to be opened on the airport side of the waterway.





**MILTON AND TOOWONG DEVELOPMENTS**

Two exciting new high-rise residential developments in the inner western suburbs are “The Milton” and “Grace on Coronation”. These two major Transit Oriented Developments are immediately next to Milton and Toowong railway stations.

“The Milton” is nearing completion at 30 stories high with a major retail area at the base.

“Grace on Coronation” is to go up on the old ABC site at Toowong and its stunning design of 3 towers with a narrow base draws its design from a banksia flower in bloom. The site includes a heritage building known as Middenbury Home, which will be retained in the future development which could become a restaurant, cafe or gallery. The heights of the towers range from 22 to 25 storeys.

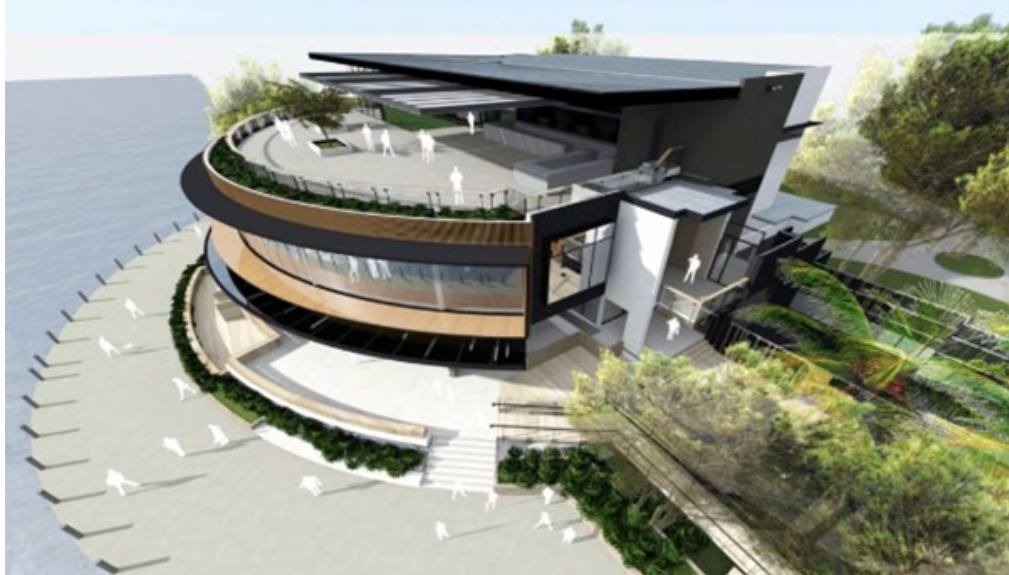




## SOUTHBANK AND CULTURAL CENTRE FUTURE PLANS

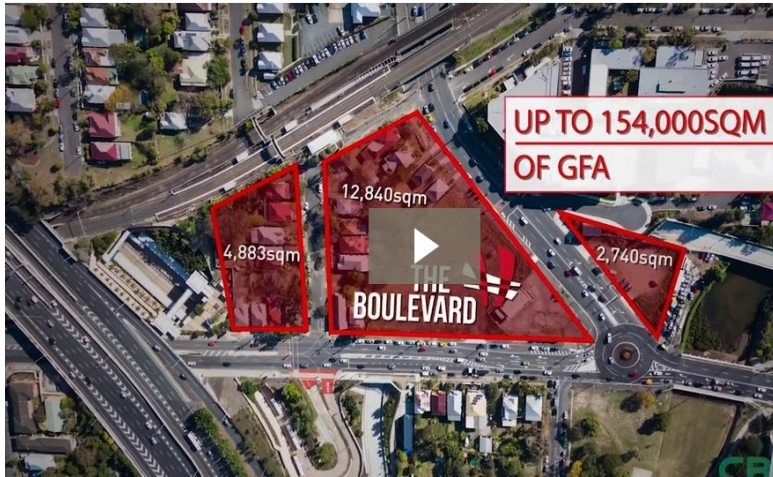
The last of the planned residential tower developments (**Top Left**) along Grey Street behind Southbank is about to begin construction along the corner of Vulture Street and Grey Street next to Southbank railway station. Plans have also been unveiled for the riverfront restaurant building in the centre of the Southbank riverfront (**Bottom Left**) which has been vacant for some time. An additional uncovered top deck is planned for the top of the building.

To the **right** are simulated views of proposals to upgrade the Cultural Centre which would include a new Sciencecentre in front of the State Library, an enlarged Cremorne Theatre and two new towers (one of which would be a 5 star hotel) which would help to fund the upgrade.





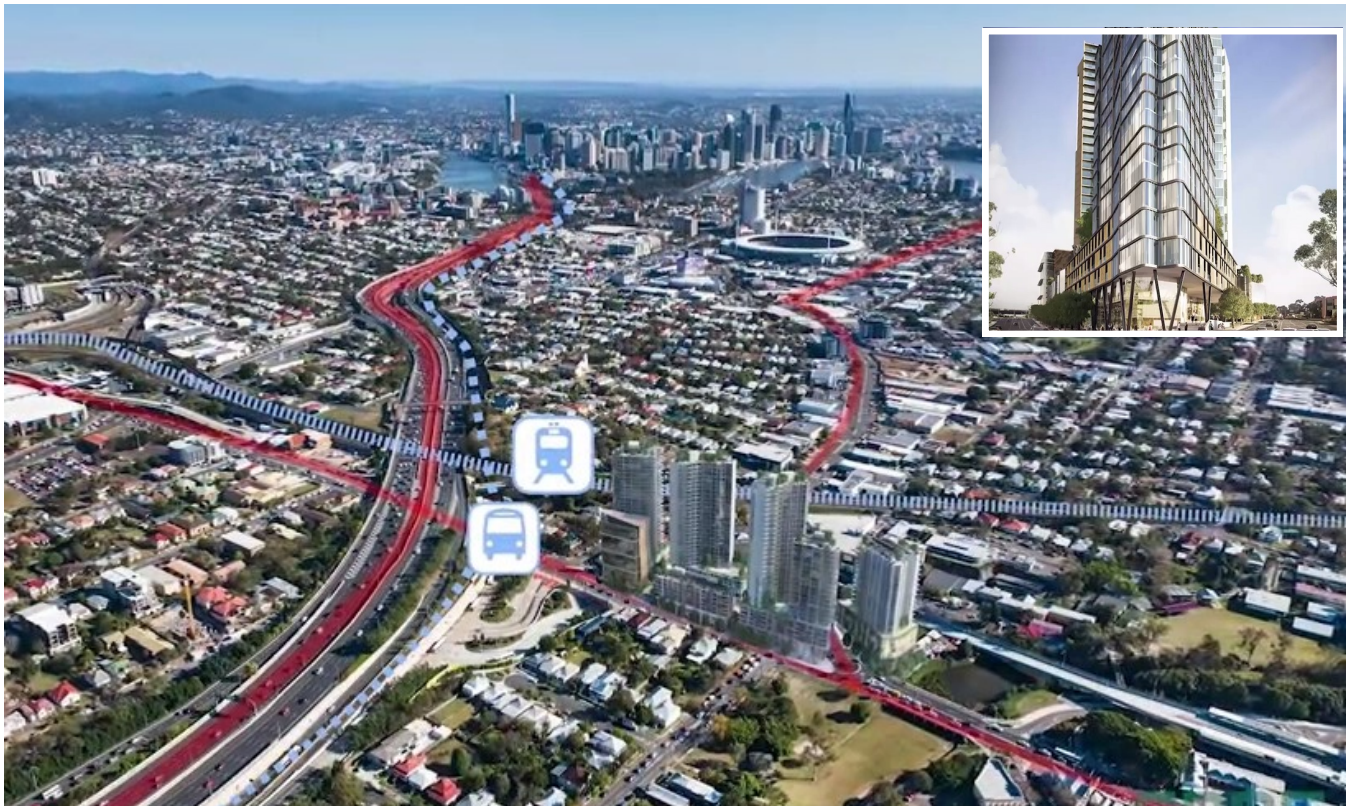
**BURANDA DEVELOPMENT**



One major Transit Oriented Development that has been taking quite a long time to be approved and developed is “The Boulevard” at Buranda next to Stones Corner and immediately next to both the Buranda railway station and the Buranda busway station. It is an ideal location for a major high-density residential development next to excellent public transport access.

The latter plans are elevated at the roundabout end to ensure there are no issues with floodwaters from Norman Creek.

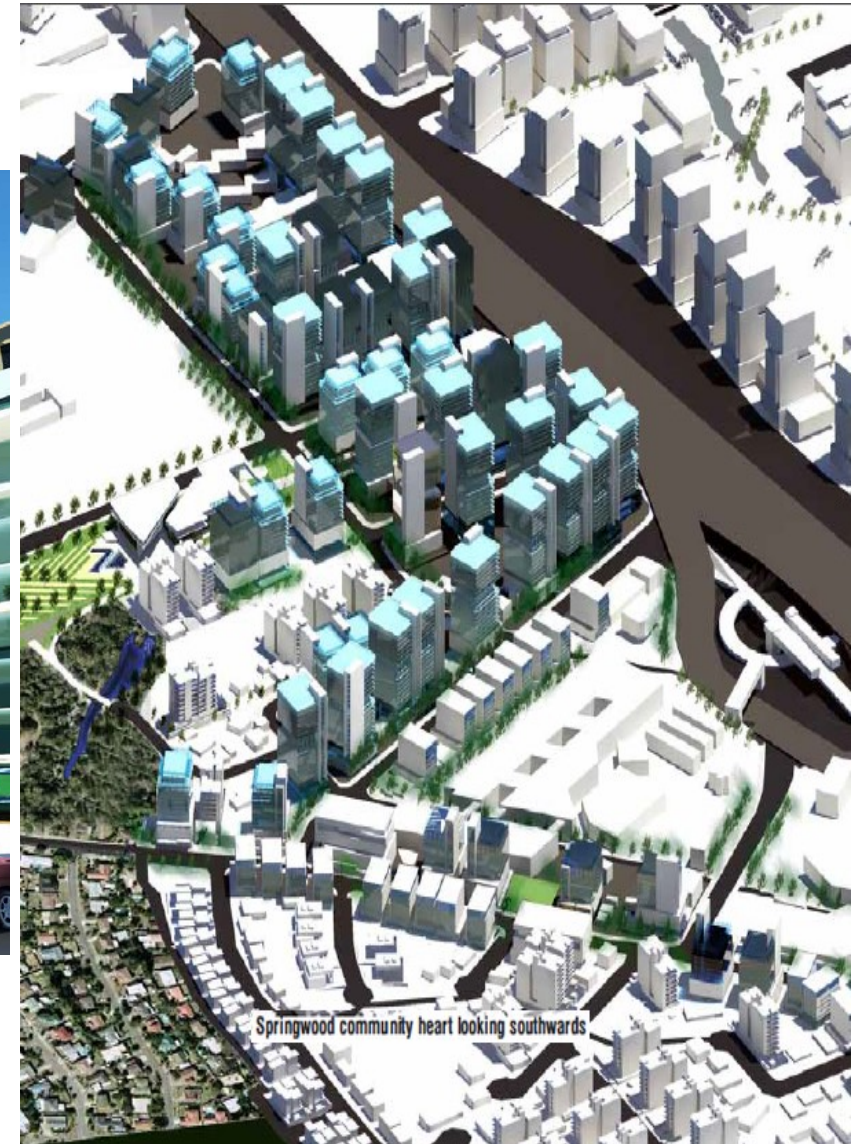
Singapore company Wee Hur Holdings recently purchased Anthony John Group’s 1.7 hectare transit-oriented Buranda site and will develop the now-approved high-rise mixed use development comprising residential, retail and office.





