

# **SYDNEY'S NEW TRAMS:**

**HASTE MAKES WASTE,**

**OR AS GRATTAN SAID,**

**THE COSTS OF**

**NEGLIGENCE & REFUSAL TO LISTEN**

**PART 1 OF THE**

**SAVE SYDNEY SUITE**

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Sydney is at re-decision point with red alerts over tram, Metro and heavy rail, and road projects, as well as Powerhouse, stadium and WS City Deal, all having adverse implications for

- financial probity and due diligence
- the credibility of employment, housing affordability and congestion policies, and
- many community and infrastructure “*unintended consequences*” resulting from failed “*pre-planning*” – or “*ideology & stupidity*” in the Prime Minister’s parlance.

Sydney is sliding down the World City scorecards. Even the Inland Rail Bridge is at risk from metropolitan blunders.

Sydney was one of the world’s great “tram cities” and should be expert in understanding them. *Wrong*, trams might be a small part of the metropolitan transit strategy but both governmental levels have made them politically explosive:

- the CBD & Eastern Suburbs tramway \$3 billion fiasco will be on the front pages for the next two years, that can only be eased not avoided; but
- the Parramatta, Green Square and Newcastle projects and “contra-gaps” elsewhere are also percolating, with
- better options waiting for sensible consideration having different risks.

We might learn much from our tram mistakes so as to force realisation of the need to “*pause and think*” across the metropolitan board.

**HISTORY**

Sydney had one of the greatest networks of trams in the world, but it was flawed through over-centralisation on a congested CBD and dangers to conductors, passengers and bicycle-riders. There were calls to “underground” them from the 1890s and the Improvement Commission recommended in 1909 they be removed and sent as “feeders” to the suburbs once the even more powerful spine of electrified railways was implemented. Their removal from the 1930s to 1961 has been consistently misrepresented by panglossians.

The massive crowds that used to go the cricket and football in the “golden age” of public entertainment created the legend that only trams have the capacity to handle such loads. This “myth” was dispelled by the 1948 Sinclair expert group which pointed out that tram capacity was restricted by the small number of routes available, while buses were more flexible. The bus transit time between Central Station and the Showground was about one-third that of the trams, and the differential was even greater during the biggest events. This was confirmed by the last Chief Planner in the Tramways, Rob Forbes, to the current analyst when the latter was preparing his “*Fall of the Giant*”<sup>1</sup>.

Those lessons were quickly forgotten. Mythology dominated such efforts as Ecotransit’s tram under Botany Bay and Clover Moore’s multiple reports; with technological change producing a counter-case for modern Bus Rapid Transit especially from US, South American and European exemplars. Whatever, tram projects are now causing serious contention in Sydney, with the innercity and Eastern Suburbs system blowing-out in costs and timeframes as well as retail, traffic and neighbourhood damage.

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<sup>1</sup> I lived on Campbell Parade from 1952 to 1968 and remember the trams and the post-tram transitions including Atlanteans. As well I am a primary historian of trams in Sydney – see my “*Fall of the Giant: trams versus trains and buses in Sydney 1900 to 1961*” in G Wotherspoon (ed.), *Sydney’s Transport* - and have studied them and BRTs across Australia, Europe and North America, and so on. Trams are still trams just as buses are still buses, trucks ditto.

The re-introduction started with an aborted effort by Milton Morris in 1974 followed by the Planning & Environment Commission at the time the Monorail replaced it, a Scully-appointed “plan” by the Public Transport Advisory Committee in around 1999 followed by a feasibility into a CBD extension in 2002 (and O-bahn or tram in the F6 corridor), then a series of reports commissioned by the new George-St-based Lord Mayor, Clover Moore, from 2004.

Then, Lord Mayor Moore and Premier Keneally, with PM Gillard watching, signed a pact six years later, leading to 2012 (below). Andrew Clennell wrote in the *Daily Telegraph* on 2 June '15,

*... with the Coalition in charge, it appears transport has the ability to again scotch the chances of leadership hopefuls... The spectre of light rail on George St has the potential to end the future run for premier for two potential successors to Mike Baird – former transport minister Gladys Berejiklian and incumbent Andrew Constance.*

The Liberal mayors of Waverley and Woollahra collaborated in a “Bondi Road” scheme (below), which was doomed to fail on logical grounds, it being a classic case of the PM’s label “ideology & stupidity”. (A Lend Lease heavy rail to Bondi Beach proposal failed in the late-1990s, due inevitably to geography.)

Such is the disorganisation, the bureaucrats who capture politicians are now talking about bringing the Anzac Metro back in the southeast catchment, falling over their distant cousins (in the same TfNSW) who are building trams which rocketed from \$0.5 billion to approaching \$3 billion and which will have lower transit performance and customer service levels than the bus routes they replace!

Tram fanatics urged fast commencement, which was granted, meaning no competent “pre-plans” covering engineering, routes and technologies (feasibility testing), community or financial parameters were done as Grattan discussed (below).

Max Moore-Wilton, then and now a leading Board member on Infrastructure NSW, commenced the BOF push in early July 2011, when he:

*... told Barry O'Farrell to just get on with building light rail from the CBD to Randwick after the Premier squibbed on a decision. Mr O'Farrell instead ordered a feasibility study into the \$1 billion project... "It's a project where people would see an improvement quickly and see the O'Farrell government was focused. I don't think we should do massive studies and all the rest..."*

He should have known that a century ago, George St was Sydney’s drain, lying at the bottom of the eastern and western hills; as the road workers found when they dug up the pavement. It is too wide, has too many heritage and glass facades to fix hangers to, and has smart poles but we’re putting back the poles that were a traffic hazard. The then Planning & Environment Commission was firmly against George St for these reasons.

