Submission

No 9

INQUIRY INTO THE UTILISATION OF RAIL CORRIDORS

Organisation: Johnston Enterprises Aust. Pty. Ltd

Name: Mr Norman Johnston

Position: CEO & Director

Date Received: 17/02/2012

Organisation: Certain Planning

Name: Mr Robert Senior

Position: Director

Date Received: 17/02/2012

Johnston Enterprises (Aust Pty Ltd)
Norman W. Johnston
MBA, MTCP, BA (Econ), Dip (Urban Studies)
ABN: 128 783 406
DEVELOPMENT ADVISOR
- Property/PPP
- Finance/Contract
- Infrastructure

T. (02) 9528 9528
M. +61437 479 004
E. njonno@optusnet.com.au

PO Box 230
Jannali 2226
Australia

Dr Carolyn Littlefair
Inquiry Manager
NSW Legislative Assembly
Macquarie St Sydney
Parliament House
2000

16th February 2012

Re: Public Inquiry into Air Space

Dear Dr Littlefair,

I refer to our recent conversation regarding the possible inclusion of material, including our prior Submissions to the current Inquiry into Air Space. I have attached for you a copy of the Submission sent to the Federal Governments Infrastructure Fiancing Inquiry – which covers much the same ground and also has NSW as the operative example.

I have also contacted the co – author – Mr Senior – who has agreed with its lodgement. My colleague is currently in Afghanistan working with the UN Base on major transport logistic issues and is not available to comment at the present time. The Submission I have attached is in response to the Infrastructure Finanace Working Group (IFWG) call for professional comment on 'barriers' to achieving new finance opportunities and possible options to encourage greater private sector investment in Infrastructure through-out Australia. It also calls on international experience and how this can be applied to issues like Air Space.

As I have undertaken a major Infrastructure Strategy with McKinseys London on such matters and Mr Senior is currently advising in Afghanistan – we believe the Submission meets such aims and is contemporary in its view.

The Submission is relevant to your current Inquiry and we submit it for your formal consideration.

Yours Sincerely

N.W.Johnston (Principal)
MBA, MTCP, BA Dip Urban Studies.

COPY

CERTAIN PLANNING

ABN 26071419639
ACN 071 419 639

PO Box 1144
HAYMARKET
SYDNEY 2000
P/F 9904 6389
M: 0419 431 064

Dr Flavio Romano
Infrastructure Australia

26th August 2011

Dear Dr Romano,

INFRASTRUCTURE FINANCE REFORM - ISSUES PAPER

This response to the subject paper - released by the Infrastructure Finance Working Group (IFWG) - provides comment on selected aspects of the paper. Relevant issues are discussed where the authors have had specific experience through extensive involvement with planning, property and transport infrastructure projects.

The response is a joint effort by:

- Robert Senior – Director Certain Planning, and
- Norm Johnston – CEO & Director of Johnston Enterprises Australia.

Collectively our experience covers the planning and delivery of over US5Billion in Infrastructure Projects and Major Developments in Australia and Overseas. This includes various forms of Contract from PPP and Master Development Agreements to traditional D&C's. We also have recognition as "preferred consultant status" to the NSW Government on issues including Urban Planning, Infrastructure and Major Development.

Our relevant projects in both senior executive public service roles and specialist consultancy roles include:

- Delivery of over $3.5Billion in signature major developments in NSW including the Central Station TOD worth $250,000,000. This Project won the prestigious annual Property Award for Best Public Sector Development in 2003.
- Planning, Financing and Delivery of US$1.5Billion in Infrastructure Projects under Joint Venture with Macquarie Bank and the Abu Dhabi Commercial Bank.
- The rationalisation of the NSW Defence estate to secure optimum asset utilisations and realise value added disposal revenues in excess of $750m. Mr Senior has also undertaken a Master's thesis on Air Space Development and has extensive knowledge of the NSW Rail Sector.
- Mr Johnston as Group General Manager of the NSW State Property Services Group, effected the sale of near $1bn in Government assets, and also been CEO of Abu Dhabi's largest Property Development Authority.
- Mr Johnston leading numerous multi disciplinary Task Force appointments as Chairman, including a 6 month McKinsey appointment on the 10 year Strategic Infrastructure Plan for Abu Dhabi which was adopted by the Executive Council – equivalent to our Commonwealth Parliament.
- Mr Johnston has also delivered numerous Key Note Addresses in Europe, the Middle East and Washington on Public Sector issues associated with infrastructure, finance and delivery of major projects.

As Professionals in the Industry we both hold dual Masters level tertiary qualifications that cover property development, land use planning, business administration (Masters) and land economics (Masters) and with a well grounded understanding of:

- familiarity with the Public Sector across three Tiers of Government,
- the inability of Agencies to operate laterally in preference to a Silo Mentality,
- the application of Value Capture to enhance project & productivity improvements, and
- the approach to Air Space as a Whole of Government issue NOT a single Portfolio issue.

Our joint Submission is attached and we would be pleased to respond to any questions or points of clarification your Working Group may have. Between our two Professional Associations we have over 60 years combined experience. The opportunity for Mr Johnston and I to review and respond to the Issues Paper was greatly appreciated and we welcome any comments.

Yours sincerely,

Robert Senior
Director

Attachment:

Response to Infrastructure Finance Reform – Issues Paper July 2011

SUBMISSION IN RESPONSE TO THE INFRASTRUCTURE FINANCE REFORM ISSUES PAPER

July 2011

PREAMBLE

CERTAIN PLANNING / JOHNSTON ENTERPRISES Advisory welcomes and supports the benefit of the Infrastructure Finance Working Group (IFWG) Reform Issues Paper regarding barriers to attracting infrastructure finance and the need to develop options to encourage better outcomes.

The Issues Paper has been read with significant interest and the depth and breadth of possible measures, having regard to the range of factors that impact and drive the viability of the model, is commended. When finalised, it will no doubt be a valuable resource tool to:

- inform governments, financiers and the private sector infrastructure providers and operators about the key issues in this challenging system, and
- provide the practical insights into mechanisms that will enable delivery of optimum practices within the infrastructure realm throughout all Australian jurisdictions.

We make one separate observation however and that is – experience and international application has identified problems with each approach to both financing and funding of infrastructure projects. Additionally the range of projects to which the Paper refers, all have unique factors driving their cost and revenue structures, therebye necessitating some specific 'financial structuring' consideration – eg the level of tunnelling, the patronage growth and specific risk transfer considerations – generally required by Governments. It would seem a more sensible way to approach such a task is to actually have a 'Priority List' of the types of projects under consideration, so that the form of funding decision can be more targeted. For example – Rail Construction and the Corridor is a PPP with construction/patronage risk and re-financing attributes, as compared to 'Urban Renewal' which is more likely a TIF or Bond regime to shore up loss leading early capital works. If the IFWG provides a Priority List of Projects across jurisdictions – then their Paper would enable focussed attention to both the commentators and the potential financiers.

More recently the GFC has exacerbated the financial modelling aspects by removing some of the financial safeguards like monocline insurers and causing the senior & subordinate debt requirements to be more stringent and difficult to wrap. Such is the case with the current international market, which is not likely to change for some time, having regard to the US market. Investment Banks should also be re-evaluating their product more openly and identifying to Policy Groups such as IFWG more prudent approaches to their management of risk and also their excessive fees – which did not help the financial viability of their traditional Model. New Models are available and the use of Super Funds should actually remove the Merchant Bank sector from the market – unless they can respond and adopt new market leading approaches.

That being the case there is a need to fully investigate new approaches and take more time analysing these issues rather than fall into further justification and complexity surrounding past approaches and more traditional Public Private Partnerships – PPP's. There is a risk that a focus may prevail on subordinating an implementation framework in favour of theoretical financial debates.

Once again, unless new paths are identified, a lot of theoretical and searching comment can follow which does nothing to overcome the need for major infrastructure investment to be prioritised and funding made available - across the Country – in every jurisdiction. Sooner or later Government's must show leadership and better recognise the value of creating inter-generational equity through investing in infrastructure futures.

PRELIMINARY COMMENTS

It is noted that the Issues Paper places its focus on the effective means to fund the provision of new infrastructure which is well understood and pertinent in the wake of recent difficulties faced with sub optimal performance of several public private partnerships (PPP's). We also should acknowledge the failure of Government procurement administrations generally in the PPP sector and specifically with the ability to effectively assess 'Patronage Risk'. Government procurement in NSW over the past 10 years has not adopted a 'Partnering approach' and in its aversion to debt has used issues like 'Patronage Risk' more as a form of arbitrage to justify the project and other risk transfer actions – without looking at the real cross subsidy requirements of the Project. We applaud the IFWG for taking on this debate.

To better prepare Governments in the future it would seem that there is scope to also:

- assess where these Procurement Agencies were context limited and critically review performance,
- determine the funding options within each of the jurisdictions,
- gauge how better to enhance the utilisation of existing state owned infrastructure,
- identify value added initiatives' that can lead to increased productivity and accelerated funding for the provisioning of added new infrastructure to existing scheduled programs.

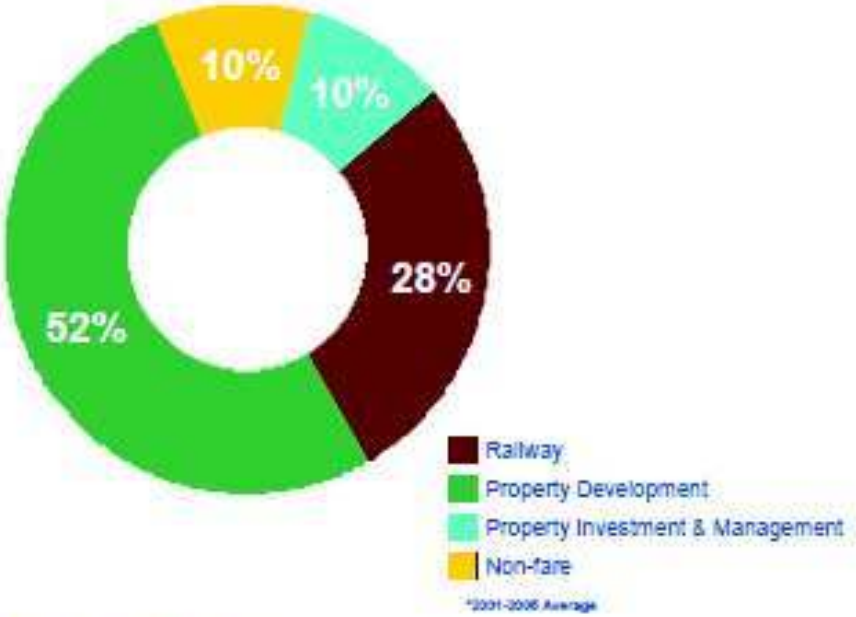
We strongly believe the work in this Paper is one such method of accelerating funding – and has been precedented many times over. The utilization of existing State & Territory owned 'lazy' assets such as the application of existing 'at grade' metropolitan rail corridors and station transport nodes for the provision of ***Air Space Developments*** is in fact a proven model both nationally and internationally.

INTERNATIONAL BEST PRACTICE – TRANSIT ORIENTED VALUE CAPTURE (TOVC)

Australia is well behind International Best Practice in this area of property development aligned with planning and infrastructure integration. The example of Transit Oriented Value Capture (TOVC) in Hong Kong has been a recognised form of property development for over 3 decades. Since the year 2000, property development has been the chief tool for generating revenues that cover both the cost of new railways and also provide substantial profits. In 2009, the split in revenue from the MTR system in Hong

Kong went this way: of the HK$7.3B in net profit, HK$3.55B was from property development and HK$2.12B was from operational revenue. Thus the system not only pays for itself but generates funds for 're-investment' into the Rail Network as depicted below:

Figure 4. MTRC Revenue Sources, 2001-2005 Average.



Source: MTRC financial accounts.

