

**SUBMISSION TO DEPARTMENT OF PLANNING & ENVIRONMENT  
WestConnex M4 East EIS: Project Number 5516307**

**A Plan for Sydney 2030 East of Homebush  
*An Economically More Efficient, Socially Inclusive  
& Ecologically Sustainable Alternative to WestConnex***

**By**

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Introduction

My name is Andrew Fraser. I hold recent qualifications in economics and planning at Masters' level. As a concerned citizen of Sydney, I am particularly interested in transport issues and related land use planning (see Attachment 1). I make this submission in what I see as the public interest.

I have looked at the M4 East-Environmental Impact Statement, currently on exhibition until 23 October and to my mind it raises more questions than it answers.

The Executive Summary of the M4 East EIS states that the:

Extension of the M4 is considered to best meet the government's objectives. Specifically it would facilitate long- term economic growth throughout the project corridor and through to Sydney's international gateway which create Sydney's commercial and freight demands.

In relation to this statement I make three points.

1. The EIS focuses on economic growth and gives little or no priority to the social and environmental costs of the huge project. These are likely to be substantial, yet the EIS contains no Benefit/Cost Analysis quantifying the social costs. A major failing in my submission because if such costs are not quantified they will be disregarded and only economic costs and benefits will be considered. This contravenes the spirit if not the letter of the recently gazetted SEPP on major projects that requires decision-makers to strike a balance between economic, environmental and social considerations.
2. The project has an enormous opportunity cost of \$15 billion in terms of alternative uses of taxpayers' funds for public and active ('sustainable') transport. The project is so big that it could 'suck the oxygen' out of the State transport infrastructure budget for a decade to come. Yet despite the enormous capital cost of \$15 billion, WestConnex has a Benefit/Cost ratio of only 1.8:1(see Vol.1, p 3-10 of M4 East EIS). A very small net benefit indeed compared to alternative projects that in my submission should have been considered in the EIS but weren't. By way of reference, Price Waterhouse Coopers did a Benefit Cost Analysis on the \$90 million sustainable transport project HarbourLink

and found that it had a much higher Benefit/Cost ratio of about 5:1 (see para.3-21.1pp74-75 of Attachment 1)

3. The assumption that growth stems from transport of goods by road is misplaced, according to the latest trends in planning. At a recent Sydney University conference by the Future Cities Collaborative conducted at Sydney University, delegates heard that growth in cities is primarily 'place led'. The best urban planners point out that 'if you plan for cars and traffic [rather than places for people] you get more cars and traffic'. This in my submission is precisely the mind set behind WestConnex and because of it I believe the project will fail in the very objective it sets out to achieve, easing car and road traffic congestion. I believe it will become a \$15 billion debacle, reminiscent of the spectacular 'modernist' planning failures of the fifties.

However it is easy to be critical and the bulk of this submission will be taken up in putting forward an alternative vision that in my view, better meets the economic objective (see above), has a much lower opportunity cost to taxpayers and promises to make Sydney a more 'liveable' city.

#### A Better Alternative Than WestConnex?

One does not need an EIS to quickly reach the conclusion that building an enormous motorway through the heavily built up Inner West is hugely expensive and massively impacts on the 'liveability' of the area. Yet a series of costly tunnels together with surface motorway connections is the centrepiece of the WestConnex project proposed to link Sydney Olympic Park to the Inner West, piercing its heart and extending to a new M5 near Sydney's ports. However despite the voluminous length of the EIS, it fails in my submission to make the business case, let alone the social and environmental case for the M4 East part of the project. How then can we say that the WestConnex proposal 'strikes a balance' (Dept. of Planning website) between economic, environmental and social considerations in terms of the present planning paradigm for major projects? Is there a cheaper and less socially and environmentally destructive way to achieve the stated economic objective?

I believe there is and I offer the alternative planning vision below to start a new conversation on the issue.

#### A Vision for a Globally Competitive Liveable Sydney

The central problem identified in the EIS is that road capacity around our ports and through the East and the Inner West has reached its limit. According to the EIS, this is likely to impede economic growth into the future unless there is a major expansion of infrastructure. However, as mentioned above, the trouble with the EIS is that it assumes that future economic growth and jobs will continue to be based around the heavy transport of goods by road.

