INQUIRY INTO IMPACT OF THE WESTCONNEX PROJECT

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SUBMISSION FROM INNER WEST COUNCIL

TO THE PUBLIC ACCOUNTABILITY COMMITTEE OF THE NSW LEGISLATIVE COUNCIL

FOR THE INQUIRY INTO THE IMPACT OF THE WESTCONNEX PROJECT

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1. Summary

This submission begins with an introduction that includes background to the development of the submission and Council's position on WestConnex. It refers to Council resolutions, Council submissions and other representations that have expressed Council's strong opposition to WestConnex, have called for an inquiry into the project and have raised a multitude of serious concerns about the project. For the purposes of this submission, these concerns have been divided into a number of sections (listed in the contents and below), acknowledging there is considerable interaction between these sections.

The submission discusses Council's issues with WestConnex according to:

- planning processes issues;
- strategic justification;
- all local impacts (summary);
- construction impacts;
- air quality impacts;
- health impacts;
- operational traffic impacts;
- impacts on public transport;
- impacts on active transport;
- land use & property impacts;
- social & economic impacts;
- urban design & visual amenity impacts; and
- other impacts.

Key process and strategic issues are:

- Council continues to strongly oppose the project;
- Council prefers alternative (non-motorway) solutions to Sydney's traffic problems public transport, active transport, demand management, transit-oriented development and modest/targeted road network improvements;
- Council seeks to mitigate negative impacts from the project and seize opportunities for community benefits;
- planning of the project has been rushed and consultation tokenistic;
- the project is not justified at a strategic level on economic and environmental grounds;
- the project's business case is flawed, with little consideration of the abovementioned alternative transport options; and
- there has been no accounting of the significant health and other costs imposed on communities, and the equity impacts of tolls.

Key local issues raised in the submission are:

- air pollution impacts on the community from unfiltered ventilation facilities and increased surface traffic;
- the full range of construction impacts, including construction noise and vibration, dust and contaminants, odour, truck movements and employee parking demands from a multitude of construction sites across the Inner West Council area and beyond;
- health issues from construction impacts, particularly from night-works and cumulative construction impacts from multiple works;

- continuation of impacts at Haberfield-Ashfield and St Peters as a result of Stage 3;
- noise, safety and amenity impacts from construction truck movements and ad-hoc stabling of trucks on streets;
- operational traffic impacts, particularly around the Haberfield, Rozelle and St Peters interchanges;
- operational traffic congestion impacts on main roads, including Anzac Bridge and The Crescent / Johnston Street;
- need for a stronger commitment to reducing surface road capacity and implementing streetscape and public transport improvements – in particular, along Victoria Road and Parramatta Road;
- the social and economic impacts of all compulsory acquisitions;
- risk of damage to buildings as a result of construction vibration and settling;
- need for full delivery of residual lands to Council at no cost with all landscaping, paths and facilities constructed by the proponent;
- a number of design issues within Urban Design & Landscape Plans (UDLPs) and related plans raised by Council and the have not been addressed;
- a potential right-of-way through the Rozelle Rail Yard (RRY) site for future a future light rail link to White Bay has been compromised;
- Council's strong objection to permanent deletion of Buruwan Park and temporary use of publicly-accessible areas of open space for the project;
- cumulative truck traffic impacts from use of White Bay for WestConnex stabling along with a number of other proposed industrial uses;
- construction impacts from the Western Harbour Tunnel (WHT) if this project proceeds, including use of the former Balmain Leagues Club site at Rozelle and Yurulbin Park at Birchgrove as construction sites; and
- the need to address a range of other local issues continually raised by Council and the community.

At the end of the submission, attachments and references are listed.

2. Introduction

As Council has been calling for an inquiry into WestConnex for some time, it follows that Council welcomes this inquiry and appreciates the opportunity for input. The inquiry provides a much-needed forum for the NSW Government to learn valuable lessons from planning and implementation of this ill-conceived and poorly-managed project. Council requests the NSW Government makes a concerted effort to address all issues raised by the inquiry.

Inner West Council and the three former councils that make up Inner West Council have strongly opposed WestConnex since planning of this project began. Council would prefer that no part of the project had been planned or constructed, and the substantial funding for the project had been directed to public transport, active transport, modest/targeted road network improvements and demand-management options.

Council has raised concerns about the multitude of local impacts from the project environmental, health, traffic, transport, construction and economic impacts, as well as lack of adherence to good planning and management practice. These concerns are outlined in this submission and will continue to be communicated in all of Council's submissions and other dealings with regard to WestConnex. At meetings on 21 September and 3 and 12 October 2017, the then newly-elected Inner West Council discussed a number of WestConnex matters and resolved (among other things) that *"Inner West Council formally adopts a position of continued opposition in the strongest terms to the WestConnex project, both approved and future stages including stage 3, consistent with the opposition of the former councils of Ashfield, Leichhardt and Marrickville."*

Council's position of opposition to WestConnex is consistent with its 2016 independent survey of Inner West Council residents on a number of issues, including WestConnex. The survey found that almost 60% of respondents were opposed to WestConnex.

Whilst Council has continued to express its position of opposition in all its dealings on this project, it has also continued to work with the Inner West community, relevant NSW Government agencies and project contractors to ensure the extensive negative impacts from the project are minimised and community benefits are maximised wherever they arise.

At the abovementioned 2017 meetings, Council had also resolved *"That Council commits to writing to all members of State Parliament seeking their support for a full inquiry into WestConnex and that the EIS for Stage 3 not proceed until the inquiry is concluded."*

Subsequently, Council's October 2017 submission on the WestConnex Stage 3 Environmental Impact Statement (EIS) included a request that *"Prior to any further consideration of the Stage 3 EIS, an inquiry should be held into all parts of WestConnex examining issues with the project's business case, flawed Stage 3 EIS and unacceptable construction and operational impacts. Findings of the inquiry to determine whether Stage 3 should proceed and to recommend improvements to Stages 1 and 2 in relation to its design, conditions of approval and environmental licensing to reduce currently unacceptable impacts."*

Council stated at that time that the inquiry's main task should be to investigate the business case for the project to identify flaws in the process of evaluating the project at the highest level, and to determine whether Stage 3 represents the best outcome compared with other transport and demand-management options. Whilst Council considers it relevant that the inquiry's terms of reference include strategic and financial aspects of the project (including the business case) Council is also keen to see that the inquiry investigates other less strategic but equally important issues.

In particular, the inquiry must investigate the full range of issues from construction impacts that have been encountered to date from Stages 1 and 2, as well as future operational traffic impacts from the entire project. In doing so, it is anticipated that the inquiry's findings would lead to immediate improvements to the design details and construction practices of Stages 1 and 2. The primary immediate aim would be to reduce the currently unacceptable impacts being suffered by the Haberfield-Ashfield and St Peters communities. This would require a number of retrospective actions, including modifications to Stage 1 and 2 conditions of approval and environmental licenses.

Council had in its Stage 3 EIS submission also requested, prior to determination of Stage 3, *"an independent health study of Haberfield-Ashfield and St Peters residents affected by Stage 1 and 2 construction sites. Study to be overseen by NSW Heath and used to inform any Stage 3 conditions of approval."* Although Stage 3 has been approved without such a study, this inquiry provides an opportunity to ensure health impacts are duly assessed. It is noted from the inquiry's terms of reference that the inquiry will have a focus on strategic and economic aspects of WestConnex. These aspects include the business case, benefit-cost analysis, governance structure of the organisations involved, compulsory acquisitions and relationship to other motorway projects.

Whilst it is appropriate that these strategic aspects are examined, Council is concerned that these terms of reference do not include health and other impacts on residents from the construction and operation of the project. In the absence of such a term, these pertinent issues have been raised in this submission under the inquiry term *"any other related matter"*. In any event, would not be possible for the inquiry to properly assess the benefits and costs of the project without considering the way it continues to impose health and other costs on the community from its construction and operation.

This submission draws on Council's October 2017 submission on the Stage 3 EIS, which itself drew on former Ashfield, Leichardt and Marrickville Council's submissions on EISs for Stages 1 and 2. This is appropriate as most of the issues raised in these submissions remain pertinent. In drawing on these prior EIS submissions, this inquiry submission raises strategic issues, process issues, current construction issues based on experiences with Stages 1 and 2, forthcoming construction issues for Stage 3 and forthcoming operational issues for all three stages of WestConnex, as well as the proposed WHT.

The submission draws on two documents that have also been attached:

- the 20016 SGS Economics & Planning (2016) WestConnex Business Case Review for former Leichhardt Council & City of Sydney Councils; and
- notes from five public meetings convened by Inner West Council in late 2017 and early 2018 to discuss WestConnex construction and operational issues.

The submission also draws on Council's experience with engaging with the community over WestConnex through a variety of means, including:

- Council meetings;
- meetings of Council's WestConnex Community Liaison Forum (WCLF);
- meetings of the NSW Government's WestConnex Community Reference Group (WCRG);
- a public meeting in late 2017 to discuss the Stage 3 EIS;
- a set of five public meetings in late 2017 and early 2018 to discuss Stage 3 construction issues (notes from these meetings are attached to the inquiry submission);
- a drop-in meeting to discuss operational traffic issues in late 2017;
- various meetings and site visits involving local residents, Council staff, project staff (SMC and its contractors) and staff from relevant NSW Government agencies, predominantly Roads & Maritime Services (RMS), the Department of Planning & Environment (DP&E) and the Environment Protection Authority (EPA); and
- three public workshops convened by Council in the week beginning 13 August 2018 to
 provide information on Council's issues to assist community members to draft their own
 inquiry submissions and to allow Council staff to hear the community issues so they
 could be incorporated into Council's submission.

3. Council's concerns about planning & management process

Throughout planning of all stages of WestConnex, Council has continued to raise issues about poor planning and project-management processes. This has made it difficult for

Council and the community to respond to draft plans and have signalled to the community that engagement for WestConnex has been rushed and tokenistic.

Examples of these issues are:

- exhibitions occurring during school holidays, e.g. exhibition of the Stage 2 EIS from was undertaken almost entirely over the Christmas / New Year holiday period;
- the short period between the close of exhibition of the Stage 3 concept design and commencement of exhibition of the EIS, which could not have possibly allowed the issues raised by the former document to influence the latter;
- applying minimum statutory exhibition periods for a large and complex project like WestConnex does not allow for proper consideration of issues by councils and the community - though extensions have been sought by Council and others, they have not been granted;
- insufficient time for Council staff to respond to consultations on most project plans (including construction management plans), with no co-ordination of the timing of these consultations between the three stages of the project;
- lack of detail and clarity in EISs on key issues, particularly for Stage 3;
- no public exhibition of Submissions and Preferred Infrastructure Reports (SPIRs) and CEMPs, even though Council had requested this for Stage 3 – essential to allow the community to comment on changes to the project post-approval; and
- difficulties associated with Council and the community having to work with a corporation (SMC) as proponent rather than a government agency (RMS), with SMC able to avoid scrutiny through commercial-in-confidence provisions.

In its submission on the Stage 3 EIS, Council had expressed concerns about the complex designs of the Rozelle Interchange and Iron Cove Link (i.e. Stage 3B) and the difficulties that would be involved construction of that part of the project. The fact that the NSW Government has not been able to readily procure a contractor for Stage 3B is evidence of the difficulties involved.

This raises the possibility of significant design changes to Stage 3B prior to construction commencing, including the possibility that some parts of the interchange could be aboveground, with a resultant increased environmental impact. This adds weight to Council's argument about the need for community input into design changes. Notwithstanding, Council expects a new EIS would be prepared if Stage 3B design changes were significant.

4. Council's concerns about the strategic justification

Council believes WestConnex is not justified at a strategic level on economic and environmental grounds. It represents a poor transport option compared to public transport and demand management alternatives. It will have profound negative impacts on the liveability and urban form in the Inner West and wider metropolitan region. Nor is the project justified at a local level due to the severe and widespread local impacts that continue to be suffered by the Inner West community.

The project is not consistent with key NSW Government planning and transport policies and does not meet some of its own original aims. Costs have been underestimated and benefits overestimated. Of particular concern to Council is lack of accounting for the significant health costs imposed on communities and the equity impacts of tolls.

Public transport, active transport, demand management transit-oriented development and modest/targeted road improvements can work together reduce traffic, further improve the

viability of public transport and consolidate development. A combination of these options are needed to move Sydney toward a more liveable and economically efficient urban form. This kind of urban form allows the majority of the city's inhabitants to access most jobs, services and recreational opportunities by means other than private car.

Creation of a transit-oriented urban form is necessary for a large city's economic performance, as liveability and transport efficiency are pre-requisites for the 'new economy'. Knowledge-based corporations and their workers seek mixed, densely-developed urban areas that facilitate face-to-face interaction and are liveable, affordable and well-served by public transport.

It has been proven around the world that the most cost-effective means of reducing traffic is to continue to increase the extent and quality of public transport, supported by active transport, demand-management and transit-oriented development. In large cities such as Sydney, *rail* speed and reliability can be the most significant factor determining *road* speed and reliability. Increasing road capacity to solve traffic congestion has been proven to be self-defeating and ultimately futile.

As Sydney's population increases, so does the price of land. Building bigger roads to incorporate tunnel exits and accommodate additional traffic is a poor use of scarce and expensive inner-city land. In contrast, encouraging dense development around quality public transport (transit-oriented development) represents the efficient use of land, creating a more efficient and productive city.

The economic future of Sydney depends on its ability to compete with other large cities nationally and around the world to operate efficiently and attract activity in the new economy, with the key measure for success being quality of public transport. Google's 2017 decision to withdraw its interest in establishing a corporate headquarters in the Bays Precinct due to lack of public transport access to the site highlights the importance of quality public transport in securing Sydney's economic future.

WestConnex will contribute to the opposite – reduced patronage of public transport with corresponding declines in reliability and quality, induced traffic, urban sprawl, polluted air, compromised neighbourhoods, declining public health and an inefficient and costly transport system that will drain the city's economy. While other major cities around the world have abandoned large-scale inner-urban motorways, the NSW Government continues to push forward with outdated road-based solutions to congestion.

One of the main arguments given for the construction of tollways over other forms of transport is that tolls generate sufficient income to offset construction costs. There is however ample evidence in Sydney and elsewhere that cost-recovery from tolls is usually over-estimated and does not fully recover construction and operational costs, e.g. Cross City Tunnel and Lane Cove tunnel.

Council is also concerned about the equity impacts of WestConnex, where the toll burden will fall primarily on lower-income earners in western Sydney. This is becoming an issue for western Sydney councils and their communities – not only through the direct impact of the tolls, but through revenue indirectly lost to western Sydney businesses, increased costs of living and a consequent decline in economic activity.

Through induced traffic, WestConnex will undermine the NSW Government's own efforts to create transit-oriented development in other parts of Sydney, such as that proposed within along the Parramatta Road and Sydenham to Bankstown corridors.

The provision of on-site parking contributes significantly to the cost of housing and the cost of doing business. Consequently, by encouraging increased reliance on private vehicles and increasing the need for development to provide parking, WestConnex undermines policies that promote affordable housing and business viability. Increasing pressures for kerbside parking also makes it difficult for Council to reclaim space for much-needed street improvements such as widened footpaths, bicycle lanes and street trees / gardens.

Most of the views expressed in this submission on the strategic aspects of WestConnex are not unique to Inner West Council – they are the views of the former councils that now make up Inner West Council, the City of Sydney and numerous planning/transport professionals and residents of Inner West Council and the wider inner-Sydney area. These views have also been expressed by some individuals and organisations in other parts of Sydney, including Western Sydney.

WestConnex will also undermine several of the NSW Government's own transport and planning policies, including the 2016 *Future Transport Technology Roadmap* and the Greater Sydney Commission's 2018 *Greater Sydney Regional Plan.* The former strategy foresees a number of changes around technology, demographics and rates of car ownership that threaten to undermine the value of WestConnex in the longer-term. By increasing vehicular traffic, WestConnex also undermines the NSW Government's active transport plans and policies, such as the 2013 *Sydney City Centre Access Strategy* and 2013 *Sydney's Cycling Future*.

Council is concerned that WestConnex, as a motorway-only transport option, fails to meet some of its own objectives. Key failures include:

- the likelihood that surface traffic will not be reduced in the long-term due to modeshifting and associated induced traffic;
- the project will not lead to the rejuvenation of Parramatta Road as originally planned;
- there will be worsening of congestion on already congested roads such as Victoria Road at the Iron Cove Bridge and City West Link Road at Anzac Bridge;
- there will not be connectivity to Sydney Airport and Port Botany as originally planned; and
- the project will bring only limited benefits for heavy vehicles.

Council continues to be concerned about the flawed processes for the evaluation of this project. In 2015 and 2016 submissions from the former councils that now make up Inner West Council on WestConnex Stages 1 and 2, particular concerns were raised the poor business case for the project.

In particular, there has been no serious evaluation of the chosen motorway-only option against combinations of other transport options that would have been more effective in allowing the project to meet its own objectives at a lower cost. Nor has there been any community consultation in developing the business case. It is apparent from the project's business case that the motorway-only option was chosen at the beginning of the planning process and the business case drafted to support this.

As part of the development of submissions by former Leichhardt and City of Sydney Councils Stage 2 (New M5) in 2016, SGS Economics and Planning was commissioned by both councils to undertake review of the WestConnex business case. The SGS review report is attached to this submission. Though the review was undertaken in 2016, all of its findings remain relevant.

