# INQUIRY INTO PLANNING PROCESS IN NEWCASTLE AND THE BROADER HUNTER REGION

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### **Official NSW State Government Policy on Newcastle City Centre Transport:**

#### A Marked Change in Transparency

The author has been a vocal critic of many of the early policy proposals presented by NSW State Government for the restructuring of transport services and infrastructure in the Newcastle City Centre. However, the most recent policy process reveals much to praise regarding the transparency of the previous processes.

While the Lower Hunter Transport Working Group deliberations involved empirical claims and analytical conclusions that did not stand up to scrutiny, they pursued their process in a substantially open and transparent way. This allowed the flaws in their empirical claims and analytical conclusions to be uncovered and subjected to public discussion. The fact that the bus capacity that they expected to be using at the Broadmeadow Bus/Rail interchange is not in fact available on existing Newcastle City Buses until they pass Beaumont Street meant that their presented plan of operation was flawed, but the fact that they presented the plan of operation publicly meant that the flaw was not built into an irreversible public investment. Further, prior to taking any irreversible action, a professional feasibility study was commissioned that revealed the negative impacts on traffic congestion and parking congestion in the Newcastle City Centre. The transparency of that step in the process allowed this unexamined cost of the policy proposal to be brought to light and enter into the public debate. Ultimately, while it might be said that the flaws in the LHTWG process prevented the City of Newcastle and the Lower Hunter region as a whole from suffering from the consequences of implementation of a flawed policy.

Similarly, in the next phase of the process, working under the auspices of the development corporation, several quite badly flawed analysis were presented. An economic impact study was presented which took the property value of properties that might be released by a rail for bus substitution as net economic benefit, ignoring the economic costs of the conversion to a lower quality public transport corridor, and then multiplied the value of that land release by the ratio of rail corridor property to all City Centre property to declare an economic impact value with absolutely no basis in any recognizable coherent economic or regional development analysis. An alternatives analysis was presented in which a majority of the most promising alternatives were overlooked, while alternatives were considered that were known in advance to be flawed. For instance, a electric tram-train option to increase frequency without increasing gate closing was ignored, while a train-tram conversion of existing Hunter vehicles already known to be technically infeasible was presented in its place. An expensive rail overpass option for Stewart Avenue was presented, while a cost-effective system of improving the coordination of trains

through Stewart Avenue and reducing congestion at Stewart Avenue by opening an additional level crossing at Steel Street was ignored.

However, because detailed analysis was presented in support of the policy decisions being made, it was possible to engage in public dialogue regarding the flaws in the analysis that lay behind the proposal. Where the analysis was incomplete, because it omitted consideration of the impact of the proposed changes on vehicular traffic and parking, it was sufficient detailed to determine how including the omitted factors would modify the planning conclusions.

The current policy process for replacing City Centre Heavy Rail services with a new Light Rail Transit service bears very little resemblance to the transparency that existed with the previous efforts. While there has been a pro forma public consultation process, there has been no public presentation of any detailed alternatives analysis for the alternative options for implementing this decision. Not only has there been no public detailed analysis of the decision to opt for a West Wickham terminus, but there is no clear evidence that there has been any detailed private analysis. At the very least, an indicative cost of the various station terminus options should have been performed as part of an alternatives analysis, and once one or a few preferred alternatives were identified, a professional engineering feasibility study performed for that option or those options.

What counted for a transparent public process was the choice between two alternative alignment options, with the end points of the proposed LRT system already decided behind closed doors. As the public explanation offered for the choice of end points does not stand up to serious scrutiny (as will be detailed below), it also appears that at least some of the criteria for the decision was also kept behind closed doors.

In response to public pressure, an alternative alignment which operated primarily along the existing rail corridor was added to consideration, but given the paucity of published analysis of the route alignment decision, this also could well have been a purely pro forma action, in which an option is declared to be in the running, with no intention of ever allowing it to be the final selected option.

The reason for insisting on transparency is not simply an issue of whether there are special favours or insider interests determining the direction of a major public investment. It is also an issue of the quality of the decision making process. We have already seen in the previous policy efforts in this issue that quite egregious flaws in policies can be contained within the analysis produced by a small team working together, even if the team is working together with the best of intentions. Public airing of the detailed analysis of a planning team is essential for assuring the quality of the results of the planning process.