Figure 5. Trends in MTRC's Profits and Losses from Property Development and Recurring Businesses for the 1980 to 2005 Period

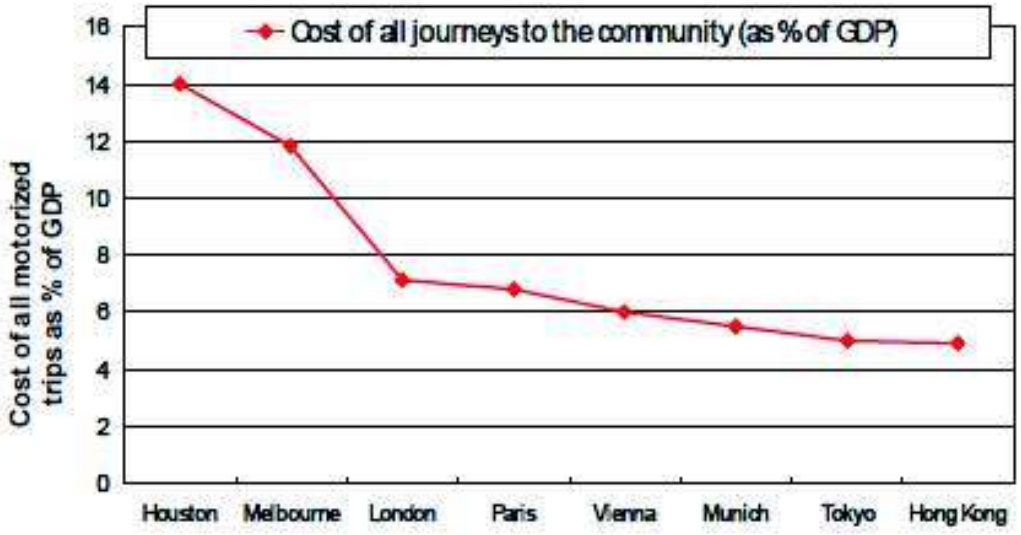
a

Some may argue that the densification of Hong Kong Island allows for and encourages such development, yet some 7 million people live within Hong Kong's total land area of 1,107 square kilometres. Sydney is planning for over 6 million people by 2036 and we are also geographically constrained by river systems, National Parks, and the Great Dividing Range. Already substantial high density **Air Space Development** occurs in St Leonards, Chatswood, Central and North Sydney – BUT we view this as *one off Projects* – not

as a Portfolio Policy initiative which is planned and strategically laid out for others to use. Hong Kong's sophisticated public transport network includes high capacity railways, trams, buses, minibuses and ferries, which Boschken (2008) identified in a technical review as a pre-requisite for a "Global City". Are we not trying to achieve the same with Sydney?

The combination of high urban densities and quality public transport services is recognised in the Metropolitan Plan 2036, linked to issues like sustainability and the environmental cost of excessive Motor Vehicle Use. On average around 5% of Hong Kong's Gross Domestic Product (GDP) is consumed through motor vehicle usage – this contrasts sharply with cities like Houston and Sydney/Melbourne – where upwards of 14% of GDP is consumed. Refer to the Graph below:

Figure 2. Comparison of Cost of Motorized Travel as a Percent of Gross Domestic Product (GDP) Among Global Cities.



Source: UITP/ISTP Millennium Cities Database for Sustainable Transport

Importantly in Hong Kong, the MTR System is not only a financial model but a "tool" for servicing broader Town Planning objectives – like promoting Transit Oriented Development (TOD). Hong Kong again is internationally recognised for its successful integration of rail transit investment and urban development. The City's exceptionally high density's across multiple nodes has assisted in the provision of a fast, efficient and reliable public transport service – one of the best in the World. Sydney itself is planning for over 6 million people by 2036, yet we have not taken advantage of merging our planning and our rail systems into an integrated Model – and Profit Centre!

AT A GLANCE

The range of positives that flow from the application of Air Space Developments (over existing rail corridors in near proximity to transport nodes) in addressing prevailing negatives is depicted below:

- **Prevailing Deficits within Jurisdictions**
- **Government Owned Lazy Assets**
- **Increased road congestion and traffic conflict**
- **Opportunity Costs - foregone revenue streams to Government**
- **Scale of required but undelivered infrastructure**

- **Overhaul of Governance Model**
- **Applied Opportunities within existing metro rail networks**
- **Legislative Planning Support**
- **Certainty of Implementation & Funding**

- **TOD and brownfield renewals**
- **Patronage growth within existing metropolitan rail transport networks**
- **Lessened high cost greenfield settlements**
- **Unscheduled revenue generation: $2bn +**
- **Expanded and accelerated new infrastructure deliveries leading to enhanced urban and regional wide productivity improvements**

PREVIOUS SUBMISSION

Our organisations have been recommending that better utilization of the 'Air Space Corridors' not only in NSW but also Australia wide to assist in the funding and long term planning of our Cities. Such a measure was reflected in the Submission initially provided to the NSW Department of Planning in May 2010 as part of its Metropolitan Strategy Review. An extract from that Submission follows:

> **The proposed application of further Air Space Development within the Greater Metropolitan Region rail network, apart from improving the integration of land-use and transport infrastructure, has the potential to integrate a range of Government's other policy drivers including:**

- **a formal realisation of air space as a highly valued Government owned portfolio;**
- **the consequential opportunity to redress an existing lazy asset and generate unscheduled revenue streams for redirection to other infrastructure projects;**
- **the provision of transit oriented development for such uses as residential (including affordable housing), commuter car parking, long day child care centres, vertical aged care villages and depending on location specific unmet demands – the possible inclusion of commercial or retail or both;**
- **a partial remedy to the difficulties faced with existing urban area infill, in recognising community opposition often being a significant barrier to urban renewals with medium / high density development; and**
- **the enhancement of public transport patronage, lessened car dependency and thus reduced GHG emissions.**

A copy of this Submission is provided at **Annex A** for ready reference. The Submission also identified challenges, and was submitted to enable awareness of the extent to which Transit-Oriented ***Air Space Developments*** over Government owned rail corridors (contiguous to appropriate nodes) can meet and address many of the current Policy issues and challenges facing Governments today. Regrettably there was no response from the State Government.

A copy of the submission was forwarded to the Federal Government to share awareness of the possibilities that could well be applied on a national basis. A copy of that correspondence and consequential reply is provided as **Annex B** for information.

Interestingly, the distancing the Engineering Function & Operational Priorities – from the System and Finance based approached enjoyed overseas, is one of the greatest opportunities available for capturing Value in NSW but also interstate metropolitan jurisdictions – viz Toowong and Milton in Brisbane and Federation Square in Melbourne.

DETAILED COMMENTS

Terms of Reference

The Issues Paper (piii) identifies that advice on the options for reform to infrastructure finance policy is required. The appropriate application of metropolitan based ***Air Space Developments*** is likely to make a significant fillip in liberating the liquidity of the existing lazy assets under State ownership.

Specifically ***Air Space Developments*** are likely to minimise barriers to the funding and timing challenges in that:

- there is minimal difficulty in aggregating sites, as all in Government ownership;
- the planning assessments / rezonings being undertaken by Government; and
- there would be less likelihood of community opposition as the large node sites are invariably road separated, in public sector control and with intended multi faceted urban outcomes.

Sale of Brownfield Assets

The Issues Paper (p20) identifies the sale of existing public assets for the purpose of reinvesting the proceeds into new infrastructure.
When taking account of ***Air Space Development*** opportunities involving the sale of the publicly owned air space the following comments are made in respect to the Issues listed from 12 to 17 below:

Issues	Responses
12. Do the models here outline all the possible options for expanding the pool of finance available for infrastructure investment?	No they don't and the Transit Oriented Value Capture is in Policy Principle – a new form of thinking. The inclusion of Air Space Development has the potential for National adoption as a Model given the extent of unscheduled revenues that can be generated to expand the pool of finance available for infrastructure investment.

Issues	Responses
13. On what bases should a model be preferred over another?	In Metropolitan Planning objectives – Transit Oriented Air Space Models have the potential to be included as a Major Cities Planning Agenda and a driver for Policy change in the States through its use as part of future productivity / funding models.
14. Would a Commonwealth equity injection to a nationally significant project influence your willingness to invest in green field projects?	Yes absolutely and this is well recognised and reported. Refer to our Draft Policy White Paper to the NSW Government in 2008. Air Space Development would have applicability within new greenfield rails corridors where nodes are at grade. Such an approach is likely to lessen the need for Commonwealth equity injection as revenues can be directed to infrastructure funding outlays.
15. What form of Commonwealth assistance do you think is most needed to attract private sector investment?	It's a leadership and shaping role that is necessary first and this can be promoted by the removal of "lazy assets" held under State ownership and the encouragement of a multi disciplinary approach to revenue maximization. Commonwealth assistance, in the form of policy review (as distinct from funding) would be provided in the form of State / Territories being required to prove up the extent of lazy asset avoidance through Air Space Development programs.
16. Would the size of the transaction costs associated with the 'recycling of funds' (sale of assets) substantially impact the viability of pursuing such a mechanism?	None what so ever – which is the attraction to Transit Oriented Air Space Model. A range of transaction costs are predicted to identify specific node suitabilities and follow-on planning, approvals, marketing and tendering. An indicative list of the cost based activities is provided at **Table 1** below.
17. The criticism has been levelled that current financial models favour the development of infrastructure projects of the smallest size necessary to address immediate demand rather than of the appropriate scale to address medium-term demand, and this has resulted in inefficiencies associated with retrofitting capacity. Is this criticism valid? If so, what measures could help to address this bias?	The financial driver for Air Space Development centres on value added revenue creation from lazy assets. The MTR best practice Model – shapes some of the biggest Portfolio wide investments in Hong Kong – and not just Rail – but integrated Nodes. The scale of revenues being linked to the size of potential developments rather than the sizes of follow on infrastructure delivery projects. The short term nature of thinking in Australian Policy application is the only hindrance to the size and scale of the infrastructure that is planned and integrated.

Table 1 Indicative List of Activities

Indicative Task Schedule	Range of Cost Based Activities
Establish Reference Group.	Seek valid responses from all relevant Government Agencies.
Review International Best Practice Model,	Evaluate the MTR Model and the application of an Integrated Pilot - as a Governance Model – with NSW taking the lead.
Identify Node Suitability within network.	Four elements envisaged: • lessons learnt from previous above rail corridor projects; • refine on-site, off-site criteria and desk top study of network; • site verifications and due diligence of above findings; and • any compatibility assessments with relevant guidelines.
Prepare Indicative Development Envelopes for each Node factoring off-site accessibilities, road traffic capacities, nearby residential and solar access & corridor patronage capacities.	Reflecting nature of unmet demand/demand creation, range of likely uses, height and floor space ratio m^2. Unmet demands factoring, patronage, residential, affordable housing, commuter car parking, vertical aged villages, child care facilities, retail & commercial.
Establish Criteria for Priority of Nodes.	Factoring geotech findings, adjacent amalgamations / acquisitions, residual land value, community / electoral issues, etc.
Identify options and formulate specifications for Rail Enclosing Structure (RES).	Scope for the conduct of a pilot project to prove up / refine processes. Vesting issues / stratum transfers, specialist engineering advice with specifications in conjunction with relevant Transport Agencies.
Seek Infrastructure Approval under relevant jurisdiction legislation.	Proposal worked through with relevant Planning / Transport Agencies.
Market valuations by site and portfolio – against planning approval.	Undertake Valuation Program which assesses value of overall Portfolio created through due diligence work. Determine RES delivery: public or private or combination.
Cost & time estimate for Node. Scope the Engineering specifications for RES Templates.	Engineering specification along Modular design principles agreed and signed off by relevant Rail Authority - QS Programming support.
Prepare Benefit/Cost analyses as per the relevant jurisdiction Guidelines.	Cost Benefit Analysis demonstrating extent of unscheduled revenue initiative.
Gain jurisdiction level sign off including Governance Framework and Budget. Prepare Delivery Program.	Possible pilot project and with initial funding sought for the RES if to be publicly delivered. Arrange corridor access arrangements / sign offs with relevant Agencies of jurisdictions.
If private delivery of RES - arrange procurement team to undertake one or two stage call process (EOI / CDP).	If private delivery, arrange tendering / contract arrangements. If public, identify & task the nominated delivery authority.
RES roll out. Start with Pilot and Modular design concept with operational synergies.	Marketing preparation for each commissioned RES specifying, as appropriate, required developer contribution for public facilities, affordable housing, etc.
Establish Tender Assessment Team across Agency's for RFT Disposal of Node Sites.	Tender documentation, criteria, weightings, probity advisor, etc.
Tender for each node to market.	Revenues from sales directed to cover RES delivery program and balance to relevant jurisdiction Agency for other infrastructure provisioning.

How Can the Funding Available for Infrastructure be Maximized?

The Issues Paper (p23) addresses both the availability of payments model and user charges and network pricing. The application of ***Air Space Developments*** provides the opportunity to extend the reach of funding sources beyond the traditional availability of payments and network charging.
When taking account of ***Air Space Development*** opportunities involving the sale of the publicly owned air space the following comments are made in respect to the Issues listed at 18.