### **GREATER SPRINGWOOD MASTER PLAN**

A major part of the Greater Springwood master plan (2031) is a rezoning from commercial/industrial to residential of the Pacific Highway service road from Moss Street north on the Slacks Creek side of the Pacific Highway. High-density residential buildings are planned to line the southern side of the Pacific Highway north of Moss Street. The rezoning appears to extend just across Slacks Creek. Slacks Creek is planned to be rehabilitated and a long linear landscaped park is planned to extend along the banks of Slacks Creek. As I often spend my weekends with family nearby I love this proposal that will take the edge off the industrial feel of this area. More high-density residential buildings are planned to line the southern side of the Pacific Highway .



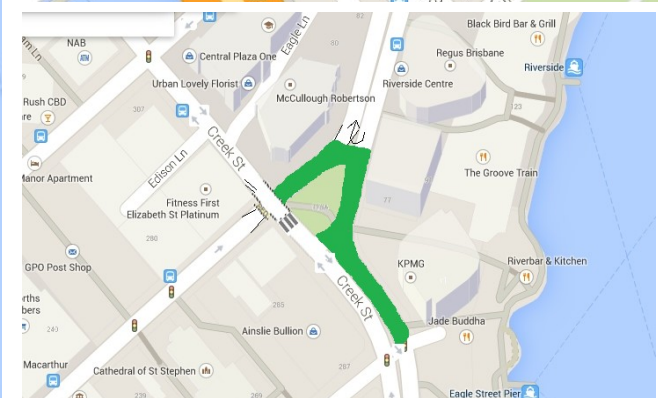
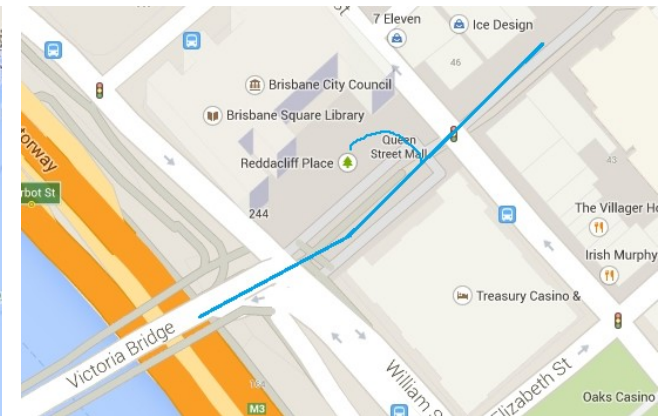
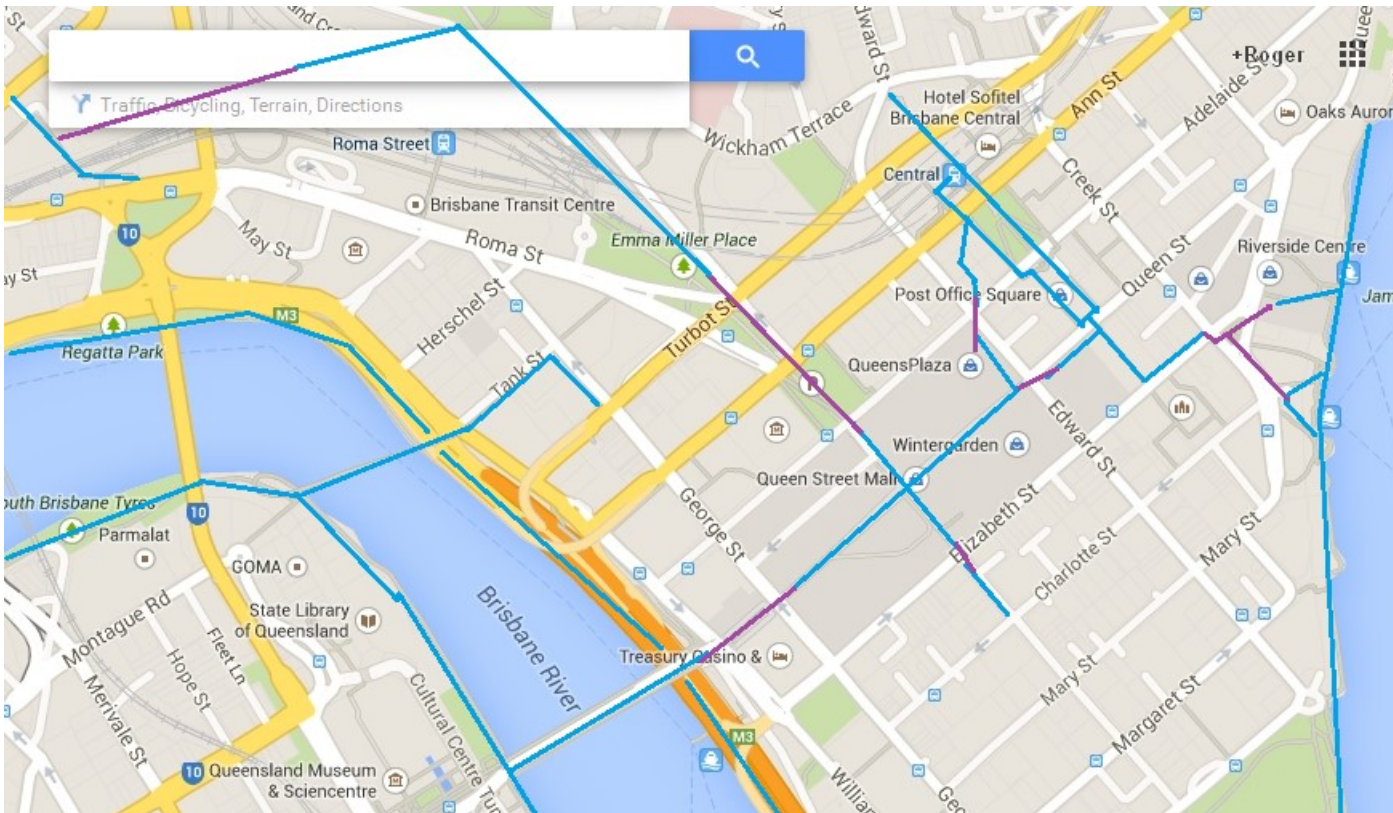


## PEDESTRIAN CONNECTIONS

When walking through Brisbane City or any city, for that matter, it is great to be able to walk for long stretches without having to stop at intersections and wait at traffic lights to cross roads. Brisbane has great river pathways and bikeways. With the Queen (and Albert) Street Mall a large part of the City is accessible without having to wait at traffic lights to cross intersections. Wickham Terrace is connected all the way to the corner of Elizabeth and Creek Streets close to the Roverside Centre by connecting walkways through Central Station, the old Titles Office, Anzac Square, Post Office Square and the GPO pedestrian arcade.

The existing pedestrian corridors are in blue. My proposed connecting links are in purple. There are several connecting links that should be addressed in time that would greatly enhance the pedestrian access through the City:

- 1) **Queen Street Mall to the GPO.** This could be addressed by a tunnel under Edward Street with escalators on either side. Ideally, it would be great to have an underground retail arcade between the Queen Street Mall and Post Office Square such as the Queen Street Down Under proposal that was proposed by the Sri Lankan developer of Springfield.
- 2) **Queens Plaza to the Old Titles Office.** This could be addressed by a tunnel under Edward Street with escalators on either side or an aerial connection between the first floors of each building.
- 3) **Elizabeth Street to Riverside Centre and Eagle St Pier.** Discussed earlier by sinking Elizabeth Street under the Creek Street intersection and closing Eagle Street between the Riverside Centre and Eagle Street Pier and a pedestrian crossing over Creek Street. Alternatively, a pedestrian overpass through and around the giant fig trees could accomplish this.
- 4) **Extending Albert Street Mall past Elizabeth Street.** This could be done by sinking Elizabeth Street at the intersection with Albert Street.
- 5) **Victoria Bridge to Queen Street Mall.** A pedestrian overpass from Victoria Bridge to the Queen St Mall would accomplish this with a branch off to Brisbane Square.
- 6) **Queen Street Mall to Roma Street Parklands.** A pedestrian crossing across to King Square followed by a pedestrian overpass to the opposite side of upper Albert Street would accomplish this.
- 7) **Roma Street Parklands to the Paddington Barracks.** A pedestrian overpass would accomplish this.





# FUTURE BRIDGES

One proposal that the Brisbane City Council in own its planning has a desire to have built is a pedestrian bridge from the Edward St entrance of the Botanic Gardens to Kangaroo Point. This reach of the Brisbane River with the Gardens and boats moored in the River is a special view. I was initially opposed to a pedestrian bridge, not because of the functional benefit of better walking access but because I did want to see anything that would spoil this view and most pedestrian bridge designs would spoil that view. I found myself pleasantly surprised when I saw this concept design. This gentle suspension design is actually quite appealing to the view and does not detract from the view. While high enough for the City Cats to go under it would need to be high enough for the masts of yachts moored near the Gardens to pass under as well. Despite my initial concerns about a pedestrian bridge spoiling the view, the design is appealing enough to dispel those and this design gets my thumbs up.

At this stage this is only at the concept stage. In the City Council's 2005 masterplan a similar pedestrian bridge has been proposed to cross from Docklands at Kangaroo Point to New Farm. The City Council has also made comments suggesting it is investigating the possibility of Green Bridges from Teneriffe to Bulimba and from West End to Toowong.

## ALICE STREET PEDESTRIAN BRIDGE

### DOUBLE-CURVED SUSPENSION BRIDGE

Brisbane's urban form for the first 170 years has been driven by the river and its circuitous form. The current lack of crossings has denied a certain compactness that is essential to realising a walkable city centre and city frame. Recognising the importance of Brisbane's pedestrian realm will in itself evolve into an evocative expression of a city that embraces its benign subtropical climate and unique riparian setting.

The Alice Street Pedestrian Bridge creates a destination link between the City and Kangaroo Point and improves integration with both existing and planned public transport services. The strategy for the bridge is driven by ideas of aesthetic simplicity, economy and efficiency in construction. The intention is to deliver a bridge which minimises impact on the river and contributes an elegant, mature form to an evolving city skyline.

The bridge's form is developed from the structural solution, which simply and clearly expresses the flow of internal forces through its static system. The languid curves of the river provide a framework for the geometry of the bridge. The double curve aligns the Alice-Edward Street intersection with Thornton Street, Kangaroo Point, and creates an elegant gesture across the river. The bridge contributes to an environment that increases the viability of a full range of sustainable travel choices in the CBD and improves integration with existing and planned public transport services.

DECK LENGTH	395 metres
DECK WIDTH	4 metres
MAST HEIGHT	50 metres
MAST DIAMETER (max)	1.1 metres
MAIN CABLE LENGTH (total)	430 metres
MAIN CABLE DIAMETER	200 millimetres

All dimensions are approximate.