But no, slap-dash prevailed and the costs escalate still! (The ABC and SMH were provided with photos and background at the time but none reported the extreme risks until it was too late, and even then, unmemorably.)

Trams were known as “cyclist killers” for catching wheels and throwing riders off the handlebars (as happened in Melbourne to Professor H.E.), but the geni didn’t think of that when they encouraged cycling in the ES/CBD corridor.

Our Prime Minister added his enthusiasm in June 2012:

*There is a blindingly obvious opportunity in the eastern suburbs in my electorate ... We do not need new rail lines to every new suburb. What we need in Sydney are some rail lines built to the old suburbs that used to have very workable, very effective light rail lines. Gladys Berejiklian is offering real hope for the first time in decades for public transport in Sydney and, in particular, light rail in my electorate.*

That affection continued through various projects including when they turned sour. The PM extended his interpretation in Parliament in March 2012, from his website:

Last year was 50 years from the day that the trams that ran out along Anzac Parade to the eastern suburbs—out to La Perouse, out past the showground, out past the cricket ground and the racecourse, and of course out where the University of New South Wales is now—were closed by a Labor government.

*Sir Thomas Hughes was not Labor and in the early 1910s Bradfield suggested cutting back the tram network. It was Government policy from 1913 to underground city trams because of the dreadful congestion they caused. Two major expert reviews from the late 1920s produced parallel conclusions to 1909's. The first major conversion (Manly) was in 1939 under a Coalition Government (Stevens then Mair). Labor's Lang tried to keep the trams going.*

(Bob Carr) could have done something for sustainability, something for public transport and something for his own constituents, but he chose to neglect all of those people and objectives.

*Disagree, trams are the most energy-expensive of all transit modes (cost/capacity) on a life cycle basis and rely on coal-fired power stations unlike buses which use recycled cooking oil and like bio-fuels (Euro standards). Trams' service standards are lower than buses'.*

The CBD & Eastern Suburbs experience was echoed by the then Minister for Roads who was reported in November 2015 as declaring of a tram link from Parramatta to Olympic Park,

*We will be having light rail, that will be coming through this sector. We've got heavy rail here already.*

Exactly – as at Green Square, the options related to connectivity as opposed to rail and tram point-to-point trunk routes were ignored.

The Gold Coast's tram was regarded as successful albeit the option of extending the rail from Robina back towards the Brisbane CBD along a coastal alignment had been downplayed.

Greiner's iNSW set an indicative cost of \$500 million based on the Gold Coast and that was used by Berejiklian. TfNSW blew out the cost to \$1.2 billion then \$1.6 billion thence \$2.1 billion, with it now heading towards \$3 billion. Their false claims of extended scope were disproved by the Auditor-General. Grattan found the CBD/ES case so objectionable that they did a project-specific report on it. Their finding was:

*The current guess-and-check approach to planning multi-billion dollar investments is negligent...*

Crikey's New Urbanist had thought in November '16 that the tea leaves were propitious (while noting the quoted cost of \$16 billion "looks a little optimistic"):

*Some of the many new light rail projects completed, under construction or proposed throughout the world are of questionable value. We should be wary of any project to replace one form of public transport with another.*

*We should also be wary of opting for high capital and relatively inflexible rail-based solutions unless the circumstances are appropriate.*

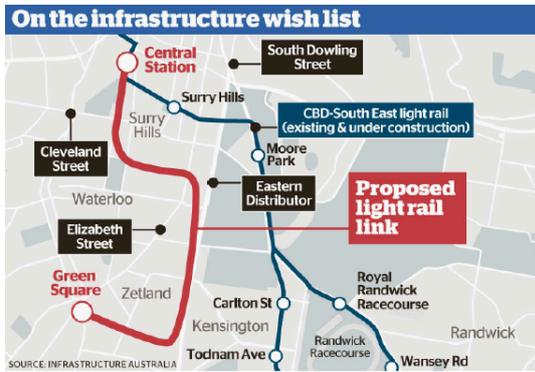
*However subject to the business case being tested, this looks like one of those cases where light rail really is the right way to go.*

The mix of bus and trams was confusing and defied the PM's own disliking of "anachronistic spatial determinism" and promise that "there's no place for ideology". It led to a similar lackadaisical approach to WestConnex and Metros, with catastrophic consequences. (There could be no better example than the "Bondi Shooter" as the corridor from Denham St to the bridge on Campbell Pde had been built-over and half of Bondi Road would have to be demolished.)

Green Square is worth a look. iA has made mistakes in every report it has published on Sydney, including pushing the West Metro to "business case under development" as soon as Baird announced it even though it had not been through Stages 1 and 2 of iA's own guidelines. The SMH published "Light rail link to Green Square among nation's top priorities" on 17 Feb '16:

The Turnbull government's top infrastructure adviser has put the need for better transport links between Sydney's CBD and Green Square among the country's top infrastructure priorities....

- It may be "top" of a house of cards
- iA forgot to mention 2 rail stations when it said "unserved", it is CBD-centric. It refused to revise after that blunder was pointed out on a petard



In heaping pressure on state and federal governments... The government adviser has named as a top priority the need for a "high-capacity, rapid transport link which could be bus or light rail" between the CBD and the "unserved parts of the area"... the link could eventually be extended further to Mascot, Rosebery, Sydney Airport and Port Botany

Until July, the City of Sydney Council had found little government support for its repeated calls for a tram line through the area.