In summary, the SGS review's findings are:

- WestConnex does not align with the NSW Government's Metropolitan Strategy ('A Plan for Growing Sydney', December 2014) or reflect Sydney's changing employment, landuse and transport needs. It could be added that WestConnex also does not align with the Greater Sydney Commission's 2016 Draft Central District Plan;
- whilst WestConnex will be the largest continuous motorway in Australia and will influence land use and transport patterns over half of Sydney, its purpose and the challenges it is trying to address are unclear;
- the NSW Government's *Metropolitan Strategy* sets out a multi-centre strategy, focused on making it easier for Sydney residents to move between their homes, jobs and the centres where they shop, study and play. The plan highlights the transformation of western Sydney centres (Parramatta, Penrith, Liverpool and the Campbelltown-Macarthur region) through growth and investment. WestConnex does not align with the *Metropolitan Strategy* and squanders limited infrastructure funding that is needed for effective transport solutions for western Sydney;
- WestConnex will not deliver for western Sydney, taxpayers or the travelling public. Sydney's travel and employment patterns are changing and motorways focused on the inner city do not align with current travel needs, let alone the emerging needs for the future of Sydney;
- the stated freight and urban renewal justifications for WestConnex are outdated or unsubstantiated;
- the first original rationale of freight connections to Sydney's gateways of Port Botany and Sydney Airport are no longer a core part of the project, and WestConnex does not take into account the second airport at Badgerys Creek;
- the Federal Government's commitment to the construction of a second Sydney airport at Badgerys Creek was made after WestConnex was announced and its business case completed. The announcement of the second airport itself is sufficient to warrant a review into the merits of WestConnex;
- by the time WestConnex links to Sydney's existing airport in 2023, planes will be arriving at Sydney's new international airport at Badgerys Creek;
- when WestConnex finally links to industrial areas in Mascot, most of the area's freight industry and manufacturing jobs will have relocated to the light industrial centres of Eastern Creek, the Broader Western Sydney Employment Area and south-west Sydney;
- alternative freight infrastructure is already being delivered, including the Port Botany Rail Freight upgrade and the Moore bank Intermodal terminal. These projects will increase capacity to move freight to and from Port Botany by rail. WestConnex will duplicate the M5 East motorway without clear benefits for freight transport;
- the second original rationale of urban renewal on Parramatta Road is uncertain, as congestion is likely to continue to undermine amenity along Parramatta Road. No traffic forecasts have been released to justify how this busy road will become any safer, healthier or more liveable, compared with a 'do nothing' scenario. Parramatta Road remains in need of the only real solution to congestion—high quality public transport;
- WestConnex won't increase western Sydney residents' access to jobs and economic development;
- only a small proportion of workers from western Sydney commute to inner Sydney. Of those that do need to commute to inner Sydney, 90% rely on public transport. Increasingly, commuters are facing crush conditions on the CityRail network approaching both Parramatta and central Sydney. WestConnex will divert funding to a project that will not ease pressure on rail services and which does not serve western Sydney's major employment centres;
- Western Sydney needs more jobs close to where people live, and better transport within and to the key centres of Liverpool, Parramatta, Penrith and Campbelltown-Macarthur;

- industrial areas near Mascot are rapidly becoming commercial and residential, and manufacturing jobs have largely moved to Western Sydney;
- WestConnex will cost taxpayers \$11.5 billion (2016 figure) in direct Government funding and the payment of user tolls for decades, including the introduction of new tolls on roads that are not currently tolled. It is residents of western Sydney who are most likely to be short-changed, with toll and parking costs of up to \$48 predicted for a single trip. That is \$240 per week for a commuter who has no reliable access to public transport alternatives;
- alternative projects could deliver more effectively on stated NSW Government objectives, including public transport projects focused on Western Sydney;
- extending the North West Rail Link through the Sydney CBD to Liverpool, Sydney Rapid Transit (SRT) would connect the North West and South West to jobs, unlocking critical capacity across the rail network;
- similarly, the Western Sydney Rapid Transit (WSRT) would link Western Sydney to the Sydney CBD via the Parramatta Road Corridor, serving important centres such as Parramatta, Sydney Olympic Park and Strathfield and supporting the renewal of Parramatta Road could also be created;
- concern that the project has not been subject to proper governance and independent assurance are supported. The 2014 Auditor-General's Report, WestConnex: Assurance to Government, raised serious concerns around the process undertaken to date and the adequacy of the project in terms of governance and independent assurance. The report found that the Government failed to implement its own Major Projects Assurance Framework;
- the NSW Auditor-General's Report found that the preliminary business case submitted for a Gateway review had many deficiencies and fell well short of the standard required for such a document. The subsequent business case put to Government still included deficiencies; and
- significant questions remain about the WestConnex project's capacity to achieve its stated aims and meet Sydney's transport challenges.

The SGS review explained that the NSW Auditor General had been critical of the project. Since the SGS review, the Australian Auditor General has also reviewed the WestConnex business case and in 2017 released a report on its findings. These were critical of many aspects of the project's funding and approvals process. They found the project had a poor business case that did not adequately consider alternative transport options, had lacked strategic oversight of its funding/approval process and appeared to be rushed to implementation.

Council is of the view that the economic case for all stages of WestConnex is flawed, with the costs far outweighing the benefits. Even if the case for WestConnex could be boosted through enhanced connectivity with other motorways such as the WHT, Beaches Link and F6 Extension (which is doubted), there is no business case, firm timeline or funding commitment to these other projects. Even the Sydney Gateway Project, which would provide a critical link to Sydney Airport / Port Botany, has been separated from WestConnex and will be assessed separately.

It would appear the project's benefits have been overestimated and its costs underestimated. As is discussed elsewhere in this submission, Council doubts the timesaving benefits of the project - and even if realised, whether they are of sufficient magnitude to be of any real value to motorists.

The financial opportunity cost of WestConnex is high and rising - but of particular concern to Council are the substantial unaccounted health costs inflicted on Inner West residents

through construction and operational impacts of the project. Health costs are also being imposed on the NSW Government through additional demands on health services.

WestConnex has imposed significant direct financial costs on the former Ashfield, Leichhardt and Marrickville Councils and Inner West Council. These costs include staff time and consultancy fees so Council can organise community meetings, convene the WestConnex Community Liaison Forum (WCLF), respond to complaints, prepare independent property dilapidation reports, make submissions on project plans and participate in numerous project meetings. These meetings include the WestConnex Community Reference Group (WCRG) and Air Quality Community Consultative Committee (AQCCC).

It is not possible for Council accurately calculate total costs due to the varied nature of staff's involvement with the project across Council. However, it is estimated that the following items directly related to WestConnex have cost Council more than \$2M to date:

- staff time from former councils to respond to Stage 1 & 2 EISs;
- three full-time WestConnex Unit staff from October 2016 to date;
- general expenses for WestConnex community meetings; and
- consultancies for Stage 3 EIS assessment and WestConnex Local Area Improvement Strategy.

Council has also suffered financial losses from acquisition of Council land, such as at Reg Coady Reserve, Haberfield. There will also be financial losses to Council from foregone bush regeneration labour costs when Buruwan Park at North Annandale is deleted for the widening of The Crescent for Stage 3. In addition, the amenity of some areas of open space will be diminished through increased traffic resulting from WestConnex. There has been no accounting for these costs borne by Council and the community.

At the operational stage, the community will suffer financial losses from the additional traffic from WestConnex – in the form of reduced residential property values and additional road safety costs. If this is to be addressed by traffic calming measures proposed in Council's WestConnex Local Area Improvement Strategy (LAIS), the total cost to Council is estimated to be \$27M. The LAIS is discussed below in Section 9: Operational traffic.

5. Summary of Council's concerns about local impacts

Council's comments on EISs for all three stages included comments and recommendations designed to ensure that appropriate conditions of approval and licensing conditions were applied and best-practice management practices implemented to protect the Inner West community against WestConnex construction and operational impacts. The comments and recommendations were also designed to ensure that all opportunities for positive outcomes from the project were seized wherever possible.

Council is keen to ensure that lessons from Stages 1 and 2 are learned so that conditions of approval are strengthened, construction practices improved and incidences of non-compliance reduced. It is imperative that current poor practices for Stages 1 and 2 are not repeated, and that residents affected by Stage 3 are not subject to the same intolerable impacts as those affected by Stages 1 and 2.

Whether or not Stage 3 had proceeded, Council had requested that a retrospective review of conditions of approval and licensing conditions for Stages 1 and 2 be undertaken to ensure:

- adoption of best practice;
- rectification of flaws in existing conditions of approval and environmental licenses; and

 long-term impacts (particularly those associated with operational traffic) resulting from the absence of Stage 3 be addressed and rectified prior to the opening of Stages 1 and 2.

In summary Council's local impact issues from construction and operation of WestConnex are:

- air quality impacts from ventilation facilities and increased surface traffic;
- the full range of construction impacts, including construction noise and vibration, dust and contaminants, truck movements, employee parking demands from all construction sites;
- particular concerns about residents suffering health issues from cumulative construction impacts and continuation of impacts at Haberfield-Ashfield and St Peters - many of these affected residents have already endured significant impacts from the construction of Stages 1 and 2 and will now be subject to an extension (and possibly amplification) of these impacts;
- particular concerns about noise, safety and amenity impacts from construction truck movements and ad-hoc stabling of trucks on streets;
- operational traffic impacts around the Haberfield, Rozelle and St Peters interchanges with long-term consequences for residential amenity, pedestrian/cyclist safety and parking demand and the need to protect affected streets from this traffic;
- particular concerns about operational traffic impacts on the Anzac Bridge and The Crescent / Johnston Street due to traffic increases on already congested roads and roads that are within residential or shopping areas;
- need for a stronger commitment to reducing surface road capacity and implementing streetscape and public transport improvements wherever traffic is reduced by WestConnex – in particular, along Victoria Road and Parramatta Road;
- social and economic impacts of all compulsory acquisitions, including a number of dwellings in Haberfield-Ashfield, dwellings along Campbell Street, St Peters, dwellings and businesses along Victoria Road at Rozelle, businesses adjacent to the Rozelle Rail Yards (RRY) site and businesses along Parramatta Road and Bridge Road at Annandale-Camperdown;
- risk of damage to buildings as a result of construction vibration and settling caused by tunnel-induced groundwater movements, and need for independent verification of damage;
- need for full delivery of the St Peters Interchange (SPI) and RRY site recreation areas, Haberfield Gardens and other residual lands to Council at no cost, with all landscaping, paths and facilities constructed by the proponent according to final designs which have been the subject of a comprehensive community consultation program;
- concerns that construction of WestConnex Stage 3 and WHT (if built) have compromised rights-of-way through the RRY site for future a future light rail link to White Bay;
- impacts from the of clean-up of the RRY site on heritage and biodiversity concerns about lack of consideration of retention of rail heritage features in-situ and staging of site clearing to minimise biodiversity impacts;
- the need to improve the design of the RRY recreation area to limit the extent of motorway service areas, create more usable areas of open space and improve walk/cycle connectivity;
- Council's strong objection to removal of areas of publicly-accessible open space, such as Buruwan Park for the widening and realignment of The Crescent at North Annandale;

- cumulative truck traffic impacts from use of White Bay for WestConnex stabling along with a number of other proposed industrial uses;
- WHT construction impacts (if this project proceeds), including use of the former Balmain Leagues Club site at Rozelle and Yurulbin Park at Birchgrove as construction sites;
- the need to address a range of other local issues raised by Council staff, community groups and members of the community through redesign and/or management plans within conditions of approval.

6. Council's concerns about construction impacts

WestConnex will not only continue to impose devastating construction impacts on residents and business operators from multiple construction sites, but will continue to impose indirect impacts on the wider Inner West community from the disruption these construction activities create across the region. The direct impacts have been mostly felt to date around Stage 1 construction sites at Haberfield-Ashfield (since 2015) and around Stage 2 construction sites at St Peters (since 2016). For Stage 3, these impacts will continue to be felt in Haberfield-Ashfield and St Peters, and will be felt in new areas in Lilyfield, Annandale-Camperdown and Rozelle.

A raft of additional activities that are not core to the project will also continue to be undertaken in areas outside construction sites and along tunnel alignments, including geotechnical investigations and relocation of utilities. This has added to the problem of cumulative impacts, discussed further below. Whilst most of the facilities will be temporary, some will be permanent - raising further concerns about on-going, longer-term impacts.

All of these construction sites are within the Inner West Council area, with the exception of the Campbell Road construction site (within the SPI site), which crosses the boundary between the Inner West and City of Sydney Council areas. The Bridge Road construction site at Annandale-Camperdown and construction sites at the RRY site and Rozelle Bay are close to Inner West Council's border with the City of Sydney. The Northcote Street construction site is within reasonable proximity to the border between the Inner West and Canada Bay council areas.

Stage 3 is proposed to be constructed in two stages:

- Stage 3A construction of the mainline tunnel from Haberfield-Ashfield to St Peters to start in 2018 and be open to traffic in 2022; and
- Stage 3B construction of the Rozelle Interchange and Iron Cove Link to start in late 2018 and be open to traffic in 2023.

Building the project in two stages would allow for the Stage 3A mainline tunnels to operate independently (initially with two lanes in each direction) prior to the completion of Stage 3B. As a result of Stage 3 being constructed in two parts, the length of the construction period and commencement/conclusion times of the sites will vary. Council has been concerned to ensure that the two-stage construction of Stage 3 does not in itself increase or extend construction or operational impacts on residents.

As mentioned above, Council is keen to ensure the numerous shortcomings from Stages 1 and 2 in relation to management of construction impacts not be repeated for Stage 3. Council has repeatedly argued that lessons learned must result in appropriate design changes, stronger conditions of approval, improved management regimes and a more generous and considerate attitude toward affected residents. Mitigation measures should not benefits to some residents at the expense of others. Stage 3 construction sites at or near the existing Stage 1 and 2 construction sites at Haberfield-Ashfield and St Peters raise particular concerns, as Haberfield-Ashfield residents have already endured significant impacts from these earlier stages. Some Haberfield-Ashfield and St Peters residents had anticipated that construction impacts would draw to a close as Stage 1 moves to completion, but have been distressed to learn that impacts will continue for Stage 3 – extending three years of impacts for a further three (or more) years. Though construction is often referred to as *"temporary"*, a continuous construction period of six or more years does not feel like a temporary impact to affected residents.

Council is particularly concerned about extended construction impacts on residents near construction sites at Northcote Street at Haberfield and Campbell Street at St Peters (area near Crown Street and Barwon Park Road). At every opportunity, Council has argued that these residents must be well protected by noise and dust mitigation measures. Council is also concerned that should the WHT proceed, residents in parts of Lilyfield and Rozelle near the WHT construction site within the RRY site would also experience an extended period of impacts.

For Haberfield-Ashfield, Council has been concerned about construction and operational impacts on residents along Wattle Street. This includes five dwellings at 14 to 24 Wattle Street who have already suffering years of construction impacts but will also suffer operational impacts from exposure to traffic noise. Council seeks mitigation of these impacts to the satisfaction of all affected residents.

Residents' endurance of extended impacts raises serious health concerns, and Council has repeatedly called on the NSW Government to undertake a health study. Council has also called on key NSW Government agencies DP&E, EPA and NSW Health to investigate construction-related health issues and work collaboratively to ensure they are addressed in EISs, construction management plans, conditions of approval, environmental licenses and construction monitoring and complaints procedures.

The experience of Inner West residents and business operators living day-to-day with impacts from Stages 1 and 2 has proved that construction activities have had profound negative impacts – not only on individuals, but whole neighbourhoods. Even where construction activities comply with the project's conditions of approval and environmental licenses, residents of Haberfield-Ashfield and St Peters have complained about the impacts being intolerable.

The most pressing of these impacts has been noise from night-works, as residents continue to suffer health problems related to stress and sleep deprivation. The impacts have been particularly acute when night-works are undertaken over a long period without residents being given adequate respite. In many instances, residents in this position have not been offered alternative accommodation or other suitable mitigation, so have endured impacts over a long period, with resulting health problems.

Council has been concerned that extended working hours and night-works have been driven by imperatives to keep roads open to traffic during the day and by incentives for contractors to complete project milestones on time. This has been without sufficient regard for affected residents.

Though Council and residents are repeatedly reassured by the proponent that tunnelling is not likely to create significant noise or vibration impacts, and only for a short period, Haberfield-Ashfield and St Peters residents already affected by general construction noise have also complained about tunnelling vibration impacts. In areas above underground interchanges and near portals, tunnel depths will be shallower, increasing the risk of operational noise and vibration impacts. Vibration from construction, ground settlement and possibly operation also puts all properties above and in the vicinity of WestConnex tunnels at risk of cracking.

Following is a Haberfield resident's account of their experience with vibration and other impacts from construction of Stage 1 that has recently been sent to Council:

"I have ornate, intricate plaster ceilings in my home that have begun to break off in large chunks and I believe this is directly related to the digging and work involved in building the new roads. I also have cracks in my walls which were not there before.

I have a large accumulation of dust on my walls that I cannot remove without suffering immense physical challenges due to my rheumatoid arthritis and sinus issues. My only daughter has multiple sclerosis and is therefore also unable to assist me.

The noise has at times been unbearable. Living in Wattle Street Haberfield, I am accustomed to traffic noise but during the night hours it usually lessens to a degree but during intense building stages there was no reprieve. Also there were times when I would be woken in my sleep by a low level sound which I realised was underground digging."

Under-reporting of health issues is likely, as residents speak of *"complaint fatigue"* – where they feel their repeated complaints have not resulted in positive responses. Residents eventually stop complaining and endure the impacts in silence. For some, language has been a barrier to making complaints, and under-reporting has resulted from complaints not being officially registered, e.g. verbal complaints being made to project construction staff rather than official complaints channels.

Although WestConnex contractors' notification procedures are defined by conditions of approval, there have been many instances where notification procedures have not been adequate and affected residents have felt that their complaints have not led to satisfactory action. For example, recently a resident of Chandos Street at Ashfield reported to Council that they had been subject to significant noise for 3 to 4 nights a week since January 2017, yet had not received formal notices as they were outside the defined notification zone.

The response by SMC and its contractors on health issues created by Stage 1 and 2 constructions has not been adequate, nor has the response from NSW Government agencies responsible for compliance and the health and well-being of Sydney's residents – DP&E, EPA and NSW Health. As a result, there has been a lack of trust by the community – not only in the proponent (RMS, SMC and its contractors) but in enforcement agencies DP&E and EPA.

Experience with Stages 1 and 2 has shown that *cumulative* construction impacts have been a major issue for residents. These have arisen primarily from a vast range of utility relocation works (necessitated by WestConnex) being undertaken at the same time as project works or during periods when residents might otherwise enjoy respite. Whilst core project works are 'contestable' in that they must comply with the project's conditions of approval, the utilities works are 'non-contestable' as they are formally not part of the project and are instead regulated by environmental licenses.

In addition to utilities works, geotechnical investigation works for various stages of WestConnex have added to the cumulative impact problem. These works are permitted by the NSW Roads Act and are non-contestable. There have been instances in Haberfield-Ashfield and St Peters residents have complained about intolerable impacts from project works, utilities works and geotechnical investigation works being undertaken simultaneously.