There is good reason to challenge this assumption. ABS statistics show that the 'knowledge economy' is now the major driver of jobs and economic growth that is based around services not goods (Figure 11p.123 of Attachment 1).

Distinguished planner Peter Newman expounds on the conditions necessary to foster and nurture the knowledge economy (see City of Sydney website and p47 of Attachment1). According to Professor Newman, the knowledge economy is driven by the notion of the 'walkable city'. Well-educated urban professionals that drive the knowledge economy want to live close to the city, network with other professionals and access complementary services nearby. They don't want to waste their valuable time commuting long distances or stuck in traffic, expect good public transport connections within walking distance of their home and want to live in a beautiful, socially dynamic, varying density and mixed use urban environment. An ugly, emissions belching, walkable- space- consuming motorway in their precious living space is the last thing they want. In short they want their city to be 'liveable' that is; an amenable place for both leisure and clean, creative, skill- rich work.

At 3-6, the EIS mentions in passing the land- use- planning document *A Plan for Growing Sydney* (NSW Govt 2014). It specifies four goals as follows:

1. A competitive economy with world class services and transport
2. A city of housing choice with homes that meet our needs and lifestyles
3. A great place to live with communities that are strong, healthy and well connected
4. A sustainable and resilient city that provides the natural environment and has a balanced approach

These goals are consistent with the modern concept of land use planning known as the *new urbanism* that is explained in detail in a report I co-authored while doing my Masters of Environmental Planning at Macquarie University. I would like that Macquarie University report to form part of this submission. This report appears hereto as Attachment 1 under the heading *Light Rail & Land Use Planning*. The *new urbanism* paradigm is dealt with at pp40-52.

In my submission the four 'Growing Sydney' goals and the *new urbanism* principles explained in Attachment 1 should be extended to cover the whole of the Inner West, as well as the City and City East. This would bring the suburbs east of Homebush, south of the Harbour and north of latitude Campsie/St Peters within these goals and principles. This new 'Metropolitan East' regional destination would also include a transformed Port Botany and Kurnell Peninsular, together with the other industrial land in the vicinity. The 'dirty' carbon-heavy industrial uses in this precinct would be replaced by new land uses that conform to the abovementioned new urbanism planning principles.

Such a strategy would provide many more homes for a growing Sydney through natural densification or 'in-fill' along a public transport corridor such as light rail, with lower density housing set further back (see Figure 18, p.44 of Attachment 1). Existing homeowners living along a planned public transport

corridor would reap their rewards with increased prices for their properties that would be tastefully redeveloped under master plans subject to extensive community consultation.

Without a monstrous motorway, with Sydney Airport moved to Wilton (see below) and with additional sustainable transport infrastructure such as light rail financed from the money saved (by not building the motorway or part thereof), inner city areas would become much more desirable places to both live and work, even at higher average housing densities. This would be particularly true if development was 'place led' not 'car led'. The planning goal should not be defined to accommodate cars and trucks but to meet the social, cultural and public/active transport needs of the community in a sustainable way.

Planning of this sort would in my submission, provide many more jobs than the WestConnex project because they would support the knowledge economy from which the trends show the bulk of the new jobs currently come and will continue to do so.

#### High Speed Rail and a New Airport at Wilton

If the inner suburbs of Metropolitan East are to become beautiful and sustainable knowledge economy drivers, there remains the problem of how to deal with the transport of goods that presently flow through Port Botany and Sydney Airport.

In my submission, the answer lies (perhaps not surprisingly) in moving the pivot or focus of freight haulage and heavy industry currently centred on Metropolitan East, further west or to Newcastle, with the relocated industries now based on clean, renewable energy.