••••• Major pedestrian/cycle links  
 — North-South arterial connection  
 — Proposed public transport interchange





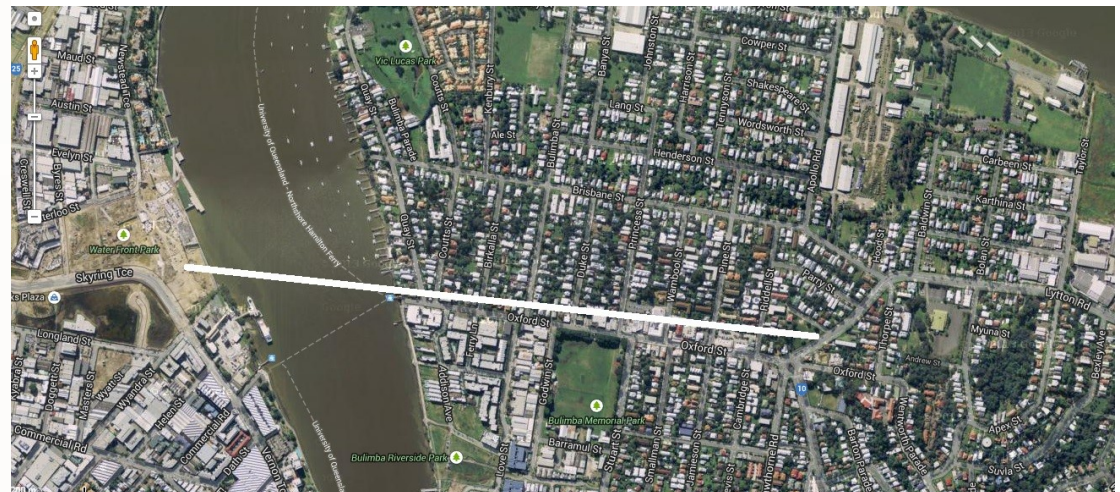
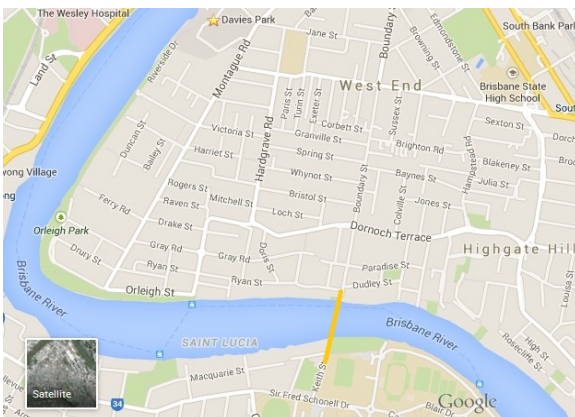
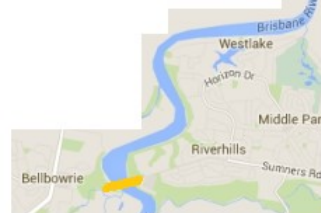
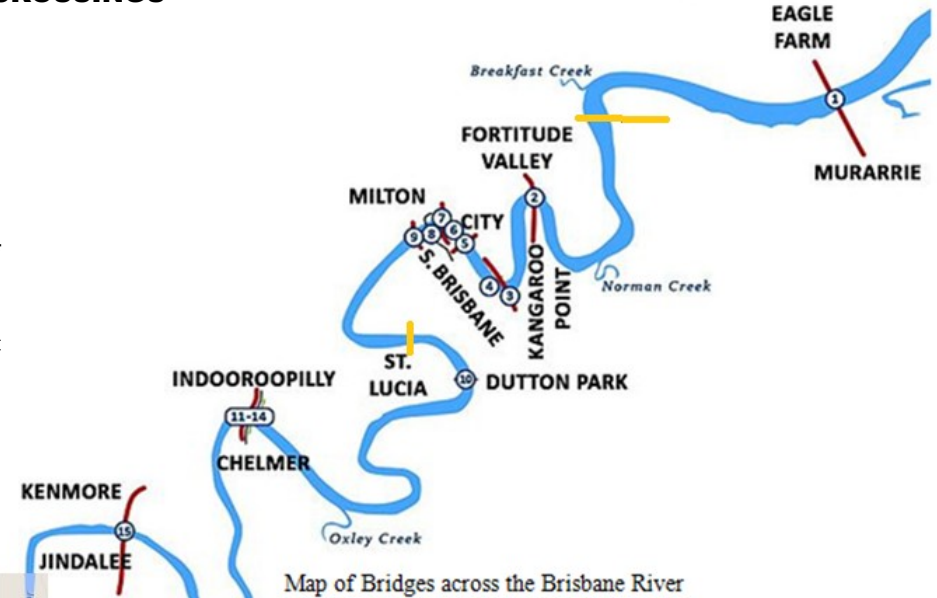




## MY PROPOSED RIVER CROSSINGS

There is 1 tunnel and only 8 car bridges across the Brisbane River, of which 5 plus the tunnel are near the CBD. There are 3 large stretches of the Brisbane River not crossed by car bridges that should be in time:

- 1) **Colleges Crossing to Centenary Bridge.** My proposed suggestion for this is a bridge at Bellbowrie. The bridge was "approved" as part of the original Bellbowrie development but was never followed through and built by the City Council. This would take a lot of pressure off Moggill Road at Kenmore as most commuting residents west of Kenmore on the north side of the river would choose to cross it and go straight along Sumner Road to the Centenary Highway. It would probably deal with about 80% of the congestion problems which the Kenmore Bypass would resolve at about 30-40% of the cost. An alternative is a bridge where the Moggill ferry is today.
- 2) **Indooroopilly to Go Between Bridge.** My proposed suggestion is a bridge from Boundary Street, West End to Keith St, St Lucia. This bridge was proposed during the 1920's and the Dornoch Terrace overpass was part of creating a highway that would have led onto the bridge had it not been for the Depression. An alternative is to make the Eleanor Schonell Green Bridge to open to car traffic, at least, until Campbell Newman's Trans-Apex bridge from Toowong to the SE Freeway is built.
- 3) **Story Bridge to Gateway Bridge.** My proposed suggestion for this is a tunnel from near the Newstead Gasworks (the vacant lot near the power transmission tower) to Lytton Rd just after Oxford St. to avoid congestion on Oxford St and preserve the village atmosphere of the area. This would be a great road connection between the Valley and onto the Gateway Motorway.





## CITY CAT SERVICE EXPANSION

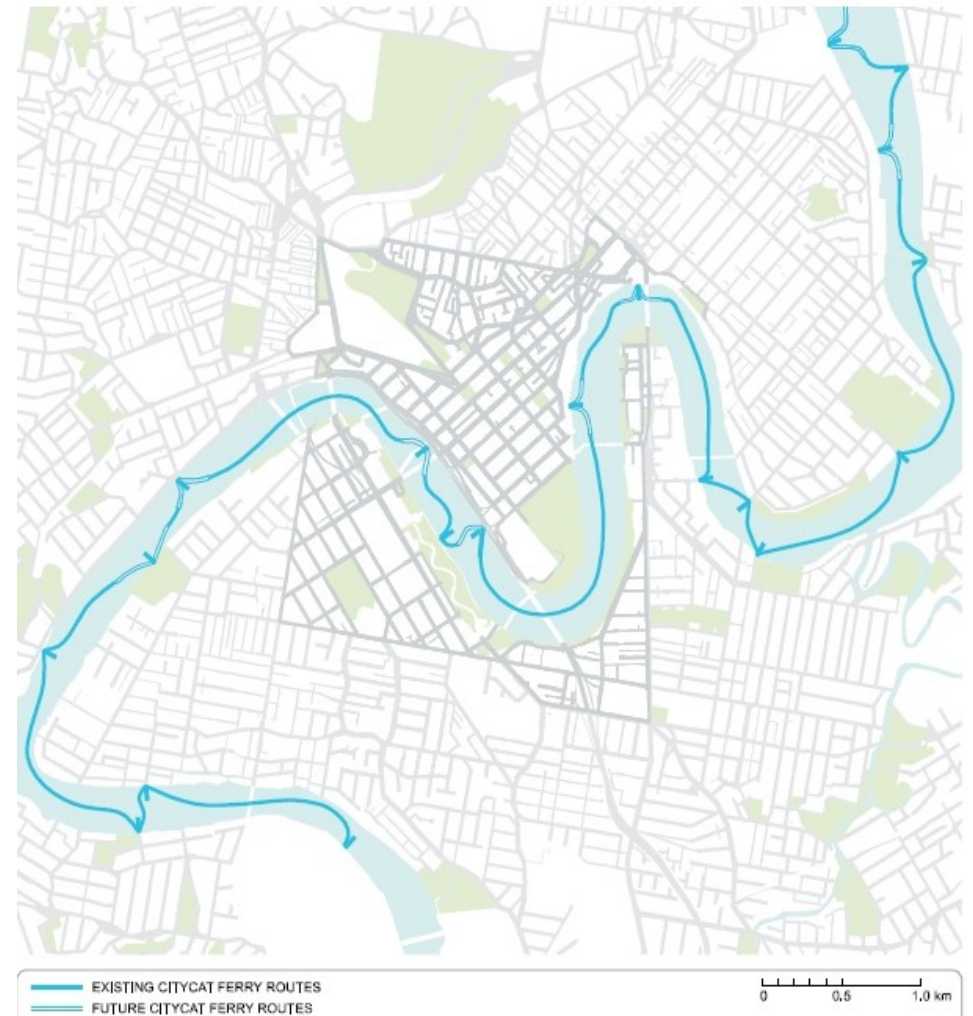
The most recent City Cat terminals installed by the Brisbane City Council include Toowong, Apollo Road and Northshore Hamilton.

As more terminals have been installed the speed of the services has slowed down due to more stops each service has to stop at. One thing badly needed for a while has been some express services that only stop at a few major stops.

The Brisbane City Council has begun the process to help facilitate such services and be able to increase regular services with their current terminal upgrades to make each terminal a dual platform terminal capable of docking two City Cats at the same time, usually one going upstream and the other downstream.

In the map to the right from the 2005 Brisbane City Council master plan you will see a number of terminals in addition to the current terminals. Those proposed terminals include: Davies Park (one I would especially love to see given I often go there to see Souths play footy), Park Road Milton (near completion), Howard Smith Wharves, Dockside at Kangaroo Point and one a little upstream from Teneriffe Wharf. Since then another has been suggested at Kurilpa.

In addition to express services to just the major stops, I recommend those proposed stops above, plus I believe the service could be extended further upstream from the University of Queensland. There could be an express service starting at Moggill with stops at Bellbowrie, Westlake, Jindalee, Fig Tree Pocket, Indooroopilly, Tennyson, Fairfield, Uni of Qld, Toowong, Southbank, QUT and finishing at the Riverside Centre.





## CAMPBELL NEWMAN'S TRANS-APEX PLAN

Part of Campbell Newman's platform to become Lord Mayor in 2004 was his tunnel plan to relieve Brisbane's traffic congestion problem. He believed he could build 3 tunnels (North-South tunnel, Western tunnel, Toowong to Woolloongabba tunnel) for \$3 billion. The Clem7 tunnel alone cost over \$3 billion so he got his costings hopelessly wrong. The Go-Between Bridge, which also became a part of his road and tunnel grand plan, also blew out in cost, almost costing as much as the duplicated Gateway Bridge.