The cumulative impact problem has been further exacerbated by works and other activities not at all related to WestConnex. These have included Metro Rail works, emergency and

routine utilities works, Council road and footway maintenance works, construction of buildings on private property and ambient noise from road traffic and aircraft – the latter being a particular issue for St Peters residents. In 2017 for example, Campbell Street residents at St Peters endured impacts from emergency night-time repairs by Sydney Water to ageing water supply infrastructure. Though not related to WestConnex, this had a significant impact on residents already fatigued by WestConnex works.

The effectiveness of enforcement has been hampered by the fact that contestable works are enforced by the DP&E (responsible for monitoring conditions of approval) whilst noncontestable works are enforced by EPA through specific environmental licenses or generic legislation such as the NSW Protection of the Environment Operations Act 1997. The splitting of these functions has meant that complaints handling has been complex and not as effective as it might have been if a single agency was responsible for enforcement. In most instances residents have not been able to distinguish between contestable and noncontestable works (nor should they be expected to) so have unwittingly not followed correct complaints procedures.

Council is pleased that the cumulative impact issue from utility works has been addressed in the Stage 3 approval with a requirement for the formation of a utilities co-ordination committee. This does not however address cumulative impact issues for Stages 1 and 2, and it remains to be seen how effective this committee will be in reducing these impacts. Council is also pleased that complaints procedure issues have also been addressed in the Stage 3 through the appointment of an independent complaints mediator. Again, this does not address issues for Stages 1 and 2, and it remains to be seen how effective this mediator will be.

A further construction issue for Stages 1 and 2 has been lack of NSW Government compliance resources for this very large, high-impact project. Responding to advocacy by Council on this matter in early-mid 2016, the DP&E created a full-time WestConnex compliance officer position, and that officer has been working from Council offices part-time. This has been welcomed, but Council has needed to argue to the DP&E that this is not sufficient. Council is pleased that in early 2018 DP&E devoted additional compliance resources to this project.

Council has also been concerned that the compliance resources within EPA have also not been adequate, and that there has not been sufficient input from other relevant agencies – particularly NSW Health – in minimising the impacts on residents described above.

A further cumulative construction impact issue has been overlapping of noise envelopes from project works from several construction areas – a particular issue for Haberfield-Ashfield residents living between a number of work sites. It would appear the conditions of approval have considered the impacts of each work site in isolation without considering how noise, vibration and other impacts add together to become intolerable. For Stage 3, this is likely to be an important issue for Rozelle, Lilyfield, and North Annandale due to the number of construction activities that would be underway across multiple sites.

The cumulative impact issue has been exacerbated by works that may have breached conditions of approval, such as works extending slightly beyond approved hours - or where breaches are not clear due to imprecisely worded conditions of approval. An example of the latter issue is idling of trucks in residential streets. In addressing this issue, it has not been clear that from conditions of approval that this activity has in fact constituted a breach, even though this has had a major impact on residents.

There have been instances where there has been an apparent lack of willingness by SMC and/or project contractors to undertake best practice (beyond simple compliance) and deal

with residents with a spirit of generosity in addressing cumulative impact issues. Council is particularly concerned that this lack of generosity may be the result of an inadequate funding available to assist affected residents through measures such as voluntary acquisition and provision of alternative accommodation.

Council continues to be involved in numerous complaints from the community about pedestrian and cyclist safety issues raised by the construction of Stages 1 and 2. These issues are critical when they affect children and their parents walking or cycling to school and people with limited vision and/or mobility impairments moving about their neighbourhoods. Examples of these issues are construction trucks crossing footpaths near St Peters Primary School, trucks parking or travelling along streets around Haberfield Primary School, damaged and uneven footpath surfaces that are difficult and dangerous for people with disabilities to negotiate.

In 2017 Council staff accompanied DP&E compliance staff and members of the community (including a community member with limited vision) for a 'walk around' Haberfield construction sites to inspect damaged footpaths and other places where pedestrian access was difficult and dangerous. In instances where the project had attempted to rectify these issues, the response was far from adequate, and it was apparent there was no compliance with relevant disability standards, or any attempt to comply. It remains there are numerous locations in Haberfield and St Peters where footpaths are damaged and dangerous. Examples of recent reports from Haberfield residents on this matter include footpaths on Northcote Street and footpaths on Ramsay Street west of Wattle Street.

Since construction of Stages 1 and 2 began, Haberfield-Ashfield and St Peters residents have continued to complain about kerbside parking pressures created by WestConnex construction. Whilst SMC and its contractors has made some effort to address parking issues through actions such as creation of dedicated car parks, Haberfield-Ashfield residents have expressed their dismay that some of these car parks have been unused, being located away from construction sites. There have been no penalties to discourage parking in residential streets or incentives to encourage parking in facilities provided by the project. It is apparent to Council that conditions of approval for Stages 1 and 2 related to parking are vague, unenforceable and ultimately ineffective.

Complaints by Haberfield residents about parking pressures led Council in 2018 to investigate the implementation of a temporary resident parking scheme in the most affected areas. Although the scheme was not implemented due to lack of community support, written comments received from residents from consultation on the scheme indicate the kinds of impacts the project has imposed on their neighbourhoods (Item 25, report to 27 July 2017 Local Traffic Committee). One resident has said: *"The WestConnex workers leave their rubbish behind on the nature strip & in the gutter. These include dust, noise starting very early in the morning, street closures and road surface damage as well as increased traffic in particular trucks using local streets."*

Council has been pleased to learn that off-street car parking will be provided at one of the Muirs sites for Stage 3. Council has advocated that systems be put in place to ensure that project workers use the car parks provided and do not have the discretion to park in local streets.

A more comprehensive approach to street closures is needed, as Haberfield/Ashfield residents have experienced many seemingly ad-hoc road closures and diversions implemented at short notice, with several of these having major implications for local residents and businesses. A blanket speed limit reduction around all construction sites of 30 or 40kph is also warranted to minimise road safety risks, particularly on streets with residential and school uses.

Haberfield residents have complained that WestConnex construction activities have made some local motor vehicle movements difficult and dangerous. For example, Northcote Street residents report that it is has been almost impossible to exit Northcote Street into Ramsay Street. Though the project had promised to address this issue, it has not been addressed. These residents also report that the left turn from Wolseley Street onto Parramatta Road is a very tight and difficult turn to negotiate in heavy traffic. Walker Avenue residents have complained about the noise barrier that was erected by the project in their street creating traffic safety issues.

Residents have complained about inadequate lead times between notices being issued and the commencement of works. There have been instances where residents have been notified by leaflet distribution, but the notice has not been posted on the SMC website, leading to the situation where residents express their concerns to Council about forthcoming works to be told that Council has no knowledge of the matter. Council has repeatedly advocated to SMC the importance of all notices being posted on SMC's website in a timely manner so that Council and the wider community is kept informed.

Council is aware of the processes that have been established to co-ordinate WestConnex construction activities between councils, State agencies, SMC and project contractors. However, Council's experiences with Stages 1 and 2 show there is much room for improvement. For example, Council has received several reports from Haberfield-Ashfield and St Peters residents of inconsistent information being disseminated by SMC and its contractors and inconsistent responses to complaints. In relation to project-related roadway changes such as the closure of Ramsay Street at Haberfield, there have been reports of inaccurate signage and Sydney Buses drivers being unaware of changes.

Council has received many reports about project trucks departing from routes defined by conditions of approval and travelling along local residential streets – with resultant noise and traffic safety impacts. In some instances, project trucks have been reported travelling past and parking near primary schools in Haberfield (in breach of conditions) creating a traffic safety hazard. Simple measures to improve enforcement include easy-to-read identification numbers on project trucks and employment of a dedicated traffic-monitoring officer for the project.

Lack of marshaling arrangements has led to circling of trucks around Haberfield-Ashfield streets and queuing of trucks on Parramatta Road at Haberfield-Ashfield as drivers await clearance to enter construction sites. This has raised noise and traffic safety issues. Council is aware that in 2017 DP&E compliance staff had taken formal enforcement action on these queuing issues.

For Stage 3, the recent addition of truck marshalling and employee parking areas at the White Bay Civil Site (C11) is welcomed in general terms as it will provide these services without direct impacts on local residents and businesses. Importantly, it would avoid use of streets for marshalling, which has been a major issue for Stage 1. The car park will assist with minimising parking demands on surrounding local streets.

In the main, trucks would use main roads to/from the White Bay site – predominantly James Craig Road and City West Link Road, so there would not be a significant direct noise impact on residents near these roads. However, Council is concerned about the traffic congestion and road safety impacts of spoil trucks using all roads, including main roads.

There would also be a cumulative truck traffic impact from other projects that would use the White Bay site and surrounding roads. These projects include a WHT spoil handling facility, multi-user facility and concrete batching plant. Council estimates that all these uses would

generate of the order of 4,000 truck movements a day, all along the same route via James Craig Road. This would lead to congestion at key intersections, particularly at the City West Link Road intersections with James Craig Road and The Crescent.

Council is also concerned about trucks using residential streets to travel between marshaling areas and construction sites. For Stage 3, Council has expressed its concerns about trucks using Johnston Street (southbound from White Bay) to access the Bridge Road site. The high frequency of truck movements, coupled with sensitive uses along Johnston Street (schools, residential areas and local shops) would result in amenity impacts and road safety risks.

For all construction sites, there is the potential for truck conflicts with other motor vehicles and bicycles on any road, and conflicts with pedestrians at pedestrian crossing and wherever trucks cross footpaths. Risks of these conflicts are at their greatest during the morning peak traffic periods and school travel periods. Working hours should be designed to avoid peak traffic periods, particularly where school travel safety issues are raised.

Truck access to the Bridge Road construction site would be from the City-bound kerbside lane of Parramatta Road. Vehicles would enter via a new temporary driveway, travel in an anti-clockwise direction via an internal access road and exit the site onto Pyrmont Bridge Road via a new temporary signalised intersection. Despite the fact that minimal modifications to the existing road network would be needed, Council has concerns about walk/cycle diversions around site entry/exit points and potential conflicts between project trucks, buses, cyclists and pedestrians wherever trucks cross the paths of these other road users.

Experience with construction trucks accessing Haberfield-Ashfield sites from Parramatta Road has shown that issues with on-site management can result in empty trucks travelling slowly in the kerbside lane when the loading area is already occupied, to avoid being sent around the block. This inhibits traffic flow in the kerbside lane, delaying buses and compelling some drivers to make hazardous manoeuvres at short notice.

The Bridge Road site has no suitable 'go-around' route as the left turn from Mallet Street to Pyrmont Bridge Road and the left turn from Pyrmont Bridge Road to Parramatta Road cannot be negotiated by spoil trucks. Layton and Barr Streets are too narrow to accommodate left turns, and large vehicles also cannot negotiate the left turn from Parramatta Road to Ross Street and Glebe Point Road is unsuitable for heavy vehicles. In any event, it is not appropriate for project trucks to be travelling on those roads for amenity reasons.

Though the site is surrounded primarily by commercial uses, there is the potential for noise, dust and other impacts on nearby sensitive uses, i.e. five dwellings located at 67 to 77 Pyrmont Bridge Road and the Bridge Road school at 127 Parramatta Road directly opposite the site. There is also the potential for site activities to negatively affect sensitive commercial and healthcare uses, e.g. dust impacts on brewery adjacent to the site. Careful site management and physical buffering will be needed to protect these sensitive uses.

Construction at the Campbell Road site at St Peters involves continued use of part of the SPI site, which raises concerns for Council about on-going impacts on nearby dwellings on the northern side of Campbell Street and the southern end of Barwon Park Road and Crown Street, St Peters. This is particularly as residents in this location have endured impacts from Stage 2. Noise and dust buffering will continue to be needed to protect these dwellings.

Cumulative impact issues are raised for Council from the four construction sites proposed in the Rozelle-Lilyfield-Annandale area. These are the Rozelle civil & tunnel site, The Crescent

Civil site, the Victoria Road civil site and the Iron Cove Link civil site - required to support construction of the Rozelle Interchange and Iron Cove Link. Cumulative impacts are likely to be an issue as these sites are within close proximity to each other and are surrounded by densely-developed residential areas, schools and other sensitive uses.

The Victoria Road site raises concerns about noise, dust, traffic and parking impacts on densely-developed residential areas surrounding the site. Numerous single-storey dwellings on the western side would be located directly adjacent to the site, and whilst these could be protected by noise barriers, multi-storey dwellings on the eastern side of the site could not be protected in this way due to the rising topography.

Council is also concerned that temporary and permanent closures of streets between Victoria Road and King George Park would create access difficulties for residents and park users. Proposed temporary walk-cycle path diversions are a further concern given proximity of this site to the Bay Run path and the high volume of pedestrian and cyclist traffic that use footpaths along this part of Victoria Road.

Adding to Council's concerns about WestConnex construction impacts are WHT construction impacts. Council has expressed its formal opposition this project as part of its position of opposing inner-Sydney motorways and preferring public transport solutions to Sydney's traffic problems.

From the recently-released WHT reference design, it is apparent the project will have a number of significant impacts, including:

- dust, noise and truck traffic impacts from a mid-tunnel construction dive-site at the former Balmain Leagues Club site on Victoria Road;
- dust noise and truck traffic impacts from a construction site within the Rozelle Rail Yards (RRY) site;
- dust, noise, loss of open space and water pollution from a construction within Yurulbin Park at Birchgrove and parts Sydney Harbour near Yurulbin Park; and
- noise and truck traffic impacts from use of part of the White Bay port area for spoil handling and construction/storage of WHT material.

Council notes that spoil trucks would not use Balmain-Birchgrove roads, as all spoil would be removed by barge from the harbour area or by trucks along main roads from the former Balmain Leagues Club site. Notwithstanding, concerns are raised about congestion and road safety impacts from the large number of trucks that would be using main roads, particularly when added to truck traffic from other industrial activities proposed for White Bay. Use of Louisa Road by light vehicles accessing the Yurulbin Park construction site is also expected to create traffic issues on that narrow residential street.

7. Council's concerns about air quality impacts

A WestConnex issue of particular concern to the community is air quality impacts - at both the construction and operational phases of the project.

At a strategic level, Council's preference for public transport is in-part based on the air quality benefits of public transport over motorways. Council accepts that due to technological advances per-vehicle emissions have declined in recent years, but remains concerned that additional traffic generated by WestConnex will negate these technology-related emission reductions.

Council continues to argue that high-occupancy public transport (supported by transitoriented development) is the most effective way to achieve travel emission reductions on a per-passenger-kilometre basis. It is acknowledged that currently a proportion of power generated for public transport is from non-renewable sources, but it should be a national and State goal for the longer-term that public transport be powered from renewable sources.

It is noted from the EIS that Sydney's air quality is considered good by world standards. This is not disputed, but the NSW Government's stated commitment to improving air quality by reducing emissions from vehicles along with other sources *is* disputed. This is because WestConnex will inevitably create further traffic growth across Sydney, and with more vehicles will come more emissions.

Though the issue of vehicle emissions is predominantly an operational one, emissions from construction vehicles is an issue worthy of note. Council has been aware of complaints from the community about emissions from diesel generators within construction sites and construction trucks idling within close proximity to residential areas, schools or preschools. Reducing the idling of trucks also has noise-reduction benefits.

The main air quality issue at the construction stage is dust emissions from construction sites. Even though air quality management plans have been implemented for all stages of WestConnex, there have been many complaints from Haberfield-Ashfield and St Peters residents about dust. Council has raised the need for best-practice monitoring systems to be implemented, and monitoring should be undertaken in both indoor and outdoor environments.

Induced demand created by WestConnex - i.e. car trips that happen purely as a consequence of the motorway being built - is anticipated to be 45,000 additional car trips per day. Induced traffic is likely to increase congestion and create roadside air pollution hot-spots around WestConnex, including Iron Cove Bridge, Anzac Bridge and Canal Road at St Peters. This would likely outweigh improvements achieved by improved traffic flows on the motorway itself.

RMS had argued in its Stage 3 EIS that the contribution of car exhaust to total air pollution at the Sydney-metropolitan scale is minor at only 0.75%, with solid fuel burning the largest contributor at 50.6%. However Council had pointed out that the EIS has omitted other non-exhaust particulates emitted by vehicles (5.5%), light duty diesel exhaust (2.2%), industrial vehicles and equipment (1.4%), which would bring total vehicle emissions to almost 10%.

Even if this was considered to be a low proportion of the total, the EIS conceded that PM_{2.5} vehicle emissions can have a health impact at any level, as can the cumulative impacts of all emissions. The point about emissions having a health impact at any level has been made widely by a number of stakeholders, including Australian university research institutes. Governments should therefore be acting to reduce all types of emissions from all sectors. For transport, the long-term goal would be zero emissions from high-occupancy public transport powered by renewables.

In planning for WestConnex, RMS has acknowledged that in the future a proportion of the national vehicle fleet will be all-electric. This would have a positive impact on local emissions, but Council is sceptical that there will be noticeable proportion of these vehicles in Australia in the near future. The average age of cars in Australia is around 10 years - consequently it will take quite some time for the fleet to turn over, and it is not known if this has been factored into WestConnex air quality modelling. As far as Council is aware, there are no proactive State or national policies to encourage electric vehicles.

Electric vehicles would in the near future be predominantly powered from coal-fired power stations, so there would be emissions, but not in Sydney. Further, motorways encourage greater car use through induced traffic, which acts to increase emissions overall. For electric vehicles to be effective in significantly reducing emissions, they would need to be powered by renewables.

It must also be recognised that even if at some point in the future almost all vehicles are electric, there will still be emissions from brakes and tyres and excessive traffic will continue to create problems of congestion, road safety risks, compromised liveability and poor land use / transport integration. Nonetheless Council believes State and Federal action is warranted to encourage electric vehicles to reduce emissions, whilst recognising this would in the short-medium term not result in significant emission reductions.

RMS has explained that surface road emissions would be reduced wherever vehicles are within WestConnex tunnels. Council disputes RMS's claim that this improves Sydney's air quality, as these same emissions emerge at ventilation facilities. Council also disputes RMS's claim that vent facility emissions would not have a significant local impact as pollutants are dispersed into the regional air-shed. In any event, Council is concerned about *any* contribution to air pollution at both the local and regional level.

It is not acceptable to Council that vent facility emissions are unfiltered as is proposed for all stages of WestConnex - even if compliance with regional air quality standards can be achieved. RMS points out that filtration is not cost-effective compared to reducing emissions at the source (i.e. the vehicle), it reduces the dispersal of emissions by slowing the velocity of air emerging from the facility and is not currently applied (or proposed to be applied) to any motorway tunnel in Sydney. Notwithstanding, Council believes that absence of filtration means that health costs will be imposed on the community. This further highlights the need for a review of the project's benefit-cost analysis.