The key to this is threefold:

- Building a curfew- free -large-scale international airport hub at Wilton,
- Constructing the High Speed Rail (HSR) linking Sydney- Canberra- Melbourne-Brisbane
- Removing the dirty, unsustainable and inefficient heavy industry from Port Botany and Kurnell to be replaced by; a cleaner, larger and more efficient container port at the Sydney Airport site that would now be free for redevelopment; new bulk commodity handling facilities at Newcastle and; electricity generating plant closer to the solar thermal power industry planned for the central west of NSW

A new 24 hour international airport hub at Wilton would service Canberra, as well as Sydney. Wilton would be a state of the art international airport hub outside the Metropolitan area but well connected to it by high quality road and rail infrastructure, much of which already exists. A purported objective of WestConnex is to ease road traffic congestion but modern planning experts

(see above) cast doubt on this 'solution' because it does not get at the causes of the crippling and growing traffic congestion. Building the new airport hub, would in one fell swoop, remove the existing congestion- generating- airport-related truck and car movements around Mascot, so addressing a large part of the problem at source.

As Wilton is a 'greenfields' site outside the Sydney Basin, it could be expected to face relatively little community opposition compared to the bitter battle that residents of Badgery's Creek and their supporters have waged against it over the last twenty- five years. Continuing with Badgery's Creek is to flog a political dead horse. And it is a truism that pushing the same line over and over again in the vain hope that things will somehow be different in the future constitutes the first sign of madness.

The same politically powerful residents, who have so effectively kept Badgery's Creek being built during the twenty- five years since Third Runway EIS was released, are now likely to throw their weight behind the Wilton option. Since Wilton would not carry the political baggage of Badgery's Creek, it could be framed as a new dawn solution to the long- standing issue of inner suburban Sydney electorates affected by the present aircraft noise. And technically, the new airport hub at Wilton is likely to be more efficient than an airport at Badgery's Creek because it would be built on a larger scale with guaranteed 24- hour operation.

Importantly a new airport hub at Wilton integrates air, heavy rail and High Speed Rail planning because Wilton is on the proposed HSR route (see BZE Report), as well as already being a key hub for heavy rail. Arguably the best thing about HSR (unlike WestConnex) is that taxpayers would not have to pay for it. The project would be a Private/Public Partnership under the enlightened regulation and guidance of state and federal government. Last year, a large audience at the symposium on High Speed Rail at the University of NSW heard that the private sector is lining up to finance, build and operate the exciting project. Representatives of regional councils, as well as potential operators and private financiers, made presentations to an enthusiastic audience in the crowded lecture hall and launched the landmark HSR report by Beyond Zero Emissions (BZE) and the University of Melbourne. The report shows that HSR is both technically feasible and commercially viable, as well as being highly sustainable project and a powerful focus for sorely- needed regional development. All HSR now lacks is the political green light.

Wilton is close to good rail and road connections such as the Hume Expressway. It is also on the proposed route for the HSR project as detailed in the above report. It is likely that passengers in the Sydney area would be able to sustainably and efficiently access the new airport by HSR in less time than it takes to access the present airport by car; an emissions-intensive and congestion- worsening mode of transport. And at Wilton, there would be ample space to build large scale and efficient air- freight facilities to meet the needs of a growing Sydney.

The abovementioned BZE Report on High Speed Rail states that once the project is up and running it would greatly reduce the number of 'short hop' flights between Sydney-Canberra-Melbourne-Brisbane. The BZE Report also says that HSR would reduce greenhouse gas emissions by about 150 000 000 tonnes, both from the reduced number of emissions-intensive flight movements it saves and the fact that the High Speed Rail would be powered with electricity from renewable sources.

The combination of the reduced demand for short hop domestic flights caused by the HSR, together with the opening of the state of the art new airport facility at Wilton, would make Sydney Airport redundant. The extensive space released would be used to build a much bigger container port than the present one at Port Botany. There would be ample room there for loading/unloading, warehousing and the shipment of containers both by rail and by road

### Construction of New Port Botany West Container Port

As discussed above, with Wilton built, the vast space presently occupied by the three runways would be released and converted into a state of the art new container port (where demand is greatest) to replace Port Botany. A short surface rail spur would be built (without the need to reclaim houses) to link the new port facility on the old airport site directly to the main rail freight network centred on Sydneham. This freight spur line would be more efficient than the slightly longer rail route to the present Port Botany. To head off bottlenecks, this new rail freight spur would use the latest technology to prioritise the line for freight movements north, west and north west of the CBD.