The Newman long-term Grand Plan was extended beyond the original 3 tunnel plan with 3 more tunnels, a bridge from Milton to West End and a new freeway. The 3 tunnels added were the Airport Link, two future planned tunnels from Toowong to Everton Park and from Kedron to Everton Park under Stafford Road and a freeway using the government-owned land of the NW transport corridor from Everton Park to Gympie Road where it becomes a highway at Carseldine.

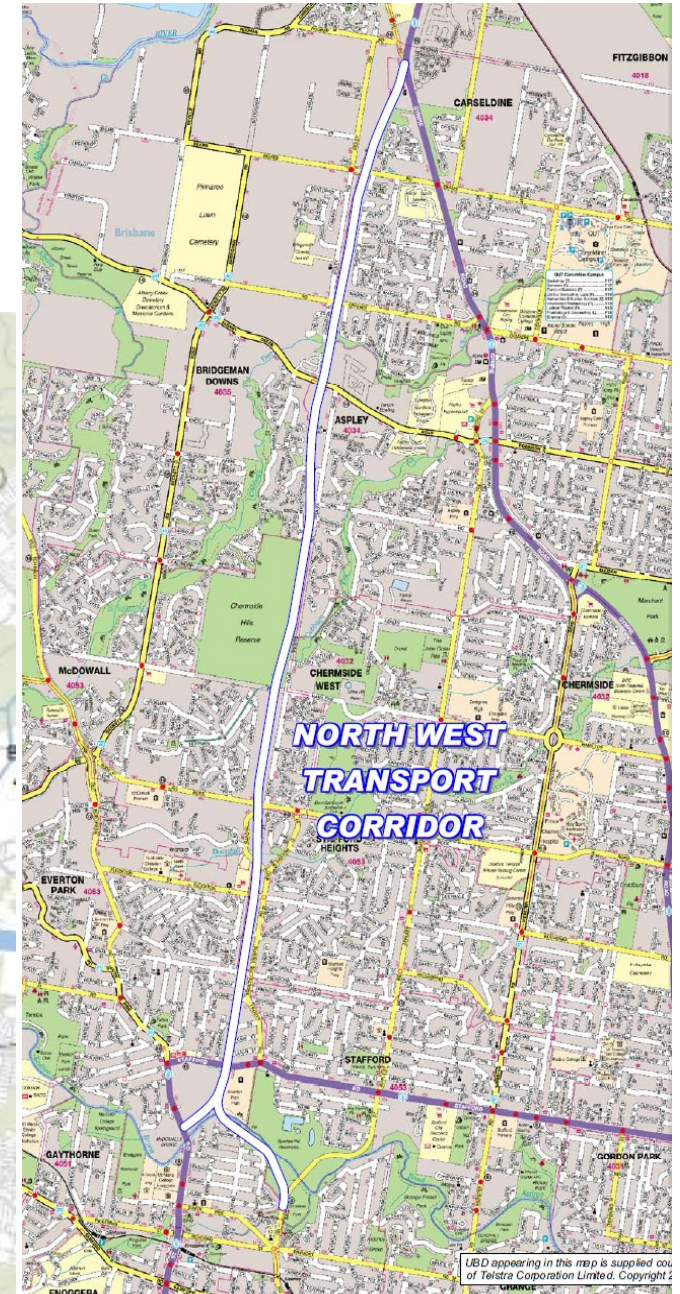
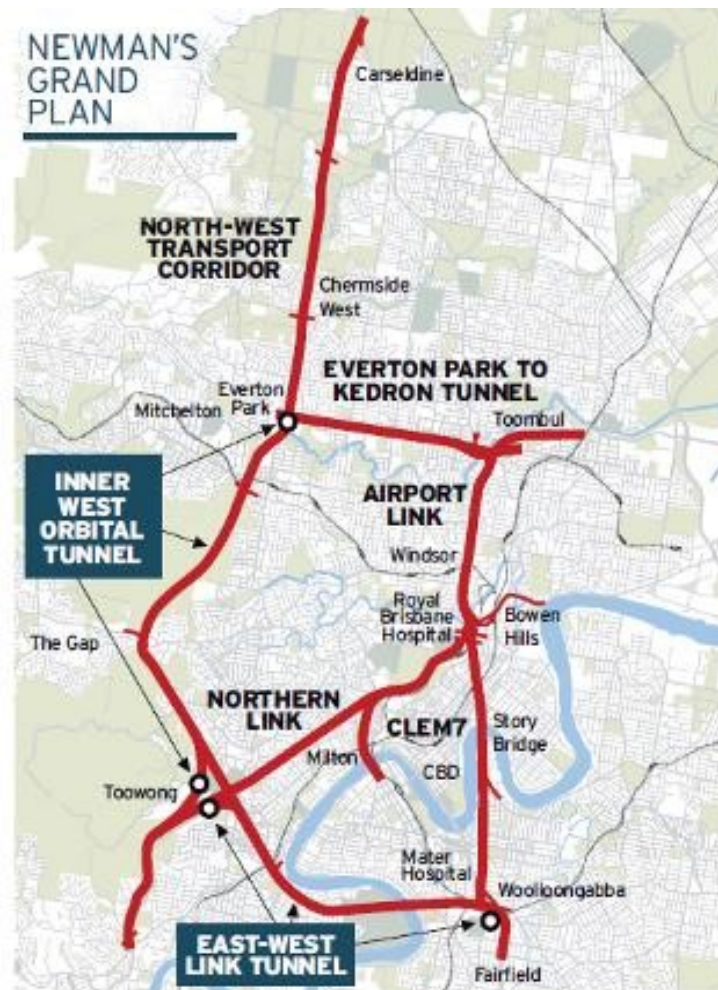
Of the original 3 tunnels:

- The 1st tunnel from Woolloongabba to Bowen Hills, the CLEM7 was opened in 2010. The original private builders went bust after building it for \$3.2 billion.
- The 2nd tunnel is under construction and soon to be completed from Toowong to the ICB (Legacy Way) .
- The 3rd tunnel was originally projected to be built around 2026 but even that is unlikely in the current economic climate if ever built at all.

The status of the other roads and tunnels in this grand plan as are follows:

- The Hale St Bridge (Go-Between Bridge) was completed in 2010 at an exorbitant \$338 million.
- The Airport Link tunnel was completed in 2012 at a cost of \$4.8 billion. The original private builders went into receivership afterwards.
- The Inner West Orbital Tunnel from Toowong to Everton Park has been suggested at being built within 20-30 years.
- The Everton Park to Kedron tunnel under Stafford Road is just a proposal at this stage.
- The North West Freeway is just a proposal at this stage. The Bligh government favoured using this government-owned corridor of land for a railway line connecting Alderley with Strathpine.

**Why not do both like they've done in Perth? Have the rail line running in between both sides of the freeway and then connect the freeway with a tunnel between Everton Park and the Airport Link.**

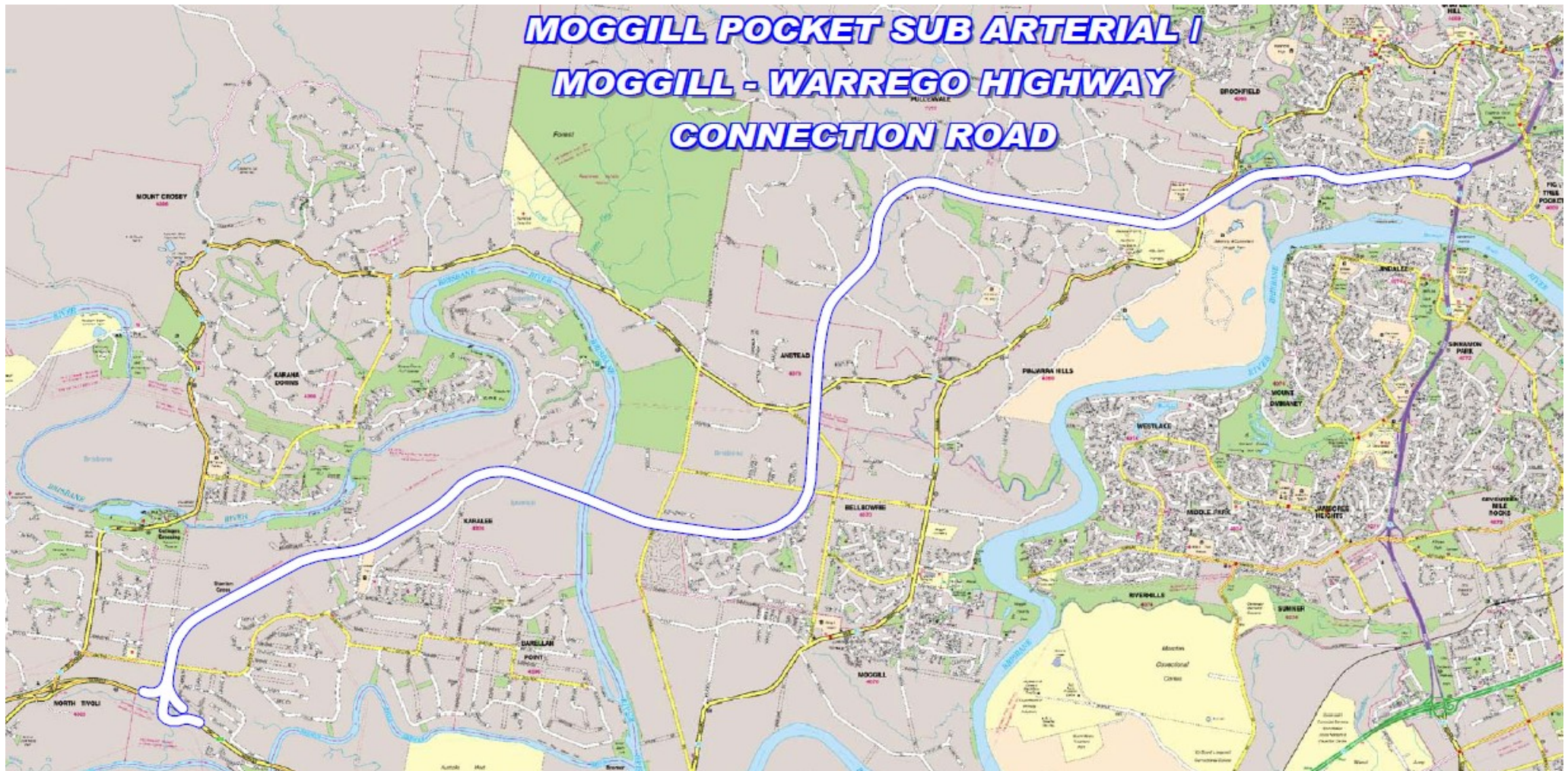




## QUEENSLAND TRANSPORT ROAD PLANS USING GOVERNMENT-OWNED ROAD CORRIDORS

To avoid the costs of future resumptions the government will often buy up undeveloped land that may be needed for new roads in anticipation of future population growth. In addition to the North West corridor there are tracts of mostly government land where the State Government on the Qld Transport website has plan for future roads when road congestion demands their use and government funding can be found for such roads.