Issue	Response
18. Can you think of other effective ways to improve the operation of markets in infrastructure?	At jurisdiction levels, where infrastructure is in public ownership, rightfully the focus upon infrastructure can be ascribed in two ways: • the provision of new, and • the enhancement of existing. The latter enables the opportunity to maximise funding through the liberation of liquidity that prevails within existing publicly owned lazy assets. With the establishment of a Corporatised Governance Model – similar to the MTR in Hong Kong a totally new market is established which can be listed on the Stock Exchange and traded to the Public. The consequential revenue streams become available for reallocation to the finance pool for new capital infrastructure programming / provisioning. This approach would have the benefit of enhancing self sufficiency at jurisdictional levels - thus either lessening the allocation of Commonwealth co-funding to the relevant jurisdictions or extending the reach for additional new 'national interest' infrastructure projects.

Joint Property Development

The Issues Paper (p 27) addresses the application of a widely used overseas practice where the infrastructure provider undertakes value capture through the development of adjacent real estate. In so doing, the infrastructure provider generates a revenue stream to offset the cost of the infrastructure provisioning.
When taking account of ***Air Space Development*** opportunities involving the sale of the publicly owned air space the following comments are made in respect to the Issues listed at 19.

Issue	Response
19. Have funding models been omitted that should be included in the tool kit available to government? On what basis should one funding model be preferred to others?	The value added model with Air Space Developments has been precedented but seemingly on an ad hoc basis with limited success. There is a strong case for the Commonwealth to place a pre condition to jurisdictions for co-funding of new infrastructure projects. Such an approach could readily require funding bids to demonstrate the extent to which jurisdictions have analysed and formally documented the scope and scale of Air Space Development potentials within their respective metropolitan rail corridors. Only where clear justifications for such opportunities do not prevail, will the Commonwealth consider co-funding arrangements.

	This approach would parallel the primary thrust of the COAG Communiqué (issued Dec 09) being to: • articulate the required criteria for all States/Territories to integrate within their respective Metropolitan Plans, and • prescribe the importance of criteria compliance in order for the Commonwealth to enable relevant funding contributions for the States/Territories to progress with the implementation of their Metropolitan Plans.

In respect to Case Studies for Joint Property Development (Ch 3.5), the recent ***Air Space Developments*** at both Chatswood and St Leonards would readily provide an insight into the value added outcomes and not limited to financial but also urban renewal, transit oriented development, commuter car parking and increased patronage to and from the rail nodes.

RELATED INFORMATION

Infrastructure NSW

A recent presentation was made to Infrastructure NSW in respect to ***Air Space Developments***. The recipients, in addition to Annexes A and B, were also made aware of a visual portrayal of the extent of existing air space utilisation within the Sydney Metropolitan Rail Network - as given at **Annex C**. Additionally, the attendees were presented with indicative project sequencing for ***Air Space Development*** to gain an appreciation of the preliminaries required - as given at **Annex D**.

It was further discussed with the attendees that this approach to asset utilisation has the risk of not being well received as it involves the integration of disciplines and portfolios which - under a 'silo approach' within Government juridictions, fail to factor and consider the wider reach of value capture opportunities in many of its' measures beyond the specifc portfolio.

The presentation was well received and the attendees indicated the need to undertake appropriate liaisons and deliberations with relevant State Agencies, and particularly the specific issue of governance and safety.

COAG Communiqué Aug 2011

The recent COAG Communiqué (Aug 2011) relating to the Intergovernmental Agreement (IGA) on Rail Safety Regulation to establish a National Rail Safety Regulator is seen as a positive step with respect to the application ***Air Space Development*** within existing publicly owned rail corridors.
In addition to the Agreement contributing to improved productivity and efficiencies from consistent national requirements and decreased regulatory burdens, there is a strong likelihood the independent regulator may no doubt challenge prevailing rail operator excuses with sidestepping ***Air Space Development*** opportunities on the ostensible grounds of 'safety'.

The IGA endeavour to abolish the current seven regulators in favour of a single national regulator and the removal of 46 separate state and Commonwealth acts - regulating rail transport in Australia, is likely to further enhance productivity within the realm of ***Air Space Developments***.

The IGA's introduction of national rail safety law for the safety regulation of Australian rail operations, together with the establishment of the Independent National Rail Safety regulator (that will administer the national rail safety law) is likely to enhance the removal safety based excuses and consequential blockages - and thus further reinforce the overall timely productivity benefits derived from ***Air Space Developments***.

Applicable Legislative Cover for NSW

The planning and legislative impacts - for NSW, in creating an Air Space Portfolio and necessary planning approvals, is well covered by the recent amendments to PART 3A of the EP&A Act. The NSW Planning Minister the Hon Brad Hazzard MP recently issues a Policy Statement in June of this Year outlining the proposed amendments to State Significant Development SSD and State Significant Infrastructure SSI.

These amendments allowed the NSW Government to introduce a Bill into the Parliament to repeal Part 3A of the *Environmental Planning and Assessment Act 1979* (the EP&A Act) and replace it with an alternative system for the assessment of projects of genuine State significance.

The Bill, known as the *Environmental Planning and Assessment Amendment (Part 3A Repeal) Bill 2011*, proposes to establish an environmental assessment framework for two broad categories of development, namely State significant development (SSD) and State significant infrastructure (SSI).

The Bill proposes that projects that fall under these two categories be assessed by the Department of Planning and Infrastructure, while projects that do not qualify as State significant under either of these categories, will be assessed by the relevant local council.
The Bill also establishes two separate assessment pathways, one for SSD and another for SSI projects.
In addition to individual types of projects, the Bill also provides for the ability to identify specific Site's as being of State significance in terms of their development potential or strategic importance.

General State Significant Criteria

In establishing the tightly defined classes and criteria that will determine what qualifies as SSI, SSD and for SSD on specified sites (all outlined in table format below), a number of broad criteria are factored and include:

Criteria	Applicability to Air Space Development
• projects delivering major public benefits, such as large-scale essential transport and utility infrastructure, and social services to the community;	✓
• infrastructure projects with significant environmental impacts and projects of a significantly hazardous or environmentally-polluting nature;	✓
• projects of significant economic benefit to the State or National economy, such as those with high levels of financial investment and employment generation;	✓

• complex or precinct-scale projects (including where projects cross over multiple council and other jurisdictional boundaries) requiring a co-ordinated assessment to reduce overlapping approvals.	✓

Specific Criteria Proposed for Road, Rail and Related Transport Facilities

(1) Development that has a capital investment value of more than $30 million for the purpose of:
(a) heavy railway lines associated with mining, extractive industries or other industry, or
(b) railway freight terminals, sidings and intermodal facilities, or
(c) roads (including bridges) by private developers.

(2) Development within a railway corridor or associated with railway infrastructure that has a capital investment value of more than $30 million for the purpose of:
(a) commercial, residential or retail development, or
(b) container packing, storage or examination facilities, or
(c) public transport interchanges.

WAY FORWARD BY JUSRIDICTION

As an outcome of this work, there must be a more committed national program for infrastructure works which, by jurisdictions, provides for both the private sector and the community a sense of purpose to the current infrastructure dilemma. NSW is a particular problem! The lack of a 'pipeline of Infrastructure Investments' and the stop/start nature of project announcements has left the State in general disarray which can't be good for the overall economic growth of the Nation. An overview of what was 'all promised … but "indefinitely deferred", cancelled or quietly dropped' include:

- Epping–Parramatta rail link
- Hurstville–Strathfield rail link
- Fast rail links to Central Coast/Newcastle and Wollongong
- CBD light rail extension
- NorthWest Rail Link
- SouthWest Rail Link (now promised all over again)
- New Redfern–St Leonards CBD heavy rail link (now promised all over again), including a new rail
- Harbour crossing (now deferred, yet again, for at least 25 years)
- Several of the most important *Clearways* projects, including extra tracks on the Richmond and Illawarra lines
- St Leonards–Chatswood rail Quadruplication (now promised all over again)

- Major upgrading and modernisation of Town Hall station, including major fire and life safety works
- North West Metro
- Epping–Top Ryde–CBD Metro
- CBD Metro
- West Metro
- Integrated ticketing (now promised all over again)

The Western Sydney Region Organisation of Councils (WSROC) commissioned an economics report in 2010, which considered the *under investment* in infrastructure for the Region. The Report went on to conclude that '**NSW is groaning under the weight of a widely recognised infrastructure crises'**. They point out that there has been, for over 20 years a 'popularist' aversion to debt while at the same time recognizing that 'infrastructure assets typically enjoy a rate of commercial return well above the cost of borrowing'. . p 22 Lateral Economics October 2010

In March 2005, the Business Council of Australia (BCA) in their Paper titled 'Infrastructure Action Plan for Future Prosperity' concluded, inter alia:

> **'fundamental infrastructure supporting all elements of the transport network, energy and water supplies, and the facilities to support growing and spreading urban communities – is in urgent need of reform, repair and expansion'**.

More recently the current Premier of NSW pointed this out in his *State of the Region Address*:

> **'If NSW growth had kept pace with Victoria over the last 14 years, our economy would be $50 billion larger, with more jobs and an additional $10 billion in revenues to invest in services, infrastructure and tax cuts'**. Premier Barry O'Farrell, July 2011

If nothing is done to address this dilemma in NSW then the continuing cost to the economy and the State's GDP will be measured in the $Billions. This is why:

- the Submission is recommending one of the key "**outcomes**" to this work – is to create a '**State Finance Strategy'** for each jurisdiction**.** A ten (10) year financial plan which actually links land supply (corridors) and financing to infrastructure delivery. Not the traditional 'Budget Funded' singular discipline approach which lacks the long term integrity required of a true Financial Model for State Economic recovery.
- Further that to support this approach in NSW, the Treasury led policy & procurement Model is replaced with a new Governance structure. This structure then provides autonomy and hypothecated funding to new multi disciplinary lead Agencies – which report back to central Government against key delivery milestones – not just financial accounting on accrual basis.
- For the Rail Corridor and to support a new 'Air Space Portfolio' a new lead Agency is created which has the same dual functionality of the MTR Hong Kong Model – with substantial expertise aligned to property development. This Model is to focus on the operational performance of the rail system and '***transit oriented value capture'***.

CLOSING COMMENTS

There is seemingly clear scope for increased effort into evaluating intervention so as to build up the understanding of value capture and the corresponding avoidance of 'opportunity costs'.
Also scope is evident for more macro reform in model bound thinking and is a case where government intervention does not trigger counterproductively but motivates jurisdictions and demonstrates how to encourage excellence. Furthermore, such Government initiated productivity improvement can't be replicated by the private sector. \Indeed higher productivity improvement demonstrates enhanced fiscal responsibility without competitive pressures and to do otherwise significantly impact's on opportunity costs / benefits foregone in all measures.

In the context of the Value Capture initiative, it can be readily seen as an equal opportunity for the Commonwealth to give consideration to apply a similar principle in a future COAG setting, whereby:

- the nature of Value Capture falling within two operational elements:
  a. ***Air Space Development*** over existing publicly owned rail corridors - as has been effectively precedented for Sydney (Chatswood, St Leonards, N Sydney, Liverpool Street car park, Kogarah and Hurstville). The submission to the State Government in May 2010 demonstrated this value added approach (**Annex A**), and
  b. The skilful creation of State / Territory based Betterment Tax provisions, whereby benefited private land owners are required to share, in an agreed formula, of the uplift value - as a consequence of State / Territory expenditure of enabling infrastructure;

- the States/Territories require funding bids to demonstrate the extent to which jurisdictions have analysed and formally documented the scope and scale of Air Space Development potentials within their respective metropolitan rail corridors and only where clear justifications for such opportunities do not prevail, will the Commonwealth consider co-funding arrangements towards relevant infrastructure projects.

With due consideration to the IFWG's:

- programming / timetabling of the Financial Reforms advice, and
- desire to seek the opportunity to incorporate the specific application of ***Air Space Development*** into the range of issues for public comment,

there may be scope to seek a rapid response from the relevant jurisdictional agencies associated with lead planning, infrastructure and finance - as to both the nature and extent of expanded multi faceted opportunities through the application of ***Air Space Developments*** within their respective metropolitan rail corridors (and potentially within appropriate road corridors), and the potential scale of 'value added revenues' so generated.

The extent to which the jurisdictional agencies add to the inputs sought by the IFWG, with the application of ***Air Space Developments*** may prove a worthwhile exercise in support of the overall endeavours being sought by:

- the ***IFWG*** in considering the range of required reforms to maximise the pool of funds potentially available for infrastructure investment, and
- ***Infrastructure Australia*** in formulating advice and facilitating the harmonisation of policies on the enhanced utilisation of existing infrastructure with the reallocation of value capture for investments into the provision of new infrastructure.