Specifically, in this case, indicative costing indicates that there are versions of a City Centre Light Rail Transit (LRT) system that could be constructed for less than \$200m less than a street-tram alignment that originates from a West Wickham terminal station that requires substantial

new land acquisition. That saving of over \$200m could be invested in other regional transport priorities which would generate network economies with City Centre transport. It could be invested in additional complementary City Centre transport infrastructure. It could be invested in providing for a LRT system with a more extended reach, such as a LRT system primarily on the rail corridor with a terminal loop in Newcastle East providing substantially better access to the beaches and the Foreshore than the proposed Pacific Park terminus.

At the same time, it would appear that the step of specifying the design envelope for the street tram has been omitted. This means that, while we know that there will be additional costs in terms of interference with vehicular, pedestrian and cycling traffic from having an on-street alignment as opposed to a dedicated alignment, it is not possible to determine exactly how bad this interference will be. Some designs will have more negative impacts on vehicular traffic, others more negative impacts on pedestrian traffic. Not presenting a design may shelter the decision process at this point in time from criticism from those who will be adversely affected ... but it will not prevent those adverse impacts from actually occurring.

Most of what the State Government has presented regarding its policy decisions has been more in the nature of marketing the policy, as opposed to opening up the decision making process to public scrutiny. However, fortunately, the State Government policy is directly in line with the expressed wishes of the Newcastle Renewal Taskforce of the Property Council of Australia. Therefore, while the State Government policy decision seems to include an effort to shelter its design process from criticism by making critical decisions before the supporting design work has actually been performed, the PCA submission in support of the Hunter Street street-tram alignment makes an effort to give a more detailed analysis, which does allow for a more detailed critique of this policy choice.

# The Submission of the Newcastle Renewal Taskforce of the PCA

In its submission regarding the proposed retirement of the existing rail corridor from Wickham to Newcastle Beach Station and its replacement with a light rail street-tram corridor primarily on Hunter Street from Stewart Avenue through Scott Street, terminating on Telford Street at Pacific Park, the Newcastle Renewal Taskforce of the Property Council of Australia claims that this proposal will:

- Confirm urban renewal and creating a competitive, liveable city as the highest order outcome
- Support its role as a multi modal transport corridor
- Attract investment and jobs
- Unlock the greatest development opportunity
- Leverage the funding of major public realm upgrades

- Deliver economic and social dividends
- Create a City Centre that is authentically Novocastrian

They explicitly contrast the Hunter Street alignment with an alignment that lies primarily in the existing rail corridor. However, careful examination of each of their claims reveals that a light rail transit service along the existing rail corridor is capable of outperforming their proposed corridor on each of these explicit criteria.

*"Confirm urban renewal and creating a competitive, liveable city as the highest order outcome."* Light rail transit (LRT) services on a street-tram route typically experiences greater interference with traffic than LRT services on a dedicated corridor. If transit by the LRT street-tram is given maximum priority, result is either greater traffic congestion for the street-tram route. If concessions are made to street traffic, then the street-tram route offers LRT services with slower transit, with service intervals (maximum and median time interval between successive services at a platform) that are both longer and less predictable than for a dedicated corridor.

The general implication is that if road capacity represents a constraint on urban renewal, a dedicated corridor, where available, is most effective at lifting that constraint, all other things equal. The Property Council taskforce addresses the issue of relative transit service quality by ignoring it. The government decision was made without indicative costs or service schedules being presented, and the taskforce does not fill in this glaring shortfall with reasonable estimates of their own.

In Newcastle City in the coming decade, road capacity shall present a constraint on urban renewal. The most recent scientific traffic study of prospective traffic and parking conditions for Newcastle City revealed that there are already substantial gridlocked access points where the Pacific Highway from the South and Stewart Avenue from the North intersect with Hunter and King Streets, and that even if Newcastle City develops at half the rate expected for the Lower Hunter region as a whole, a substantial increase in transit, cycle and pedestrian commuter and general transport mode shares will be required to avoid general gridlock in much of Newcastle City. While general gridlock may spur profitable development opportunities in Newcastle West, it would seriously hamper opportunities for business and property development in the Newcastle East and Civic precincts.