Below is a map of one such road proposal. This western bypass connects the Centenary Highway with the Warrego Highway at Tivoli. It includes a bridge from Karalee to Bellbowrie before heading north through Anstead and passing through Moggill Road at Pinjarra Hills and then connecting with the Centenary Highway at Kenmore. The last section between Moggill Road and the Centenary Highway at Kenmore is the Kenmore Bypass which has been a political football and not built despite the awful congestion on Moggill Road in Kenmore during peak hours. The Kenmore Bypass has been estimated to cost between \$500 and \$900 million and is badly needed, though a Bellbowrie Bridge, which should cost around \$200 million would relieve in my estimation about 80% of the congestion that the Kenmore Bypass would resolve diverting much of that traffic from Sumners Road onto the Centenary Highway.

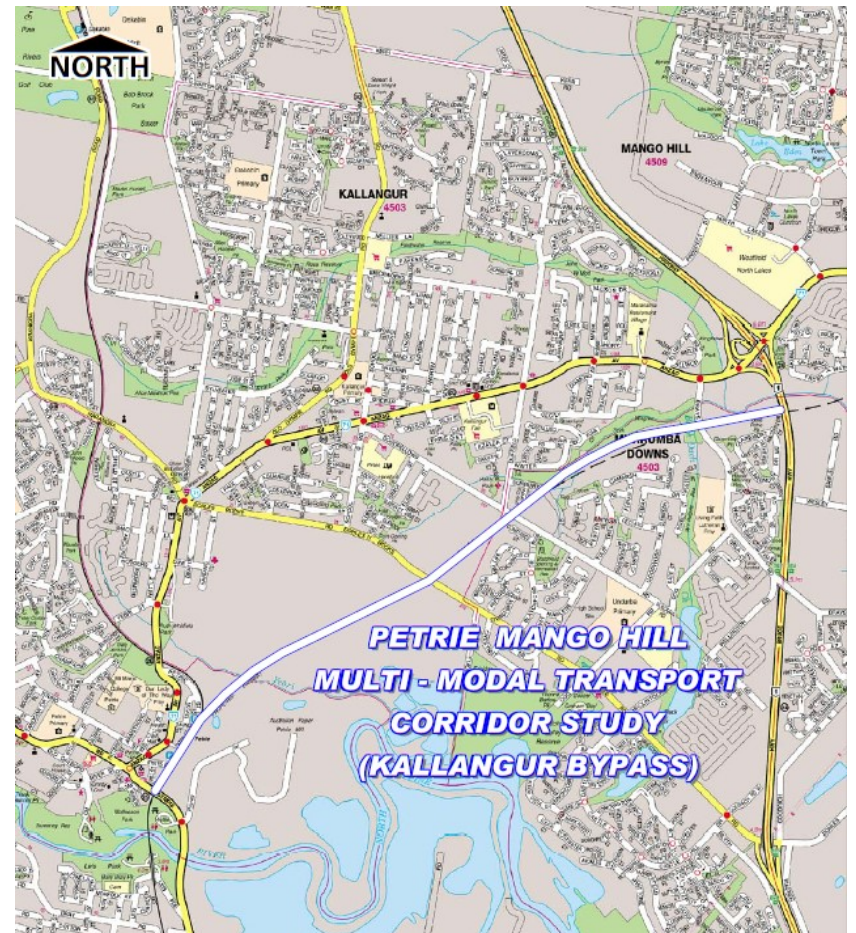
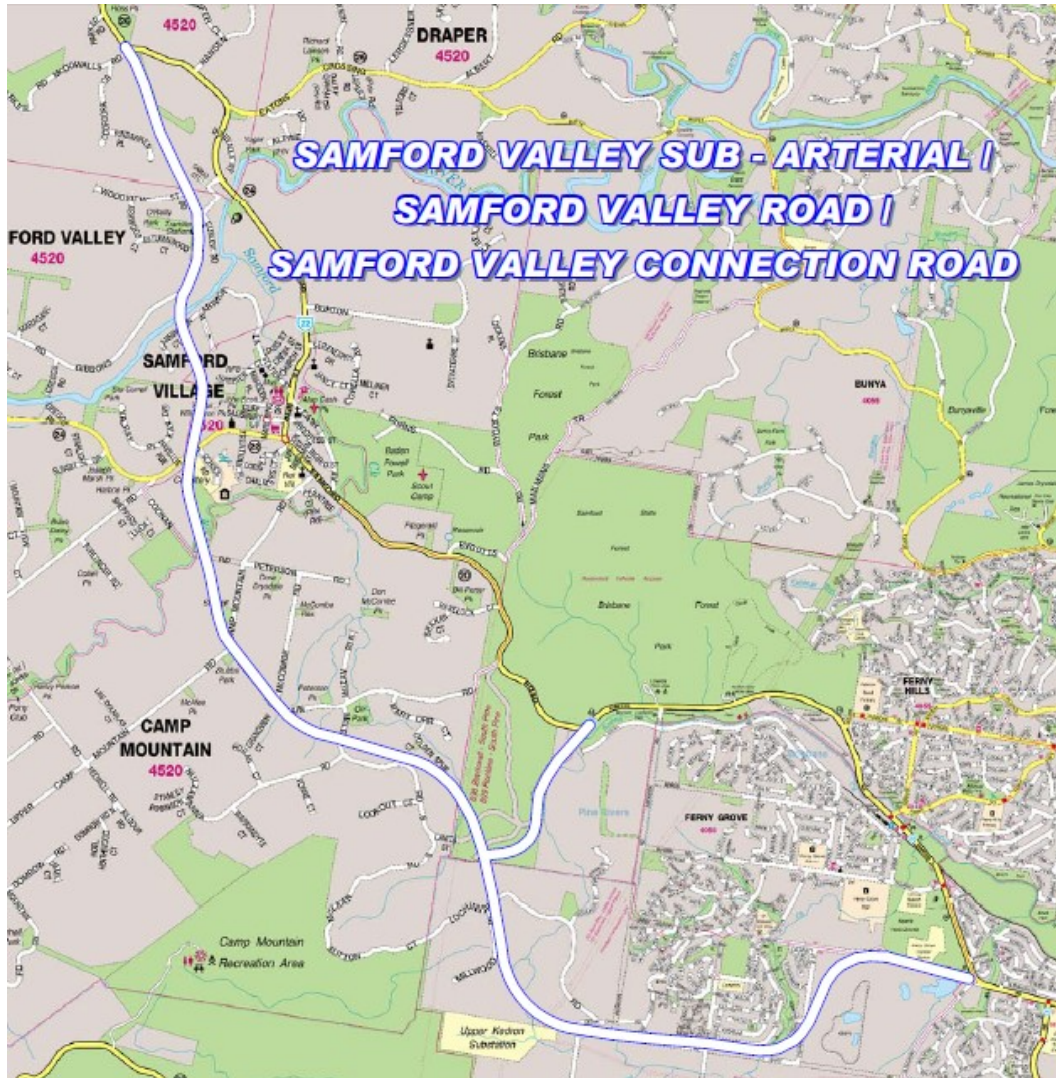




Here are another 3 traffic corridors with Queensland Transport proposals for them. One is a new road connecting Ferny Grove with Samford Valley using the flatter land to the south before heading north.

The second is a Goodna Bypass which seems highly ambitious to me with 4 bridges which would cost \$1 billion alone to construct. It would, of course, be nice to have a bridge at Moggill to finally replace the ferry. Much of the need for this road was made redundant with the 2009 expansion of the Ipswich Motorway.

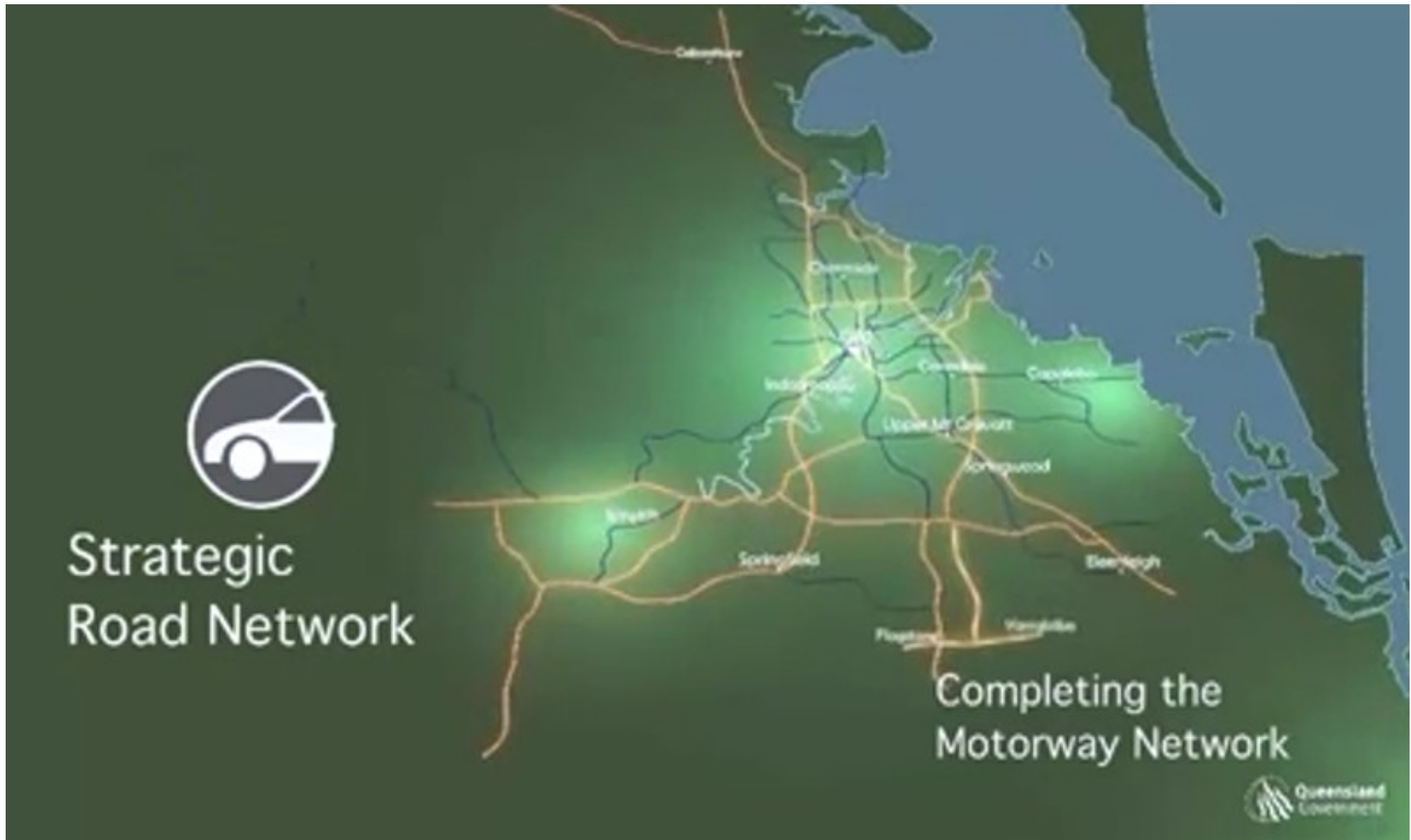
The last one here is a Petrie to Murrumba Downs bypass. This corridor will include the new railway line to Kippa-Ring, though the government here has indicated a road beside it as a possibility.