Council has particular concerns about local impacts from the vent facilities. Examples are:

- emissions from the large Parramatta Road vent facility at Haberfield would affect Haberfield Primary School, emissions from the two facilities at the St Peters would affect St Peters Primary School and emissions from the Victoria Road / Terry Street facility would affect Rozelle Primary School and Sydney Secondary College Balmain, with Parents' and Citizens' Associations (P&Cs) from these schools raising concerns;
- the height of the St Peters ventilation facilities has been limited by Sydney Airport's Obstacle Limitation Surface, so reduced dispersal can be expected from these facilities;
- at St Peters, dispersal of ventilation facility emissions would be further affected by turbulence from passing aircraft; and
- some residential areas and schools in Rozelle and Lilyfield would be located above the level of the Iron Cove and RRY site vent facilities, further increasing impacts.

RMS has argued that unfiltered emissions from WestConnex vent facilities complies with national air quality standards. Even if this is the case, Council sees the need to review these standards to ensure they a bringing about *improved* air quality in Australia's cities in the long-term.

Above it was mentioned that Council is also concerned about increased *roadside* emissions from induced traffic from WestConnex. Of particular concern are the following locations:

- Victoria Road from the Iron Cove Link tunnel portal at Rozelle through to Drummoyne;
- Anzac Bridge and Western Distributor; and
- Canal Road and Gardeners Road in the Mascot-Alexandria area.

Although most of the impacts at these locations are (respectively) within the Canada Bay, City of Sydney and Bayside Council areas, they are close to the Inner West, and impacts on the Inner West are likely to be increased because of local weather effects, such as wind – a point that has not been noted by RMS. Council is concerned about emission impacts on all residential areas and other sensitive uses regardless of whether they are within Council's boundaries.

Roadside emission impacts along the Anzac Bridge and Western Distributor are of particular concern as they will affect the substantial future residential and commercial development planned for the Bays Precinct. It may be appropriate that the density of Bays Precinct development be reduced to account for WestConnex emission impacts. A further concern is the impact on the existing area of high density residential (apartment) development on the southern side of Gardeners Road at Mascot, within the Bayside Council area.

Council believes RMS has not given *roadside* air quality impacts sufficient prominence in its WestConnex air quality assessments. Council had noted in responding to WestConnex EISs that an assessment of worst-case surface road emissions around WestConnex ramps and interchanges (all technically part of the project) had not been included.

RMS has given assurances that WestConnex will include a state-of-the-art tunnel longitudinal ventilation system. However experience with existing tunnels such as the M5 has shown that it is inherently difficult to achieve clean air within *any* road tunnel. Cars and trucks are enclosed, so offer some protection from in-tunnel emission - but this is not the case for motorcycles. There will always be some tunnel users that are sensitive to pollutants at any level, e.g. asthmatics.

Though the journey through WestConnex tunnels would for most last for a relatively short period, there will be regular users of these tunnels that will be exposed to pollutants over a long period. There will also be times when congestion slows traffic, increasing emissions and keeping motorists within the tunnel for a longer period, increasing their exposure to pollutants. RMS has not confirmed whether there will be an alternative in-tunnel ventilation system should the main system fail, or if there is a fire or similar emergency in the tunnel. Council notes that these issues generally do not apply to rail tunnels as there are no operational in-tunnel emissions.

In-tunnel emissions within the Rozelle Interchange raise particular concerns due to steep grades. As grades increase, so do emissions - an issue relevant to the existing M5 East tunnels. Council has also been concerned that in-tunnel emission standards used in the planning of WestConnex – considered by RMS to be 'best practice' for NSW – are not sufficiently stringent compared to in-tunnel standards used internationally.

Council will continue to argue that air quality monitoring at childcare centres, schools and aged housing facilities is a priority, and the community is kept fully informed of the results of air quality monitoring established for all stages of WestConnex, including Stage 3. Council is represented on the Air Quality Community Consultative Committee (AQCCC) for Stages 1 and 2, so is aware the air quality monitoring stations are being established to monitor operational emissions.

Through this committee, Council will continue to argue that monitoring of sensitive land uses be prioritised. Council will also continue to argue for the real-time online display of *all* air quality monitoring data, as is now occurring for WestConnex Stage 1. Council also seeks a clearer explanation of the implications of this data on community health.

At its 24 July 2018 meeting, Council considered a report entitled *WestConnex Air Quality & Noise Concerns* and made a number of resolutions. In summary, the resolutions are:

- 1. Council to consider a new *"air quality, pollution, environmental and traffic impacts"* fund at the next quarterly budget review;
- 2. Council notes the efforts of the community to organise citizen-run air quality monitoring around various WestConnex construction sites and writes to relevant university research institutes inviting their partnership and seeking advice on how Council can work with the community to implement this monitoring and analyse and share the results.
- 3. Council writes to the NSW Minister for the Environment and Minister for Health to request that staff and other resources are allocated within EPA and NSW Health to:
 - further analyse and explain clearly to the broader community all issues, including complex technical matters, that arise from meetings of the WestConnex Air Quality Community Consultative Committee (AQCCC);
 - review on a regular basis the air quality monitoring data being produced by WestConnex air quality monitors, investigate and report publicly on any exceedances and recommend and/or require any additional measures that may be required to mitigate health impacts from air pollution;
 - explain why air quality monitoring data for the WestConnex Stage 1 now being
 posted on EPA's public website and previous readings taken from the WestConnex
 monitor at St Peters Public School has at times showed exceedances of some air
 pollution standards, and the health implications of these exceedances;
 - investigate the health impacts caused by construction noise, particularly night works, on residents impacted by WestConnex, including noise caused by any utilities works in these areas; and
 - undertake a comprehensive study into the health impacts of WestConnex, including both construction and operational health impacts.

Council has raised technical issues about air quality modelling in WestConnex EISs. The first issue is the modelling and assessment methodology used in the EIS varies from the NSW approved methods in a number of ways – for example, choice of dispersion model, the method used to construct the meteorological input file and the method used to calculate NO_2 concentrations.

The second issue is the potential for flawed assumptions in the EIS's traffic modelling compromising the air quality modelling, leading to an inaccurate assessment of air impacts overall. The model incorporates main roads only, ignoring emissions from regional and local roads. It is appropriate that these lower-order roads be included in the assessment as several of these are expected to experience increased traffic as a result of the project.

A third issue is that only emissions from ventilation facilities were considered, not roadside emissions. No mitigation measures or air quality monitoring have been proposed for areas that would be affected by surface road emissions.

There has been lack of consideration of the impact of topography, buildings and other structures in the vicinity of the vent facilities on the dispersal of emissions, which could be significant. This adds to Council's abovementioned concerns about dwellings and schools being located above the level of the of the RRY and Iron Cove vent facilities because of topography.

8. Council's concerns about health impacts

Numerous studies worldwide indicate that the construction of urban motorways contributes to private car dependency. In turn, this increased dependency - with an estimated induced

demand of 45,000 additional vehicle trips per day created by WestConnex - contributes to reduced human and community health through:

- reduced air quality, potentially leading to increased incidence of respiratory illness;
- sleep disturbance due to construction activity and increased traffic noise, potentially contributing to stress levels of local residents, reduced immune response, increased personal irritability, reduced concentration span, increased levels of hyperactivity in children;
- psychological distress created by uncertainty of future circumstances including property acquisitions and property value fluctuations; and
- reduced use of active transport, where there is direct access to a car in comparison to walking to a railway station or bus stop – potentially leading to increased obesity and corresponding increases in diabetes and cardiovascular illness.

While many of the physiological impacts are more prevalent in communities with larger proportions of vulnerable populations, including frail, aged and children, the psychological impacts may affect all groups. In relation to increased stress, young families may experience the compounding effects of financial stress (due to property value fluctuations), long work hours combined with sleep disturbance when at home and concern over the well-being of their children.

Experience to date from Stages 1 and 2 proves Council's concerns about the human health impacts from WestConnex construction are based on residents' lived experiences since construction of WestConnex began. As discussed above in Section 6 *Construction impacts*, the key health impact has been stress and sleep deprivation from night-works. Cumulative construction impacts have been a major contributor to health problems. Haberfield-Ashfield residents located between a number of WestConnex work sites report they are regularly affected by noise even during (so-called) respite periods. One Haberfield resident has said: *"when one worksite stops, another one starts"*.

Affected residents report to Council their despair at these impacts, frustrations with the complaints processes and consequently a *"loss of faith in the democratic process"*. Many believe that community consultation processes for the project are cursory and not genuine. Residents also despair at the blighted appearance of their neighbourhood whilst works are progressing. They complain of fatigue from the constant interruptions to their peace of mind from construction noise and vibration, and the psychological impact of project trucks and employees *"invading"* their neighbourhoods.

Residents report *"extraordinary amounts of dust"* in their neighbourhoods. Dust, along with diesel emissions from construction vehicles and generators, has adverse health impacts on all affected residents. This is particularly so for young and elderly people, where it more readily affects heart, vascular and lung health. Noise also adversely affects heart and vascular health as well as affecting cognitive functions. The health impact study requested by Council in this submission should investigate these impacts, integrating health data from schools, local doctors and other sources to monitor the health impact of project - at both construction and operational stages.

Beyond health impacts, the dust creates a need for constant cleaning of windows and interior surfaces. Residents also report their concerns about inadequate and seemingly adhoc dust mitigation measures, and see a clear need to improve dust monitoring and compliance enforcement.

From Council staff discussions with affected residents, the project has affected their psychological health and has heightened their general sense of insecurity. The constantly

changing work schedules, changes to traffic arrangements and cumulative noise impacts has led to constant disruptions to the day-to-day lives of residents. For Haberfield-Ashfield and St Peters residents, the impacts from years of construction are showing in the form of fatigue and poor health. Continuation of these impacts for Stage 3 would have a devastating health impact these residents.

At the operational stage, induced traffic from WestConnex will contribute to reduced air quality. As discussed above in Section 7 *Air quality impacts*, Council is of the view that *any* reduction in air quality is unacceptable and will contribute to reductions in the quality of human health. By the same argument, *any* increase in dust, noise and other impacts from the project will have adverse health impacts.

Numerous studies have examined the impacts of various pollutants on human health. In general terms, human health impacts associated with WestConnex fall into the following categories: particulate matter emissions (particulates); gaseous chemical emissions (e.g. NO₂); dust emissions; the mental or psychological impacts of noise; and the psychological impacts of behavioural disruption, sometimes leading to social isolation.

In 2015 the Woolcock Institute of Medical Research examined the health impacts of emission sources, types and levels of particulates in air pollution in ambient air in NSW. It stated that while ambient levels of particulates in urban NSW are low by world standards, evidence suggests that exposure to levels of particulates that currently exist in NSW will have measureable adverse impacts on health. This is particularly the case for vulnerable people such as individuals with chronic respiratory and cardiovascular diseases, the elderly, and children. Reductions in particulates in air pollution in NSW are likely to result in health benefits, particularly for these most vulnerable groups.

The review's main findings are:

- all particulates, regardless of source, should be considered detrimental to health;
- there is considerable evidence of adverse health impacts linked to exposure to particulates from combustion-related emissions, including coal-fired power stations, onroad vehicles, diesel exhaust, more so than other particulate sources;
- there is evidence that fine particles (PM_{2.5}) are more detrimental to health and have a wider range of health effects than larger particles however, larger inhalable particles are not benign, and it has been demonstrated that coarse particles (PM_{10-2.5}) have detrimental health impacts and that these health impacts differ from those associated with smaller particles; and
- there is no evidence of a threshold level of ambient PM_{2.5}, below which further reductions in concentrations will not provide additional population health benefits.

The study states that increases in ambient $PM_{2.5}$ and PM_{10} are associated with increases in mortality and increases in cardiovascular and respiratory morbidity. Exposure to PM from combustion-related sources (coal -fired power stations, on-road vehicles, diesel exhaust) is associated with impacts on cardiovascular and respiratory health. There is thus sufficient evidence to indicate that particulates from on-road vehicles will increase risk of mortality, as well as cardiovascular and respiratory morbidity.

A 2014 study by Munzel et al *Cardiovascular effects of environmental noise exposure* published in the European Heart Journal found that long-term noise exposure may lead to cardiovascular problems, and night-time noise was particularly of concern. A 2013 study by Harding et al *The cost of hypertension-related ill-health attributable to environmental noise* published in the Noise Health Journal found that on-going exposure to high levels of

environmental noise has the potential to influence community levels of dementia, stroke and heart attack.

A 2013 study by Tiesler et al *Exposure to road traffic noise and children's behavioural problems and sleep disturbance* published in the Environmental Research Journal indicates that a sample of over 850 10-year-old children living near busy roads in Germany presented with behavioural problems at greater levels than similar children living on quieter streets. These behavioural problems included hyperactivity, inattentiveness and anxiousness.

Several other studies indicate broader impacts of traffic and construction noise on human health. A 2007 book by Professor Deepak Prasher of University College London *Noise and its effects* explains that even if people are habituated to on-going noise, the impacts of exposure can detrimentally affect human physiology, including endocrine, immune and cardiovascular systems.

A 2014 paper by Tzivian et al *Effect of long-term outdoor air pollution and noise on cognitive and psychological functions in adults* in the International Journal of Hygiene and Environmental Health found that on-going noise exposure contributes toward cognitive development in children, cognitive and psychological functions in adults which includes stress, aggravated depression, public conflict, loss of concentration and general exhaustion.

Other studies acknowledge that particulate emissions from on-road motor vehicles (diesel and non-diesel) represent only a relatively small proportion of the ambient particulate levels, but caution that any exposure to fine or coarse particulates has the potential to negatively influence human health.

It follows that WestConnex will make a major contribution to individual and community health problems through noise, vehicle and dust emissions and social disruption during construction and operational stages. These health costs have not been included in any of the economic analysis associated with the project's business case, nor have they been adequately assessed in EISs.

Beyond the abovementioned construction impacts, there have been short and long-term impacts on the psychological health and well-being on individuals from loss of friends and community members when residential properties in the St Peters, Haberfield-Ashfield and Rozelle area were compulsory acquired and individuals, households and families were lost to the community.

Residents of Haberfield/Ashfield tell of neighbours forced out of their homes not being able to rent or purchase equivalent homes within the area and becoming *"refugees"* in Sydney. This has long-term impacts the lives of individuals and families, with greatest the impacts usually felt by migrant families. The loss of attachment to a sense of place has been profound for both acquired residents and those left behind.

For Stage 3, this is currently the experience for residents whose homes are being *compulsorily* acquired along Victoria Road. It is also the experience of businesses being acquired at Haberfield, Leichhardt, Annandale/Camperdown, Lilyfield (next to the RRY site) and along Victoria Road at Rozelle. It is likely this impact will widen as *voluntary* acquisitions are also implemented around other construction sites.

Council has advocated elsewhere in this submission that a health study, overseen by Health NSW, be undertaken prior to any determination which involves collection of data on the current health status of residents affected by Stages 1 and 2 at Haberfield-Ashfield and St Peters. This should involve of the NSW Department of Education for the collection of data on

the health of school children. The study should also collect baseline health data on all areas affected by Stage 3.

This study would examine the full range of health issues and impacts, including:

- construction air quality impacts predominantly dust from construction sites and construction truck vehicle diesel emissions;
- operational air quality impacts (predicted) surface impacts, i.e. areas where WestConnex has increased surface traffic and hence vehicle emissions, and predicted ventilation stack impacts, i.e. areas affected by emissions from stacks;
- cumulative air quality impacts, where WestConnex emissions are added to emissions from a range of other sources across the Sydney metropolitan area, e.g. general vehicle emissions and bushfires;
- the range of actual health impacts encountered to date from construction air emissions from WestConnex Stages 1 & 2, including the incidence of asthma in school children near construction sites;
- health impacts from construction air quality impacts likely to be encountered from Stage 3, based on actual impacts from Stages 1 & 2;
- construction noise/vibration impacts predominantly noise/vibration from a range of WestConnex tunnelling, surface activities on construction sites and construction trucks on route to/from sites;
- operational noise/vibration impacts (predicted) predominantly noise/vibration from increased levels of traffic resulting from WestConnex on residential streets, but also including noise/vibration from motorway operation facilities such as fans within ventilation stacks;
- cumulative noise/vibration impacts, where WestConnex-related noise is added to noise/vibration from a range of other sources, such as project-related utility relocations, construction of other public/private projects and general traffic and aircraft noise;
- the range of actual health impacts encountered to date from construction noise/vibration from WestConnex Stages 1 & 2, with a focus on the health effects of sleep deprivation caused by out-of-hours construction noise; and
- health impacts from construction noise/vibration impacts likely to be encountered from Stage 3, based on actual impacts from Stages 1 & 2.

9. Council's concerns about operational traffic impacts

Council has had a long-standing concerns about existing high levels of traffic through inner-Sydney and is further concerned about increased traffic from WestConnex. As is evident from the discussion of strategic traffic/transport issues above, induced traffic is a major issue for Council.

The WestConnex business case indicates that an increase of some 45,000 extra car trips per day, which is approximately 0.4% of the estimated total regional traffic in 2031, is likely to be induced, i.e. trips that have occurred because of WestConnex. This may underestimate the real situation - but in any event it represents a significant increase in traffic and illustrates the sensitivity of forecasts for regional traffic growth.

Council is sceptical that the stated travel time reduction benefits of WestConnex are accurate – they are most likely overstated. Analysis of the network-wide (motorway and other roads combined) distance travelled and time taken provided in the Stage 3 EIS indicates that in 2033 the *do minimum* scenario is estimated to result in an average individual vehicle speed of 25.3kph, while the *cumulative* scenario from multiple planned

projects (including Stage 3) is estimated result in an average individual vehicle speed of 26.4kph. This is noting that today's average speed across the total network is 33.8kph.

If these projections are correct, each individual driver using Sydney's road network will only experience an increased travel speed of 1.1kph (a negligible benefit) and their average speed will be 7.5kph slower than today's network-wide average. It appears the time saving benefits of WestConnex have been overestimated and the costs have been underestimated, particularly when the health costs of communities affected by the project have been largely ignored. Consequently the project's benefit-cost analysis must be questioned.