So compared to a dedicated rail corridor, a street-tram will create more road traffic interference while offering a less effective transit service, which will therefore attract fewer motorists into switching to public transport.

Now, this is an "all other things equal" comparison, and of course not all other things are equal. The most common reason for urban areas choosing a street-tram alignment over a dedicated alignment is the substantially higher cost of property acquisition and construction required for a dedicated alignment, while the property for a street-tram alignment is generally already publicly owned. This either makes it feasible to provide the service at all, or allows the urban area to invest scarce funds in other transit services that as an equal-cost package offers a better transit solution for the city in question.

However, in this case, the dedicated transit corridor is already in public ownership. We do not have firm cost figures, because state government did examine the costs of alternatives before making their policy decision. However, a reasonable indicative cost suggests that the street-tram alternative will cost over \$200m more than a longer LRT service from a heavy rail terminus the area of the present Hamilton station. That cost discrepancy implies that the transit advantages of the dedicated corridor alternative can be substantially increased with effective investment into regional transport to offer more effective transport connections to the higher quality dedicated LRT corridor.

*"Support its role as a multi modal transport corridor."* Wickham West is not an effective location for connections to the rest of the City of Newcastle or the rest of the Lower Hunter Region. Car, bus and taxi access to the station during peak demand periods will at best require negotiating traffic held up by intersections already at capacity during peak morning and evening travel demand, and for most access routes will require cars, buses and taxis to get across those capacity intersections in order to gain access to the station. The Wickham West location requires closing Railway Street, which presently serves as a relief route between West Wickham and Newcastle West, to avoid those congested intersections, so it will make that congestion worse.

For cyclists, the use of the existing rail corridor as a cycleway is not as useful as provision of a protected two-way cycleway on Hunter Street. And while a street-tram will likely require the sacrifice of all parking on Hunter Street as well as Hunter Street turn lanes, a protected Hunter Street cycleway would only require the use of one lane, so would allow much more on-street parking to be retained, along with right-turn lanes.

Hunter Street is the most heavily used bus transit route for the Newcastle Bus Service to connect to the Civic Precinct and Newcastle East. Therefore, a detailed design envelope and service plan for the LRT on the street-tram alignment is required in order to establish that the street-tram will not interfere with buses. As the Property Council submission lacks a design envelope and service plan for their proposed Hunter Street LRT, they have no basis for analyzing whether or not their preferred alignment will cause serious service delays and consequent loss of bus ridership for the NBS. Any claim with respect to NBS buses that their proposed alignment best supports multi-modal transport is clearly spurious.

As the Property Council submission takes for granted the state government decision to terminate the heavy rail corridor at Wickham West, they also are hobbling the multi-modal opportunities of the dedicated corridor alternative. There is ample public property adjoining the grounds of the current Hamilton Station for heavy rail inter-trip stabling, for light rail stabling, and also for multi-modal coach and bus facilities. And unlike the intersections of Stewart Avenue with King and Hunter Streets, there are non-gridlocked lines of access and egress to this location that connect to main arteries

The sense in which the alignment advocated by the Property Council "supports" multi-modal transport is the fact that terminating heavy rail services west of the Civic and Newcastle East precincts will force rail commuters to rely on multiple modes to complete their trip. However, as the street-tram LRT alternative offers slower, less predictable travel times than either the existing heavy rail service, or the dedicated corridor LRT alternative, a reasonable transport model would predict that the dedicated corridor LRT alternative will support "more" of this type of multi-modal transport, since more rail commuters will elect to continue using regional rail to connect to the LRT if the LRT offers a more prompt and predictable arrivals to their destination in Newcastle City.

*"Attract investment and jobs."* To the extent that a high frequency LRT service on the Hunter Street alignment will attract additional investment and jobs, a higher frequency, higher quality of transit LRT service on the available dedicated alignment will be more effective. And as the Hunter Street alignment will increase traffic congestion at the most important road access point for Newcastle City, the likely smaller increment of new investment and jobs that the facility attracts have to be offset against a larger increment of new investment and jobs diverted from Newcastle City due to the increase in traffic and parking congestion in a development precincts where parking congestion is already causing some interference and where traffic congestion will present a serious development constraint in the coming decade.