Without the need to transport passengers, the existing Airport Line at the now new Port Botany West destination would become a second spur line for loading freight bound for south west destinations like Glenfield, Leppington and Bringelly where much of Sydney's future growth will occur. The advantage of this freight loading spur line at new Port Botany West would be that not all freight would have to go through Sydneham and rail capacity would be freed up there. Among other advantages, this would facilitate the construction of the planned new Metro line from Chatswood to Sydneham that would connect to the Bankstown line.

The upgraded Airport line would connect the new Port Botany West to Glenfield that is strategically important. Apart from the abovementioned advantages, Glenfield connects to the new 11.4 km South West Rail Link that will serve the new south- west growth area of Sydney. As demand and government priorities warrant it, the South West Rail line would be extended to Bringelly where there is room for 'greenfields' expansion of rail and road infrastructure, including new rail freight handling capacity.

A new motorway connecting Bringelly along the route of the A9 to the Hume Expressway at Varroville and to the M4 near Penrith would facilitate road connectivity to the new airport hub at Wilton. Such a motorway project, pitched as an the alternative to a new airport at Badgery's Creek, is likely to

be much better received by the locals because there would be no airport noise problem. And the local residents would benefit from much better road connections to major centres like Penrith or the new airport hub at Wilton.

As Glenfield is a hub for many metropolitan rail lines, including the proposed HSR, it would be the ideal point for freight trains from metropolitan freight destinations like the new Port Botany West to access HSR or vice versa. Inter or intra state transport of goods by HSR would dramatically improve the speed and efficiency of rail freight. Transport speeds would be comparable to air- freight over shorter distances but costs would be cheaper per tonne because of the greater capacity of rail freight. And of course rail freight is more sustainable than air.

Other freight would be transported to and from the new 'Port Botany West' to Homebush where updated technology and release of industrial land in the latter vicinity would be used to add value and capacity to the existing rail infrastructure serving the Flemington markets. Freight trains from Homebush could also access HSR at Glenfield or vice versa.

#### Small Truck Distribution System in Metropolitan East

Freight movements in the metropolitan area east of Homebush ('Metropolitan East') would be via small trucks. Homebush and the new Port Botany West, at the edges of Metropolitan East, would comprise the two main redistribution centres for small truck freight movements in that region. At both the Homebush and new Port Botany freight hubs there would be ample space for new infrastructure, as well as scope for the more efficient use of the old, to facilitate the small truck distribution objective for Metropolitan East. And there would be opportunity to recycle old infrastructure to save costs. At the new Port Botany destination, for example, the current international and domestic terminal buildings would be recycled as much needed warehouse space.

This 'small truck' distribution system is used extensively in Europe to preserve the amenity and essential character of historic town centres. These centres then become tourism, tertiary education and knowledge economy drivers that earn export dollars. There would be an important role for the private sector planning, designing and building beautiful places within Metropolitan East that will enliven the city and turn inner city suburbs into more exciting places, that take account of Sydney's rich multi-cultural diversity. Places that would attract highly educated and skilled professionals that are in demand globally to live and work in our city, thus improving the global competitiveness of Sydney's knowledge economy.

The small trucks would fan out and negotiate the existing network of streets in Metropolitan East and so take the pressure off the current bottleneck of Parramatta Road, where large trucks would now be heavily restricted through regulation and/or pricing policy. This would allow the current east/west road configuration that poses a significant barrier to north/south connectivity on either side of Parramatta Road, to be eased.



Traffic congestion would be improved further by setting up an inner city zone (like that of Singapore) where people would have to pay charges for the privilege of bringing their congestion- generating and emissions-intensive cars into the exclusion zone. This pricing solution would help to effectively reduce the number of cars on the road, freeing up road space and decreasing travel times for small delivery vehicles. Instead of having large trucks delivering goods on slow moving roads as we have now, there would be a larger number of smaller trucks delivering goods faster and more frequently, so the efficiency of the overall goods distribution system in Metropolitan East would significantly improve.