Infrastructure Australia chairman Mark Birrell said NSW was best placed of any of the states to complete transport projects because it had pursued reforms such as electricity privatisation.

- Southern extensions bely Anzac Metro
- No link to east, no acknowledgement sighted of east/west congestion especially the critical path from/to Bondi Junction/Randwick and Newtown
- "Little government support" was reversed by vulnerability during the greyhounds fiasco as well as revelations of how far John Brogden's UGNSW had pushed densification – but the capacity/load issue was not dealt with as a PR blitz, not an engineering challenge
- CoS covers half of Newtown but neglects it, its CBD focus inhibits non-CBD strategies
- "Or bus" was forgotten in this map and Railways are omitted, walking distances are not mentioned
- Bus or light rail should not have been pre-selected without consideration of all options including cycleways, PRT and moving walkways in line with iA's first and greatest Chairman, Sir Rod Eddington.
- Birrell was wrong as was often the case - \$15.9 b in proceeds, \$100 b committed = NSW is worst placed because it is incompetent

It can be added that the "Central Industrial Area" was converted into a residential and retail zone by happenstance from the mid-1980s. The loss of engineering and manufacturing SMEs to the west has had ongoing implications for close accessibility to essential services of the eastern and inner suburbs. Then Planning Minister Hazzard's "Landcom on steroids" pushed the pace and magnitude of changes out of sensible planning bounds. In September 2012 The Australian reported Brogden as saying

*The chairman of the NSW government's development agency, Landcom, has hit out at lengthy delays to government-backed housing projects, such as Sydney's \$1.7 billion Green Square in the city's inner south, blaming layers of policy and high costs.*

Parramatta City Council had published a radial plan for trams (and no other modes) to replace its parallel heavy rail plan once the State's preferences ("ideology") moved to trams from rail. (Berejiklian sterilised the incredibly important Parra/Epping Link after a fight with PM Gillard and the recent WS City Deal is a further blow to professional planning in Sydney.)



The Parramatta "business case" showed the tram (see APPENDIX) was not viable but that the driving force was real estate interests – not the community accessibility that ParraCity based its comprehensive plan on.

It wasn't entirely clear but the impression was gained that \$100 million was granted (spent?) for a feasibility study. Certainly options emerged without adequate business-case contents but the sequestration of the debate by proponents of the real-estate corporates put paid to systemic options, especially as any one-mode approach has failed even before it was published.

As finally announced, the tram stopped short of Strathfield which has yet more unintended consequences (blunders), including not allowing inter-line working between the NW, Parramatta and the East Hills and Illawarra lines. Needless to say, TfNSW was witless – it's all in EDDINGTON BEDROCK.

The expectation of raising \$2.9 billion from value capture taxes was fanciful (below). (The media carried a story in August 2017 that the levy would be \$110 per property per year. That was either mischievous or irrelevant.)

The PM gave a direct Budget grant of \$78.3 million to the new tramway – contrary to his promises and iA guidelines. This was an integrated layering of conflicted interests. Needless to say, like Labor's *stench*, the project damaged heritage buildings without being legitimised and funded.

Examples outside the Eastern Suburbs include Newcastle where the scheme is compromised by being based on politics rather than a clever balance of the best ideas from the community and expert bodies. The "needs" or problems included two level crossings: Berejiklian's solution was to leave one on a reduced stub line which now leaves a smaller stub – meaning ongoing problems and the complete failure to consider an integrated bus/rail terminal at Broadmeadow as urged by this analyst when CEO of the City Council.

Brunswick or Burke Rd in Melbourne show that trams freeze when congestion fills roads, while our own Central tram moves more slowly than a three-legged goat.

The Canberra tram has suffered many criticisms, one being the ACT Government's refusal to increase residential density along it so as to ease housing pressures elsewhere.

There have been several other attempts to find new ways of using trams:

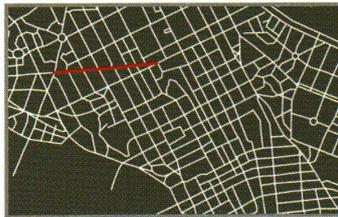
- A low-level tram route along Barangaroo which would impede the extension of trams to the west, north or east should future generations decide to do so – the "Zurich" model
- Extension of the current snail-pace innerwest tram to the Overseas Passenger Terminal and White Bay – an horrendous welcome to any visitors
- "Expressnets" of combined modes through the CBDs of Sydney and Parramatta and in the Eastern, innerwest and inner northwest belts (copyrighted in EDDINGTON BEDROCK), but the PM and Premiers have not listened
- Using the Scully-commissioned feasibility assessment by SKM in 1999 to extend trams along Norton and Marion Sts (instead of the freight line) then down past 3 universities and 2 major shopping centres (by this analyst), with some ten-times the patronage, but support was refused by 2 mayors of Leichhardt
- Extension of current innerwest tram from a different point on it to same effect by this analyst
- Various for Parramatta Road – in late 2017 the Government abandoned a till-then secret plan! Also various BRT as in Christie 2010 which lacked systemic sense.

## TECHNOLOGY & CONTEXT

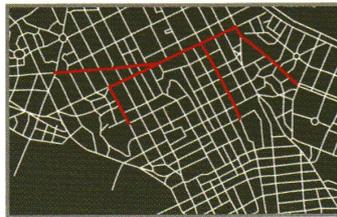
Trams provide a point-to-point service with limited catchments. The principle is widely known: Bus Rapid Transit has higher capacity than light rail under apples-for-apples comparisons, without the expense and inflexibility of rails and wires (also using renewables and electric cells rather than bulk electricity).