*"Unlock the greatest development opportunity."* In terms of gross development potential, this is the sole claim that seems to have some merit. The fact is that the Hunter Street alternative opens up the opportunity for high level developments in the precinct between Scott Street and the Foreshore. If the dedicated alignment is used instead, similar development can be built to similar height, but those developments will not have the same ground floor footprint, since area will be needed for the Newcastle Mall / Brown Street platform, a corridor (of less than 20m) will be required until the start of the final street-tram portion of the dedicated rail alignment, and depending on whether the LRT transits on the rail corridor side or the Scott Street side of Newcastle Station, some area may also be needed for the Newcastle Station platform.

However, in terms of net development impact, clearly the loss of some ground floor space for the highest value high rise developments blocking Foreshore views from the Mall is clearly more than offset over the long term through the lower amount of total transport access that results from using a lower capacity and slower LRT corridor, more subject to further delays as a consequence of increased road congestion.

From a private developer perspective, the uncertainties of individual projects may lead them to heavily discount property redevelopment some five to ten years in the future relative to more immediate opportunities "brownfield" land release property development. However, the public planning authority must balance the interests of private developers with Newcastle City property owners in general, and with the employment and economic development needs of the City of Newcastle and the general Lower Hunter region. In terms relevant to the public interests of concern to public planning authorities, the dedicated corridor LRT alternative unlocks the greater development opportunity.

*"Leverage the funding of major public realm upgrades."* The road transport capacity constraint that Newcastle City faces in the coming decade is the challenge that overturns this claim by the Property Council. Given a binding transport capacity constraint, major public real upgrades, which generate more uses of transport capacity, will serve to crowd out private development. The binding road transport capacity constraints that face Newcastle City are due to its geography in which all major transport arteries through the Lower Hunter Peninsula merge together into a single corridor. Relieving this constraint requires increases in transport mode share and active transport (cycling and pedestrian) mode shares for commuting, professional, commercial and personal traffic.

The dedicated LRT corridor alignment offers the best capacity, best opportunity for attractive, high frequency services, suffers the least interference from increasing traffic congestion, introduces the least interference with already congested traffic, and offers the best opportunities for multi-modal transport connections into the rest of the Newcastle / Northern Lake Macquarie urbanized area and the balance of the Lower Hunter. It therefore better serves the role of releasing the binding road transport constraint that will face Newcastle City in the coming decade, and so best leverages the funding of major public realm upgrades.

**"Deliver economic and social dividends."** Provision of a high frequency LRT service will deliver net economic and social dividends. However, the advocacy of the Property Council for the LRT Hunter Street alignment does not address the transit service factors or cost for which the dedicated alignment alternative is superior. It simply ignores these factors. When these factors are taken into account, it is implausible that the Hunter Street alternative delivers **greater** economic and social dividends than the substantially less expensive dedicated alignment.

*"Create a City Centre that is authentically Novocastrian."* At one time, the authentically Novocastrian City Centre was a compact linear CBD connected to the Beaches, with the gritty industrial working docks on the northern side of the railroad corridor as the "wrong side of the tracks". However, Newcastle City has benefitted substantially from the development of the Foreshore and Hunter River precincts, and the Novocastrian mix of a CBD that opens up into the Pacific Ocean has been extended into a CBD that opens up into the Pacific Ocean and Hunter River.

It can indeed be argued that removal of heavy rail services serves to further the evolution of this distinctively Novocastrian City Centre. However, in advocating the Hunter Street alignment, the Property Council is refusing to take full advantage of this opportunity. Due to its history, the

existing rail corridor is uniquely suited to offering platforms with direct entrances both to the North of the rail corridor, for legacy and newly established Foreshore destinations, and with access both accessible or directly on Hunter Street, the traditional "Main Street" of the City Centre.