The above pricing policy would be the 'stick' part of the so- called 'carrot and stick' approach to reducing the number of private cars on the roads in Metropolitan East (see Attachment 1, pp74-77). The 'carrot' is to build an extensive network of new bus routes and light rail lines. It would then be more efficient, more sustainable and less stressful to use public transport rather than private cars within the exclusion zone. The streets, now reclaimed from the cars, would become thriving walkable places for shopping, socialising and working. However people living west of the city exclusion zone would still be able to use their cars cheaply and there would be an increased demand for parking stations on the western edge of Metropolitan East that would be facilitated by local planning regulations.

Cycling infrastructure within Metropolitan East would also be greatly expanded. For example the exciting Greenway project in the Inner West would be extended from Iron Cove along the present light rail route to urban renewal developments closer to the CBD (see Attachment 1, pp71-82)

Without the heavy trucks on Parramatta road (now replaced by small delivery vehicles), it would be possible to turn the road into the much-vaunted 'boulevard of dreams'. A pedestrian friendly place, serviced by a sustainable and efficient light rail line extending west to Parramatta and east to the CBD.

#### Existing Port Botany Facilities

The present Port Botany facilities would now be freed up for redevelopment.

One option would be to draw up a master plan to turn the old docks into a thriving retail and residential precinct connected by the old freight line that would now be converted cheaply to a passenger light rail line like the recently opened Lilyfield to Dulwich Hill line. The reinvented large- scale retail precinct would specialise in imported goods transferred the short distance from the new Port Botany West that would receive containers from all over the world.

As retail is labour- intensive, the new development would become an important jobs growth centre. It would be modelled on the highly successful urban renewal project for the old Melbourne docks.

'Dirty' Land Uses at Port Botany & Kurnell

As the world (including Australia) rapidly transitions to renewable energy, it will be increasingly difficult to justify the continued retention of the heavy carbon-based industrial uses at Port Botany or Kurnell and the surrounding area. Carbon pricing and tougher environmental standards will make such fossil fuel based development unattractive from a business point of view. Increased land prices in the historic and scenic Kurnell area (where Captain Cook landed) that is very close to the CBD, will put pressure on government to rezone the land and industry to sell it off (after remediation) for higher value uses like residential real estate and mixed- use commercial/retail/ residential etc development.

The extensive Kurnell Oil Refinery constitutes a particularly ugly spot on the once sparkling shores of Botany Bay, in the 'emerald city'. The Sydney that now competes to attract skilled people from all round the world for its new knowledge based economy. For this reason alone the refinery facilities should be decommissioned and relocated as soon as possible. But, equally important from a business point of view, new renewable energy technology is rapidly rendering the old- fashioned crude oil refinery plant obsolete. The production of bio-fuel (particularly for aviation) from for example the bio-sequestration of algae (Attachment 2), as well as the use of electric vehicles made possible by recent rapid advances in battery technology, will significantly cut the demand for petroleum imports and local refining. Such new clean technology will receive an enormous boost from carbon pricing, that even some oil executives now see as inevitable.

As a general planning objective, the 'dirty' land uses on the Kurnell Peninsular that are based on fossil fuel energy production should be phased out over five years and the production switched out west or to Newcastle. In these new locations the heavy industry will now be based on clean renewable energy.

Newcastle has loads of spare bulk handling capacity and cheap industrial land, as well as being on the proposed HSR route (see BZE Report) that makes possible the efficient distribution of bulk commodities or products with varying degrees of transformation throughout the state and beyond. Shifting the residual former Port Botany bulk- handling facility to Newcastle would also provide much- needed jobs in the Hunter Region, helping the 'just transition' out of coal.

The huge new solar thermal power generation and storage industry planned for the Central West that is technically capable of driving heavy industry would make the need for the electricity generation facilities at Kurnell redundant. It makes business sense to shift the latter facilities west much closer to the new renewable energy power sources and Sydney's main industrial areas.

As the industrial uses on the Kurnell Peninsular and Port Botany begin to disappear as outlined above, the traditional owners should be consulted not only about sacred sites but the alternative uses they would like to see for the area. For example, the indigenous community of La Perouse should be

closely consulted as regards their preferences for low cost housing and community services.