Case studies were done for the NRMA's Clean Air 2000 campaign re Victoria Road and the Grand Parade and of the Northern Beaches Peninsula for Mike Baird MP (the latter work was neither acknowledged nor paid for). Volvo produced this graphic a decade ago:

## HOW MUCH PUBLIC TRANSPORT DOES A BILLION DOLLARS BUY?



10 kilometres of subway



50 kilometres of lightrail



250 kilometres of BRT

The superior solution for the longer NW to SE corridors was the Anzac Metro which came out of Ron Christie's Plan of 2001 and was announced by Labor, but killed by the metromaniacs in Premiers Department who instead pursued the 40-km standing-room NW Metro and the 3-station "fiasco" called the CBD Metro (serving only 10,000 people for close to \$6 billion).

O'Farrell said he'd end Labor's "planning stench" and Berejiklian that "the metros were doomed if the Coalition won".

But for those brainsnaps and broken promises, Berejiklian's in the darkest period of Sydney history which was June/July 2012, we'd now have a metro running from Macquarie Uni across the Parramatta River into Balmain and Leichhardt, along Parramatta Road then under the CBD and out to the UNSW and Malabar. About 19 kms, 16 stations and 250,000 direct users, with fewer buses in the innerwest, CBD and Anzac Pde and Oxford St. The tram would be redundant.

**Instead of mindless, useless metros destroying the Bradfield legacy.**

That metro was the only prospective successful PPP which would have meant lower imposts on citizens. Building tramways is a no-brainer, right? Wrong. NSW has shown how to plan and build tramways so badly that even the most senior national politicians lose credibility.

The cry that overseas cities are installing trams as proof they should be here is misguided as there are no "one size fits all" solutions and cities that have no extant transit structures often do jump to Bus Rapid Transit and/or trams. Sydney has a strong axial spine of heavy rail lines, area nets of bus and ferry routes, and scope for creative adaptation of so-far-unused technologies as in EDDINGTON BEDROCK: FROM CHRISTIE TO GREINER TO GIBBONS.

Subsequent to announcements on Metros, the City of Sydney published its high-rise residential distribution which is understandable in timing – as the State Government keeps changing its desires without a City Plan – but illustrative of what Nick Greiner called "all a bit arse-about". Demography and economics should determine genuine engagement and budget allocations.

Trams and bi-articulated buses have similar capacity (but not energy) profiles where reserved corridors are in place as in St Kilda Road and part of Anzac Pde. Modern buses use recycled cooking oil and other bio-fuels and need no tracks and overhead wires and poles, making them far more energy-prudent. They operate in multiple configurations with much greater route flexibility than trams.

The Grattan Institute normally focuses on broad principles but they made an exception of the ES tram. They explained the cost overruns, ignoring of options and sloppy engineering as coming from a "lack of pre-planning", as did Infrastructure Australia. Here's what Grattan concluded:

*The current guess-and-check approach to planning multi-billion dollar investments is negligent... The actions that would really make a difference would be to curb [Baird's] fellow politicians from*

*promising to spend public money before a business case and project evaluation have been tabled in the Parliament ...*

Nick Greiner's 2012 *State Infrastructure Strategy* emphasised commonsense rules, which Moore-Wilton's and the PM's words contradicted. Here are some pertinent quotes (NB Berejiklian has varied the length of trams to much dismay, and failed to address the defects of the Gehl scheme (documented by this analyst), but both she and Greiner missed the point that BRT buses can each carry 200-300 passengers at less than 1 minute headways, given the right hub designs):

*Attempting to serve the mass commuter market from this proposed corridor, presents major challenges. It would be difficult to match current bus travel times for South Eastern suburbs commuters to the CBD (especially express services to the northern CBD via the Eastern Distributor tunnel). Efforts to reduce travel times for light rail by tunnelling part of the route will substantially increase costs and could make the project unviable.*

*The difficulty of effectively serving the commuter markets on this corridor suggests a more realistic option may be to focus primarily on the recreational and student markets. Demand for the University alone already requires at least 85 buses per hour on top of the regular 60 buses per hour service scheduled from Central. The aim would be to deliver a similar travel time to current buses, but with the superior travel experience that light rail offers for the peak heavy loadings.*

*It would be expected that most South Eastern Suburb commuters to the Northern CBD would continue to use existing bus services, at least until such time as a plan for substantially increased urban densities could justify an extension to the Eastern Suburbs Railway.*

*With these less ambitious objectives, the project scope and costs would be managed down to achieve a practical and deliverable solution. A surface route (rather than a tunnel) and a single terminus would reduce costs. With these assumptions, Infrastructure NSW would expect a scoping estimate of approximately \$500 million (approximately \$70 million per kilometre for seven kilometres). This is consistent with the cost per kilometre for Gold Coast Light Rail.*

Future generations will shake their collective head and say, *“they knew how to do better, why did they leave us this mess!”* The actual practices as seen in earlier quotes are off-the-planet compared with professional practice; and TfNSW is a disgrace. (The accounts of residents who attended briefings were unanimous: the officers had no answers and no interest.)

## **FUTURE**

Too many contracts have been signed. Some decisions must be paused such as the Bankstown Metro and the Peninsula uber-tunnel before any more money is wasted and more unnecessary community damage caused. Most important is breaking the stranglehold of corporate interests on public policy matters through enforcement of due diligence.

In the CBD, the Gehl scheme has disappeared, rightly, but that leaves too many unresolved issues. There is a “traffic oasis” scheme in EDDINGTON BEDROCK that was extensively peer-reviewed including by two former Commissioners for Main Roads: the universal view is that this analyst's scheme should have happened long ago.