In advocating for the Hunter Street alignment, the Property Council presents notional platform locations for the Hunter Street and the dedicated rail alignment. However, as the submission ignores the differences in service qualities between the two, it places the thumb on the scales by specifying an equal number of platforms located at approximately equal intervals. In reality, the corridor that supports more rapid and more predictable transit, investing some part of that faster transit service into an additional platform stop on the dedicated transport corridor makes for a corridor that better services Newcastle West and the Civic district. And locating the dedicated rail corridor platform at Hunter Street Mall / Brown Street rather than directly south of Queens Wharf provides for better interconnection with both the Mall and with Newcastle Bus Service buses serving the Mall.

One aspect of the Newcastle City Centre that is distinctively Novocastrian is that it is not simply a tourist, legal, financial, and high end residential centre, but is a substantial working centre for a number of occupations. However, as the Hunter Street alignment will not serve Newcastle City Centre commuters as well as a dedicated alignment will, advocating for the Hunter Street alignment seems to have led to the interests of commuters being given short shrift.

# **Begging the Question**

The core conclusion of the PCA Task Force assumes that the shortcomings of the rail corridor lies in "urban design":

Using the existing heavy rail corridor for light rail represents marginal change to the urban design of Newcastle and will not support the strategic priorities of the Government's Newcastle Urban Renewal Strategy (NURS).

The primary question when choosing a rail alignment is the quality of service that is available on that corridor, which includes both urban design issues of proximity of platforms to destinations of interest, and also includes transport service performance issues such as capacity of services, maximum and median waiting times between services, and ease of transfers with other modes of transport, both in terms of making the physical transition and in terms of support for multi-modal ticketing.

In effect, the PCA submission is assuming that the existing heavy rail services provide the state of the art quality of service for an intra-urban rail corridor. If that were the case, then the current rail corridor would be offering the best possible transport for the given corridor design, so that the PCA would be justified in assuming that a marginal change in structural urban design could only possibly offer a marginal change in quality of service.

However, the current service as state of the art quality of service is a tacit assumption of the PCA analysis that must be left unstated and unexamined. Once it is brought to light, it is laughably unrealistic. The current service provided between stations on the existing Newcastle CBD trunk is not designed as an intra-urban service, but is simply a coincidence of the process of scheduling the Central Coast / Sydney, Lake Macquarie, Maitland and Upper Hunter regional rail services. And it does not provide anything like the quality of service that would allow it to be an intra-urban rail service.

An intra-urban rail service along a corridor some four kilometers long that is going to be used by transferring commuters for multiple transport modes, and for intra-urban transit by both local residents, inbound commuters, and those arriving in the city by car, a public transport mode or bike should be operating with service intervals of no more than ten minutes during the period between the "shoulders" before the morning peak and after the evening peak. A maximum expected wait of ten minutes is the threshold for a "show up an go" transport service. By contrast, the current maximum expected waits for a passenger at Hamilton Station looking to go to Newcastle Station (average waits in parentheses for comparison):

- 7am-9am: 26min (10min)
- 9am-5pm: 30min (15min)
- 5pm-7pm: 27min (13min)
- 7pm-12mid: 41min (16min)
- 12mid-7am: 32min (30min)

The only part of the day that the average wait for service approaches the threshold for an effective daytime intra-urban rail service is the 7am-9am interval, in service of inbound commuters, but due to the bunching of inbound commuter services the maximum interval in that period is still 26 minutes.

So, in effect, the existing rail corridor supports the terminal section of multiple regional rail corridors, which are strategic for transport within the Lower Hunter and connections with the Central Coast and points south. It does not, however, offer anything like an intra-urban rail service. So for any rail service that allowed reducing maximum wait times 7am-7pm to 10 minutes would in effect be offering a new transport option that is not presently available.

This then gives the lie to the second part of the PCA claim. The Newcastle City Centre road network is approaching maximum physical capacity in the coming decade at existing transport mode shares. Therefore, the support that a high capacity rail corridor can best offer to economic and property development in this area is by providing high capacity, high frequency intra-urban

services, with performance that will be robust in the face of road gridlock. We can therefore amend the PCA conclusion to:

Using the existing heavy rail corridor for light rail represents a major upgrade in the effectiveness of rail transport services, which provides substantial support for the strategic priorities of the Government's Newcastle Urban Renewal Strategy (NURS). It accomplishes this with a marginal change to the urban design of Newcastle, and is therefore far more cost effective than available alternatives.