Many believe that at COP21 in Paris this year, we will see the world change direction in favour of much higher and binding carbon emission targets that that will set us all on a transformative path to renewable energy. The government and industry leaders will sooner or later decide to expunge the Kurnell Peninsular and Port Botany of the present 'dirty' and inappropriate industrial uses. We will see plans to redevelop the area for residential and mixed land uses. Then there shall be insufficient demand to justify building WestConnex (or the greater part of it), even in terms of the EIS's own assumptions. WestConnex will become the State's biggest white elephant and a \$15billion planning debacle.

### Opportunity to Restore Original Botany Bay Shoreline

The recent realisation of Paul Keating's dream to restore the original first settlement shoreline of the now Barangaroo Headland Park was a magnificent example of what can be achieved with true Aussie grit.

Why not take this as the precedent for restoring the original Botany Bay shoreline to how it was when Captain Cook first landed there?

With the plan outlined in this submission, this exciting possibility becomes possible. Imagine a Botany Bay no longer dominated by the ugly artificial eyesore of Sydney's Second and Third Runways that protrude like a snake's fangs into the once naturally beautiful bay that botanist Joseph Banks wrote about so eloquently and sketched so superbly? Tragically environmental scientists lament that industrial development has devastated the Botany Bay ecosystem. Instead of a princely pristine waterway that fittingly constitutes the site of the first European discovery of Australia's East Coast, Botany Bay has become an ugly, polluted cesspool, the legacy of many decades of dirty industrial abuse. The current world trend to carbon pricing, led by China and the EU, will signal a halt to such dirty polluting land uses that destroy our limited natural environment. Clean renewable energy, for which there is overwhelming public support, now constitutes a scientific and commercial reality that undeniably shows industry the way of the future.

With the airport removed to Wilton, we would no longer need the 'snake's fangs' of Sydney Airport and the original ecosystem could be regenerated. The runways could be dug up and removed in the same way they were put there; by human instruments such as trucks, trains and ships. This would provide transitional jobs until retirement for displaced blue-collar workers from Port Botany/ Kurnell or from elsewhere when the abovementioned dirty uses are relocated or decommissioned. The more mobile, younger and/or more skilled workers would find jobs in the clean renewable energy industry now relocated further west or in the Metropolitan East knowledge economy.

Other workers would be employed restoring the shoreline or remediating the soil around Port Botany and the Kurnell Peninsular. Kurnell marks the actual

site of the first European landing in what would become Australia. It is a hugely significant site for both indigenous people and Australians generally. Extensive community and expert consultation (eg. historians, environmental scientists or indigenous elders) would thus need to be done around future redevelopment, with restoration of the original shoreline the starting priority. And of course any residential redevelopment would need to ensure there is adequate social infrastructure such as schools and health services to service the additional population to be housed.

The above transitional construction job -creating projects could also be framed as ecologically- sustainable ones at every stage. The sand, rocks and concrete removed could be used to fill the voids in the Hunter Valley after the coal mines go or to build retaining walls to protect coastal land from the rise in sea levels as a result of global warming.

These works need not interfere with construction of the new container port at Port Botany West. This port would be constructed within the same large space currently occupied by the East/West Runway. However to facilitate construction of the new container port, the M5 (where it currently intersects the Airport) would need to be rerouted along the present Airport Drive. No houses should have to be reclaimed for this purpose, so this should not be a costly exercise.

Best of all the new container port would be contoured to fit in naturally with the original concave- shaped shoreline of Botany Bay that Captain Cook espied with his telescope more than two hundred years ago. The same place where the Cadigal people had lived for 60 000 years when Cook arrived; and which remains under the traditional custodianship of their descendants to this day. Such a vision would fittingly represent the Gateway to Sydney's Global Economy, framed to the east by the now properly respected place where Cook landed and to the west by a modern container port. These two pillars of a 21<sup>st</sup> Century Sydney that support both an illustrious history and a vibrant future, standing side by side and joined together, under the bridging arch of a cosmopolitan harmony fashioned with the bricks and mortar of a thousand dynamic multicultural places situated throughout our great metropolis. A city where cars and traffic rank behind people and Sydney's natural heritage!

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