The Eastern Suburbs potpourri of slap-dash notions and ignored options and rejected planning protocols had two fundamental political parameters:

- getting trams out of the city and into the zones that were to be served by the Eastern Suburbs Railway and by the Ron Christie-inspired Anzac Metro (below) – but long-served by an intensive bus network that is based on the old tram routes! and
- somehow replicating the “Bondi Shooter” to appease municipal ambitions.

Both have “densification” implications in a metropolis that is resenting “forced activation” along Anzac Pde out to Malabar as well as – imminently – on the Northern Beaches. The first stage of iA's protocol is a proper “needs analysis” which in this case should have included upgrading the buses on BRT lines and

adding trams as an option to be included. No, buses were excluded and the local stakeholders and major Bus Union was silent. (There was a ginger group arguing the BRT case quite effectively.)

The first challenge, linking the CBD and suburbs, has “options” as can be inferred – railways Vs metros Vs buses Vs trams. Other options include smashing through Surry Hills and the Anzac Pde trees Vs not ... The “not” comes from Professor Rob Lee’s and my proposed extensions south and east of the disused Bradfield tunnel that runs from Martin Place to Whitlam Square, using Flexity tram/trains from as far away as Cronulla.

Does that sound interesting? – Berejiklian (after foolishly selecting Devonshire St) would not even listen to the Surry Hills community. iA would have no more idea than TfNSW of what good planning looks like: the tram planned for Green Square points in the same direction as three stations, instead of east/west which would address congestion in more relevant directions, to Waverley/Randwick and to Sydney Uni.

Consult Australia stated in its VALUE CAPTURE ROADMAP that

- “NSW continues to struggle under suboptimal governance arrangements at the local and state government levels”
- “Consistent and coordinated leadership (should be) non-partisan, evidence-based and in the long-term public interest”
- “institutional and governance arrangements for the provision of much of Australia’s public infrastructure are deficient and are a major contributor to unsatisfactory outcomes” (Productivity Commission)

Greiner put the real answer concisely in his iNSW 2012 report re Anzac Pde:

*The business case to support any investment by Government, and demonstrate value-for-money, will need to compare the preferred light rail proposal to alternative options, for example improving existing bus services or using higher capacity buses.*

The second challenge cannot be met by any rail-based system, there simply isn’t any room. Both local councils and both levels of government (including the PM as local MP) refused to consider a solution that was adapted from the European Community’s proposal in a similarly tight congestion zone amid heritage buildings in a UK city.

Around Parramatta, there must be a professional Eddington-type planning exercise that has a multi-modal basis and reverses the contextual defects as including:

- The by-passing of Parra CBD by the North South Rail and the real but theoretical Parra/Epping link
- The exclusion of the two alternatives to the West Metro (Greiner’s and this analyst’s) including a superior outcome for Badgerys and for the east/west employment balance via logistics
- The exclusion of O-Bahn with potential as established in c 1980 by this analyst, incorporated in a BRT network, given the tram is marginal at best.

At Green Square, iA has to withdraw its highly deficient reports and re-do the assessments so as to include the major east/west congestion corridor as tram or BRT.

The tram systems have multiple forced changed-over points and changes in bus routes, an absence of properly integrated cross-route and cross-service interchanges, longer trip times, and possible intermodal fare costs. In the course of all this, again as a context, in the Bankstown corridor – where the metros could have run on existing lines, without any election mandate or due diligence legitimisation,

- 40% of the Bradfield city system will be depopulated and possibly de-activated, cost implications will sit as contingent liabilities on the State’s balance sheet
- commuters will have to change trains at four points or more, with longer transit times but no proportionate increase in capacity, losing special events capabilities, in perpetuity as the current metro extension stupidity must end

- commuters will have to queue behind chutes on platforms which is ridiculous in most suburban stations
- commuters will face extended close-downs of their lines, incurring additional costs and possibly leaving the degraded system.

The BOF Opposition promised to devolve responsibility back to communities. The WS City Deal destroyed the last vestige of that theme which otherwise is dominant in the UK and USA and elsewhere. Professor Richard Tomlinson put it this way in “[Metropolitan governance is the missing link in Australia’s reform agenda](#)”:

*Transport and planning ministerial silos compromise effective state leadership in the development of urban regions. Big-budget transport ministries show scant regard for planning ministries. ... despite a professed commitment to compact cities in state-prepared metropolitan strategic plans, infrastructure investment has contributed to urban sprawl.*

The Government has said it will seek to facilitate tram, metro and other projects as well as the Greater Sydney Commission with “land value” or “betterment” capture. That has been defeated twice in Sydney by Conservative Governments and failed under London’s CrossRail 1. iNSW reported that “*Challenges for value capture mechanisms include identifying the beneficiaries, quantifying the gains and crystallising cashflows to Government. In the short term, value capture will not provide a substitute for the other funding strategies set out in this (report). (A betterment scanning report for RailCorp by this analyst had interesting conclusions in line with “low gain for much pain”.)*”

The Greater Sydney Commission has no evident economic or other assessments behind its route, technology, engagement or taxation streams. It meets none of the previous bullet points although scores high on decorative presentations.

The current entanglements through just Infrastructure Partnerships Australia and associated official bodies is amazing when one recalls the effectiveness of TRANSAC which had no commercial entanglements. The Executive culture has deteriorated so much that this would be more risky than in the 1970s-80s. Professor Shergold’s Spann Oration in 2008 (“*The delicate balance between responsiveness to government direction and public service independence is a matter of ongoing public debate*”), and Gerry Gleeson’s in 2010 (“*There appears to be a lack of capacity in Departments and more importantly across the Government for strategic policy and review. This in turn leads to the excessive use of private consultants ....*”) bear on this pessimism. So many consultants reports are nothing more than borrowing a watch to broadcast the time.