Authors

Robert Senior: B Urban Estate Planning, M Planning, M Land Economics

Norman Johnston: MBA, MTCP, BA Dip, Cert Portfolio/Accounting

Annexes:

A. Submission to the NSW Government

B. Letter and Response from Infrastructure Australia

C. Sydney Metropolitan Rail Network

D. Indicative Project Sequencing for Air Space Development

ANNEX A

SUBMISSION TO THE NSW GOVERNMENT

(May 2010)

CERTAIN PLANNING

COPY

ACN 071 419 639

PO Box 1144
HAYMARKET
SYDNEY 2000
P/F: 9317 1547
M: 0419 431 064

The Hon Tony Kelly, ALGA, MLC
Minister for Planning, Minister for Infrastructure, Minister for Lands
Level 34, Governor Macquarie Tower
1 Farrer Place
SYDNEY NSW 2000

31st May 2010

Dear Minister,

RESPONSE TO REQUEST FOR FEEDBACK ON

THE METROPOLITAN STRATEGY REVIEW

- AIR SPACE DEVELOPMENT AS A CONTRIBUTING SOLUTION TO

IMPROVED INTEGRATION OF LAND-USE AND TRANSPORT INFRASTRUCTURE

Thank you for the opportunity to respond to the request for feedback on the ***Metropolitan Strategy Review***.
The attached Submission to the Department of Planning was made by e:mail on the 28th May 2010.

The proposed application of further air space development within the GMR rail network, apart from improving the integration of land-use and transport infrastructure, has the potential to integrate a range of Government's other policy drivers including:

- a formal realisation of air space as a highly valued Government owned portfolio;
- the consequential opportunity to redress an existing lazy asset and generate unscheduled revenue streams;
- the provision of transit oriented development for such uses as residential (including affordable housing), commuter car parking, long day child care centres, vertical aged care villages and depending on location specific unmet demands – the possible inclusion of commercial or retail or both;
- a partial remedy to the difficulties faced with existing urban area infill, in recognising community opposition often being a significant barrier to urban renewals with medium / high density development; and
- the enhancement of public transport patronage, lessened car dependency and thus reduced GHG emissions.

The Submission also identifies challenges, and is forwarded to enable awareness of the initial evaluation task being faced by the Department of Planning. As transit oriented air space development meets many of the current Policy agenda's facing Government today, I recognise the importance of you being apprised of the opportunities.

I would be pleased to respond to any questions or points of clarification your Office may have. Thank you for your time.

Yours sincerely,

Robert Senior
Director

Attachment:
Response to Metropolitan Strategy Review

RESPONSE TO METROPOLITAN STRATEGY REVIEW DISCUSSION PAPER

into

SYDNEY'S FULLY INTEGRATED PLAN

that

REFRESHES THE METROPOLITAN STRATEGY

and

PROVIDES A ROBUST PLANNING PLATFORM

for

THE NEXT 25 YEARS

SELECTIVE UTILISATION OF AIR SPACE

ABOVE RAIL CORRIDORS

within the

GREATER METROPOLITAN REGION

for

TRANSIT ORIENTED DEVELOPMENT

SUBMISSION BY:

Certain Planning Pty Ltd

ABN: 26 071 419 639

28 May 2010

TABLE OF CONTENTS

SECTION	SUBJECT	PAGE
	EXECUTIVE SUMMARY	2
1.	INTRODUCTION	3
2.	BACKGROUND	3
3.	EXISTING PRECEDENTS OF TOD WITHIN THE SYDNEY GMR	4
4.	CURRENT LIMITATIONS TO EXPANSION POTENTIAL	5
5.	THE OPPORTUNITY	5
6.	INDICATIVE METRICS OF A TOD PORTFOLIO	7
7.	SUMMARY OF POTENTIAL OUTCOMES AGAINST THE PROPOSED DIRECTIONS TO 2036	8
8.	RELATED ISSUES FOR CONSIDERATION	11
9.	CONCLUSION	12

ATTACHMENTS		
A.	Auditor General Performance Audit, ***Connecting With Public Transport*** June 2007 Executive Summary and Recommendations	13
B.	Indicative Data Table Template- to Estimate Avoided Annual Emissions within the Metropolitan Region	15
C.	Identified NSW State Plan (2010) – Relevant Priorities Enhanced with the Provision of TOD.	16
D.	Application of TOD Against the COAG December 2009 Criteria	17
E.	Indicative Selection Criteria to Identify Suitable TOD Node Sites	18
F.	Indicative Yield Calculations for both a TOD Node Site and the GMR Network	20

EXECUTIVE SUMMARY

This Submission is in response to the Sydney ***Metropolitan Strategy Review 2036 Discussion Paper***. The purpose of the paper is to describe the scope and opportunities for providing Transit Oriented Development (TOD) over suitable sites within the Sydney Greater Metropolitan Region's rail network.

Given the limited scope of residual 'low hanging fruit' to effect existing urban infill, air space development adjacent to appropriately located rail node stations has the potential to generate a range of benefits including a contributing solution to improved integration of strategic land-use planning and infrastructure.

The paper recognises other government and advocacy documents / reports used in developing the Submission and the key issues raised including:

- the 2008 Auditor General initiated a Performance Audit, ***Connecting With Public Transport***,
- the ***2008 NRMA Audit of Park and Ride Facilities***,
- the ***COAG Communiqué*** of December 2009,
- the ***2008/2009 Metropolitan Development Program Report***,
- the 2010 ***Metropolitan Transport Plan***,
- the ***NSW State Plan 2010***, and
- the Commonwealth's ***National Housing Supply Council's State of Supply Report 2010***.

The key issues identified, include sustainable planning for growing populations, reducing congestion, integration of land-use with transport and infrastructure planning, growing Sydney's value, the treatment of above rail air space as a new portfolio, realisation of unscheduled disposal revenues from the sale of air rights, a substantial increase in the delivery of 'in fill' housing stock and assist in making Sydney climate change ready.

The potential value of an air space portfolio, when applying a notional \$350 / m^2, may yield a disposal revenue in excess of \$2 bn. The estimated additional car parking could exceed 69,000 spaces with an annual emission reduction of some 80,000 tonnes/ CO_{2e}.

The summary of the factors influencing successful TOD includes:

- Integration of land use and transportation planning coordinated at the State level between the relevant Agencies.
- State Governments' realisation of the unscheduled revenue opportunities.
- An appropriate mix of land uses encouraging optimum utilisation of public transport.
- A revised Transport Administration Act to enabling air space development over operating rail corridors with an appropriate stratum subdivision and delivery authority.
- Ownership of the air space vested in a Government planning / development entity such as the Metropolitan Development Authority (MDA) or equivalent and with powers of air space assembly rights and an established interface role with the rail corridor operator.
- The development of realistic and attainable criteria for selecting TOD sites and network assessment being funded from the existing private car levy as collected by the Office of State Revenue.
- The over rail building platform potentially delivered by Government
- Prescribed development controls (maybe contained in a new SEPP) that reflect sustainability in triple bottom line measures.
- The public sector actions that include investment in pedestrian and transit improvements.
- A likely consequential review of the Government's levy allocations for commuter car parking and switched to facilitate the construction of commuter car parking for bus / light rail transit nodes.
- Disposal of Air Space Development rights under competitive market tension arrangements.

Suitably identified TOD Air Space Development projects would substantially increase the available capital expenditure for other public transport infrastructure projects for rail or other modes.

1. INTRODUCTION

The NSW State Government has invited community input regarding the Metropolitan Strategy Review 2036 Discussion Paper for Sydney. The outcomes identified in the Review Discussion Paper, together with the integration of the finalised Metropolitan Transport Plan are acknowledged and supported.

The purpose of this Submission is to assist in the development of a primary focus of the Review: 'improved integration of strategic land use planning and infrastructure'. This Submission outlines a contributing solution which captures added benefits to the NSW State Government and the community of Sydney.

This Submission incorporates and expands on the following sub themes within the Discussion Paper:

- Sustainable planning for a growing population,
- Reducing congestion and controlling urban sprawl,
- Integration of land-use with transport and infrastructure planning,
- Building vibrant and sustainable communities through urban renewal,
- Making Sydney climate change ready, and
- Meeting changing housing needs.

Within the above sub themes, this Submission has its focus on:

- **What** can be done to enhance the existing underutilisation of transit oriented air space development opportunities within Sydney's existing Greater Metropolitan Region (GMR) rail network,
- **Why** the proposal would make a difference in overcoming the current opportunity cost to both Government and community, and
- **How** the new strategy should incorporate an identification of Transit Oriented Development (TOD) sites within the existing and proposed new 'at grade' rail corridor network.

2. BACKGROUND

A major deterrent to the use of public transport is the shortage of sufficient commuter car parking at existing railway stations. The consequential impacts are extensive metropolitan road and CBD congestion and the avoidable emission of greenhouse gases (GHGs). These impacts are clearly identified in Metropolitan Strategy Review Discussion Paper and recognise the extent of GHG reductions with the application of appropriate strategies (both individual and collective).

In June 2007, the NSW State Government's Auditor General initiated a Performance Audit, ***Connecting With Public Transport***. The audit examined the effectiveness of commuter car parking / interchanges in promoting increased use of public transport in Sydney and focused on three specific questions:

- Has the Government adopted a coordinated and strategic approach to developing interchanges?
- Are there adequate information systems to inform the public and management?
- Has funding of interchanges been adequately addressed?

A summary of the Audit findings – Executive Summary and Recommendations are given at Attachment A.

In February 2008, the '***NRMA Investigation and Audit of Park and Ride Facilities'*** within the GMR identified an undisclosed estimate of vehicles that would have utilised commuter parking at railway stations if available.

In July 2008, the Department of Environment and Climate Change (DECC) established a provisional carbon accounting formula that gave a projected annual emissions per car for Sydney equating to 4.3 tonnes of CO_2 (or equivalent). A calculation template for deriving the extent of Avoided Annual Emissions (tonnes of CO_{2e} for Metropolitan Sydney, with the provision of large scale metropolitan based commuter car parking) is provided at Attachment B.

The NSW Government, through:

- ***DECCW***, is developing a range of strategies for energy efficiencies to contain the extent of GHG emissions,
- the ***Department of Planning***, has prescribed clear targets for residential and employment growth to meet increased population growth and initiated the policy for the integration of land use and transport planning,
- the ***Department of Transport and Infrastructure***, has a stated goal of developing best practice guidelines for the funding and provisioning of commuter car parking,
- ***RailCorp,*** maintains current control of the rail corridors including a small number of *'above grade'* developed air rights, commuter car parking, all non utilized corridor air space and operates in excess of 300 railway stations within the GMR,
- the ***NSW Treasury,*** has responsibility to ensure optimum utilisation of State owned assets, and
- the ***Department of Premier and Cabinet,*** has finalised the three yearly review of the NSW State Plan (2010).

These various areas of individual Agency responsibilities constitute the prospect for an interdepartmental review. This would have the role of assessing the opportunities and synergies for defining new or enhanced strategic air space for TODs that will yield substantial environmental social and economic benefits for the overall betterment of both the Government and the community. The benefits would arise from a combination of:

- creating and capturing the economic, social and environmental benefits attainable with the existing infrastructure, through : integration and access, rail mode capacity enhancement, optimizing existing infrastructure assets and realizing all potential unscheduled revenues to enhance a sustainable funding regime;
- enhancing a range of specific priorities outlined in the NSW State Plan (2010 Review) as listed at Attachment C; and
- enhancing the range of specific directions outlined in the Strategy Review Discussion Paper and detailed further at Section 7.

At the Federal Government level, the COAG meeting of December 2009, resulted in a communiqué that included a capital city strategic planning systems. The COAG agreed that, by 1 January 2012, all States will have in place plans that meet new national criteria. The extent to which the application of TODs within the rail corridors of Sydney' GMR meets the relevant criteria of COAG's communiqué is outlined at Attachment D.

3. EXISTING PRECEDENTS WITHIN THE SYDNEY GMR

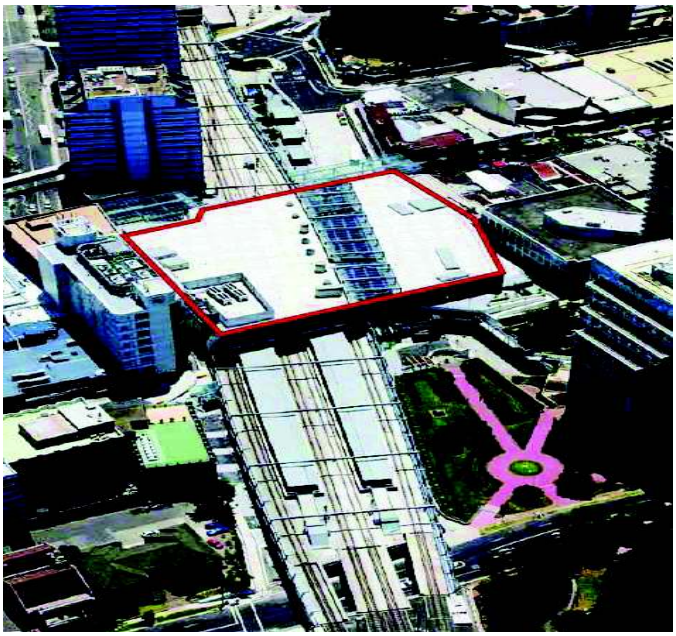
Within the Greater Metropolitan Region (GMR), initial research shows that only six (less than 3 % of the total network of *'at or near grade'* rail station precincts) have air space developments. They are: Central (north for non TOD car parking) and a range of mixed uses at Chatswood, Hurstville, Kogarah, North Sydney, and St Leonards. The five mixed use above rail developments are contiguous to rail stations and with uses ranging from car parking, commercial, retail and residential.