Further to this, there has been no assessment of public transport and demand management improvements that could be initiated to achieve that same congestion reductions and travel time savings. Council is particularly concerned about the likelihood of mode shifting from walking, cycling and public transport to private cars. This not only leads to increased traffic, but also undermines the viability of public transport through reduced patronage. It is counter to numerous local, State and Federal government policies that all aim to reduce private car use and promote walking, cycling and use of public transport as part of the creation of a liveable city.

At the local scale, Council is concerned about WestConnex-related traffic growth along residential streets in the Inner West Council area - particularly those around the Haberfield, Rozelle and St Peters interchanges. For Stage 3, much of that concern focuses on streets around the Rozelle Interchange.

Council is concerned that should Stage 3 proceed with entry/exit points from the Rozelle Interchange considerable additional traffic will spill onto the already congested Anzac Bridge and other significant streets such as The Crescent and Johnston Street. Additional traffic would continue onto other connecting streets further afield (including Ross Street, Glebe).

Even though Johnston Street is classified as a State Road, it is essentially a residential street that also includes two schools, two churches, a number of community facilities and the Annandale local shopping centre. Increased traffic is anticipated on this street, but road capacity would need to be reduced accommodate a separated cycleway, as has been proposed by Council. Such as cycleway is feasible as two of the four traffic lanes could readily be converted to bicycle lanes. Council sees this cycleway as an imperative to mitigate against WestConnex-related traffic impacts.

On streets like these, and wherever there is additional traffic, RMS may consider road widening (or clearway extensions) to accommodate the additional traffic - similar to what is now underway for Stage 2 at Campbell Street/Road, St Peters and Euston Road, Alexandra. Reconfiguring these roads in this way is always at the expense of neighbourhood liveability, residential amenity, business vitality and safety for pedestrians and cyclists.

Council is developing a strategy to identify and traffic-calm other local roads that may be affected by additional traffic from WestConnex. The Crescent, Johnston Street, Waratah Street, Dalhousie Street, Street Ramsay Street and other adjoining streets are being examined as part of this strategy.

Council is concerned that 'rat-running' will occur as motorists either seek to avoid WestConnex tolls or where WestConnex has missing links - for example, when Stage 1 opens but there is no direct connection to destinations such as Sydney Airport. This would result in significant and potentially permanent adverse impacts on the amenity of Inner West residential neighbourhoods. Above in Section 4 *Strategic justification*, it was pointed out that the community will suffer *financial* losses from the additional traffic from WestConnex in the form of reduced residential property values and additional road safety costs. Conditions of approval for WestConnex Stages 1 and 2 acknowledge the need for monitoring and treatment of affected roads around WestConnex. For example, Stage 1 Condition E36 and Stage 2 Condition E40 requires the preparation of a *Road Network Performance Review Plan* which includes assessing the impacts of WestConnex on local roads.

Development of the plan would not however commence until 12 months after the project is operational, potentially condemning residents to a period of traffic impacts before any remedial action is contemplated. Council considers this to be unacceptable, arguing that impacts should be projected through traffic modelling, and other prediction techniques and remediation measures put in place to avoid the impacts *before* they occur.

As a result, in 2017 Council commissioned its own traffic modelling, using the 'Zenith' model, which can apply to *local* roads. RMS assisted Council with information from its WestConnex Road Traffic Model (WRTM), which applies to *main* roads. Scenarios modelled include: base case 2011; base case 2021; project case 2021 – WestConnex Stages 1 & 2; project case 2031 – WestConnex Stages 1 , 2 & 3.

The modelling has guided the development of Council's *WestConnex Local Area Improvement Strategy* (LAIS). The LAIS uses the above traffic model to identify streets that are likely to be affected by increased traffic and proposes precinct-wide treatments to protect and improve these streets.

The treatments are based on three typologies:

- Typology 1: integrated traffic calming, e.g. slow points, thresholds, tadpoles, traffic islands/refuges and raised platforms;
- Typology 2: intersection modifications, e.g. roundabouts, T-treatments, Give Way and Stop signs/prioritisation; and
- Typology 3: traffic diversions, e.g. diagonal, partial and full road closures.

The treatments are indicative and will require further investigation and community engagement before final draft schemes can be considered.

The LAIS study includes a strategic framework and cost estimates for traffic management, streetscape and water-sensitive urban design (WSUD) improvements for the following five precincts:

- Precinct 1: Ashfield \$3.7M;
- Precinct 2: Haberfield \$9.1M;
- Precinct 3: Leichhardt West \$5.7M;
- Precinct 4: Johnston Street \$6.6M;
- Precinct 5: St Peters \$2.2M; and
- TOTAL all five precincts \$27.4M.

At its 8 May 2018 meeting, Council considered a report on the LAIS and resolved to write to RMS seeking funding for the LAIS works. Council has argued that RMS funding is justified as WestConnex has created the need for these works. Subject to funding, the LAIS would be implemented in a similar way that all of Council's Local Area Traffic Management (LATM) schemes are implemented, involving local community consultation, detailed design, approval and implementation.

One of the few benefits from WestConnex is the opportunity to reduce traffic capacity and make a range of surface improvements - including public transport improvements - wherever WestConnex reduces surface traffic. For Stage 3, the main opportunity is to improve Victoria Road at Rozelle – possible because of surface traffic reductions brought about by the Iron Cove Link. There is also an opportunity to make improvements to Parramatta Road, created by all stages of WestConnex.

RMS has resisted traffic capacity reductions on main roads, even where traffic levels have been reduced. Council seeks to avoid a situation where increased road capacity belowground has not resulted in captured capacity (i.e. use of spare capacity for public and active transport and public domain improvements) above-ground. In particular, Council seeks assurance from SMC and the NSW Government that reduced traffic capacity along Victoria Road and Parramatta Road will result increased capacity for public and active transport.

Though Council has not yet been able to confidently conclude that WestConnex will reduce traffic on Parramatta Road (for its full length through the Inner West Council area), it will continue to advocate traffic capacity capture and high-capacity public transport along that corridor. One of the public transport options Council has been investigating for Parramatta Road is Guided Electric Transit, with a view to improving public transport and revitalising the corridor.

Although one of the main original justifications for the WestConnex was to take airport and port related heavy vehicles off the surface roads, there is little evidence that this project aim remains valid. As indicated in the EIS, relatively few heavy vehicles in 2031 are likely to have a desire line between the eastern end of the M4 and the airport and port.

Further, the project now delivers vehicles at the surface at St Peters, some 5km by road from the airport and some 15km by road from Port Botany, thus requiring the construction of the Sydney Gateway an additional project (not part of WestConnex) to gain access to the airport/port. It is also not known how sensitive heavy vehicle users will be to tolling regimes or the if it is likely that reduced surface road congestion to attract heavy vehicles back to these streets.

10. Council's concerns about impacts on public transport

As is discussed above in Section 4 *Strategic justification*, Council is concerned about the impact of induced traffic from WestConnex and its impact on public transport from mode-shifting. This critical issue for the Inner West whole of Sydney has been ignored by the WestConnex business case.

The business case indicates that increased road capacity created by the project will encourage in the order of 45,000 additional car trips per day in the Sydney region. The business case does not however state whether these trips are new trips, a conversion from existing public transport trips or a combination of both. Even if it is conservatively assumed that one-quarter of these trips are converted from public transport, around 11,250 trips per day, or over 4 million trips per year, will move away from public transport. Conservatively assuming these trips cost the minimum rate of \$3.46 (peak) and \$2.42 (off-peak), with 20% as peak-period trips, WestConnex could reduce public transport revenue by more than \$11M per year.

Nor has the business case considered how this induced traffic and resulting congestion will negatively affect bus running times and the ability for passengers to interchange between modes, e.g. from bus services on Parramatta Road to the Inner West Light Rail. Again, the

inquiry could access Opal Card usage data to ascertain the current extent of these interchanges.

The significant funding for WestConnex would have been better spent on targeted improvements to the existing road network and by adding to public transport rolling stock and improving the network to increase capacity. As recent media reports have confirmed, Sydney has the highest public transport mode share of all the Australian capital cities and this continues to grow.

However the public transport network increasingly suffers from overcrowding during peak periods. Meeting this peak demand for public transport is a far move effect way to reduce traffic than increasing road capacity through inner-urban motorways. Council seeks to verify this point about growing public transport demand and requests the inquiry investigate this matter by accessing NSW Government Opal Card usage data.

Over the past decade Council and various public transport advocacy groups have argued that the former freight rail corridor between the RRY site and White Bay should be preserved for future light rail. In 2012 transport advocacy group EcoTransit published its *Sydney Light Rail Orbital – White Bay Green Link* proposal. This proposal shows a link from Lilyfield and Rozelle Bay Stops to Balmain via White Bay. Whilst former Leichhardt Council had expressed reservations about some aspects of this proposal, Council supported the proposed extension of the Inner West Light Rail to White Bay using the former freight rail corridor.

Council has subsequently argued the need to preserve the former freight-rail corridor at meetings and in submissions to the NSW Government on projects/plans such as WestConnex and the Bays Precinct. Working groups for the Bays Precinct have indicated general support for investigations into the light rail to White Bay. The NSW Government has also referred to the possibility of light rail to White Bay and the Bays Precinct in its *Draft Greater Sydney Services and Infrastructure Plan/Future Transport 2056.* Sydney Motorway Corporation (SMC) and Roads & Maritime Services (RMS) have also recognised the potential for this light rail link in its *Submissions and Preferred Infrastructure Report* (M4-M5 Link).

Despite these indications of support from the NSW Government, it is apparent that approved designs for the WestConnex Rozelle Interchange and associated RRY linear park have compromised opportunities for a light rail link between the Lilyfield Light Rail Stop at Catherine Street and White Bay. This is because the placement of motorway operation buildings, motorway portals and drainage infrastructure make it difficult to identify an unimpeded light rail corridor. Even if a suitable corridor could be identified, significant structural works would be needed - for example, the link would require construction of the light rail track length-wise over major drainage channels. This would result in added costs that could make the extension prohibitively expensive.

As the Sydney West Metro alignment and depths are yet to be finalised it is not possible to definitively assess the likely impacts of WestConnex on its alignment. In its submissions on WestConnex Stage 3, Council has argued that WestConnex should not affect the alignment of the *Sydney Metro West* or negatively affect it in any way. Verbal assurances have been given by WestConnex and Sydney Metro West project staff that the alignments of both projects are being co-ordinated and WestConnex will not preclude Sydney Metro West.

Further, the WestConnex Stage 3 Submissions & Preferred Infrastructure Report states: "Insufficient information is available at this time regarding the alignment of the proposed Sydney West Metro rail tunnels to determine whether there is any conflict of alignment (vertical and horizontal) with the M4-M5 Link project. Consultation has occurred and will continue to be undertaken with Transport for NSW regarding the potential interface of the two projects as the preliminary design for the Sydney West Metro project is developed. If required, adjustments to horizontal and vertical alignments of the tunnels can be made during the detailed design phase."

Even if the Sydney Metro West is not *precluded* by WestConnex, Council is concerned that its optimum alignment may be *compromised* – for example, the extent of tunnelling for the WestConnex Rozelle Interchange may force Metro tunnels to a depth that limits opportunities to create Metro stations within the Inner West Council area.

Five bus services run along Victoria Road, Rozelle, and all will be affected by congestion from WestConnex construction vehicles. They will also be potentially affected by operational elements of WestConnex.

The Iron Cove Link tunnel component of WestConnex Stage 3 has the potential to significantly reduce traffic on Victoria Road between the Iron Cove Bridge and Anzac Bridge. The NSW Government has proposed a public transport study be undertaken for Victoria Road, and it is assumed this study would identify long-term improvements to public transport in this corridor. The opportunity to capitalise on reduced volumes on Victoria Road at Rozelle by improving public transport and by providing a separated cycleway should be taken.

However projected construction traffic associated with the concurrent construction of WestConnex, the Bays Precinct and WHT is likely to result in over 3,000 additional truck movement/day through the intersection of James Craig Road and The Crescent. Delays at this intersection have the potential to result in traffic queues along The Crescent, Victoria Road and Anzac Bridge, all of which cater for Sydney Buses services. As this congestion has the potential to remain for five years or more, Council is concerned that it will hamper opportunities to enhance public transport in the near future.

Eight bus services run along Parramatta Road between Leichhardt and Camperdown, and as is the case for Victoria Road, all will be affected by congestion from WestConnex construction vehicles. They will also be potentially affected by operational elements of WestConnex.

Of particular concern to Council is the impact on Parramatta Road bus services of construction trucks accessing the Bridge Road mid-tunnel construction dive-site. Trucks will approach the site City-bound from the northern kerbside lane, which is currently a bus lane. This will affect the reliability of buses by forcing them to either mix with construction traffic or merge into the other traffic lanes.

Sections of Parramatta Road are anticipated to experience reduced traffic volumes, and the *Draft Greater Sydney Services and Infrastructure Plan/Future Transport 2056* highlights the opportunity to prepare a public transport study for Parramatta Road. The conditions of approval for the M4 East also include the provision of two permanent 24/7 lanes for public transport, one in each direction. Additionally, Inner West and Canada Bay Councils' *Parramatta Road Public Transport Opportunities Study* identified both the opportunity to consider centre-running Guided Electric Transit ('GETs' or 'track-free trams') for Parramatta Road, and the need to capture released capacity on Parramatta Road immediately WestConnex is completed.

For the *Parramatta Road Corridor Urban Transformation Strategy* to proceed it is essential the following actions are undertaken:

traffic volumes are reduced;

- public transport is significantly improved;
- kerbside parking (at least outside peak periods) is retained;
- urban amenity and public domain improvements are introduced concurrently with the completion of WestConnex.

Without the co-ordinated introduction these actions, the revitalisation of the Parramatta Road Corridor (including revitalisation of selected side streets) will not likely be achieved. Additionally, as WestConnex may generate additional traffic on some streets crossing Parramatta Road bus services, there is a possibility that congestion and associated delays may reduce the reliability of these services.

11. Council's concerns about impacts on active transport

As Council always strives to improve conditions for pedestrians and cyclists, the active transport strategies associated with WestConnex EISs have been welcomed. Council has however been concerned that construction and operation of WestConnex will continue to create connectivity and safety problems for pedestrians and cyclists.

By increasing traffic in the Inner West, through induced traffic, the project would result in an overall deterioration of conditions for walking and cycling in the longer-term. The extra traffic also makes it more difficult for Council to reclaim traffic lanes for dedicated bicycle lanes, particularly on State and Regional roads, where they are usually most needed.

Council is keen to ensure the creation of the RRY recreation area results in significantly improved walk/cycle connectivity across this site. Council notes that north-south connectivity has been poor in the past due to lack of any public access to or through the derelict site, although some of these movements have been possible along a limited number of public roads that cross the site, such as Balmain Road and Catherine Street.

The wide and heavily-trafficked City West Link Road (and the inaccessible RRY site itself) have traditionally been a barrier to north-south connectivity. On either side of the RRY site, east-west movements have been possible along reasonably direct local streets such as Lilyfield Road, Railway Parade and Brenan Street, even though the City West Link Road is not available to pedestrians and cyclists. Creation of the RRY recreation area represents an important opportunity to improve this situation.

Though Council has supported the walk/cycle routes proposed, it is apparent further work is needed to ensure routes follow walk/cycle desire lines and are designed to a high standard. Council's main concerns at this stage are the need for a greater number of north-south walk/cycle connections, that walk/cycle bridges be constructed to a higher standard than shown and that the proposed land bridge from Buruwan Park does not negatively affect the park or active transport links across The Crescent to Federal and Jubilee parks and the shared foreshore path network.

The two connections shown are welcomed, but a third (and possibly fourth) connection is warranted to ensure maximum connectivity. In the draft RRY site recreation area masterplan, only one of the two bridges shown is a 'land bridge' – the other is a minimum-width bridge without landscaping. All bridges should be designed and constructed as land bridges to ensure the crossing of City West Link Road is as attractive and safe as possible. The added cost is warranted as the RRY recreation area is expected to generate considerable walk/cycle traffic. Prioritising walk/cycle access is also important to minimise the need to access the site by car, reducing the need to provide for parking within or near the site.

It is important that walk/cycle connections to and through the RRY site are integrated into the regional walk/cycle network defined by various active transport plans of the NSW Government and relevant councils.

Capacity capture opportunities on streets likely to experience reduced traffic from WestConnex (discussed above) should provide the ability to enhance connectivity to existing networks and desired future networks. These networks are defined in Council's bicycle plans and in the City of Sydney's 2014 *Inner Sydney Regional Bike Network*. A key route to address is the City West Cycle Link, which would run along the Inner West light rail corridor between The GreenWay / Bay Run and Anzac Bridge / Glebe Island Bridge.

A reinstated Glebe Island Bridge, a heritage-listed RMS asset, would be part of the wider GreenWay / Bays Precinct active transport network. Additionally the new (fenced-off) section of James Craig Road, an extension between White Bay and Glebe Island, would be part of a future public/active transport corridor to the City and Pyrmont from Balmain via the Glebe Island Bridge.

The project's active transport strategy should also consider standards set by Council for the GreenWay – developed as part of Council's GreenWay 'missing links' strategy. This includes standards for landscaping using locally indigenous species, bike path widths, signage, lighting, public domain and street furniture for the Greenway missing links strategy. Paths should also incorporate public art wherever possible and commission works by local artists.

Post-construction, there must be sufficient space at this location for a flat path to run on the southwest edge of the proposed slip-lane from Railway Parade to connect with The Crescent footpath. The project also provides an opportunity to widen the road shoulder or provide a dedicated bicycle path under the railway viaduct for cyclists using The Crescent.

12. Council's concerns about land use & property impacts

Compulsory acquisition of homes and businesses at Haberfield-Ashfield and St Peters for Stages 1 and 2 has devastated the lives of many individuals, families, households and business operators and their employees. To make matters worse, some property owners have claimed the compensation they received was not sufficient to enable them to purchase equivalent properties within their neighbourhoods. Affected residents and business owners have reported their sense that acquisition processes are being poorly treated by RMS in negotiations over their properties.

The Victoria Road acquisitions involve a number of businesses, and businesses are also being acquired in the Gordon Street industrial area at Lilyfield adjacent to the RRY site, in the block bounded by Parramatta Road, Pyrmont Bridge Road and Mallet Street at Annandale and at 199 Parramatta Rd, Haberfield (Muirs Holden). Many of these businesses are well-established, so their relocation (or disappearance) will have a major impact their owners and employees. Loss of these businesses also raises concerns for Council about loss of employment lands in the Inner West.