A sharp local observer who sat in the centre of the NSW Government extended that:

*Voltaire was spot on with much urban/transport transport planning. Twerps preventing perfectly workable improvements from happening because the proposals don't measure up to some hypothetical or personal ideal or philosophy. The political process has become intertwined with this magical thinking, dressed with a sauce of Greens’ wilful, disdainful disregard of 'plebeian' everyday concerns and priorities. We fancy ourselves to be a class-free society...*

Peace Plans were presented to iNSW and to the PM, without response (therefore rejection by default).

The essence is a 1908-type commission independent of Government (in line with Grattan recommendations), to

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Commission Options & Scenarios papers on

1. each of the significant scenario/regional challenges in the Sydney Metropolitan area associated with housing affordability and congestion reduction, in accordance with iA guidelines for feasibility

tests and business cases and the Prime Minister's *if you want someone to change, you must persuade them there's a problem, then you explain the solution.*

2. engage the community in line with NewDemocracy's and ResPublica's *Civic Limits* guidelines
3. report to the national and state governments, in relation to the following key challenges:
  - Corridor mapping (travel needs versus current and anticipated gaps in access coverage) shown in the *Urban Transport Statement* of 2006 and any subsequent evidence-based investigations
  - Maximising the capacity of transport infrastructure to service the new dwellings level of 800,000+ over 15 years and then further growth over 30 years, considering –
    - a. Distribution of high rise, medium density and fully distributed housing types according to broad accessibility, affordability and life style criteria, matched to transport corridors
    - b. Service standards compared in terms of walking distances, generated hourly and daily rail/bus/car numbers, usage costs, and TfNSW/RMS opinions on congestion impacts considering local road and transit network conditions etc
    - c. Technologies best suited to each corridor and for system integration
    - d. Nett self-reliance
      - i. Revenues from fare box, tolls, levies, practicable and equitable value capture, and explicit subsidies from all levels of government, discounted and compared with
      - ii. Costs – operating, capital, employment numbers, time preference (phasing/timing) and externality
    - e. Community environmental and family budget diseconomies as well as benefits, equity in all aspects
    - f. Impacts on
      - i. Trends in housing costs and
      - ii. energy and heat sink factors
    - g. logistics and employment needs including linking Ports Hunter, Botany and Kembla with the Inland Rail Bridge and IMT at or near Eastern Creek
4. The scenario areas include normal parameter and sensitivity testing within accepted benefit/cost analysis practices – avoiding “nonsense on stilts” (Peter Self), “options” including:
  - a. maximum utilisation of Metro lines and WestConnex where fully legitimised (NW/Chatswood to Sydenham), the Iron Cove/Gladesville and Harbour Bridges, and alternatives where Metros and roads/tunnels are envisioned but not yet legitimised, and
  - b. Sydney to Parramatta – West Metro, Christie/Greiner fast trains, release of paths via Chatswood to Parramatta for 2<sup>nd</sup> Airport and other fast trains etc
  - c. The innerwest and Eastern Suburbs to the NorthWest and Peninsula (cross-Harbour) – Metro, linked bus and tram networks via known bridge options and/or tunnels
  - d. The Bays and Innerwest including “Barangaroo ExpressNet<sup>®</sup>” -
    - i. Linking of the street transit systems (bus and tram) on the eastern and western sides of the CBD
    - ii. Completion of the innerwest tram network back to Central (via SydUni, Broadway Centre, Catholic Uni, Central Park and UTS), and possibly out to (say) Macquarie Park and/or (say) Burwood
    - iii. Resolution of CBD congestion by the elimination of 7 E/W conflicted intersections through a circumferential road by-pass and transit boulevard
    - iv. Provision of fast transit through The Bays to the Victoria Road corridor at Rozelle, including the Overseas Passenger Terminal and White Bay Power Station (the Google site, now foregone due to delays in providing transit un-locking, UrbanGrowth having frozen 16,000 units til 2021-2)
    - v. Relief of the ANZAC Bridge which is about to experience more congestion off the WestConnex works

- vi. Promotion of walking and cycling in extension of current programs, and
- vii. Provision of a basis of a long-term fast transit service using Flexity Swifta or similar tram/trains to link street and rail transit systems.
- e. Northern Beaches, both to/from CBD/south and NorthWest including federal, 2008 and subsequent proposals with their differential impacts on the Peninsula's character and liveability
- f. NorthWest to KSA and CBD via Strathfield using tram/trains, including other routes
- g. SouthWest and SouthEast to Northwest employment zones

There's an irony in the historical circle's closing. There was widespread concern in the 1890s that new tramlines were being built without adequate financial justification via the Public Works Committee. Not much has changed.

## APPENDIX: THE PARRAMATTA LIGHT RAIL DEBACLE

The Parramatta Peninsula tramway started as a semi-sensible City Council approach supported by \$100 million in feasibility studies. It had a chance of reducing congestion. All was wasted due to a Berejiklian obsession to sterilise the incredibly important Parramatta-to-Epping rail link, so she shifted the money to tram but without a plan. The Greater Sydney Commission is trying to catch-up with developer needs rather than pursue "orderly development". The Western Sydney Leadership Dialog called it "a potential windfall to local developers".

It is important to note that BRT was not assessed as an option to trams as would be required by iAust and Treasury Guidelines; and for a tax yield of say \$2.9 billion to cover capital costs (and lifecycle costs must be included), assuming a 25% value uplift and 15% capture, the value of land covered would need to be about \$200,000,000,000. Annual payments would be about \$274 million or \$23 million a month. \$110 a year is amazingly misleading.