In the case of Chatswood, the over rail building platform has been completed and includes some 500 car parking spaces. The site is currently for sale with an approved Building Rights package for the delivery further parking and three residential towers. The Building Rights Package (as indicated in the EOI release) includes four freehold stratums (3 residential stratum and 1 carpark stratum).

The three residential towers range from 25 to 40 storeys will provide in excess of 500 apartments.

The Gross Floor Area represents some 58,000m^2 and with scope for uplift in area and with an indicated uplift payment impost of $525 /m^2 at the time of the EOI release.

The extent of the building platform for air space development above the rail corridor is portrayed in the aerial photograph following:



In the case of the five mixed use precedents mentioned above, although subject to competitive tension, the created TODs were conceived within the private sector interests for take up. In this regard, and given the projected population growth and prevailing challenges in dealing with existing urban infill, the opportunity exists for Government to accelerate the rate of future TOD deliveries by shifting the initiative from the private sector to the public sector.

4. CURRENT LIMITATION TO EXPANSION POTENTIAL

So long as RailCorp remains the sole authority entrusted with ongoing airspace ownership on railway properties, it is unlikely that the broader social, environmental and economic planning considerations will be contemplated. There is seemingly no corporate driver or requirement for successful outcomes. Whilst rail operators' objectives and responsibilities are confined to rail transport operations they exclude any requirement to realise the broader principle of: ***'the greater good for the greater number'***. Because of this, the Government and the community will continue to forego the potential gains derived from an impelling range of triple bottom line benefits.

In benchmarking terms, the adopted technique for the provision of rail enclosing structures (the equivalent of land creation) could parallel the proven safe and fast method adopted at the 2.5 ha high intensity public domain of Federation Square in Melbourne. This building platform involved the production of off-site pre-stressed pre-cast concrete paneling for vertical and horizontal placements. Such an approach attains a high level of efficiency and effectiveness by reducing the time required for track possessions and overcoming any risk any side load impacts with conventional column placements. Accordingly, a new opportunity prevails in addressing what can be done, why and how.

5. THE OPPORTUNITY

Given the limited scope of residual 'low hanging fruit' to effect existing urban infill, the scale of the GMR rail corridor, the limited uptake on air rights development and the exampled precedent as with Chatswood, there is substantial scope for the assignment of an air space portfolio that is formally assessed and led by Government. A proactively created new strategy for air rights development above rail corridors, in terms of what, why and how, is outlined below:

What: the creation of a new (unscheduled) property portfolio (with a State Significant classification) that:

- recognises the scope to harness air space development for the provision of TODs,
- determines relevant criteria for site analyses in proximity to metropolitan network stations, and
- identifies appropriate mixed use developments that can meet a realisable portion of the forecast demands arising from sustainable urban growth, including the provision of commuter car parking facilities, affordable housing, transit oriented long day child care centres, vertical aged care facilities and residential development.

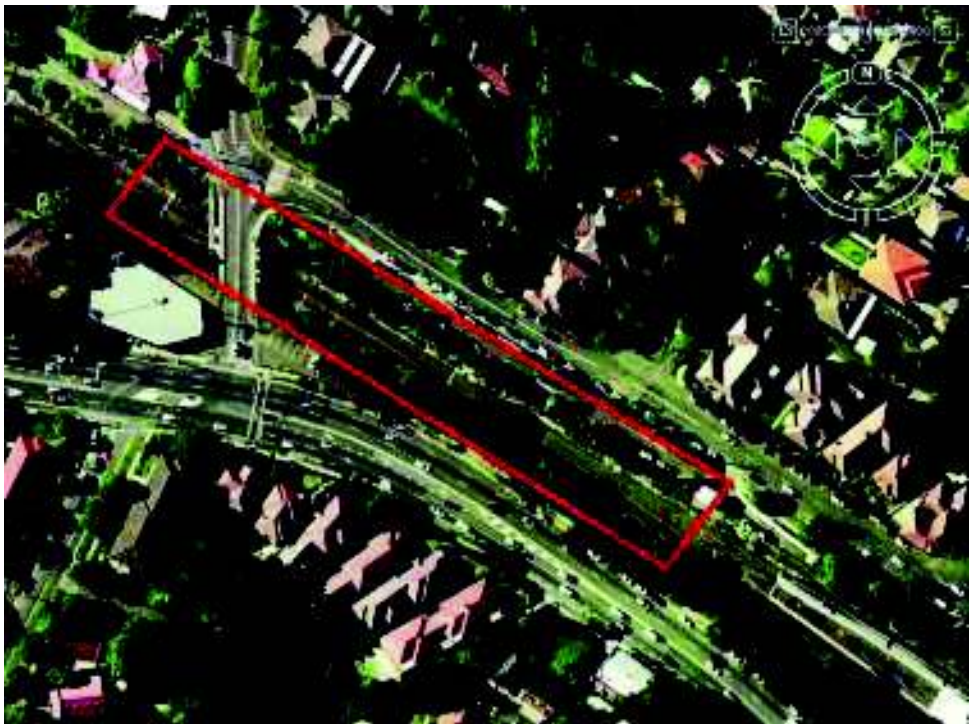
Why: to enable:

- the integration and more effective use of an existing array of related State Government policy drivers to fulfill metropolitan sustainability as identified in the NSW State Plan (2010 Review),
- optimised utilisation of significant State owned *"lazy asset"*, and
- the creation of substantial revenue from the commercial disposal of '***air space development rights***' to the property market

How: by initiating a formal assessment of air space development contiguous to appropriate rail station precincts with terms of reference to:

- recommend which should be the preferred Agency with ownership / responsibility / delivery of air space building platforms for TODs;
- identify the extent to which the initial corridor assessment should be funded from the existing car parking levy, given that future commuter car parking can be readily integrated with other air space development at suitably identified node sites;
- assess the essential criteria for 'air space' selections within each of the identified network station precincts, as indicated at Attachment E;
- identify suitable sites for TODs that takes account of Site Compatibility Certification under *State Environmental Planning Policy (Infrastructure) 2007* (the Infrastructure SEPP);
- determine the range of appropriate market-derived uses within each identified transit node site; and
- recommend the methods by which the follow-on financial and economic analyses are prepared to derive the respective development rights value.

The aerial below illustrates a potential siting location for air space development in relation to a suburban rail station:



The over rail development enables the provision of commuter car parking, transit oriented child care including car spaces for parents, and other mixed uses including commercial / retail (subject to locality demand), residential including affordable housing and appropriately designed vertical aged care facilities, and with roof top landscaped open space.

Such an approach within the GMR rail network has the potential to generate a worthy range of identifiable outcomes.

Identifiable Outcomes:

Subject to ongoing rail operational and safety requirements, the application of TOD air space development uses would enable an effective merge of the relevant Federal and State guidelines, policies and directions as follows:

- assists in addressing the issues of the funding and provisioning of commuter car parking as identified in the ***NSW State Auditor General's Audit Findings*** as outlined at Attachment A;
- assists in meeting the relevant priorities announced in the ***NSW State Plan review (2010)*** as outlined at Attachment C;
- satisfies selected national criteria from the ***COAG Communiqué December 2009*** for capital city strategic planning systems as identified at Attachment D;
- aligns with and supports the ***National Housing Supply Council's State of Supply Report 2010*** in recognising the importance of State Governments, in addressing 'infill' housing, to take substantial steps to facilitate infill development;
- accelerates TOD delivery through an MDA or equivalent (as identified in the ***Metropolitan Strategy Review Discussion Paper***) enabling additional supply of housing and increased patronage on public transport;
- augments the identified transit nodes sites within the ***NSW Government's Metropolitan Development Program*** (MDP) major sites data base for existing urban areas;
- expands provisioning of long day child care facilities linked with home to work journeys or home to education / training journeys;
- significantly reduces emissions by providing commuter car parking within rail corridors;
- facilitates proactive and attainable infill delivery for increased affordable housing stock and a consequential reduction of development pressure on upon metropolitan fringe agricultural land;
- offers a significant enabler in meeting the brown field dwelling and employment targets (and growing) that have been prescribed within the existing Sub Regional Strategies;
- lessens community opposition compared to compulsory acquisition measures to enable large scale development within existing established transit oriented residential precincts;
- enhances utilisation of State Government owned assets (defining a new portfolio) and with the creation of significant unscheduled revenues to Government; and
- offers the opportunity to redirect unscheduled revenue for the purpose of other transport infrastructure such as upgrades for stations, signaling, stabling yards, new rolling stock, contributions to affordable housing delivery, land purchase to protect urban fringe agricultural lands or a combination of these.

6. INDICATIVE METRICS FOR A NEW TOD PORTFOLIO WITHIN THE GMR

Within the context of Sydney's GMR, an indicative assessment of assumptions and potential floor space (m^2) available for air space development are derived from the following calculation inputs:

- With a network coverage between Maitland, Lithgow and Bomaderry comprising some 250 (approximate) at grade' rail stations, each with 2 potential sites (up line and down line of each station) and applying a notional 15% suitable for development, would yield 75 development sites over time.
- With a rail access precinct (as defined in the MDP) of 400m radius, less the station length of say 200m, would provide for 300m length for each potential up line / down line node site.
- An average corridor width of 40m and allowing 2.5m boundary setbacks.
- An average height of 12 storeys (but subject to relevant constraints such as solar access etc), and each level of elevation with a reduced area to enable a taper effect.
- a generic building efficiency (gross to nett) at 85%.

The indicative measurements for both a node site and the network, factoring the above calculations, are provided at Attachment F. An overview of the calculated findings, as applied to the GMR rail network, is listed below:

Feature	Approximate Findings
Total Base Plate nett area	67 ha
Total Units with allocated car parking	49,500 units
Long Day Child Care [(1)]	3,000 places
Commuter Car Parking	19,800 spaces
GHG Emission Reductions	80,000 tonnes
Network Air Space Value [(2)]	$2.2 billion

Notes:

1. Provisioning subject to locality market demand.

2. A formal valuation would be derived from follow-on ground truthing and subsequent:

   - feasibilities guided by the indicative selection criteria for TOD node sites as indicated at Attachment E;
   - agreed ratios between residential units (and corresponding car parking allocations), and other mixed use elements including commercial, retail, aged care, child care and commuter car parking; and
   - agreed final value for both m^2 and assigned car spaces for residential, commuter and long day care centre uses.