**MORE ROAD PLANS**

The following screenshot comes from the Queensland Transport's Connecting SE Queensland 2031 video. In addition to the roads previously looked at there are a few others noted here. There is a road plan for connecting the Warrego Highway with the Cunningham Highway at Amberley. There is also an extension to the Gateway Motorway from the Logan Motorway down and then splitting off towards and connecting the new "Springfield-like" developments at Flagstone near Jimboomba and Yarrabilba to the south of Waterford West along Logan Reserve Road.



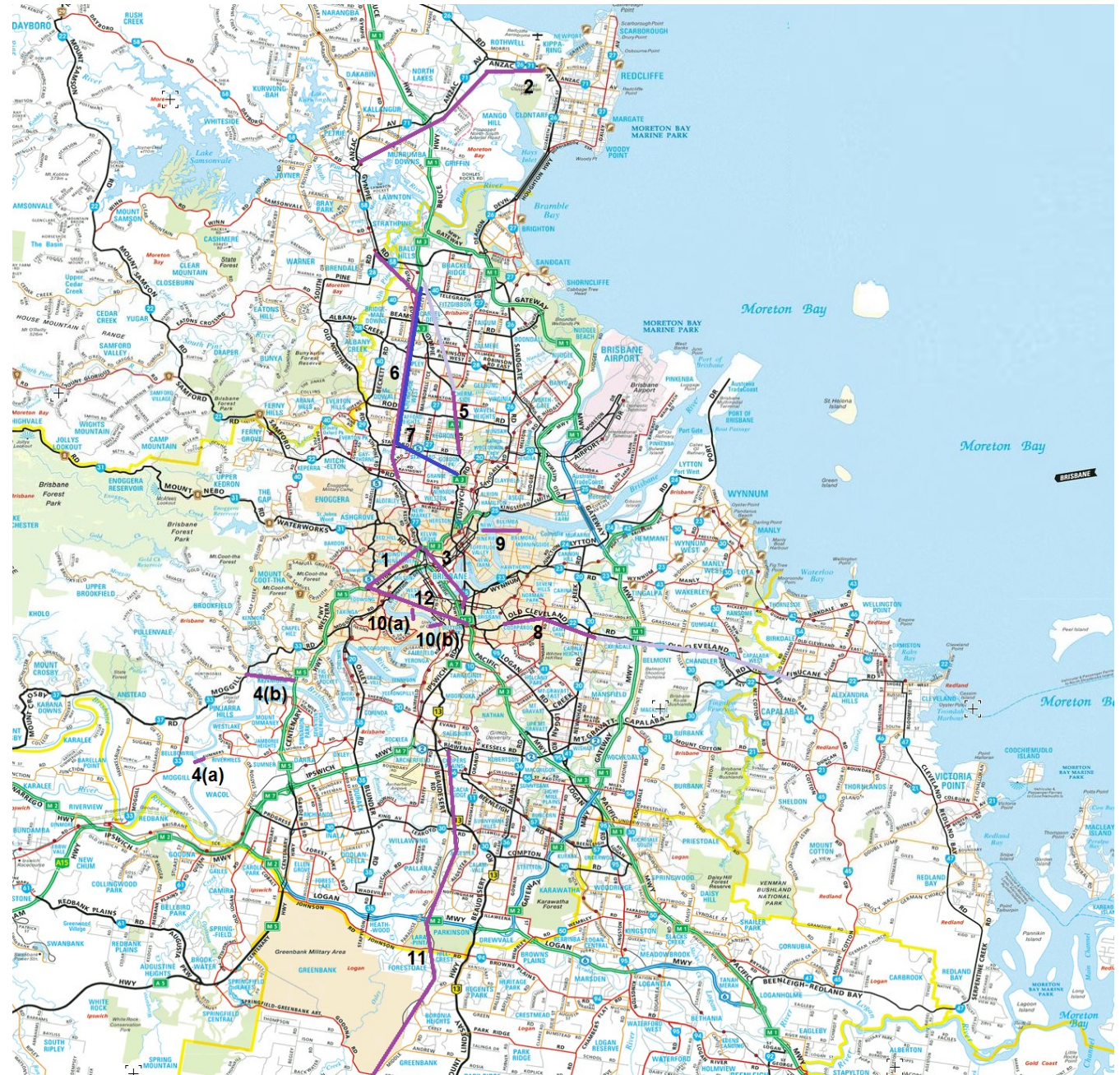


# MY TOP RANKED INFRASTRUCTURE PROJECTS

I rank below my top 12 road and rail infrastructure (excluding subway and tram) projects for Brisbane:

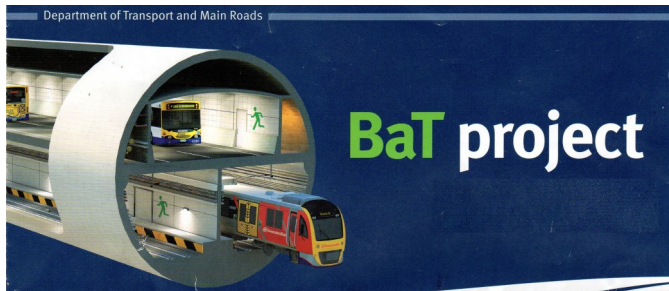
- 1] **Legacy Way (under construction now).** Unlike the CLEM7 and Airport Link tunnels this tunnel has very poor free alternatives in Milton Road and Coronation Drive during peak hour traffic and is badly needed for our western suburbs who have benefited little from the massive amount of infrastructure built in the last decade.
- 2] **Petrie to Kippa Ring (Redcliffe) rail line (under construction now).** Overdue for 100 years. Enough said.
- 3] **BaT tunnel.** Vital if we are to have more running trains in peak hour to the Southside lines as well as dealing with the bus congestion on Victoria Bridge though many of these could go over the Captain Cook bridge now.
- 4] **BaT tunnel. Belbowrie Bridge or Kenmore Bypass.** Needed to free up the massive peak hour bottleneck through Kenmore.
- 5] **Northern Busway (to Chermside especially).** This will revolutionise bus travel on the northside the way the SE busway has done.
- 6] **Alderley to Strathpine rail line.** This will revolutionise rail travel on the northside in the north and north-west.
- 7] **NW Freeway and Airport Link-Everton Park tunnel.** This will create a northern freeway all the way from the City through to the Bruce Highway without any land resumptions.
- 8] **Eastern Busway (to Carindale especially).**
- 9] **Newstead to Lytton Road under river tunnel.**
- 10] **West End-St Lucia Bridge or open Eleanor Schonell bridge to car traffic until Toowong-SE Freeway tunnel is built.**
- 11] **Salisbury to Flagstone rail line.**
- 12] **Toowong to SE Freeway tunnel.**

Additionally, the bottleneck on the SE Freeway at the Eight Mile Plains bus station needs to be corrected. With the new bus tunnel under the Gateway Motorway a third lane can be returned all the way to where the SE Freeway connects with the Gateway Motorway going south. Also, with Legacy Way being built the Council needs to fix the problem where, if coming from the City, you have to suddenly cross two busy lanes within 50 metres to turn right to go up to Mount Coot-tha or else find yourself on the Western Freeway. One last thing I think is needed is a southbound off ramp from the Inner City Bypass at Bowen Hills near Queensland Newspapers.





## THE BaT TUNNEL



## About the project

The BaT project is a proposed new five kilometre north-south tunnel that would deliver rail and bus together in a world-first design.

It combines a railway and busway in a single, double-decked, 15-metre-wide tunnel beneath the Brisbane River and Brisbane's central business district (CBD).

The BaT project would run from Dutton Park in the south to Victoria Park at Spring Hill in the north with new underground stations at Woolloongabba, George Street and Roma Street. The project would also include an upgrade of the existing Dutton Park Station.

The project tackles Brisbane's major public transport capacity challenges—the Merivale Bridge, the Cultural Centre bus precinct, Central Station and the Captain Cook Bridge.

## BaT essential for South East Queensland

The Reference Design and Environmental Impact Statement (EIS) for the BaT (Bus and Train) project are now available for public review.

Following the release of the draft design in March 2014, more than 3,000 people participated in an extensive community consultation program.

Community feedback and the results of further technical studies have helped shape the Reference Design, with Dutton Park Station to remain open at the southern portal and a significant decrease in the permanent impacts to Victoria Park at the northern portal.

The BaT project is an affordable, efficient solution that brings together separate cross-river projects to expand the rail and bus network. It is projected to cost about \$5 billion – \$3 billion less than the combined former proposals.

The BaT project is essential for the region. Extensive environmental, transport and economic studies undertaken as part of the EIS demonstrate that the project's long-term regional benefits significantly outweigh any short-term construction impacts.

By providing a new underground rail and bus network right through the heart of inner city Brisbane, BaT doubles rail and busway capacity across the Brisbane River. It means thousands of commuters across South East Queensland would enjoy faster, more frequent, direct and reliable trips into the CBD every day.

Importantly, under the Reference Design, no surface residential properties would be acquired to build the BaT project.

The Queensland Government will continue to seek input from the private sector about innovative ways to deliver the project. Subject to Queensland Government approval, early construction work could begin in 2015, with major construction starting in 2016. The current plan has construction finishing in 2020, with the BaT tunnel operational in 2021.

The BaT Tunnel is the latest incarnation of the Cross River Rail project spurred by the need to increase the number of rail services restricted by having only one inner city railway crossing over the Brisbane River in the Merivale Bridge. The revised plan involves a 14.8m external diameter 5.4 km tunnel to accommodate both a dual track rail line on the lower level and a two lane busway above. The cost is expected to be \$5 billion with construction, earlier proposed to start in 2015 and completed by 2021 though now it will be delayed further.

The latest plan commences in the vicinity of Dutton Park station, with 2 new underground stations at Woolloongabba (where the Government printing office is) and George Street, adjacent to a proposed casino site. The George street station is proposed to be built 48m below 63 George Street building on the corner of George and Mary streets.

The tunnel will connect with Roma St station and then surface connecting to the Exhibition loop near Bowen Hills. The Underground stations will also be busway stations. The southern end of the busway is proposed to connect directly to the existing Eastern Busway, with the northern end to connect to the Northern Busway via a bridge over the railway and Inner City Bypass. Only hinted at so far, in my opinion, the BaT tunnel needs to connect with Legacy Way when completed to service the western suburbs properly.

The BaT tunnel will also allow Batman to have much quicker access through Brisbane as well in his Batmobile.

## More services, more choice

The BaT project would boost the capacity of the public transport network and reshape it to meet the region's growing and changing travel demands.

## More fast, frequent and reliable services

The BaT tunnel doubles the capacity of the rail and busway networks across the Brisbane River, catering for demand to 2031 and beyond.

With the BaT project in place in 2031, an additional 12 peak hour rail services would be provided across the Brisbane River. The project would also double busway capacity from the north and south into the CBD.

BaT bus services would have reliable travel times, with an underground, congestion-free route through the CBD.

Trips would be faster and more direct meaning Brisbane commuters can get home to their families faster.

## More inner city stations

The three new combined bus and rail stations at Woolloongabba, George Street and Roma Street would diversify public transport options available to commuters, students and tourists.

The southern CBD (including the QUT Gardens Point Campus, Queen's Wharf Brisbane and the government precinct) would be connected to the high-frequency public transport network, with travel time savings of up to 15 minutes from stations between Beenleigh and Kuraby.

By offering better access to the CBD by bus and rail, most of the CBD would be within a 10-minute walk (93,500 passengers per day are expected to use the new George Street Station in 2031).