Is that realistic? The Voluntary Contribution approach requires a small number of investors in a discrete area. The levies per property would be intimidating and discriminatory. The proper model combines fares, Government contribution and landowners' contribution as in CrossRail.

Stage 1 has not been funded but there is a panic to get through the PR Barrier to have Stage 2 accepted as a *fait accompli*. (That worked with the Bankstown Metro among even the wisest analysts. But not all of us!) The mono-modal and limited axial nature of quite massive expenditure on a local scheme is indicative of a sub-optimal scenario – and note that iA's stage 2 "scenario testing" and stage 3 "business plan for each option" have not been met, with nary a niggler from the local Business Chamber, City Council or GSC.

The illustration is typical of the Government's mischievous PR representations – true also for George St – of downplaying the overheads.



The remit of the Greater Sydney commission is to adopt, without question, the Government's transport whims. GSC's credibility sees a media acceptance of the house of cards – all options dismissed, tax and budgeting issues absent, land use being lines on maps until suburbs are confronted with mandated targets – 67 high-rises in Campsie alone. GSC's words are

*Greater Parramatta – the metropolitan centre – is the core of the Central River City and Central City District. Its economy is centred on world-class health, education and research institutions as well as finance, business services and administration. Greater Parramatta and the Olympic Peninsula (GPOP) – taking in the Westmead health and education precinct; advanced technology and urban services in Camellia, Rydalmere, Silverwater and Auburn; and the Sydney Olympic Park lifestyle precinct – will be supported by the Parramatta Light Rail and Sydney Metro West.*

*Sydney Metro Northwest will improve the growth prospects for the north west of the District.*

Such words are meaningless. The difference between Metro NW and West is that one exists as a white elephant (cf iNSW) and the other is an obsessives' and developers' dream.

The Western Sydney Leadership Dialogue (WSLD) issued a blog, published in the AFR, called "An Revolution By Any Name" (22 Oct 2015). It was a mixture of the relevant and the questionable. By referencing it, we can cover the background quickly:

#### **WSL Dialogue:**

In the 1980's, then-Treasurer Paul Keating famously said that "every mug in the pub is talking about micro economic reform" while few really knew what it meant. A modern day equivalent of a little known economic concept which everyone seems to be talking about is "value-capture", where the private sector contributes to the costs of public infrastructure. It was kicked along this week when the Federal Government announced that its ambitious Victorian major projects agenda would feature this unique funding mechanism.

Value capture goes by different names in different jurisdictions. American State governments are pioneers and use the term 'tax increment financing' while their municipal counterparts prefer 'impact fees'. (The Consult Australia report referred to later made the statement that "Value capture funding methods arose in California in the 1960s" – almost 300 years behind London. This is presumably the incremental approach.)

Former NSW Treasurer, Andrew Constance ... broke down his former agency's 50 year obsession against 'hypothecation', allowing State developer levies to be quarantined for use in specific projects, and not dumped into Treasury's consolidated revenue. He is now the State's Transport Minister and is promoting the scheme to fund his own projects, but the politically-savvy Constance prefers the softer descriptive term of 'value-sharing'. Meanwhile, Labor's Federal infrastructure spokesman, and urban transport advocate, Anthony Albanese is a fan of 'value uplift'.

Of course, while Federal and State Governments in Australia are recent converts to this partnership approach, local councils have been doing it for years under the banner of 'Section 94 contributions'. Other community projects have utilised 'voluntary planning agreements' to fund development.

#### **Comment:**

*Value capture generally refers to short-term "economic rent" (cf Murray national inquiry) rather than "betterment" over the life of a project (up to 20 and more years). There's **nothing unique** about current proposals. (The iNSW quote above referred to special levies, presumably of the §94 style, below.)*

*It is not little known at all.*

*The "private sector" is a misnomer. Different taxes have different incidence, most of them on the community. Some motives are driven by real estate profit expectations and by cost-shifting.*

*Most governments include such mechanisms at some point in their lives: few achieve them. They have been defeated twice in Sydney's twentieth century, both by property-orientated conservative governments. **How such national and state governments now think they will overcome past travails is a mystery.***

*Hypothecation has long applied in the transport and roads sectors of NSW and was the basis of the failed "urban budget" thinking at different times.*

*Pioneers were in England from 1427 and the private docklands in London in the C17. "Incremental" means a different thing to most concepts of "value capture". US systems are technically precise (accounting manuals etc) as they form the basis of municipal bond issues. They are extremely complex. ("Sharing" is an invalid term under most models. "Rapacious communities" is a weird term to use.)*

*§94 levies represented partial cost-recovery for local roads and footpaths etc and became politically invalid due to the escalating rate, the unfairness in spatial applications, the effect on land and house prices, and the levy-type (not incremental) of the impost. They*

Essentially, developers (and their eventual customers) share the benefit of increased land values and densities that flow from the provision of rail lines past their planned apartment block.... Capturing and taxing the increased value of private land that follows the provision of new infrastructure is the best chance that cash strapped governments and rapacious communities have in financing the backlog of infrastructure this country demands.

were levies for construction, not betterment taxes. Developer lobbies were the harshest critics. **Why this would be re-imposed is a mystery.**

The WSLD strongly supported the Parramatta to Olympic Park tram. It said that “*This potential windfall to local developers was quantified in a recent Deloitte report for the WestLine Partnership landowner consortium. It calculated that local rezonings and developer levies could generate \$3 billion to help defray the cost of rail lines and remediation of the old industrial sites.*” The report gave optimistic levels of redevelopment of the corridor, no analysis of options, no indication of application of accepted assessment methodologies, and its estimate of voluntary contributions ranged from \$1.6 to \$2.9 billion (the 81% variation suggesting guesstimates). The rest of the “defray” was presumably private, which could be fair unless the landowners seek site bonuses for the same (as they often do). There is an impressive list of endorsees including the NRMA and Business Chamber.