### **Potential Route Assessment**

The strongest evidence from the PCA Submission that the analysis as presented is not the basis for a decision, but is rather a rationalization of a decision based upon other criteria not publicly stated comes from the PCA potential route assessment analysis. The most striking feature of this route assessment is what it omits. There is no attempt in this route assessment to analyse the capacity or transit quality of service supported by any of the three corridors examined. This is striking, since no matter what trips are supported by the layout of the alignment, what determines its ability to support property and economic development is how appealing it is to potential riders to use the service to take those trips. Also missing is any consideration of the relative costs of the alignments. This is a critical issue, since it can imply elimination of more cost-effective opportunities for transport investment, given the substantial number of potential complementary transport investment opportunities both within the Newcastle City Centre and in regions originating trips into the Newcastle City Centre. And there is no consideration of development impacts west of Stewart Avenue, where the design envelope of the government decision requires the closure of Railway Street, the sole existing crossing over the current rail corridor between the Maitland Road overpass and the congested Stewart Avenue crossing, north of the intersections with Hunter and King Street.

However, the analysis that is presented in terms of the given criteria also provides a striking picture. The case for the Hunter Street alignment rests in four criteria: street permeability; "front door delivery", activation of the Newcastle West precinct, and activation of the Civic precinct. However, careful examination of the arguments presented in order to make this case strongly suggests that the criteria presented are not, in fact, the criteria that actually drive the support of the PCA for this route alignment alternative.

"Street Permeability." The Hunter Street route is graded as having "very good" street permeability because "street pattern is of the finest grain along Hunter Street, which allows for maximum permeability." In reality, the fine grain along Hunter Street is of no subtantial positive benefit to the permeability of the LRT route to the light rail service, which is modeled as having six stops along its length. It is, however, relevant for the permeability of the Hunter Street light rail route to vehicular, pedestrian and cycle traffic, as the fine grain implies a larger number of intersections between the light rail route and vehicular, pedestrian and cyclist lines of travel. In addition, all West Wickham heavy rail terminus options require the closure of the Railway Street level crossing, further reducing the permeability of West Wickham to vehicular traffic. So the Hunter Street alignment clearly creates the greatest *negative* impacts on permeability.

By contrast, the impacts on permeability is lower for the hybrid route, and lower still for the rail corridor route. The rail corridor route from the West Wickham terminal station trades off the increase in permeability in replacing heavy rail gates with light controlled intersections with the reduced permeability in blocking all cross corridor traffic between the Maitland Road overpass and the peak-demand gridlocked Stewart Avenue intersections. The option which offers a clear net increase in permeability is the excluded option of a Hamilton Station interchange with stabling east of Beaumont Street, which was excluded in a behind closed doors decision by state government. The excluded option would have allowed an LRT to operate through a light-controled intersection at Railway Street, and then continue as the rail corridor option, providing for a net positive increase in permeability of the access across the rail corridor without any negative impacts on permeability to existing and future vehicular, pedestrian and cycle traffic on Hunter Street.

"Front Door Delivery'." The PCA analysis places this in quotes as it is a new term of art to express a service characteristic that they imply is highly desirable. It ranks the Hunter Street option as very good on this criteria, based on the claim that it "Will travel past the most front doors of any route and most importantly traverse adjacent to sites that generate a significant number of patrons such as the UoN NeW Space Campus and the Newcastle Courthouse".

However, obviously, traveling past a front door is not front door delivery. The appropriate unit of analysis for "Front Door Delivery" is the pedestrian path from the platform entrance to the front door of the establishment. However, given the more rapid transit opportunity offered by the rail corridor option, the rail corridor option can offer a faster assured transit through the Newcastle City Centre with an additional stop relative to the Hunter Street option. A neutral comparison of the two options that compared the "Front Door Delivery" of the two routes, including one more stop for the rail corridor alternative, between the Maitland Rd. overpass and Civic, would favor the rail corridor alternative.