## More interchange choices

The new Woolloongabba and Roma Street stations would become major interchanges, each servicing a different side of the river, allowing passengers to easily transfer between bus and train services.

Local services would run from these hubs, giving the community more direct, frequent links to hospitals, sports stadiums, universities, shops, parklands and workplaces.

## Reduced overcrowding

BaT would result in a significant reduction in overcrowding on the Gold Coast/Beenleigh Line.

It would also reduce overcrowding on bus services across the Brisbane River and reduce passenger congestion at Cultural Centre Busway Station and Central Station.

## Reduced congestion

The South East Busway, Captain Cook Bridge and Victoria Bridge would experience less congestion.

By diverting some services to the BaT tunnel, there would be 150 fewer buses on busy city streets during the morning peak.

The BaT tunnel would also open up capacity for train lines using the Merivale Bridge including the Cleveland Line.

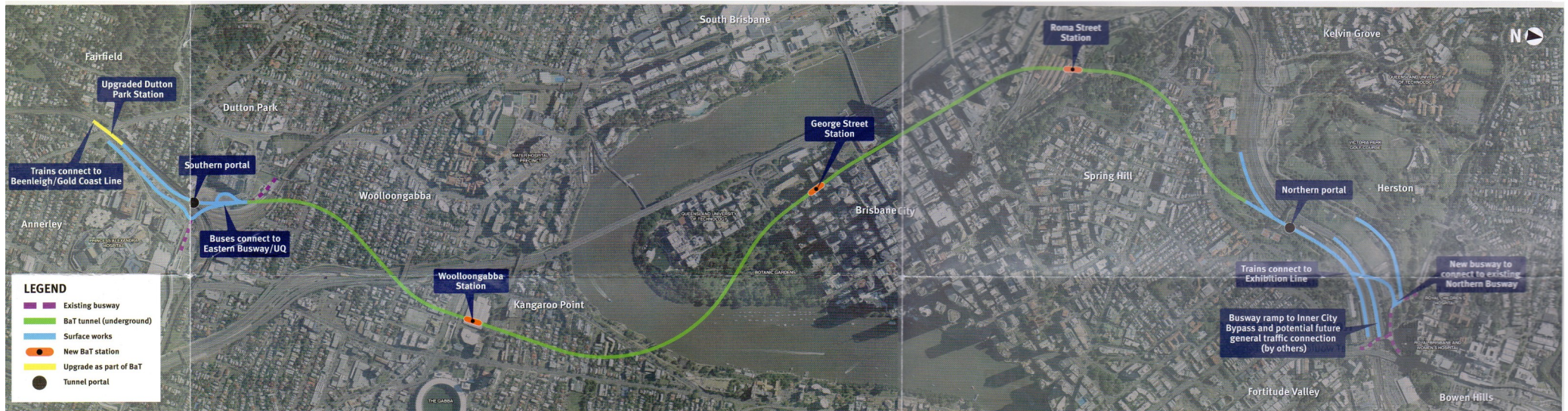
There would be 80 million fewer private car kilometres (per year) in 2031 as more people make the switch to fast, frequent and more reliable public transport.

**4min**  
**QUICKER**

**CBD bus trips from**  
**Bracken Ridge, Aspley,**  
**Lutwyche and Chermiside**

**9 EXTRA**  
**each hour**  
**FROM GOLD COAST**  
**in the morning peak**

**1600**  
**jobs during**  
**construction**

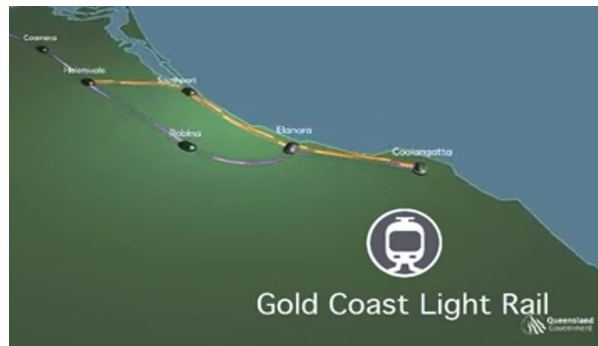




## NEW RAILWAY LINES

The following screenshots comes from the Queensland Transport's Connecting SE Queensland 2031 video. We see here the government plans for future railway lines. Though not completely shown here in the first screenshot, the government intends to eventually extend the Gold Coast heavy rail to Elanora and eventually all the way to the Gold Coast Airport. The Gold Coast Light Rail so far has been a big success stretching from the University behind Southport to Pacific Fair at Broadbeach. It is planned to extend the line northwards to Helensvale rail station and southwards all the way to the Gold Coast Airport. There may also be a branch line from Broadbeach to Carrara stadium and onto Nerang rail station. On the Sunshine Coast there are plans for a new line from Beerwah to Maroochydore which, like the Gold Coast, may be supplemented with light rail from Caloundra up to Maroochydore and possibly beyond.

In Brisbane work has commenced on the very long-awaited Petrie to Kippa Ring (Redcliffe) line due to completed in 2016. A new rail line is also planned from Alderley to Strathpine along the government owned NW corridor. This would make for a much more direct line up to Strathpine, Caboolture and beyond. The interstate line from Salisbury is planned to eventually be upgraded to include a new passenger line through Greenbank near Browns Plains and down to Flagstone near Jimboomba. The branch line to Springfield was recently completed and there are also plans to extend the Ipswich line from Ipswich to the new township of Ripley to the south of Ipswich.





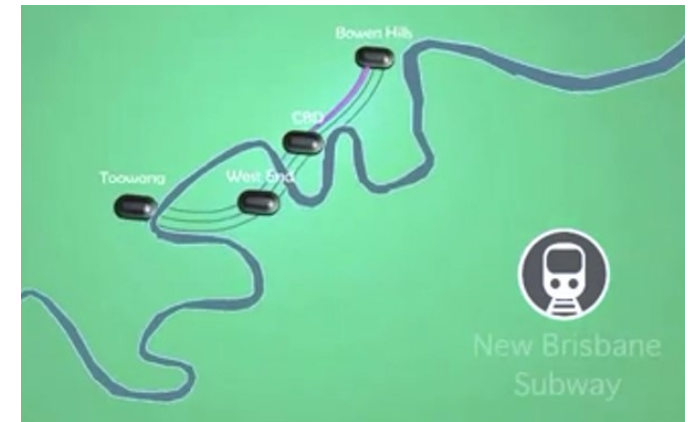
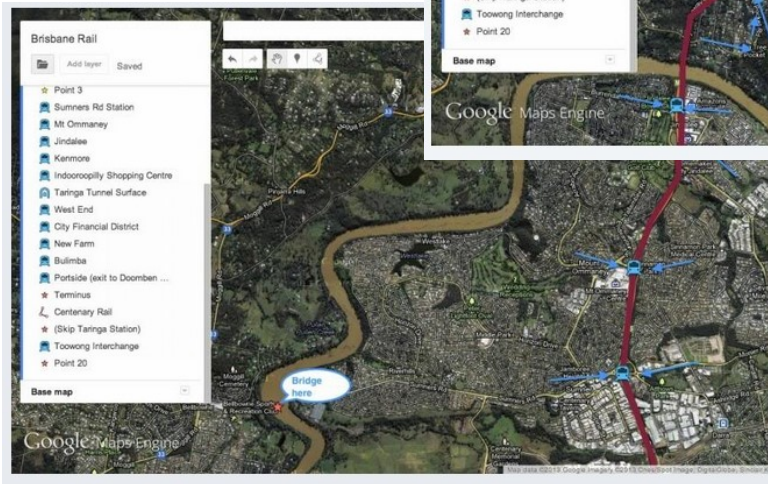
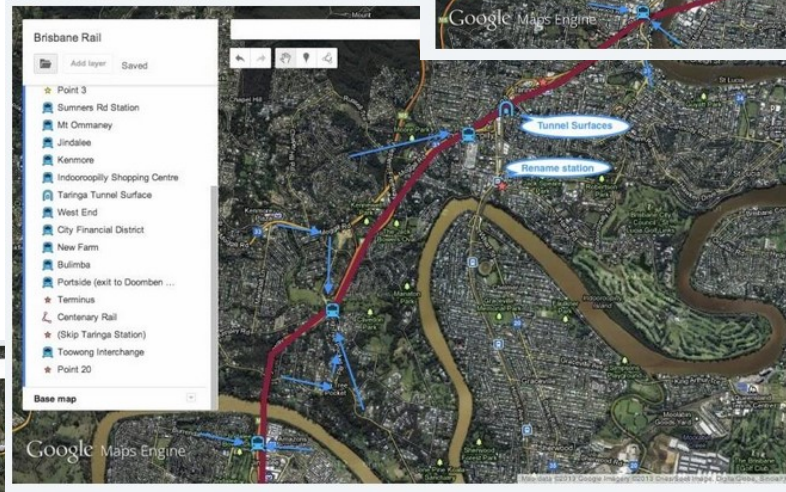
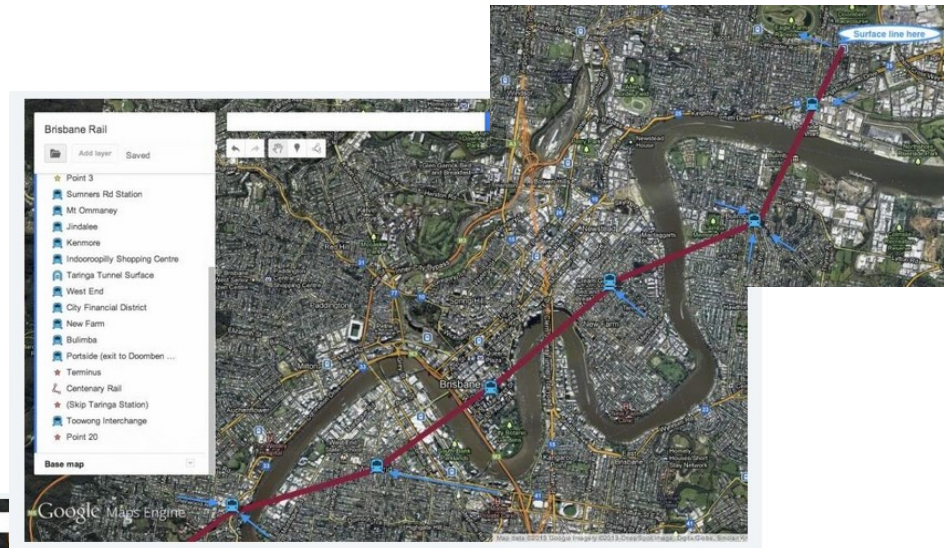
# CENTENARY RAIL AND SUBWAY PROPOSALS

One area not serviced by either current or future proposed rail lines or busways is the western suburbs. It was originally intended to have a rapid transit busway to the western suburbs but those plans seem to have been shelved.

One proposal floated on a railway forum that I found on the internet is the proposal shown below for a centenary railway line. This map shows it going along the Centenary Highway and over the Centenary Bridge and then along the Western Freeway before breaking off to connect and cross the Ipswich Line at Indooroopilly rail station. From there he envisages it going underground in a similar but expanded path as that proposed by the Bligh government with its suggested subway proposal (bottom right map).