---

7. SUMMARY OF POTENTIAL OUTCOMES AGAINST THE PROPOSED DIRECTIONS to 2036

The projected outcomes of the proposal, when compared against the stated Directions in the Discussion Paper, are summarised below:

Planning for a growing population. Implement sustainable planning for a growing and ageing population. By 2036 Sydney will need to accommodate 6 million people. • 1A Should Sydney continue to accommodate the majority of population growth in NSW? What are the alternatives?	• **Continued accommodation of growth subject to the provision of additional land supply including air rights development sites and with linked infrastructure support.**
Making Sydney climate change ready. Address the vulnerability of Sydney to a changing climate and a carbon constrained future. • 2A What land use responses will help Sydney mitigate, and adapt to climate change? • 2B How can the planning system help Sydney adapt to the impacts of climate change? • 2C How can planning in Sydney be improved to boost water, fuel, energy and waste efficiency? • 2D How can we bring more green and open spaces into our communities?	• **Enables the opportunity for accelerated provisioning of TOD delivery enabling reduced car dependency and reduced CO_2 emissions.** • **TOD for fuel and energy efficiency.** • **Enhanced Green outcomes (emission reductions) through TOD.** • **The provision of roof top open gardens**

Integrating land use with transport. Get best value from investment in transport infrastructure with integrated land use planning. • 3A What is the best use of land within walking distance of stations and bus stops? • 3B How can we make our city better for pedestrians, cyclists and public transport users? • 3C How can we reduce the need for people to travel as far or as often?	• **Air Space TOD within relevant rail access precincts and potentially selected bus interchanges.** • **Air Space TOD for mixed uses.** • **Air Space TOD for mixed uses including vertical aged care facilities, child care facilities and commuter car parks.**
More jobs in the Sydney Region. Boost job growth by providing a good supply of land for employment. • 4A Where should we reserve future employment land? • 4B How can we maintain and revitalise older industrial sites in established areas? • 4C What initiatives can boost the success of future employment lands? • 4D How can we ensure sufficient retail and commercial space to support economic growth? • 4E What economic development incentives might attract businesses and increase jobs?	• **Predominately at grade but with provision above grade (air space developments).** • **Combination of renewals and higher densities.** • **Air Space TOD for mixed uses at appropriate rail node precincts.** • **Air Space TOD with mixed uses including employment as appropriate.** • **Employment attractions for both TOD delivery and whole-of-life operations with the provisioning of substantial air space FSR m^2.**
Growing Sydney's value. Increase diversity of employment to strengthen local economies and provide a wider range of jobs closer to home. • 5A What are the ways of facilitating diverse employment and supporting jobs in new and existing centres? • 5B How can we attract diverse employment and new jobs in Western Sydney? • 5C How do we encourage affordable places for small and creative businesses? • 5D How do we enhance Sydney's role as a Global City?	• **Air Space TOD including air space development at relevant rail access precincts and potentially selected bus interchanges.** • **Air Space TOD for mixed uses**
Strengthening a City of Cities. Improve the capacity of Sydney to accommodate the majority of its housing growth within existing urban areas. • 6A What is the best way to unlock the potential for growth in centres and areas within walking distance to stations and bus stops? • 6B How can the planning system support investment and jobs in new and existing centres? • 6C What features are essential to a vibrant centre? • 6D How do we ensure these features are incorporated into our planning?	• **Air Space TOD at relevant rail access precincts and potentially selected bus interchanges.** • **Entire existing rail corridor network potentials formally assessed to optimise opportunities for TOD provisioning.** • **Favourable attributes to health, physical functionality and economic success** • **Relevant criteria of the COAG Communiqué applicable at the localised level.**

Meeting changing housing needs. Ensure a wider mix of housing types and costs across Sydney in response to an ageing population and changing housing preferences. • 7A What housing types will we need in our local areas in the future? e.g. stand– alone or terraced houses, townhouses, tall apartment buildings, small blocks of apartments with shared gardens or big houses divided into two homes? • 7B Which areas are appropriate for higher density housing–such as apartments?	• **Enables the opportunity for accelerated provisioning of affordable housing, commuter car parking, transit oriented child care and vertical aged care facilities.** • **Air space development over appropriately located rail access precincts for selected high rise mixed uses**
Balancing land uses on the city fringe. Plan for new housing in greenfield areas, while protecting land for primary production, open space and conservation needs. • 8A Should we continue to concentrate greenfields development in the Growth Centres? • 8B Should more be done to encourage food production in the Sydney Basin? • 8C To what extent should land on the city fringe be identified and protected for open space and conservation? • 8D How can the process of greenfield land release be improved?	• **Integration of Air space development over appropriately located at grade new rail access precincts within Growth Centres.** • **Lessen the pressure on high cost greenfield lots with the increase in transit node (infill) sites.** • **Greater emphasis on future Air space developments integrated with new rail infrastructure**
Achieving Renewal Build communities through redevelopment. • 9A Which parts of Sydney would benefit from a new centre with shops, small businesses and public transport services? • 9B How can we improve the design of public spaces and new buildings in existing areas? • 9C What are the barriers to accessing key services in your local area? • 9D What future uses, activities and services should be grouped in and around centres?	**The benefit of Air space TOD over appropriately located transit nodes needs to be factored in all forms of renewal /infill assessments.** **Mixed uses including affordable housing, vertical aged care facilities, transit oriented long day care centres, commuter car parking, and other mixed uses as appropriate.**
Implementation Implement a revised Metropolitan Strategy. • 10A What should be the key characteristics of an urban renewal authority (e.g. Sydney Metropolitan Development Authority)? • 10B What legislative and planning tools should be available to such an authority? • 10C What indicators should we use to measure the success of our Metropolitan Plan?	• **Source the provision of unscheduled disposal revenues that could be derived from new air rights development over otherwise existing "lazy assets", enabling: increased available finance for expenditures including network upgrades or new City infrastructure projects or both.** • **Necessary legislation to enable 'air space development rights' and timely enactment.** • **Achievements against the criteria established by the COAG communiqué released December 2009.**

What else? • 11A What top three issues or geographical areas should the next Metropolitan Plan particularly focus on? Why? • 11B Do you think the ten proposed directions above are the right way for Sydney to head towards 2036?	• **Issues and areas likely to be derived from appropriately considered, sequenced and evidence-based land creation (over rail corridor), envelop studies, feasibilities and expressions of interest, ensuring an appropriate balance of infill TODs (within existing nodes) and greenfields TODs (at future rail nodes);** • **Provided that clearly identified priorities for policy effort initiatives and investment by governments ensue, and with an effective framework for private sector innovation, investment and delivery.**

8. RELATED ISSUES FOR CONSIDERATION

The range of related issues that may warrant further considerations may include but are not limited to:

a. ***State Government Level***:

- The application of an appropriately modified Government 'Gateway Process' to explore the willingness to adopt existing air space development precedents within Sydney, adapt as appropriate in order to realise adeptness in the highly valued creation of TODs at appropriately identified transit Node Sites.
- The enhanced rail network capacity measures to accommodate increased commuter patronage levels.
- The appropriateness to effect change in the ownership / management the rail corridor air space.
- Realistic and attainable selection criteria for transit node site identification as exampled at Attachment E.
- The scope for change in the relevant enabling legislation to enhance system effectiveness that is simple, rapid and able to deliver land use certainty.
- The costs to examine, test and establish physically and financially viable TOD sites including envelope studies.
- The scope for initial assessment funding being allocated from the existing car parking levy program, given the likelihood of a significant increase in commuter car parking.
- Assessment of costs / revenues for effective park and ride ticketing mechanisms.
- The expenditure priorities of the newly derived revenues from air space development rights disposals.

b. ***Federal Government Level***

- The appropriateness of a national approach for:
  - encouraging TOD outcomes to enhance public rail and road transport ridership with the consequential, economic, social and environmental benefits;
  - managing the containment of infrastructure costs of passenger rail and road networks as experienced with the conventional 'sprawl spread phenomena' of most major cities;
  - including the application of air space TOD as a feature or criteria in the capital cities strategic planning systems and enabling existing urban area infill to aid in meeting the national future housing supply; and
  - liberating the liquidity from existing State / Territory government owned infrastructure property assets for appropriate expenditure on other capital city programs or projects.

9. CONCLUSION

The considered primary factors influencing successful TOD include but not limited to:

- Integration of land use and transportation planning coordinated at the State level between the relevant Agencies.
- The realisation of limited residual 'low hanging fruit' to effect existing urban infill and the importance of State Governments to take substantial steps to facilitate infill development as recognised by the ***National Housing Supply Council's State of Supply Report 2010***.
- State Governments' realisation of the unscheduled revenue opportunities.
- The appropriate mix of land uses deriving optimum utilisation of public transport.
- An appropriate review of the Transport Administration Act to enable Air space development over operating rail corridors with an appropriate stratum subdivision and development delivery authority.
- Realistic and attainable selection criteria for TOD Node Sites identification.
- Ownership of the air space linked to a Government planning / development entity.
- The role of a Metropolitan Development Authority (MDA) or equivalent being vested with the relevant air space assembly rights with stratum subdivision, and established interface role with the rail corridor operator.
- The development of realistic and attainable criteria for selecting TOD Node Sites and network assessment being funded from the existing private car levy as collected by the Office of State Revenue.
- Prescribed development controls (maybe contained in a new SEPP) that reflect sustainability in triple bottom line measures.
- The provision of over rail building platforms being potentially delivered by Government through an MDA or equivalent.
- The public sector actions that include investment in pedestrian and transit improvements.
- A likely consequential review of the Government's levy allocations for commuter car parking and switched to facilitate the construction of commuter car parking for bus / light rail transit nodes.
- Disposal of Air Space Development rights under competitive market tension arrangements.
- Suitably identified TOD Air Space Development projects would substantially increase the Government's available capital expenditure for other public transport infrastructure projects for rail or other modes.

ATTACHMENTS:

A. Executive Summary Auditor General Performance Audit, ***Connecting With Public Transport*** - June 2007

B. Data Table Template- ***Avoided Annual Emissions*** - tonnes of $CO_{2\,e}$

C. Identified ***Draft NSW State Plan (2010)*** Objectives - Enhanced with the Provision of TOD

D. Application of TOD Outcomes Against the ***COAG Communiqué*** December 2009 Criteria

E. Indicative Selection Criteria in Identifying Suitable TOD Node Sites

F. Indicative Yield Calculations for both a TOD Node Site and the GMR Network

AUDITOR GENERAL PERFORMANCE AUDIT - *CONNECTING WITH PUBLIC TRANSPORT*

Executive Summary

The focus of our audit

The NSW Government released the *State Plan – A New Direction for NSW* in November 2006. A priority area is to increase the public transport system's share of peak hour journeys undertaken in Sydney.

Interchanges provide access to public transport. They include bus stops, railway stations, ferry wharves, taxi ranks, kiss and ride areas, cycle racks and park and ride areas. Many key aspects of integration come together at interchanges including information, ticketing, network accessibility, service coordination and personal security.

The looked at the effectiveness of interchanges in promoting increased use of public transport in Sydney. More particularly, the three questions asked:

- Has the Government adopted a coordinated and strategic approach to developing interchanges?
- Are there adequate information systems to inform the public and management?
- Has funding of interchanges been adequately addressed?

The audit included a review of interchange projects built since 1992-93. In more recent years there has been less interchange development. In this context, the audit looked for areas for improvement that the Ministry of Transport can apply in its development of new processes.

Audit opinion

We see considerable potential for the Ministry of Transport to plan and manage interchanges more effectively, so as to make better use of our public transport network.

Interchanges can promote access to the public transport network with good waiting environments and fast transfers. But poor interchanges, with long walks, stairs, long waits, poor travelling information, and poor weather protection can substantially discourage access to public transport.

The State Government has in recent years developed a *State Plan*, a *Metropolitan Strategy* and an *Urban Transport Statement* to encourage development in accessible locations and improve transport between Sydney's centres. During this period, the Ministry has focused particularly on arrangements to improve private bus services.

We believe that the Ministry now needs to focus more on multi-modal transport planning and interchange performance. It needs to assign responsibility for the coordination and oversight of inter-modal operations to an entity resourced for the purpose. Without this it will continue to be very difficult to identify and address unmet needs, seek and secure stakeholder funding, and monitor and evaluate system performance.

Below, we explain in brief the basis for this opinion. Our analysis is set out in the report that follows.

The State's total investment and future requirements cannot be readily identified.

Funding objectives and options for interchanges need to be developed.

There is a potential to make more use of alternative funding sources, such as from private sector investment and multiple use developments.

Recommendations

We recommend that the Ministry of Transport:

Assign clear responsibilities

- establish a coordinating and oversight entity to assess interchange standards, monitor interchange performance, plan access to the public transport system, and plan whole of network development
- establish clear responsibilities for interchange "ownership", operation and maintenance

Develop a more strategic approach

- set performance objectives for interchanges such as demand levels, connectivity offered and cost-effectiveness achieved
- develop multi-modal transport plans to improve interchange planning and overall effectiveness
- further develop the 'quality gap' assessment using facility inspections against a set of specific standards and risk assessments
- develop and publish a ten year rolling plan for interchanges

Develop and promote Best Practice

- develop and issue Best Practice Guidelines for different categories of interchanges, including arrangements for integrated emergency and security response
- carry out a review against Best Practice Guidelines to assess the quality of the present interchange arrangements
- work in partnership with local stakeholders to identify ways of ensuring good quality multi-modal interchanges, particularly those where quality falls short of the Guidelines.