"Activate Newcastle West." All of these alternatives would be substantially effective in "activating" Newcastle West, as all three offer a more attractive collection of intra-urban stops with the opportunity for services at a frequency that will be substantially effective in providing intra-urban services. However, maximum effectiveness in activating Newcastle West would refrain from suppressing development in Wickham. All three of these alternatives are based upon the West Wickham terminus, which will increase traffic congestion at the Stewart Avenue intersections with Hunter and King Street, both directly, due to traffic accessing and egressing the station, and indirectly through the closure of Railway Street and attendant traffic impacts. An alternative that would best activate the Newcastle West city precinct would: terminate the heavy rail traffic at Hamilton; upgrade Railway Street from a level crossing to a light controlled intersection, rather than closing it; place a light rail platform between Railway Street and Stewart Avenue; place a light rail platform between Bellevue Street and Steel Street; and place a light rail platform west of the restored connection between Worth Place and Wright Lane.

"Activate the Civic precinct." The sole effective differences between the Hunter Street option and the rail corridor option in terms of the activation of the Civic precinct are the greater interference with vehicular, pedestrian and cycle lines of travel presented by the Hunter Street option and the greater frequency of service available from the same number of light rail vehicles if they operate on the corridor that offers more rapid and secure transit. Therefore if provision of high frequency service with greater traffic interference on the Hunter Street option is considered to "activate" the Civic precinct, clearly the provision of higher frequency service with less traffic interference on the rail corridor option will do so as well.

Analysis of this route assessment suggests that this route assessment was not the basis for selecting the Hunter Street alignment, but rather was constructed to support a preference for the Hunter Street alignment motivated for reasons not presented in the PCA submissions. Construction of an new on-street alignment will evidently be more expensive than redevelopment of an already existing rail corridor, so that constructing a route assessment to favor the Hunter Street alignment should omit cost considerations. Even taking full advantage of the most effective opportunities to reconnect roads across the rail corridor and provide at grade pedestrian paths to replace pedestrian rail bridges, a dedicated on-street alignment will have to operate under more strict speed limits and will experience more traffic interference than a dedicated alignment on the existing corridor. Therefore route criteria to support the Hunter Street alignment should omit service characteristics. The rail corridor will operate primarily behind buildings on both Hunter Street and the Foreshore, allowing platform entrances that effectively serve convenient pedestrian access from both the Hunter Street and the Foreshore. Therefore the criteria should replace the conventional assessment criteria of ease of pedestrian access with a newly invented criteria of whether the LRT operates past the front door of buildings on its way to its light rail platforms. And Hunter Street has the finest grained street grid in the City Centre, so analysis of permeability take a fine-grained street structure as if it were directly equivalent to permeability, and ignore the interference of the corridors with travel paths.

#### Is the PCA Analysis a Rational, or a Rationalization?

In conclusion, an analysis of the PCA primary claims, the conclusion presented as the most fundamental conclusion, and what is purported to be the Potential Route Assessment strongly suggests that it is unlikely that the PCA arrived at this conclusion based upon the arguments presented in their submission. A serious effort to follow the analysis along the lines of the argument that they present would not so consistently omit the primary service and cost factors which favor the rail corridor option, and would not so consistently accept invalid or underinformed argument in favor of the Hunter Street alternative.

Rather, the submission appears to be an attempt to rationalize a preference for the Hunter Street option, where the PCA is not sharing with us its actual motivation for preferring the Hunter Street option. The most obvious rationale that has been expressed in public discussions of this issue in Newcastle is the opportunities for high rise development between Scott Street and the Foreshore, as the ground underneath the rail corridor is not undermined, and so development of high rise structures in this location does not entail the same expense in footings and foundation support as in most of the City Centre, where mine subsidence remains an issue that must be accounted for before engaging in high rise construction.

However, if this is the case, it would appear to represent a poor analysis of the development opportunities available under competing alternatives. While the operating of diesel passenger trains into Newcastle Station precludes a substantial amount of air space development, the existing passenger rail services could be supported on a much narrower footprint than they are presently using. If the rail corridor were converted for use in an LRT service operating through multiple light rail platforms on the Mall side of the current corridor, that would allow both the majority of the present rail operations footprint to be released for development as well as all of the airspace over the corridor. If the option was taken of bringing the LRT service out of the corridor onto a terminal street route on Scott Street to Pacific Park, the opportunities for development between Scott Street and the Foreshore would be quite similar to the opportunities offered by the Hunter Street alignment option.