Like the Bligh proposal it has underground stations near the Toowong rail station, West End near its shopping precinct, the City near the George Street station with the BaT tunnel but then goes off in a more easterly direction with stops at New Farm, under the river to Oxford St in Bulimba and then back under the river to Hamilton and connecting with the Doomben line.

It's an ambitious idea and probably won't be something the government would do. A busway is a more likely option they would take to service the western suburbs who do need to be serviced with better public transport.



I like the subway option, though I can see the government balking at the cost. If a subway was to go ahead I would like to see stops at:

- Toowong
- West End
- George St (BaT tunnel station)
- Riverside Centre,
- New Farm (preferably near the intersection of Brunswick and Barker Streets)
- Gasworks at Teneriffe
- Oxford St, Bulimba
- Hamilton to then connect with the Doomben rail line.

I would also like to see a subway line from the Riverside Centre to Central station and then to Roma Street to create an underground city circle line like they have in Sydney which is fantastic for getting around the CBD.



## BRISBANE LIGHT RAIL

I was born in the year that Brisbane's tram network closed in 1969. Having travelled on trams in Europe as well as Melbourne and recently the Gold Coast's new light rail, I can empathise with older generations who remember Brisbane's trams with great affection and long to see their return in Brisbane. The last serious effort to bring back a tram network to Brisbane was during the Borbidge government in the 1990's. Below left is the preferred light rail network proposed by the Tramway Museum at Ferny Grove.

The South East Queensland Integrated Regional Transport Plan 1997 recommended a 75 km, 65-station network of busways rather than light rail to be constructed in Brisbane in order to provide a rapid public transport system to areas of Brisbane not served by the existing heavy rail network. It recommended 5 busways to service the south-east, north, east, west and south-west suburban corridors. Only the first 3 busways were built with the west and south-west corridors missing out. Funding allocated for the light rail from West End to Teneriffe was reallocated to the busways.

One good thing that has been confirmed to me by someone who worked in the Council's planning department is that the busways were designed in a way that they could also accommodate light rail should the government ever decide to do so. As light rail has much greater capacity than buses they would excel on the busways. Even with buses, the government has decided in its Connecting SEQ 2031 plan to have more services that run just along the busways and have many services that run from the City just run from the nearest busway station to the area that the route mainly services.

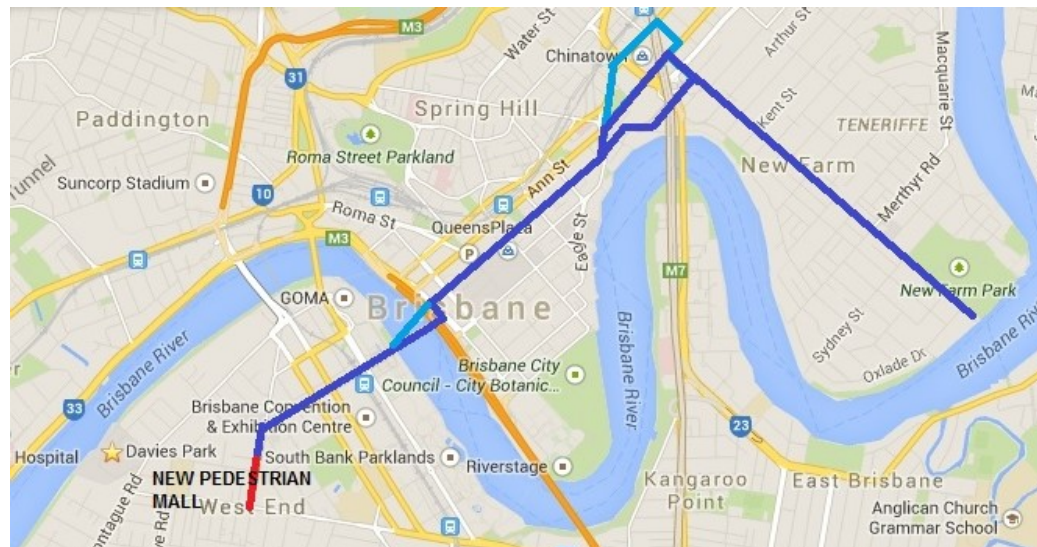


This means a little bit of inconvenience having to change buses but studies have shown that the overall waiting time for the total journey is significantly reduced. Passengers will get used to it just as commuters do on the London Underground. Light rail would be perfect for the high-frequency, high-capacity services that would need to be run on the busways.

As a tourist attraction I would certainly love to see a light rail service between West End and New Farm. The government would probably balk at the cost (which would include a tram workshop) and the traffic complications to do so but it would be great to have a tram line in Brisbane and there is momentum for it following the success of the Gold Coast Light Rail.

It would also present an opportunity to create a pedestrian mall in the main West End shopping precinct on Boundary Road which would be a great attraction. Starting from there it would go along Melbourne St and over Victoria Bridge (assuming it is strong enough to cope with trams) and then turn into Adelaide Street (a difficult couple of turns which would be alleviated by a proposed Adelaide St bridge).

The original tram lines are still buried under bitumen on Adelaide St which could be closed to just buses and trams. Where it gets tricky is getting through the Valley to New Farm because of the Brunswick St Mall. I favour widening the Ivory St tunnel for New Farm bound trams. Along Brunswick Street down to Sydney St would need to be closed to parking so there is a lane each for cars and the trams. Past Sydney St to New Farm Park there could be parking again and the other lane shared between cars and trams.





## THE FUTURE OF PUBLIC TRANSPORT — SKYTRAN

One very exciting new technology that may revolutionise public transport in the years ahead is SkyTran. The technology was developed by NASA's Ames Research Center in California partnering with nearby company SkyTran.

The game changer about this form of personal transport system is that it is estimated to cost less than 1/10th of the cost per kilometre of any competing transport network such as highways, rail, busways and light rail networks.

Two things combine to make that huge cost saving possible. The first is the passive magnetic levitation technology developed by NASA. It is an improvement on previous maglev technologies like the bullet train as the magnets are not in the track but in the vehicles only. There are only coils in the track and as vehicles pass each coil it induces a magnetic current which lifts the vehicles so it glides above the track with zero friction which allows it to move much faster. Like the bullet train it can go at high speeds. While the speed can be adjusted, the top speed possible is 250kph.

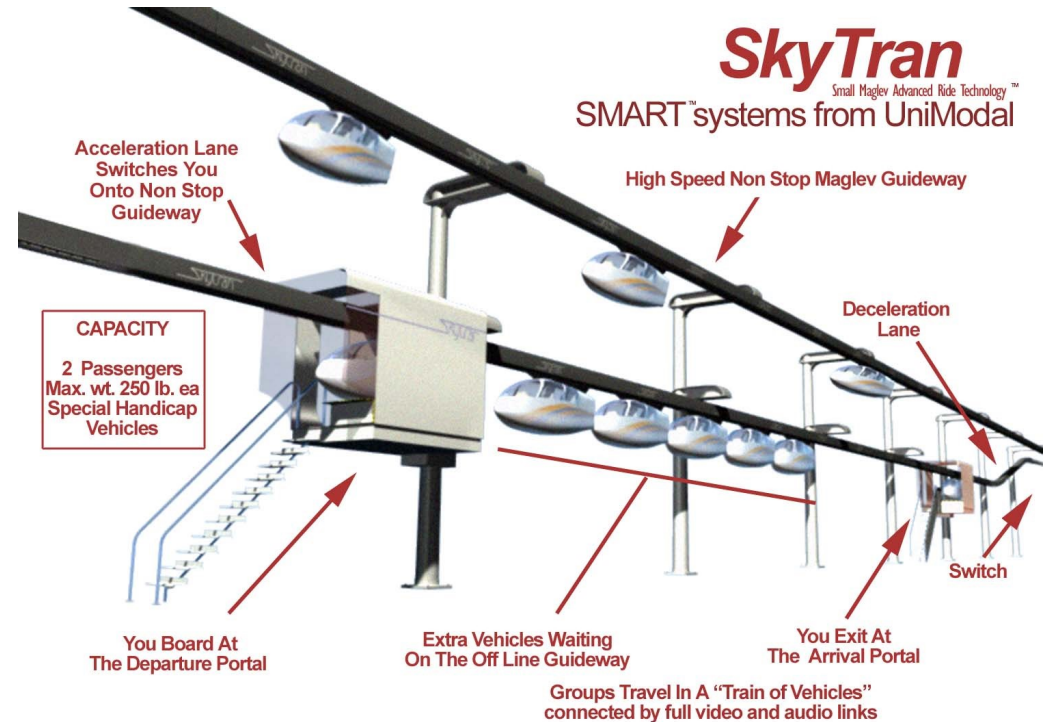
Energy is just needed to get it started. It is like a puck gliding after you hit when playing air hockey or if you tap it over an ice rink. They envisage solar panels along the track to almost have a net neutral amount of energy required to power the movement which dramatically reduces the running costs.

The second thing which reduces the cost of installing the network is that the majority of the network consists of identical sized metal poles and aluminium track lengths that are connected together like lego which can be pre-fabricated and mass produced. Not only does this reduce the cost of installation this also means an entire network of cable track lines can be installed very quickly reducing labour costs.

It is like a high-speed cable car network that can be developed initially as branch lines but further on down the track can then be expanded into every street much the same way that electricity is fed into every street by poles and cables.

This system has some great advantages:

- You can book a vehicle ahead or turn up and an empty vehicle is available immediately or shortly thereafter. You don't have to follow timetables and you can go when you want to go.
- You don't have to stop at other people's stations. There's an off ramp when someone ahead of you needs to get off and you go straight past them. There is also potential to have dual tracks (one fast and one slower).
- You don't have to be crowded in with others like you do on a bus or train. Each 2 person vehicle is private and comfortable.
- With such low installation and running costs this form of public transport will be quite cheap and the savings will encourage further expansion of the network which will decrease the distance people have to go to get to a departure portal.
- The computer software is highly advanced allowing the unpiloted vehicles to travel safely avoiding traffic accidents and allowing passengers to watch TV privately or work on their PC while they travel.
- There is no pollution generated by the network.





I am a little unsure of how many people per hour past any given point it will do compared with the number of people moved by cars on a highway or by trains. This is the one concern that I haven't seen hard figures for comparison. It would, at least, be close and it would certainly be more comfortable and faster at an individual level.

Some other concerns I have is having room for lots of luggage given they are two seat capacity. What about mothers who are carting around a tribe of kids? And what about disabled passengers in wheelchairs? There are other forms of transport that can accommodate these concerns but, for the vast amount of people this will be a fantastic way to get around and get quickly where you need to go at little cost.

Testing is soon to be done in Tel Aviv who's government are interested in developing it across their city. Other city governments will, no doubt, be interested in how well it develops in Tel Aviv.

In Brisbane, the first places where branch lines could be developed is in the western suburbs which are not served by either heavy rail or busways. The more the network would expand the less people will feel the need to drive their cars to work given it will be much cheaper to go by SkyTran than the cost of petrol to drive. I see no reason why SkyTran can't also be a cheap and very fast inter-city form of transport as well to the Gold Coast (20 mins) and Sydney (4 hours).

It will be truly a revolution when SkyTran takes off around the world decreasing the need for cars and other forms of public transport over time. The sky truly is the limit!

It has been an exciting glimpse into the future. Brisbane has a very rich history and it certainly has a very promising future as well!