In May 2018 Council was pleased to learn that the NSW Supreme Court had upheld Desane's legal challenge of the proposed compulsory acquisition by Roads and Maritime Services (RMS) of its Rozelle commercial property. The Desane property is located within a commercial/industrial area on the northern side of the RRY site. Council is also pleased that private timber merchant Swadlings and crane hire firm Gillespies, which have properties neighbouring Desane's in Rozelle, are also considering negotiating higher compensation payments than what the RMS has offered to acquire their land for WestConnex Stage 3(b). This provides further evidence of RMS not acting responsibly in its actions to acquire properties.

Recently a RMS spokesperson confirmed that a total 427 properties are required to support the construction of all stages of WestConnex. Of these 427 properties, 111 were yet to be acquired. Given these figures, the cost of properties required is likely to exceed \$1.5 billion. Council considers that the cumulative negative impacts of the project are aggravated by the high financial cost of these acquisitions.

Numerous difficulties experienced by residents who have been served with property acquisition notices have exposed cumulative negative experiences ranging from undervaluation of homes to disruption of community life. Many households reported that they were financially disadvantaged by the acquisition process and as a result has moved away from their local communities and support networks. This exodus represents a significant loss to the communities concerned.

Council has requested the continued review of compulsory acquisition processes by the NSW Government with a view to greater fairness for affected property owners. Council has also requested similar improvements to *voluntary* acquisition procedures.

Whilst Council welcomed the dedication of residual WestConnex lands to the community and for open space, it would prefer this to occur without WestConnex. Council expressed an expectation that these residual lands will be delivered to Council for its ownership at no cost, and all landscaping, paths and other facilities are constructed by the NSW Government according to approved designs. Council has also sought maintenance funding and involvement of the community in plans of management for these areas. These lands should be unburdened by contamination or any immediate need for maintenance.

Council is also keen to ensure that construction and handover of the RRY and SPI site recreation areas and other residual lands is not delayed by construction of other projects, such as the proposed WHT. The community deserves the benefits of the residual land open space areas as soon as possible and does not want to see land vacant for years awaiting use as a construction zone for another future project.

Whilst Council would in general terms prefer all WestConnex residual lands be devoted to community use rather than sold for commercial gain, the possible exception is the Pyrmont Bridge Road site. This site would be appropriately be returned to a 'biomedical hub' use in keeping with the *Parramatta Road Urban Transformation Strategy*. Notwithstanding, it is important that surrounding communities who have suffered the negative impacts of WestConnex derive benefit from these lands.

Council seeks ownership of *useful* public space and facilities only. It does not want to own and maintain useless or problematic residual areas created by WestConnex that are difficult to access and are blighted by motorway traffic. RMS should retain ownership of problematic areas.

For all stages of WestConnex, all properties within 50m of the outer edge of underground tunnels would be offered a property condition survey before construction with a follow up survey for the property after construction. This is to ensure there is a record of the property's condition before and after construction. If there is any damage attributed to the project, it would be repaired at no cost to the property owner.

Residents have raised issues with the WestConnex dilapidation reporting process, which required by conditions of approval to be carried out by the proponent. Residents have cited

a lack of independence, a perception of conflict-of-interest and a lack of trust in the proponent. As a result of these community concerns, Council has established a program for independent dilapidation reports to be prepared at no cost to property owners.

Where cracking of buildings has occurred, some residents have disputed the proponent's opinion on the cause. In cases like this where there are disputes, residents are offered 'mediation', but doubt the authenticity of this process as it is provided by the proponent. Residents also complain about not being able to afford legal advice or other assistance that may help with their mediation. Some residents have also doubted that the project's definition of 'affected area' (where the offer of report applies) is sufficiently broad.

As is discussed below in Section 15 *Other impacts,* Council has been concerned about cracking of buildings – not only from construction activities in the immediate term but also in the longer term from soil settlement from tunnel-related groundwater withdrawal. Council has been particularly concerned that cracking risks are high in interchange areas where tunnels are at shallow depths. These areas include the Haberfield Interchange, the Inner West Interchange (below the surface in the Leichhardt area), the Rozelle Interchange and the St Peters Interchange.

13. Council's concerns about social & economic impacts

As is the case elsewhere in this submission, the discussion of social impacts draws on Council staff's discussions of issues with residents affected by WestConnex Stages 1 and 2. Inclusion of the main points from this dialogue is in Council's view critical to ensure lessons are learned from Stages 1 and 2.

Council's recent discussions with a group of Haberfield public housing tenants revealed they were suffering severe impact from the construction of Stage 1. They reported serious impacts on their health and well-being as a result of noise, vibration and dust, that the complaints system was inefficient and ineffective and they felt frustration when dealing with this system, which added to the stress in their lives.

There has not been sufficient consideration of alternative designs that would reduce the project's adverse impacts on residents. There is concern that all stages of WestConnex will continue to reduce local connectivity and reduced ability for some to participate in community activities.

WestConnex will continue to have a major impact on parks and other publicly-accessible areas of open space across the Inner West. Examples of parks already affected (temporarily) by Stages 1 and 2 are Reg Coady Reserve (Haberfield), Tempe Reserve and Simpson Park (St Peters).

As is mentioned above in Section 1 *Summary* Council has expressed its strong objection to RMS over the proposed permanent removal of Buruwan Park at North Annandale. Council acknowledges Buruwan Park is owned by the NSW Government, not Council, and that new areas of open space will be created by the project, e.g. recreation areas at the RRY and SPI sites. Notwithstanding, Council views all publicly-accessible open space as valuable (regardless of ownership), particularly as the Inner West has traditionally been undersupplied with open space.

WestConnex could also have an impact on areas that include public art – for example, a mural in Buruwan Park, and the Guerrilla Gardeners Troll under the Johnston Street Bridge. Council has argued that these items be protected. The project will result in increased areas

of concrete walls, access ramps and related infrastructure which may create new opportunities for public art, but also a need for graffiti management.

The strategic economic impacts of WestConnex have been discussed above. These include the impact of the financial and opportunity cost of the project and the equity impact of tolls. At a local level, Council is disappointed that the WestConnex proponent views the negative impact on local businesses as minor. From Council's recent experience with the impact of Stage 1 on Haberfield businesses, this was far from minor.

WestConnex Stages 1 & 2 have imposed a number of negative impacts on businesses which have failed to be identified and assessed in the EIS. These impacts include reduced accessibility for customers, staff and deliveries to business premises due to road closures/diversions, changes in public transport services and loss of parking as construction vehicles occupy spaces side streets. This has been the most critical issue, particularly in shopping centres such as Haberfield.

In addition, the quality of business operations has been reduced from vibration disturbance and noise and air pollution. There has been an impact on the brand image of businesses because of reduced visibility created by obstruction of views by construction materials and reductions in passing traffic. An example of the latter issue is the drop in business in the Haberfield shopping centre due to the temporary closure of Ramsay Street.

For businesses with outdoor trading and dining, there has been decreased amenity for customers due to construction noise and increased traffic on some local roads where drivers avoid construction areas. There has been increased likelihood that newly-established businesses will fail due to combinations of the above pressures.

Of all the impacts listed above, it is the changes to road access, public transport and parking that has had the largest impact on businesses. This is because most customers (not just the businesses) cannot adjust to change in environment brought about through road closures, changes to public transport and parking in project work zones.

From Council's experience with Stages 1 and 2, there is a need to improving directional signage related to road closures, diversions and modifications in areas around shopping centres and other business clusters. Signs should clearly outline to businesses and the public the changes to road access points into business villages and centres, providing drivers with detailed directions into and around business villages. Signage should direct people to temporary bus stops locations, and this should be in large print and in languages additional to English. *Open For Business* signs are also helpful.

The parking demand impact of the project on local businesses is reduced wherever off-street parking is provided for project employees. In developing parking management plans, the proponent should consult with local businesses and business chambers. Other ideas include Council has suggested include installation of bicycle lanes to encourage visitation to businesses, reduce vehicle speed limits and implement traffic calming (even if temporary) to enhance the footway environment at shopping strips.

In its submission on the Stage 3 EIS, Council had requested a dedicated full-time business manager, fully funded by the project, to implement the business management plan and to assist affected businesses on a day-to-day basis. This manager would work closely with Council and local businesses. This manager would require access to funding to enable actions to be implemented, such as marketing campaigns to boost awareness of affected centres. Without this, responsibility for this kind of assistance to local businesses would fall on Council, as has been the case for Stages 1 and 2.

The possibility that clearways on roads through commercial centres could be created or extended is a major concern for the many mainstreet businesses in the Inner West, as even minor changes can have a profound negative impact on these centres. The considerable opposition to any extension of clearways on King Street, Newtown provides a good example of the concerns of businesses and communities to this threat. Road widenings, such as that being undertaken currently on Euston Road, Alexandria are a further threat.

Council has repeatedly requested that there be no new road widenings, clearways or extensions of clearways on streets around WestConnex. It has also been explained that Council seeks to implement, public and active transport improvements, traffic calming and amenity improvements on streets where traffic has been increased or reduced by WestConnex.

14. Council's concerns about urban design & visual amenity impacts

Council acknowledges that WestConnex will bring some urban design and visual amenity improvements. However the scope of these improvements is limited compared to the major negative urban design and amenity impacts the project will impose across the Inner West.

Council's experience with Stages 1 and 2 has shown that the process of developing Urban Design & Landscape Plans (UDLPs) and negotiating with Council over legacy projects and plans for other residual lands has not been effective. As is required by conditions of approval, Council is represented on the Urban Design Review Panels for the development of the Stage 1 and 2 UDLPs. Whilst Council has appreciated the opportunity for input, there have been instances where Council's reasonable requests for amendments to UDLP designs have been ignored.

For example, for Stage 1, Council staff had in 2016 and 2017 raised issues about inadequate widths for the shared walk/cycle paths along Parramatta Road at Ashfield and along the eastern side of Wattle Street at Haberfield. An added difficulty for Council has been that design drawings provided by the project have not specified path widths, nor have they been scalable to allow these widths to be determined.

It has been disappointing that the proponent has defaulted to minimum footway and path widths rather than taking the opportunity to provide generously-spaced footways and paths. It is apparent that in every instance, space requirements for vehicular traffic and motorways service areas have taken priority over space for local walk/cycle movements. The narrow footway and path now under construction along Parramatta Road is a particular concern, and one that has been raised by the community as well as Council. As this narrow path is adjacent to substantial 60kph traffic along Parramatta Road, it raises safety concerns.

Added to this issue is the placement by the project of a number of obstacles along existing footways and paths. This is against repeated requests by Council that motorway sign footings and related infrastructure not be installed on footways at all - but if this must occur, that paths not be blocked. Recent installations of signs, over-height detectors and electrical cabinets on Dalhousie Street at Haberfield and along Parramatta Road at Ashfield shows that Council's reasonable requests for footways to remain obstacle-free are being ignored. It again signals to Council and the community that the motorway takes priority over local pedestrian movements and visual amenity.

These obstacles impair the free movement of pedestrians and cyclists and create serious issues for people whose vision and mobility is limited. These obstacles also have a negative visual impact on Haberfield (a Heritage Conservation Area) and Ashfield Park. As would be

expected, many local residents have made complaints about what they see as a further blight on their neighbourhoods from WestConnex.

The widened roads and intersections around the Haberfield interchange (i.e. along Parramatta Road and Wattle Street / Dobroyd Parade) have inevitably led to increased crossing distances, decreasing freedom of movement across the neighbourhood. Whilst it is recognised that the existing Bland Street pedestrian over-bridge will remain and crossings of key intersections will be signalised for pedestrians, there is nonetheless a perception in the community that WestConnex has made these crossings more difficult and dangerous.

The design of the Stage 1 operational noise walls along the eastern side of Wattle Street at Haberfield has also raised issues. Although local residents recognise the noise protection benefits of these walls, they have been shocked and disappointed at the visual impact they have on their neigbourhood now they have been constructed.

Council has raised issues that have not been resolved about some aspects of the Stage 2 UDLP designs as they apply Campbell Street at St Peters. Council has acknowledged the pros and cons of the car park proposed at the corner of St Peters and Campbell Streets and is aware that there are differences of opinion in the community about this facility. Council has however stated that on balance the car park should be removed from the plans to maximise the area of landscaped open space. The car park remains in UDLP plans.

Council has also advocated the application of a 40kph school zone on Campbell Street to improve safety for parents and children using the signalised crossing over Campbell Street at the St Peters street intersection. Although St Peters Primary School does not have a direct frontage this part of Campbell Street, the school zone is justified as the crossing is part of a well-used walking route to the school. The number of parents and children using the crossing is likely to increase into the future as residential redevelopment proceeds in the St Peters triangle area. Council has also advocated a 50kph general speed limit on Campbell Street instead of the 60kph speed limit proposed. RMS has not acted on these requests.

A further Campbell Street design issue has been inclusion of medians that prevent necessary local traffic movements in and out of the local streets that join Campbell Road. Council has pointed out that with a 50kph general speed limit and provision for these movements, the traffic environment would be calmed and would be safer for all road users. As it stands, RMS has prioritised the fast movement of through traffic over local traffic movements, road safety and residential amenity.

As is noted above in this submission, Council has throughout the project argued the need for *full* delivery of the SPI and RRY site recreation areas, Haberfield Gardens and other residual lands to Council at no cost, with all landscaping, paths and facilities constructed by the proponent according to final designs which have been the subject of a comprehensive community consultation program. Council has been disappointed to learn recently that due to project budget limitations, the SPI recreation area may be delivered to Inner West Council and City of Sydney without facilities fully constructed. Alternatively, the design of the land bridge may be compromised.

Though there is limited information within the EIS on urban design details for the RRY site, Council expects that should the project proceed there will be opportunities for Council and the community to participate in the development of an urban design plan for the site. Hence comments in this submission are offered as initial comments only.

Council recognises there the need for open space and community facilities across the Inner West. Some areas have traditionally had a shortfall, and demand will increase into the future as the population increases through redevelopment. This is particularly the case for

the RRY site, where densely-developed residential areas around the site have traditionally suffered a shortfall of open space, and future development at the Bays Precinct will bring substantial new development.

Council sees the need for a clear 'recreational needs' basis for the use of the area with reference to Council's *Recreation & Open Space Needs Study*. As is the case for the St Peters Interchange recreation area, Council is keen to boost the supply of much-needed active recreation areas. From the concepts in the EIS, there appears more opportunity to provide active recreational facilities.

Considerations in the design of residual lands include roadside or ventilation facility air quality impacts, walk/cycle desire lines, links to the wider network of paths and open spaces, safety-by-design, equity of access, aesthetics and public art. It is expected that should the project proceed, Council and the community will be involved the design of the RRY recreation area and other Stage 3 residual lands through development and implementation of urban design and residual lands plans, mandated by conditions of approval.

Given the RRY site is isolated by a number of barriers including roads, cliffs and the light rail line, active uses on the site (including evening uses) would provide security benefits from surveillance and enhance the community's enjoyment of this facility. This could include night-time sports and youth-focused outdoor and indoor recreation facilities.

Being a former creek-line, management of stormwater on the RRY site is a major task. All stormwater facilities should be integrated and where appropriate featured, with Water Sensitive Urban Design (WSUD) implemented. Wetlands (as proposed) are supported and these should be integrated into landscaping, not fenced. Use of concrete culverts should be minimised. Aboriginal and non-Aboriginal heritage should also be featured in landscape designs for the RRY recreation area.

The other area of importance for urban design is the area along Victoria Road near the Iron Cove Bridge that will be improved as a result residual lands from road widening and significant traffic reductions from the Iron Cove Link tunnel. As with all residual lands from WestConnex, Council wishes to avoid the creation of useless pieces of open space that could create safety or security issues.

Active edges to this strip of land through developments (business, residential or community uses) that front onto this space are needed to enhance security. This is preferred to the space being framed by blank side noise barriers or rear dwelling fences, although Council acknowledges there will be a need for some noise buffering. Being next to Victoria Road, indoor community uses may be appropriate as well as open spaces.

Council is also keen to maximise walk/cycle connectivity to/from all adjoining streets and Easton Park connecting to the new areas. There are many opportunities to do this on the northern site, but the City West Link Road is a barrier on the southern side and there will be reliance on three proposed bridge connections - two over City West Link Road and one over The Crescent. Three access points provided by these bridges is considered sufficient, as they are reasonably evenly spaced across the length of the RRY site.

It is also important that the existing walk/cycle connections over Victoria Road to the Anzac Bridge, to White Bay and to the Rozelle and Balmain area be improved by the project. Providing both ramp and stair links to the eastern and western sides of Victoria Road are also important.

Council is disappointed at the number and extent of motorway support facilities planned for the RRY site. This was not so apparent in the Concept Design, but the EIS shows that these

facilities would occupy a fair proportion of the site, break up useable areas and create a sense of clutter. With careful design and consolidation of these facilities, it should be possible to accommodate these facilities without hindering free movement open vistas around the site.

The proposed 20-30m tall ventilation facilities within the RRY recreation area near The Crescent will inevitably be a major visual intrusion. The extent of this intrusion should be minimised, noting that any reduction in the height of this facility would reduce its ability to disperse emissions. Similarly, the proposed facility at Victoria Road near Terry Street is located in a visually prominent position, and consideration should be given to an alternative facility design which would be less prominent and would be unlikely to direct its plume toward adjacent sensitive uses.

A further visual impact issue Council has encountered in relation to Stage 1 is the erection of large standard directional signs and variable message signs. This has been a particularly important issue for Haberfield as this suburb is a Heritage Conservation Area. Council has argued that if they are to be erected, then the number, size, height and bulk should be minimised and they should be located to avoid sensitive locations.

Council recognises there are RMS standards for these signs, but has sought exemption from these standards to reduce their size and minimise visual impacts. Council has also sought to ensure sign footings do not obstruct to walk/cycle paths of travel on footways. These points should be considered for any signs proposed in relation to Stage 3.

15. Council's concerns about other impacts

Council has raised concerns about that extensive soil and groundwater contamination has been previously found throughout the entire RRY site due to past contaminating activities from its former railway uses. Council is aware that contamination is being managed by an environmental management plan, and should works reveal any unexpected finds relating to contamination Council should be notified.