Provide better information

- provide better information to the public, such as by including on the Transport Infoline 131500 website details of interchange layouts, transport services, kiss and ride facilities, park and ride facilities, taxi ranks and amenities
- enhance the Transport Infoline 131500 website journey planner such as by adding an ability to plan part of the journey by taxi or car, as a means of encouraging a change in travel behaviour
- develop a strategy to assess and, if necessary, improve brand awareness of the service
- establish and maintain an accurate inventory of existing facilities, site ownership by facility, transport services provided, capital amenities provided, identification of access attributes, capacity, utilisation and costs
- link the facilities inventory to a map including existing and planned bus, rail and ferry routes and services to develop a context for placing new facilities or expanding those already in existence

Systematically evaluate performance

- establish an evaluation process framework with performance objectives, performance monitoring and post evaluation to establish the impact of the interchange facilities on public transport
- establish a means of systematically reviewing the frequency and character of transport service provided at individual facilities to ensure that it is adequate for the purpose

Address the need for long term funding

- forecast long term funding requirements for development, operations, maintenance and security
- clearly state funding objectives and options for interchanges such as minimising the cost to commuters, minimising the cost to public agencies or promoting joint development
- promote joint development of interchanges using a more market-oriented approach
- continue to improve transparency in how *Parking Space Levy* funds are allocated to infrastructure projects by the use of criteria (including extent of achievement of the object of the PSL legislation) and evaluation of the relative merits of alternatives
- identify and assess the adequacy of funding sources for interchanges, including for operations, maintenance and security
- identify, secure and leverage further funding sources as necessary to address any shortfalls.

ATTACHMENT B

INDICATIVE DATA TABLE TEMPLATE

to

ESTIMATE AVOIDED ANNUAL EMISSIONS

within the

GREATER METROPOLITAN REGION

Railway Station (1)	**Existing Car Spaces** (2)	**Existing Commuters**(2)	**Unmet Demand for Parking Spaces** (3)	**Annual $CO_{2\,e}$ Avoided Emissions (tons)** (4)
(a)	(b)	(c)	(d)	(e)
A				
B				
C				
D				
E				
F				
G				
H				
I				
J				
K				
L				
M				
N				
O				
P				
etc				
Totals			***(x)***	***(y)***

Notes:

1. The 2008 NRMA Audit of Park and Ride Facilities identified 27 Metro stations and 20 Regional stations, but details not available for release.

2. Audit figures identified, but not available for release.

3. An estimate of potential demand for commuter spaces as derived from the column (c) space demand less column (b).

4. Calculation derived from the total of column (d) times the DECCW advised average car emission of 4.3 tons pa of $CO_{2\,e}$ that includes workday metropolitan commuting.

NSW STATE PLAN REVIEW (2010)

RELEVANT PRIORITIES ENHANCED WITH THE PROVISION OF TOD

STATE PRIORITY	ENABLING TOD BENEFITS
Better Transport & Livable Cities	• Supports a new approach to the integration of transport and land use planning • Reduces car dependency and increasing share of peak hour journeys and safe and reliable public transport systems • Improves efficiency of road network • Improves road safety • Increases the supply of affordable housing for low and moderate income households • Creates the opportunity for transit oriented long day child care centres whereby both the child / children is / are placed and the private car is parked • Creates the opportunity for the provisioning of vertical village aged care centres
Supporting Business & Jobs	• Offers unscheduled revenues with the sale of air space development rights • Enhances the maintenance and investment in infrastructure expenditure • Subject to the locality demand for each TOD Node Site, the provision of commercial / retail, increases business investment & support of jobs closer to home
Green State	• Expands sustainable transport options with the provision of TODs within the rail network • Increases rail access commuter car parking and therefore greater public transport patronage • Offers cleaner air and progress on GHG reductions

APPLICATION OF TOD OUTCOMES AGAINST THE COAG COMMUNIQUÉ

CRITERIA - December 2009

Relevant Criteria for Future Strategic Planning	Application to TOD
Capital city strategic planning systems should:	
• be integrated across functions, including land-use and transport planning, economic and infrastructure development, environmental assessment and urban development .	✓
• address nationally-significant policy issues including:	✓
- population growth and demographic change;	✓
- climate change mitigation and adaptation;	✓
- efficient development and use of existing and new infrastructure and other public assets;	✓
- connectivity of people to jobs and businesses to markets;	✓
- development of major urban corridors;	✓
- social inclusion;	✓
- health, liveability, and community wellbeing; and	✓
- housing affordability.	✓

INDICATIVE SELECTION CRITERIA TO

IDENTIFY SUITABLE TOD NODE SITES

The likely selection criteria for both off-site and on-site considerations may include but not limited to:

Off Site:

- site bounded by public road on at least one side or scope for the creation of a boundary road access;
- natural land level along boundaries at or above corridor grade;
- opportunity to create adjoining land amalgamation(s) with private or public property or both;
- adjacent land uses not unduly affected by overshadowing affecting private and public amenity;
- accessible spare capacity of enabling infrastructure (pipes and wires) or scope for amplification;
- existing large scale commuter car parking not provisioned the within rail access precinct;
- potential to interconnect with existing public roads in an economic manner; and
- relationship to existing or proposed road transport interchanges, buses or light rail.

On Site:

- outer distance of each node site up to 300m for up and down line of station structure;
- scope for multi floor plates where 300m node sectors affected by existing above rail structures such as public road / pedestrian bridge(s) or trunk pipeline(s);
- planned provisioning for commuter car parking can be made for another transit node;
- each node site sector not affected by diverging track junctions;
- signaling, cabling infrastructure readily repositioned / integrated with above rail structures;
- tracks being straight lined or large curves to optimize signaling sighting distances;
- the future provisioning of additional track lines will not limit a node site for development; and
- where the underlying ideal geological structures are suitable.

Subsequent to the preliminary identification of suitable node sites, formal assessment by means of Site Compatibility Certification would follow as applicable to:

- *State Environmental Planning Policy (Infrastructure) 2007* (the Infrastructure SEPP) for rail corridor considerations; and
- *State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004* for vertical village consideration.

INDICATIVE YIELD CALCULATIONS FOR BOTH

A NODE SITE AND THE GMR NETWORK

Within the context of Sydney's GMR, an indicative assessment of assumptions and potential floor space (m^2) available for air space development are derived from the following calculation inputs:

- With a network coverage between Maitland, Lithgow and Bomaderry comprising some 250 (approximate) at grade' rail stations, each with 2 potential sites (up line and down line of each station) and applying a notional 15% suitable for development, would yield 75 development sites over time.
- With a rail access precinct (as defined in the MDP) of 400m radius, less the station length of say 200m, would provide for 300m length for each potential up line / down line node site.
- An average corridor width of 40m and allowing 2.5m boundary setbacks.
- An average height of 12 storeys (but subject to relevant constraints such as solar access etc, and each level of elevation with a reduced area to enable a taper effect.
- a generic building efficiency (gross to nett) at 85%.

Node Site: the indicative measurements for a node site, factoring the above calculations:

1 Node Site Base Plate

Gross area 300 x 35		10,500	m^2 gross
Gross area x 85% (building efficiency)	=	**8,925**	m^2 nett

2 Total Car Spaces per Node (for residential & commuters)

Lower 2 levels (nett) allowing 40% circulation space & 12m^2 / car	=	**893**	spaces

3 Residential FSR m^2

Say 4 separate Towers each 30m x 50m and average 12 floor levels		72,000	m^2 gross
& 85% building efficiency	=	**61,200**	m^2 nett

4 Indicative Residential Yield for each node site

Net floor plate @ 61,200m^2 less 15% intenal circulation say 52,000m^2

Bedroom	Area m^2	% Allocation	Total Net	%	Units
1	60	30	52,000	0.3	260
2	85	50	52,000	0.5	306
3	110	20	52,000	0.2	95
			Total		**660**

5 Long Day Child Care Center (1)

1 x 40 place Lond Day Child Care Center per node sit on landscaped roof top with separate elevator access

6 Car Parking Allocations

Residential				
Bedrooms	Allocation	Units		Spaces
1	0.5/unit	260		130
2	1.0/unit	306		306
3	1.5/unit	95		142
Child Care Spaces				
	1/parent	40		40
	1/ staff	10		10
			sub total	**628**
			Total spaces available	**893**
Spaces available for Commuter Car Parking				**265**

Network: the indicative measurements for the network, factoring the above calculations:

1 Total Network Node Site Areas

Base plate area x 75 sites	=	669,375	m^2

2 Total Units with allocated car parking [1]

Units per node @ 660 x 75 node sites	=	**49,532**	units

3 Total Long Day Care Centre Places

1 x 40 place center per node site x 75 node sites	=	**3,000**	places

4 Total Commutor Car Parking

265 space per node site x 75 node sites	=	**19,860**	car spaces

5 GHG Indicative Annual Reduction

Estimated network commutor car parking capacity 19,860 x DECC estimate of 4 tons CO_{2e} per annum for commuting	=	**79,440**	tonnes

6 Indicative Air Space Value [2] **of the Network to Government**

Applying a notional $350 value for developable m^2 air space within the portfolio (residential and car parking)		
Residential gross area - 72,000m^2 x 350 x 75	=	$1,890,000,000
Long Day Care Centres 1200m^2 x 350 x 75	=	$31,500,000
Car Parking gross x 2 levels x x 350 x 75	=	$275,625,000
Total		**$2,197,125,000**

Note:

1. Provisioning subject to locatlity market demand.
2. A refined valuation would be derived from follow-on ground truthing and subsequent:
   - feasibilities guided by the indicative selection criteria for TOD node sites as indicated at Attachment E;
   - agreed ratios between residential units (and corresponding car parking allocations); and other mixed use elements including commercial, retail, aged care, child care and commuter car parking.
   - agreed final value for both m^2 and assigned car spaces for residential, commuter, long day care centre and retail uses.

ANNEX B

LETTER AND RESPONSE

FROM

INFRASTRUCTURE AUSTRALIA

(June / July 2010)

COPY

CERTAIN PLANNING

ACN 071 419 639

PO Box 1144
HAYMARKET
SYDNEY 2000
P/F: 9317 1547
M: 0419 431 064

The Hon, Anthony Albanese MP
Minister for Infrastructure, Transport, Regional Development and Local Government.
MG 43
Parliament House
Canberra ACT 2600

2nd June 2010

Dear Hon. Albanese,

RESPONSE TO REQUEST FOR FEEDBACK ON

NSW METROPOLITAN STRATEGY REVIEW

- AIR SPACE DEVELOPMENT AS A CONTRIBUTING SOLUTION TO

IMPROVE INTEGRATION OF LAND-USE AND TRANSPORT INFRASTRUCTURE

The attached Letter to the NSW Minister for Planning has been forwarded to you to enable awareness of the potential integration opportunities that may flow in the event that Government elects to adopt the Submission proposal.

Transit oriented air space development meets many of the current Policy agendas facing the NSW Government today. In this regard, I sense it important that you are apprised of the opportunity to gauge how the NSW Government may or may not undertake a gear shift in the management of its' capital city urban affairs and including appropriate integration.

I would be pleased to respond to any questions or points of clarification your Office may have.
Thank you for your time.

Yours sincerely,

Robert Senior
Director

Attachment:
Response to Metropolitan Strategy Review

Australian Government
Infrastructure Australia

7/7/10

Mr Robert Senior
Director, Certain Planning
PO Box 1144
Haymarket SYDNEY 2000

Dear Mr Senior

Thank you for your correspondence dated 2nd June 2010 to the Hon. Anthony Albanese, Minister for Infrastructure, Transport, Regional Development and Local Government enclosing a copy of your submission to the NSW Metropolitan Strategy Review. As your correspondence relates to improved integration of land use and transport infrastructure, the Minister has referred your submission to my office for consideration.

Your submission to the Metropolitan Strategy Review focuses on the merits of air space development within the rail network and how such development could contribute to a range of positive land use, transport, and fiscal outcomes.

My office, including the Major Cities Unit which is collocated with Infrastructure Australia, shares your views about the need to obtain maximum benefits from land and infrastructure assets. There is clearly much scope for air space development above rail assets, particularly at key stations and interchanges, and I commend you for presenting a strong case for such development in your submission to the NSW Minister for Planning, Infrastructure and Lands.

Infrastructure Australia is also exploring how the Australian Governments' investments in infrastructure may leverage greater urban development outcomes, such as those you describe.

Thank you for your contribution to the NSW debate. It is also of relevance in other States and Territories.