So there may be additional decision drivers that are part of the preference for the Hunter Street option. One aspect of the Hunter Street option a lower number of trip-kilometers per hour per vehicle, due to the lower speed limits and requirement for greater turn-around allowance to accommodate interference with vehicular and pedestrian traffic along its route. This means that while the rail corridor alternative is compatible with using the superior Hamilton Station location for a heavy rail terminal station, the Hunter Street alternative requires that the LRT corridor be kept as short as practicable. Therefore the Hunter Street alternative locks the choice of the West Wickham heavy rail terminus in place.

The state government's behind closed doors decision to prefer West Wickham is puzzling, since it was purported to be justified by the development benefits of a terminus station. However, the West Wickham Station directly generates additional traffic congestion on Stewart Avenue, which interferes with development opportunities in Newcastle West. It also requires the closure of Railway Street, which indirectly generates additional traffic congestion on Stewart Avenue. And it is in a location where the lack of sufficient publicly owned land would require expensive site acquisition that would not be required at the Hamilton Station alternative. And a LRT platform serving the area between Stewart Avenue and the Maitland Street overpass could have its location optimized to best serve local intra-urban transport, since it would not face the siting constraints that a heavy rail terminus faces.

So it may be that some of those who stand to benefit from that site acquisition expense are primarily invested in support for the West Wickham terminus. If they are in a coalition of interests behind closed doors with those focused on opening up opportunities for substantial property development opportunities in Newcastle East, that would offer a far more plausible explanation for support of both the state government West Wickham terminal station siting decision and preference for the Hunter Street alignment alternative.

However, the analysis is not conclusive: it is only suggestive. While it may seem unlikely that competent analysts would develop work which is so systematically biased in favor of the preferred option and against the primary competing option, it is not outside the realm of possibility.

Indeed, the preferred features of an open and transparent decision process for a major public investment which have been substantially omitted from the current round of planning for a high capacity transport route into and through the Newcastle City Centre are not simply required to prevent the service of insider special interests at the expense of public welfare. They are also required to vet the quality of the works of analysis upon which the decision has been based. And the past experience of policy and project planning for the provision of high capacity transport service into and through the Newcastle City Centre clearly demonstrate the benefit of processes in which analysis of the most important cost and service impacts are made public in advance of breaking ground.

# The Context of Previous Flawed Newcastle Rail Corridor Analyses

The purpose of the present inquiry is not to attempt to do the analysis that the State Government has either failed to do, or has performed and failed to make public. It is, rather, to scrutinize the process by which this policy decision was made, involving an irreversible modification of a strategic public resource and a substantial allocation of funds that are under the stewardship of the NSW State Government.

So, the conclusions of this critique are not conclusions regarding the analysis, but are rather conclusions regarding what seems to be the strategy of avoiding public criticism for a policy by avoiding doing design work in advance that can provide a basis for that public criticism:

• It is an inappropriate and reckless use of public funds to make a public investment of this magnitude, and as irreversible as this, without a comprehensive alternatives analysis, including professional and impartial indicative costings, of a broad range of options, including the most effective available alternatives within the range, and

without making this alternatives analysis public in advance of making any final siting decisions

• It is an inappropriate and reckless use of public funds to commit to breaking ground for a public investment of this magnitude, and as irreversible as this, without a professional feasibility study, including detailed site and corridor design and an indicative plan of operations, and without making this feasibility study public in advance of any final decisions to proceed with the investment.

As far as issues as to whether flaws in any analyses that have been performed involve issues of technical competence, overlooking key issues due to small team groupthink dynamics, or involve catering to insider interests or special dealing being hidden from the public, discriminating between these alternatives is beyond my area of professional expertise, and so I do not have any basis to comment.

However, as far as whether the public planning process that has been followed follows norms of good transport planning and ideals of open and transparent public decision making, in my professional opinion it has failed on both counts. As a regional economist, I should have enough information publicly available from this phase of the State Government planning process to repeat an alternatives analysis and verify the conclusions of a feasibility study. I know that passing this benchmark is possible in New South Wales, because the previous stages of this planning process met this standard. But I find that the current stage of this planning process fails this benchmark.

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