For the RRY and SPI sites, Council and the community have been particularly concerned about disturbance of asbestos within the surface soils on the site. Council notes the proponent will continue to monitor airborne asbestos, and its disposal will be guided by appropriate management plans. Council recommends the proponent keeps Council and surrounding residents informed of the results of asbestos monitoring and any asbestos issues as they are encountered.

In 2017, odour from former landfill leachate at the SPI site had a major impact on the St Peters community. Council is pleased that this issue has been rectified and EPA has taken formal action against the project over this impact.

Project EISs have all proposed that designs will be prepared with recognition to the various flood management plans and policies currently in place. Council however is not convinced that the many critical issues associated with flooding and drainage have adequately been addressed.

Council recognises the potential for impacts on the adjacent stormwater network, particularly during construction; noting that excess stormwater created by the tunnel should not be diverted into the existing stormwater system. Council has requested that stormwater, ground water and drainage monitoring should be operational prior to commencement of construction (establishing a hydraulic baseline) and should continue from that onward including a systematic review and rectification program.

In addition to run-off issues, there is potential for elevated soil salinity and induced water table changes resulting from both tunnelling activities (during construction) and the long term presence of deep tunnels. Such impacts could include impacts on local aquifers, potential for an elevated water table and redirection of groundwater flows. Comprehensive floodplain assessments and hydraulic modelling should be supported by a series of appropriate mitigation measures to ensure that no property (private or public) shall be disadvantaged or adversely affected.

Council has sought consideration of the project's impact on Sydney Water's Iron Cove Creek renewal proposal at Haberfield / Five Dock and whether the combined Stage 1 and Stage 3 will delay its implementation or cause adverse impacts on this waterway.

Potential impacts from groundwater withdrawal induced settlement on properties has raised concern for Council, and this has not been adequately addressed in EISs. The EISs do not prescribe responsibility for a construction-settlement monitoring program, but imply this may sit with the construction contractor, which would be a conflict of interest.

The studies undertaken for the Stage 3 EIS predict ground water withdrawal, which will permanently affect ground water levels at the end of construction up to 500m either side of the tunnel alignment and up to 1.4km over the longer-term in some areas. This modelling predicts that at the end of construction, steep localised cones of depression will develop beneath Newtown and St Peters within the Ashfield Shale.

The risk of ground movement from groundwater drawdown is lessened where tunnelling is more than 35m deep. However, some tunnelling in areas near portal and underground interchanges will be far shallower than this. Steep gradients are likely to cause greater differential settlement with potential damage to buildings in the area. Localised modelling is possible, but Council notes that has been deferred to be undertaken by the construction contractor. As this modelling has not been undertaken at the EIS stage, there is no information about which properties may be subject to potential exceedances of settlement criteria.

Concerns are also raised about the potential for saline water intrusion into the foreshore areas due to depletion of groundwater table along the proposed tunnels. The impact of sea level rise on this has not been addressed adequately in the EIS.

The key site affected by the project that raises biodiversity issues for Council is the RRY site. There are other smaller areas where biodiversity would be affected, but the principles that need to be applied to manage biodiversity within the RRY site can be applied to these other areas.

In its December 2016 submission on for the surface clean-up of the RRY site, Council had raised a number of site-specific issues including minimisation of biodiversity impacts. Council staff discussed these issues at a meeting with relevant project staff during the REF exhibition and at a June 2017 site visit. Although Council is satisfied that SMC is aware of these issues, concerns remain that they have not been resolved to Council's satisfaction.

The main concern is that there has not been sufficient consideration of how works can be staged to minimise impacts on fauna, particularly native reptiles and birds. In order to retain fauna on-site, it is critical that a minimum area of habitat be retained at each stage of the clean-up and other works on the RRY site. Council seeks reassurance that this can and will be achieved.

The RRY site contains the most extensive areas of native small bird habitat in the area. The plant species that make up this habitat are for the most part exotic weed species. It is a common practice in inner urban areas to preserve these habitats regardless of the fact that they are weedy. Preservation of this habitat should, where possible, be a priority in the flora and fauna management plan for the site.

The RRY site is recognised regionally as an important biodiversity corridor, i.e. the Greenway. Loss of species from the RRY site would undoubtedly compromise the biodiversity conservation outcomes Council expects for the Greenway. The project will also need to consider impacts on species listed as vulnerable according to NSW Government legislation.

Regarding rail heritage, Council was informed at the time the RRY site REF was being assessed that the significant rail heritage items would be re-used, i.e. integrated into the landscaping of the RRY recreation area. Council agrees there is a role for re-use but had argued that some of the more significant items be retained in-situ so the site's rail heritage more accurately interpreted by future users of the recreation area. The proponent has not agreed to the retention of rail heritage item in-situ.

Regarding hazard and risk, it is a concern to Council that WestConnex EISs have not considered development of plans for situations such as traffic crashes, ventilation disruptions and tunnel fires.

Council has been disappointed that there has not been sufficient consideration of the project's impact on climate change – there has only been consideration of how climate change will affect the project. Consequently, the assessment of environmental (and climate change risk) simply indicates that the likelihood of the project being placed at risk by the environment is *"low"*. Further, there has not been any consideration of the 'heat island' impacts of paved road surfaces, ventilation facility surfaces, ventilation plumes and heat from additional traffic induced by WestConnex - engine heat, road surface friction etc. Council sees a need to soften surface of vents both visually and to reduce the heat island effect.

16. Attachments

- 1. SGS Economics & Planning (2016) *WestConnex Business Case Review*, for former Leichhardt Council & City of Sydney
- 2. Notes from five public meetings Convened by Inner West Council in late 2017 and early 2018 to discuss WestConnex construction and operational issues

17. References

Beca Australia (2017) WestConnex Stage 3 (M4-M5 Link) EIS Review – facilitated by Beca for Inner West Council - currently being drafted, to be attached to Council's submission on the EIS

City of Sydney (2014) Inner Sydney Regional Bike Network

Former Ashfield Council (2015) Submission on WestConnex Stage 1 (M4 East)

Former Leichhardt Council (2016) Submission on WestConnex Stage 2 (New M5)

Former Leichhardt Council (date unknown) GreenWay Revegetation & Bushcare Plan

- Former Leichhardt Council (date unknown) Leichhardt Native Revegetation & Biodiversity Management Plan
- Former Marrickville Council (2016) Submission on WestConnex Stage 2 (New M5)
- Greater Sydney Commission (2018) Greater Sydney Regional Plan
- Harding et al (2013) *The cost of hypertension-related ill-health attributable to environmental noise*, Noise Health Journal
- Inner West Council (2018) WestConnex Local Area Improvement Strategy (LAIS)
- Munzel et al (2014) Cardiovascular effects of environmental noise exposure, European Heart Journal
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- RMS (2014) Advisory Committee on Tunnel Air Quality TP09: Evolution of road tunnels in Sydney
- Saunders (2008) Avian Biodiversity Monitoring & Bird Habitat Management within the Leichhardt LGA
- SGS Economics & Planning (2016) WestConnex Business Case Review, for former Leichhardt Council & City of Sydney
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- Tzivian et al (2014) Effect of long-term outdoor air pollution and noise on cognitive and psychological functions in adults, International Journal of Hygiene and Environmental Health
- Urban Growth NSW (2016) Parramatta Road Urban Transformation Strategy
- Woolcock Institute of Medical Research Centre for Air Quality and Health Research & Evaluation (2015) *Review of the health impacts of emission sources, types and levels of particulate matter air pollution in ambient air in NSW* for NSW EPA

WestConnex Business Case Review



Final Report

Leichhardt City Council January 2016

Independent insight.





This report has been prepared for Leichhardt City Council. SGS Economics and Planning has taken all due care in the preparation of this report. However, SGS and its associated consultants are not liable to any person or entity for any damage or loss that has occurred, or may occur, in relation to that person or entity taking or not taking action in respect of any representation, statement, opinion or advice referred to herein.

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EXECUTIVE SUMMARY

WestConnex is a series of road projects including the M4 Widening, the M4 East, a M4-M5 Link and a New M5 from Beverly Hills to St Peters. WestConnex also sets the stage for other road projects including a link to the port and Sydney airport, a Western Harbour Tunnel running under Rozelle to the Northern Beaches Link and a Southern Gateway to the Illawarra. When all stages of WestConnex are completed it will be the largest continuous motorway in Australia and will be one of the most expense transport infrastructure project undertaken anywhere in the world. The project will influence land use and transport patterns over half of Sydney.

In November 2015, the WestConnex *Updated Strategic Business Case* was released to describe the need for the project, build the case that the project was the best solution, measure the benefits and identify project costs. However, the *Updated Strategic Business Case* fails to address many of the key requirements of a business case. The purpose of WestConnex and who will benefit from the project remains unclear. Issues with the *Updated Strategic Business Case include:*

Alternatives to WestConnex have not been considered

The *Updated Strategic Business Case* does not consider any strategic alternatives to WestConnex. This approach contrasts with Transport for New South Wales guidance which recommends the identification and analysis of solutions on the basis of physical circumstances and available technologies. For example, the proposed West Metro from Westmead to the Sydney CBD could have been considered as an alternative to the M4 sections of WestConnex.

Project objectives prevent a non-road based solution from being considered

The project objectives for WestConnex are inherently road-based – preventing an integrated transport solution which considers public transport and / or demand management alongside a road. In addition, none of the stated objectives aim to deliver an environmentally sustainable outcome.

Other global cities are focusing on integrated transport solutions

Other global cities have recognised that congestion cannot be solved by building more roads and in turn, have refocused efforts in transport infrastructure onto public transport and demand management.

The longevity of the project is unclear

Once the Western Harbour Tunnel and Northern Beaches Link are in operation, the *Updated Strategic Business Case* suggests that WestConnex will be close to capacity by 2031. If wholly completed by 2021, this would result in \$16.8 billion being spent for around ten years of marginally improved travel times.

The impact of WestConnex on the Bays Precinct will be significant

The Bays Precinct may benefit from road access provided by WestConnex, but the proposed realignment of WestConnex Stage 3 to include an interchange at Rozelle connecting to the Anzac Bridge and future Western Harbour connection has significant implications for traffic flow and congestion in and around The Bays Precinct. Establishing a motorway through The Bays Precinct appears counterintuitive to the aims of the urban renewal project to create.

Costs are high and are likely to be even higher



WestConnex is estimated to cost \$16.8 billion in the *Updated Strategic Business Case*. However, this cost estimate is provided at a P50 level, meaning, there is a 50 per cent chance that the actual project cost will vary. For a project of this scale, it is best practice to produce a P90 cost.

Since 2013 it appears that the cost for comparable sections of WestConnex has not changed. Whilst additional road links and supporting costs have been added to the total, the cost of the remainder of the project remains at \$14.8 billion – an outcome which suggests that over two years, no additional analysis has been undertaken on project costs and inflation has not been accounted for either.

At \$16.8 billion, WestConnex would be considerably more expensive than other international and national projects on a per kilometre basis. At 33 kilometres in length, WestConnex would be approximately \$510 million per kilometre. In contrast the Channel Tunnel (UK) cost \$426 per kilometre and the Eastern Distributor was \$223 per kilometre, in 2015 dollars.

The traffic modelling has a range of issues

The description of the transport modelling applied to the WestConnex project is opaque and confusing and the toll regime that is used in traffic forecasts is not fully explained.

The treatment of induced demand is questionable. The forecasts of induced demand are concerning, as they suggest a very high level of new trips will be induced by WestConnex, but the transport benefits do not appear to have been reduced with this increase in traffic. This result is hard to comprehend.

All results in the *Updated Strategic Business Case* are presented as absolute numbers rather than in ranges. The sensitivity of the modelling should have been tested against reasonable variations to input parameters to provide credibility to the estimates. The absence of modelling for more distance future year (e.g. 2046) is concerning.

As a result of increased congestion and the introduction of tolls, transport modelling suggests that a very small percentage of Leichardt residents will use public transport more when WestConnex is complete.

The cost benefit analysis is littered with issues

The *Updated Strategic Business Case* has costs of \$13,547 million and benefits of \$22,204.9 million and a benefit cost ratio of 1.71. However, dividing the present value of benefits against the present value of costs results in a benefit cost ratio of 1.64. This difference is too large to be the result of a rounding error.

If travel time savings of less than five minutes is excluded, the travel time benefits are reduced from the benefits would fall from \$12.9 billion to \$5.9 billion – reducing the BCR from the recalculated 1.64 to 1.12. These small travel time savings were one of the issues with the Lane Cove and Cross City Tunnels, where Roads and Maritime Services described that "the majority of travel time savings were less than five minutes (which are often not realised and can be considered inframarginal in economic terms)".

The rationale for the large proportion of business trips is unclear. 33 per cent of travel time benefits are attributed to cars – privately registered, business use. However, it is unclear why so many business car users have been included in the analysis – justification is not provided in the *Updated Strategic Business Case*.

Land acquisition costs or the opportunity cost of land being used for the project do not appear to be included in the WestConnex project costs or in the broader cost benefit analysis. The health impacts, local amenity impacts and related land use implications are not discussed by the *Updated Strategic Business Case*.

In summary, the *Updated Strategic Business Case* fails to establish WestConnex as the best transport solution for Sydney.



1 INTRODUCTION

1.1 **Project context**

WestConnex will have an impact on the Leichhardt LGA. A number of these implications have been identified by SGS and in a recent submission by Leichhardt Council regarding the M4 East Environmental Impact Statement. The submission was produced in response to the release of the WestConnex Stage 1B Environmental Impact Statement. Key implications associated with WestConnex intersecting with the LGA include:

- WestConnex Stage 1B is inconsistent with the aims of Leichhardt Council's adopted Integrated Transport Plan. The plan seeks to improve accessibility within and throughout the Local Government Area (LGA), create a legible, direct and safe pedestrian and cycling environment and encourage public transport use.
- The EIS does not consider the future relationship the road corridor may have with major planning projects currently underway within the subregional context of Leichhardt such as the Bays Precinct and Sydney Metro.
- Traffic around Leichhardt's local road network is likely to increase with the completion of Stage 1B M4
 East as traffic is likely to be diverted from the congested Parramatta Road and Dobroyd Parade. This may influence Leichhardt's precincts by reducing accessibility and amenity within the local street network.
- Potential Increased traffic generation due to the flow on effect from the Anzac Bridge and Parramatta Road extension and congestion of Victoria Road and Anzac Bridge.
- An exit tunnel at Victoria Road near the Anzac Bridge could increase traffic along the already congested Victoria Road and increase local traffic along Johnson Street and other streets with more cars entering the local road network.
- If WestConnex does relieve pressure on Parramatta Road, it could create a better urban environment along the southern boundary of the Leichhardt LGA. However, if as expected, traffic along Parramatta Road increases, this will exacerbate the urban quality irrespective of the urban renewal vision of UrbanGrowth NSW.

1.2 **Project brief**

SGS Economics and Planning (SGS) was commissioned by Leichhardt City Council to review the *Updated Strategic Business Case* for WestConnex. The focus of this review is:

- The sustainability and environmental objectives and performance of the project
- The economic analysis of WestConnex and the underlying assumptions, including project costs and how health and wellbeing have been accounted for, and
- The transport implications of the project, including induced demand and possible loss of public transport patronage.

These three foci form the structure of this report.



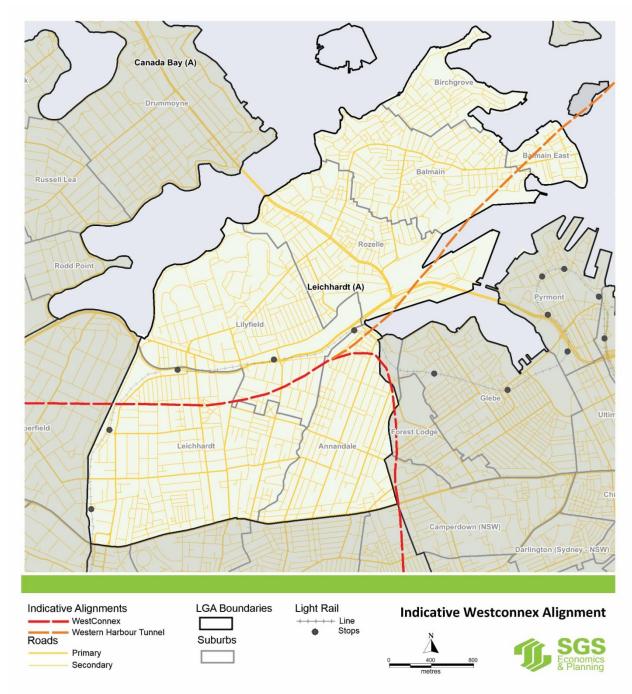


FIGURE 1. PROPOSED WESTCONNEX ALIGNMENT

1.3 History of WestConnex

The NSW Government announced WestConnex in 2012 as part of *NSW'S State Infrastructure Strategy* (SIS). Under the SIS, Infrastructure NSW identified WestConnex as a "catalyst to renew and transform the parts of Sydney through which is passes. WestConnex is intended to develop as an integrated land use and transport scheme delivering on road transport, urban renewal and public transport outcomes" (Infrastructure NSW, p88).



As outlined in the SIS, WestConnex was designed to integrate the M4 extension from Parramatta towards the Airport with an expansion of the M5 East. Figure 1 details the key opportunities and benefits envisaged for WestConnex.



FIGURE 1. WESTCONNEX ALIGNMENT 2012

Source: Infrastructure NSW, 2012

The SIS also promoted WestConnex as supporting freight and people movements to Sydney Airport, relieving congestion and facilitating improvements in public transport. The strategic benefits of the project were justified under the SIS and included:

- relieving congestion on the existing M4/Parramatta Road and M5 East
- supporting freight movements between Sydney's Gateways and the logistics hubs in Western and South Western Sydney
- supporting people movements to Sydney Airport
- acting as a catalyst for urban regeneration along key corridors, particularly Parramatta Road
- enhancing orbital road connectivity South and West of the CBD
- facilitating improvements in public transport, particularly on the Parramatta Road corridor.

However, the SIS outlined that existing assets should be maximised before investing in new projects.

"NSW should also maximise the use of existing assets wherever possible before investing in new projects because it is both cost effective and it is capable of delivering quick improvements for the community that are sacrificed when there is too great a focus on big projects with long lead times" (Infrastructure NSW, p24).

This statement reflects that rather than embarking on major construction projects, the existing M4 and M5 motorways should be tolled in order to manage demand.