Yours sincerely,

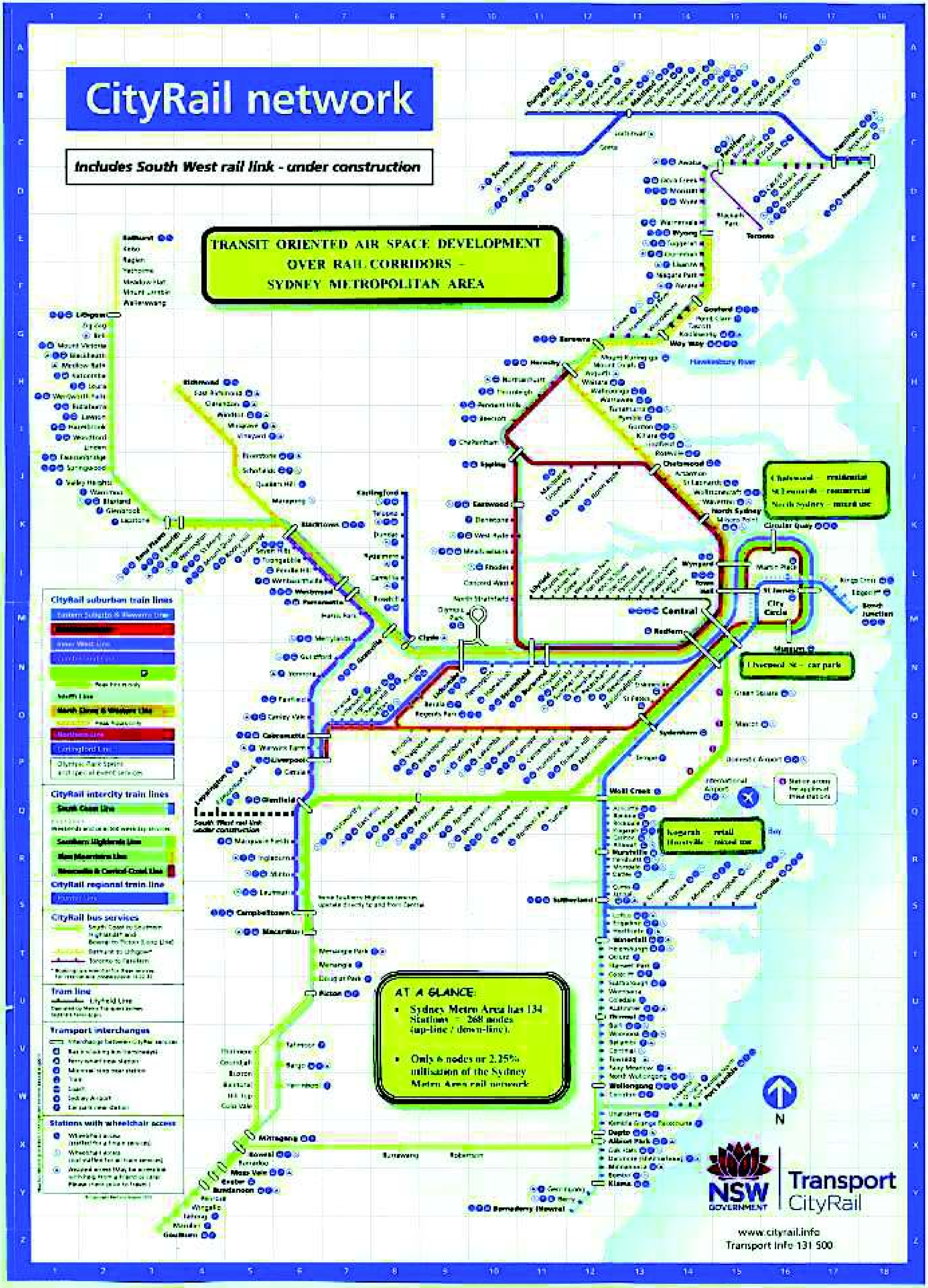
Michael Deegan
Infrastructure Coordinator

Infrastructure Australia
GPO Box 594, Canberra ACT 2601 Australia
Telephone (02) 8114 1900 facsimile (02) 8114 1932
www.infrastructureaustralia.gov.au

ANNEX C

SYDNEY METROPOLITAN AREA RAIL NETWORK

(A3 print)



CityRail network
Includes South West rail link - under construction
TRANSIT ORIENTED AIR SPACE DEVELOPMENT OVER RAIL CORRIDORS - SYDNEY METROPOLITAN AREA
Chatswood - residential
St Leonards - commercial
North Sydney - mixed use
Liverpool St - car park
Kogarah - retail
Hurstville - mixed use
AT A GLANCE:
• Sydney Metro Area has 134 Stations = 268 nodes (up-line / down-line).
• Only 6 nodes or 2.25% utilisation of the Sydney Metro Area rail network
CityRail suburban train lines
CityRail intercity train lines
South Coast Line
Southern Highlands Line
Blue Mountains Line
Newcastle & Central Coast Line
CityRail regional train line
CityRail bus services
Tram line
Transport interchanges
Stations with wheelchair access
South West rail link under construction
Central
Circular Quay
Wynyard
Town Hall
St James
Museum
Redfern
City Circle
Martin Place
Kings Cross
Edgecliff
Bondi Junction
Wolli Creek
Sydenham
Hurstville
Sutherland
Cronulla
Waterfall
Thirroul
Wollongong
Port Kembla
Dapto
Kiama
Bomaderry (Nowra)
Campbelltown
Macarthur
Picton
Mittagong
Bowral
Moss Vale
Bundanoon
Goulburn
Liverpool
Cabramatta
Glenfield
Leppington
Parramatta
Westmead
Blacktown
Richmond
Emu Plains
Penrith
Lithgow
Bathurst
Strathfield
Burwood
Lidcombe
Clyde
Carlingford
Epping
Hornsby
Berowra
Eastwood
Rhodes
Chatswood
North Sydney
Gosford
Woy Woy
Wyong
Broadmeadow
Hamilton
Newcastle
Maitland
Dungog
Scone
Hawkesbury River
Toronto
N
NSW GOVERNMENT
Transport
CityRail
www.cityrail.info
Transport Info 131 500

ANNEX D

INDICATIVE PROJECT SEQUENCING

FOR AIR SPACE DEVELOPMENT

INDICATIVE PROJECT SEQUENCING FOR AIR SPACE DEVELOPMENT

BY THE NSW STATE GOVERNMENT

Step	Task	Remarks	Nature of Support Offered
1.	Establish Reference Group.	Representation from Infra NSW, Dept Planning & Infrastructure & Dept Transport for NSW to seek valid responses from all relevant Government Agencies.	Assist with formulating draft Brief for issue by Reference Group to all relevant Agencies. For end user Agencies, seek type of use (housing, childcare, car parking, aged care facilities etc by m^2 and locality by Council area or Sub Region. Assist with follow-on assessment of Agency responses.
2.	Identify Node Suitabilities within network.	Four Stages envisaged: • lessons learnt from the recent St Leonards and Chatswood projects; • desk top study factoring on-site and offsite criteria (see **Attachment A**); • site verifications and due diligence of above findings; and • compatibility assessment with the relevant SEPPs (see **Attachment A**).	Assist with: • framework & workshop participation, • modelling the framework & follow-on assessments, • preparing the ground truthing program and conduct, • preparing the framework and assessment processes within and between the relevant SEPPs.
3.	Prepare Indicative Development Envelopes for each Node.	Reflecting nature of unmet demand/demand creation, range of likely uses, height and FSR m^2. Unmet demands factoring, patronage, residential, affordable housing, commuter car parking, vertical aged villages, child care facilities, retail, commercial.	Prepare gap analyses framework & source DPI, other relevant Agency and ABS data inputs. Prep envelope model factoring findings from Step 2, off site accessibility, spare road traffic capacity, adjoining residential uses against solar access limits & spare patronage capacities.
4.	Establish Criteria for Priority of Nodes.	Factoring geotech findings, adjacent amalgamations / acquisitions, residual land value, community / electoral issues, etc.	Prepare brief for geotech services (public or private) from scale and placement findings of Step 3 & manage tender, contract, tasking arrangements. Assist with amalgamation opportunities with LPI inputs. Conduct residual land value assessments.
5.	Identify options and formulate specifications for Rail Enclosing Structure (RES).	Scope for the conduct of a pilot project to prove up / refine processes. Vesting issues / stratum transfers, specialist engineering advice with specifications in conjunction with Transport for NSW.	Prepare draft brief for specialised engineering / conveyancing services (public or private).
6	Seek State Significant Infrastructure Approval & Variation to EP&A Act.	Proposal worked through with Dept Planning & Infrastructure Metropolitan Team and Major Projects Team.	Assist with formulation of appropriate legislative amendments
7.	Ascertain market value by site and portfolio – against planning approval. Determine RES delivery: public or private or combination.	Undertake Valuation Program which assesses value of overall Portfolio created through due diligence work.	Prepare draft Brief for valuation services (public or private) and assist with evaluation / selection.

Step	Task	Remarks	Offered Support by JE Pty Ltd
8.	Cost & time estimate for Node. Scope the Engineering specifications for RES Templates.	Engineering specification along Modular design principles agreed and signed off by Rail Authorities - QS Programming support.	Prepare draft Brief for QS services (public or private) and assist with evaluation / selection.
9	Prepare Benefit/Cost analyses as per Treasury Guidelines. Seek Initial funding for RES on a pilot procurement site.	Cost Benefit Analysis to Treasury demonstrating extent of unscheduled revenue initiative. Works extrapolated for the Portfolio approach. Benefit/Cost Ratio determined when all variables factored into decision matrix and CBA.	Prepare draft Brief for CBA services (public or private) and assist with evaluation / selection. Prepare draft Brief Business Case for CBA to Treasury for funding pilot and with Transport for NSW and DPI endorsement.
10.	Gain Cabinet sign off which includes Governance Framework and Budget. Prepare Delivery Program.	Infrastructure NSW leads the Cabinet Agenda. Agencies invited to comment against Draft Cabinet Paper. In conjunction with Transport for NSW for corridor access arrangements / sign offs.	Assist in preparation of Cabinet Submission. Prepare draft Brief for Program services (public or private) and assist with evaluation / selection.
11.	If private delivery - arrange procurement team to undertake one or two stage call process (EOI / CDP).	If private delivery, arrange tendering / contract arrangements. If public, identify & task the nominated delivery authority. Must be completed against Template Design and used as Benchmark.	Assist with preparation for EOI or CDP including criteria, weightings, probity, assessment process & contractual arrangements.
12.	RES roll out. Start with Pilot and Modular design concept with operational synergies.	Marketing preparation for each commissioned RES specifying, as appropriate, required developer contribution for public facilities, affordable housing, etc.	Assist with preparation of Preliminary Contributions Model in conjunction with agreed beneficiary Agencies as identified at Step 3.
13.	Establish Tender Assessment Team across Agency's for RFT Disposal of Node Sites.	Tender documentation, criteria, weightings, probity advisor, etc.	Assist with formulating Assessment Team Process and Program as required.
14.	Tender for each node to market. Establish a Reference Group to provide feedback to Proponent.	Revenues from sales directed to cover RES delivery program and balance to Infrastructure NSW for other infrastructure provisioning.	Assist with Team preparation of Request for Tender including criteria, weightings, probity, assessment process & contractual arrangements as required.

Attachment:

A. Indicative Selection Criteria to Identify Suitable Node Sites

ATTACHMENT A

INDICATIVE SELECTION CRITERIA TO

IDENTIFY SUITABLE TOD NODE SITES

The likely selection criteria for both off-site and on-site considerations may include but not limited to:

Off Site:

- population density within relevant rail access precincts;
- patronage of public transport and modes;
- profile of existing retail, education, health, transport, commercial, community facilities;
- site bounded by public road on at least one side or scope for the creation of a boundary road access;
- natural land level along boundaries at or above corridor grade;
- opportunity to create adjoining land amalgamation(s) with private or public property or both;
- adjacent land uses not unduly affected by overshadowing affecting private and public amenity;
- accessible spare capacity of enabling infrastructure (pipes and wires) or scope for amplification;
- existing large scale commuter car parking not provisioned the within rail access precinct;
- potential to interconnect with existing public roads in an economic manner; and
- relationship to existing or proposed road transport interchanges, buses or light rail.

On Site:

- outer distance of each node site up to 300m for up and down line of station structure;
- scope for multi floor plates where 300m node sectors affected by existing above rail structures such as public road / pedestrian bridge(s) & trunk pipeline(s);
- planned provisioning for commuter car parking can be made for another transit node;
- each node site sector not affected by diverging track junctions;
- signalling, cabling infrastructure readily repositioned / integrated with above rail structures;
- tracks being straight lined or large curves to optimize signalling sighting distances;
- the future provisioning of additional track lines will not limit a node site for development; and
- where the underlying ideal geological structures are suitable.

Subsequent to the preliminary identification of suitable node sites, formal assessment by means of Site Compatibility Certification would follow as applicable to:

- *State Environmental Planning Policy (Infrastructure) 2007* (the Infrastructure SEPP) for rail corridor considerations;
- *State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004* for vertical village consideration;
- *State Environmental Planning Policy (Affordable Rental Housing) 2009* for residential accommodation; and
- *State Environmental Planning Policy (Urban Renewal)* to complement the relevant objectives of the Metropolitan Plan for Sydney 2036.