The study reported the following (which are largely generalisations):

- Drawing on the work of Duranton and Turner (2012), Deloitte Access Economics estimated that for rail, a 10% increase in Sydney’s rail infrastructure was assumed to increase population by 0.04% per year, which has a subsequent positive impact on economic growth. (NOTE: the cost of a 10% increase would be astronomical.)
- In America, price premiums of between 6.4% and 45% have been observed for housing that was situated within 400 m to 800 m radius of rail transit stations, compared to equivalent housing outside of these areas. A premium of between 8% and 40% was also observed for commercial properties (NOTE: not light rail)
- the construction of a tram line in Portland in 1997 was found to increase the density of developments from less than half the allowable density prior to the construction of the tram line to 60–90% of allowable density post construction. Over \$3.5 billion in private capital has been invested within two blocks of the tram line, including more than 10,000 new apartments and 5 million square feet of commercial space (NOTE: generalised, needs more analysis)
- The Flemington Markets could potentially relocate to Badgery’s Creek Airport ... boosting employment in outer Western Sydney and improving access for Markets vendors, this would reduce vehicle congestion on Parramatta Road and free up the 43 hectare site for redevelopment - 6000 apartments for over 13,000 residents.
- By connecting Parramatta to Sydney Olympic Park over 300 hectares of land will be rezoned and remediated developing new communities connected to major employment centres and recreation centres. By delivering this missing link, a network is created connecting major hospitals and universities to one another. A light rail solution would connect isolated communities in the precinct and free up local roads currently burdened by heavy traffic as the only feasible connection to the precinct is by road.
- The light rail could have the capacity to move 5000 passengers per hour in both directions through The Corridor. This is equivalent to 40 light rail services in place of 200 buses
- A 7 km link between Camellia and Olympic Park is estimated to cost between \$210m – \$420m in capital costs. (NOTE: the rest of the report talks about a 15 km route.)
- Building a 15 km light rail through The Corridor, with approximately 16 stops will create an enabler for future dwelling, population and job growth in the precinct.
- In the absence of detailed capital costs, it is estimated a 15 km link will range between \$30m to \$60m per kilometre based on historical figures. Historically costs have usually blown out due to relocating services and tunnelling costs. The higher estimated cost takes into account this uncertainty. It will provide 1800 to 4200 jobs during construction
- What is proposed to fund the Olympic Corridor Light Rail is a shared benefit mechanism that leverages off existing planning legislation. The contribution is voluntary and paid by land owners who elect to take up the density incentives offered by Government. The rate is based on the uplifted areas by applying an agreed per

square meter funding rate. The rate varies based on the complexity of the area (i.e. service relocation or environmental remediation) and the level of infrastructure and services already established in the area. No contribution is sought from the owners of existing developments unless they have the opportunity to add to their buildings. These people are considered to have made adequate contribution by providing the base demand driving this project.

- Some areas within The Corridor will require remediation before any reuse will be possible. This approach could be applied with a higher density offered and rate charged to raise the funds to undertake these works. Alternatively this approach could be coupled with some form of remediation levy or charge.
- The model has the flexibility to be applied at a targeted or general level ways. The first method applies the rates to a negotiated radius (ranging from 150 to 400 m) around the stations along the route between Camellia and Sydney Olympic Park. Using this approach it is estimated that between \$545 m to \$1,090 m in voluntary contribution funding could be raised. Alternatively the approach can be applied to the whole Olympic Corridor. This approach presents an opportunity to unlock the full land reuse potential of The Corridor. It is estimated that if all density uplift opportunities were exercised voluntary contribution funding of between \$1.6 billion to \$2.9 billion could be generated.
- 231,551 total jobs in The Corridor by 2036, representing 108,000 additional jobs or 12% of total metropolitan jobs growth. Relocation of Sydney Markets could allow 6,000 apartments for over 13,000 residents. Potential to accommodate more people and jobs than Green Square, Barangaroo, Central to Eveleigh and Bays Precinct combined.

The Parramatta tram is a rock-hard illustration of the defects of the NSW's Governments' failures since 1995. The NSW Audit Commission agreed with the Lambert Review, anticipating Grattan, that *"rigorous and holistic asset planning in NSW is sometimes absent and tends to follow, rather than lead, the commitment to an infrastructure investment"*.

Notably:

- *some specific infrastructure projects have been pursued for their own sake with little consideration to their objectives or the outcomes they actually deliver. The supporting evidence base for projects has sometimes been inadequate and anecdotal in nature*
- *an emphasis is placed on providing new fixed infrastructure over addressing some of the demand drivers, or maintaining and improving the utilisation of existing assets*
- *projects were not always subject to rigorous evaluation or detailed studies before they are announced publicly. This includes financial and economic cost-benefit analyses which are sometimes treated as a 'compliance' exercise, rather than being genuinely used by agencies to identify and evaluate optimal service solutions. Announced cost estimates are often much lower than actual delivery cost*
- *there is a general lack of prioritisation and coordination of new infrastructure within and across sectors*
- *a failure to strategically prioritise needs within realistic future funding limits set by reference to the fiscal capacity of the State.*

QED