In October 2012, the NSW Government announced it would proceed with the recommendation put forward by Infrastructure NSW, to develop a business case for Westconnex. The recommendation formed part of the future Sydney motorway network identified in the SIS and the NSW Government's Draft Long Term Transport Master Plan. In August 2013, the business case was approved by the NSW



Government and the WestConnex Delivery Authority (WDA) was established to manage the project in October 2013.

The text box below details the concern raised by the NSW Auditor General around the development of the business case process. The Auditor General noted that "the preliminary business case submitted for Gateway review had many deficiencies and fell well short of the standard required for such a document. Further, on our analysis, the business case put to the Government still included some deficiencies that independent Gateway reviews and external assurance arrangements, if they had occurred, should have identified" (NSW Auditor-General 2014, p3).

WestConnex Assurance to the Government

In December 2014 the NSW Auditor-General issued a report into assurance processes associated with WestConnex. This highlighted that the process undertaken to date is not considered satisfactory. The focus of the audit was to determine whether WestConnex assurance processes are consistent with key principles underlying NSW Government major projects assurance frameworks and have been effectively implemented to provide sound, independent assurance to Government and project sponsors.

The audit did not examine the merit of the project or whether it represented value-for-money. The report found that additional independent gateway reviews should have been conducted. Only one review was conducted which found that the preliminary business case was deficient and fell well short of the standard required for such a document. Four additional gateway reviews should have been conducted.

A number of other conflicts of interest were raised in relation to governance arrangements and the board members of WDA. The final conclusion of the report was that "There were a number of deficiencies in governance and independent assurance over the early stages of the WestConnex project. Going forward, these need to be rectified to ensure that WestConnex achieves the expected benefits at a reasonable cost". Further to this, the report notes that "The preliminary business cases submitted raise deficiencies in business cases on which decisions have been made".

Updated WestConnex Route (2014)

The NSW Government announced in June 2014 that the WestConnex Delivery Authority (WDA) would prepare a business case for two extensions to WestConnex. As part of the business case, northern and southern extensions were proposed, with the WDA to assess the feasibility and affordability of the change.

The northern and southern extensions were both identified under the NSW *Long Term Master Plan* as corridors for investigation. The northern extension will link the former Rozelle Goods Yard to Victoria Road to the north and the Anzac Bridge and Western Distributor to the east. The southern extension will connect the new M5 to President Avenue in Rockdale. However, it is not stated how this alignment is superior to the original (for example, in terms of cost benefit analysis).

With reference to the SIS Update 2014, these extensions aim to provide a western bypass of Sydney's CBD to alleviate existing pressure on the existing north-south corridor of Sydney's orbital network. Infrastructure NSW also focused on reducing journey times from the south. Stage 3 of WestConnex was rerouted towards the northern extension and away from Parramatta Road.

Figure 2 illustrated the updated alignment from December 2014 with Stage 3 linking the M4 and M5. As an outcome from the realignment, Parramatta Road is no longer duplicated from Haberfield to Petersham and there has been a connection introduced onto Parramatta Road at Camperdown. Hence the opportunity for urban renewal along Parramatta Road was lost.





FIGURE 2. WESTCONNEX ALIGNMENT (NOVEMBER 2015)

Source: WestConnex Delivery Authority, 2014

2015 Updated Strategic Business Case

In November 2015, the NSW Government released the *Updated Strategic Business Case*. It consolidates the work undertaken in the original business case, with additional modelling, analysis and changes to the reference design enhancements. This report will examine the WestConnex *Updated Strategic Business Case* in more detail.

Key implications of the current project compared to the original project include:

- The various stages of WestConnex will be constructed more quickly allowing benefits to be unlocked more quickly.
- The Stage 1 section is closer to the CBD and will generate increased congestion for those travelling to and from the CBD and Eastern suburbs. The ANZAC Bridge will be particularly adversely impacted.
- Urban amenity and local traffic conditions will not be improved along Parramatta Road by WestConnex, and the opportunities for urban renewal will not be improved by the project. Hence one of the key strategic reasons for the project has been lost.
- The route which will allow access to Sydney Airport and Port Botany is not fully explained and will be delivered four years after the opening of Stage 2 of WestConnex. The *Updated Strategic Business Case* is also silent on the potential impact of the Western Sydney Airport on future traffic demand. It is unclear if the access to Sydney's global gateways will be improved with the new airport, hence bringing into question one of the key strategic reasons for the project.



2 THE SUSTAINABILITY OF WESTCONNEX

2.1 Introduction

The strategic merit of WestConnex is not fully established by the *Updated Strategic Business Case* or in supporting Environmental Impact Statements (EIS) released to date. This has generated considerable uncertainty around whether WestConnex is a sustainable and superior solution for Sydney's transport issues. The following section draws on numerous parts of the *Updated Strategic Business Case* to examine the sustainability of WestConnex and what its potential impact may be on Leichhardt Council.

2.2 Is WestConnex the only solution?

Alternatives to WestConnex have not been considered

The *Updated Strategic Business Case* does not consider any strategic alternatives to WestConnex. Analysis of options appears to be limited to minor variations in route alignments, and this analysis is primarily incorporated into the M4 East and Stage 2 Environmental Impact Statements.

Section 3 of the *Updated Strategic Business Case* focuses on 'Solutions in a Strategic Context'. This section actually establishes the policy alignment of the WestConnex proposal, rather than considering solutions to identified problems. The strategic alignment of WestConnex to a range of policies is considered, including *NSW State Priorities, NSW 2021, 2012 State Infrastructure Strategy, NSW Long Term Transport Master Plan, 2014 State Infrastructure Strategy, NSW freight and Ports Strategy, A plan for Growing Sydney* and the *2014-15 NSW Budget*. The outcome of this analysis is qualitative reasoning supporting the strategic merit of WestConnex. However, this section does not consider broader potential solutions.

This approach contrasts with Transport for New South Wales (TfNSW) *Principles and Guidelines for Economic Appraisal of Transport Initiatives (2013)* which recommends the identification and analysis of solutions on the basis of physical circumstances and available technologies.

The Guidelines note that:

'The main risk of distorting the evaluation is the risk of neglecting relevant alternatives, in particular, low cost solutions such as managing and pricing solutions.'

TfNSW (2013, p. 27).

For a project as significant as the \$16.8 billion WestConnex, it is concerning that other solutions and in particular, demand management (electronic road pricing) or public transport solutions, have not been assessed. A strategic alternative or option analysis may have identified the need for an integrated transport solution which could have included guided (or unguided) bus ways connecting between rail lines, intelligent transport systems, better integration of land use and transport strategies, and demand responsive systems. Failure to consider these options is a missed opportunity.

An example of consideration of strategic alternatives is the *East West Link Needs Assessment* undertaken by Sir Rod Eddington for the Victoria Government. This assessment developed four options which



integrated a range of road and public transport investment with the aim of improving east-west connectivity in Melbourne.

Project objectives prevent a non-road based solution from being considered

The objectives of WestConnex are primarily road-based. Shown in Section 4 of the *Updated Strategic Business Case*, these objectives centre on improving motorway access, relieving road congestion, catering to travel demands that are best met by road and improving productivity. For the most part, these objectives can only be fulfilled by *WestConnex*.

Whilst the *Updated Strategic Business Plan* does not identify strategic alternatives or assess these against these objectives, this assessment is presented in the Stage 2 EIS. Here, a range of high level strategic alternatives are dismissed on the basis of non-performance against stated criteria.

Whilst the failure to consider projects other than WestConnex, particularly integrated projects, is concerning, it is also of concern that sustainability objectives are not identified. The sustainability of the project in terms of longevity and environmental performance is not identified as an objective of WestConnex.

Other global cities are focusing on integrated transport solutions

Road congestion is a significant problem for Sydney. TomTom data suggests Sydney is the 21st most congested city in the world – a point that is used in the *Updated Strategic Business Case* as a key justification for developing WestConnex.

Table 1 contains an overview of selected cities from the TomTom data.

World rank	Filter rank	City	Country	Congestion Level	Morning peak	Evening peak	Highways	Non- highways
10	10	Los Angeles	United States	39%	60%	80%	36%	42%
13	13	Rome	Italy	38%	71%	65%	24%	43%
16	16	London	United Kingdom	37%	65%	67%	22%	43%
20	20	Vancouver	Canada	35%	53%	66%	13%	41%
21	21	Sydney	Australia	35%	66%	64%	31%	37%
22	22	Paris	France	35%	64%	64%	35%	35%
26	26	San Francisco	United States	34%	53%	68%	29%	39%

TABLE 1. CONGESTION RANKINGS

Source: TomTom, 2014

However, significant literature exists around the traffic inducement effect of new roads and as cities grow larger roads become a less viable transport solution. Many cities in Europe, North America and East Asia are also removing motorways from their inner city to improve liveability, improve transport sustainability, and effectively manage traffic congestion (Lavanchy 2014, Napolitan and Zegras 2008, Kang and Cervero 2009, Cervero 2006).

Other global cities recognise this issue and in turn, have refocused efforts in transport infrastructure onto public transport.



- Los Angeles, the 10th most congested city in the world, long known for its sprawling development pattern and reliance on cars, has seen significant investment in mass transit since the early 1990s. Over the last two decades, a number of new subway lines have been constructed, along with light rail lines and rapid bus lines. 'Measure R' was implemented in 2008 to enable taxes to create a dedicated funding stream for new transit.
- Rome, the 13th most congested city in the world, launched an *Urban Mobility Plan* in 2010 which
 places restrictions on traffic within specific zones in the city. Emissions reduction mechanisms, altered
 parking restrictions and expanded cycling and public transport form part of the plan to improve
 mobility while reducing reliance on cars.
- London, the 16th most congested city in the world, introduced a congestion charge in 2003. Almost
 half of the revenue has been reinvested into public transport, roads and active transport schemes and
 traffic volumes have been reduced by 10 per cent (Transport for London, 2014).
- In Vancouver, the 20th most congested city in the world, the *Transportation 2040 Plan* looks to improve public transport patronage by revising fare structures and introducing a smartcard system, optimising the road network through improved signalling and peak hour parking regulation, and through investigating a congestion charge policy in more detail.

Congestion is a common issue for global cities and Sydney is no exception. The potential investment of at least \$16.8 billion into a toll road in Sydney is not consistent with the path taken by other international cities and is not supported by a rigorous assessment of alternatives.

The longevity of the project is unclear

It would be expected that a high cost project would generate benefits for decades to come. This does not appear to be the case for WestConnex.

On-ramps at Rozelle will provide westbound access from Anzac Bridge to WestConnex. However, once the Western Harbour Tunnel and Northern Beaches Link are in operation, the *Updated Strategic Business Case* suggests that WestConnex will be close to capacity by 2031. If wholly completed by 2021, this would result in \$16.8 billion being spent for around ten years of marginally improved travel times.

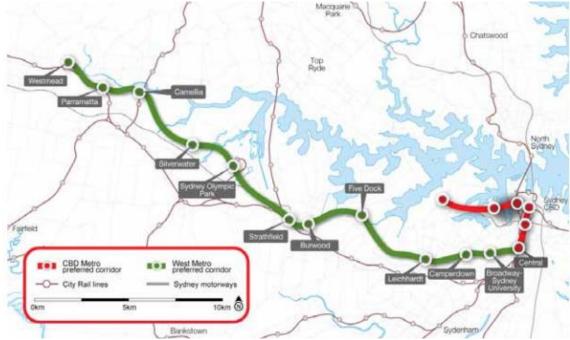
The West Metro project is not identified or compared against

The WestConnex Stage 2 EIS addresses public transport alternatives in very broad terms, with no specific proposals considered. The EIS concluded that as no one public transport project can provide for all passenger needs (private and freight), WestConnex is supported.

This report uses the shelved West Metro proposal as a comparison with WestConnex. West Metro was proposed in the mid-2000s to connect Westmead and Parramatta to the Sydney CBD via a high frequency metro line. West Metro was proposed as an extension of the CBD Metro line, proposed to run from Central Station to Rozelle. The proposed route for West Metro, shown in Figure 3, is very similar to the route of Stage 2 of WestConnex. West Metro was proposed to have trains operating every 2-3 minutes during peak hours and a maximum daytime wait of 5 minutes (NSW Government 2009, 4). Transport modelling prepared for the West Metro EIS found that by 2031, between 45,000 and 60,000 passengers would utilise West Metro in the AM peak (NSW Government 2009, 4).



FIGURE 3. WEST METRO



Source: NSW Government, 2009

As with WestConnex, the West Metro was found to reduce travel times for commuters during the AM peak at all proposed stations, however the travel time savings were more significant for West Metro. Travel time savings were noted for commuters at Westmead and Parramatta as the stations benefit from faster and more frequent rail services (NSW Government 2009, 21). The most pronounced travel time savings noted at Camellia, Silverwater, Five Dock and Leichhardt, with over 20 minutes saved (NSW Government 2009, 21). The West Metro EIS found that the introduction of a high speed rail line would provide significant relief to the Western rail line, diverting approximately 40 percent of passenger trips from the existing rail network to the West Metro during the AM peak (NSW Government 2009, 23).

West Metro provides a reliable service, with peak services proposed every 2-3 minutes. The rail network is separate from the road network and unlike buses are not subject to significant delays from road congestion. Current bus frequency and timetables are significantly impacted by traffic congestion and while there is potential for a dedicated bus lane along Parramatta Road with WestConnex, no indication has been made in the Stage 1b EIS regarding improved reliability of services.

In addition to faster travel times, the West Metro proposal provides benefits to residents and businesses in the Leichhardt LGA that simply cannot be achieved through the WestConnex project. West Metro has the potential to significantly reduce travel times for residents of Leichhardt LGA and surrounds into the CBD, providing a travel time saving of over 20 minutes (NSW Government 2009, 21). No travel time savings for areas east of Burwood have been provided in the Stage 1b EIS for WestConnex. It is therefore unclear whether any travel time saving is forecast for the majority of Sydney's Inner West.

Introducing a high speed rail network through the Inner West and the Leichhardt LGA has the potential to encourage greater public transport patronage, reducing car usage and car dependency and therefore relieving road congestion. The WestConnex proposal does the exact opposite, reinforcing car dependency across Sydney and providing to incentivise a modal shift away from private vehicles to public transport. Improving public transport and reducing congestion are recognised as vital actions to improve the liveability of Sydney in the *NSW Long Term Transport Master Plan* (2012, 176). While the proposed West Metro would have helped achieve this objective, WestConnex is unlikely to reduced private vehicle use.



The impacts of WestConnex project and the West Metro project are summarised in Table 2 below. It is evident from the comparison between the two projects that Westconnex is an inferior transport solution for the residents and businesses of the Leichhardt LGA, providing fewer benefits and more negative impacts than the previous West Metro proposal.

TABLE 2. IMPACTS OF PROJECTS ON LEICHHARDT LGA

	Benefits to Leichhardt LGA	Costs to Leichhardt LGA
WestConnex	 Potential travel time savings by bus, however this is not clearly articulated in planning documents Improved road connections to Parramatta Improved motorway access 	 Increased local traffic as motorists avoid tolls on WestConnex Increased local traffic as staging of the project does not see the M4-M5 connection complete when Stage 1b is complete, depositing motorists in Haberfield. Local roads used to drive into the city. Increased local traffic as Stage 3 deposits motorists at the Anzac Bridge or Victoria Road, adding additional vehicles to already congested road networks. Potential air quality impacts however this is not clearly articulated in planning documents
West Metro	 Reduced travel times by over 20 minutes from Leichhardt LGA into the CBD Reliable public transport unaffected by road congestion Improved development potential around a proposed Leichhardt station and adjacent areas of Parramatta Road Improved connections to Sydney and Parramatta CBDs Improved public transport interchange, with bus interchange proposed at a proposed Leichhardt station Encouraging less car dependency through improved public transport network 	 Potential increase to local traffic and parking demand for metro station Lack of benefit for northern areas of Leichhardt LGA (Rozelle, Balmain, Lilyfield) without CBD Metro or light network

2.3 How WestConnex will affect Leichhardt

Issues identified in the previous EIS remain unaddressed

At its meeting on 27 October 2015, Leichhardt Council endorsed a submission in response to the Environmental Impact Statement (EIS) prepared for Stage 1b of the WestConnex proposal. In its submission, Leichhardt Council indicated it opposed the WestConnex development due to the significant impacts and lack of key information surrounding the proposal. The impact of the proposal on Sydney's road network (including road capacity, usage and travel times) and full costs and benefits were not provided as part of the EIS. Leichhardt Council also notes in their submission that the EIS also lacks a comparison of the cost and benefits of the WestConnex project to a public transport project of a similar scale. Several concerns raised by Leichhardt Council in previous submissions provided to the NSW Government prior to the release of the EIS for Stage 1b, such as concerns around air quality and impact on identified urban renewal precincts, have not been addressed and in some cases, no information has been provided.

In their submission, Leichhardt Council notes that the WestConnex project is inconsistent with the aims of Council's Integrated Transport Plan as the proposal does not:

- improve accessibility within and throughout the Leichhardt LGA;
- create a legible, direct and safe pedestrian and cycling environment;
- encourage public transport use;
- provide a safe and efficient road network for all road users;



- facilitate integration of land use, transport and community & cultural activities;
- provide convenience for users of Leichhardt;
- promote health and wellbeing;
- improve environmental conditions; and
- support Council's adopted 10 Year mode shift targets, including a reduction of private car use from 44% to 28%.

Leichhardt Council raised concerns about the traffic modelling produced for the EIS as the EIS does not give clear consideration of major projects planned for the surrounding area, such as the Bays Precinct, Central to Eveleigh urban renewal, and the Sydney Metro. Leichhardt Council's submission called for further information regarding how local street networks in Leichhardt LGA and surrounds from additional through traffic, including transportation of hazardous goods.

The impact of WestConnex on the Bays Precinct will be significant

As noted in Leichhardt Council's submission, the impacts of the WestConnex project on The Bays Precinct urban renewal project have not been explained in the Stage 1b EIS or in any detail in the Updated Strategic Business Case.

It is noted that while the government has outlined its intent for The Bays Precinct, no detailed information regarding resident or worker populations has yet been provided. The *Transformation Plan: The Bays Precinct Sydney* was released in October 2015 and present the high level vision for the urban renewal project. The Bays Precinct is separated into eight localities, each with its own vision, opportunities and challenges.

The Rozelle Rail Yards is the western-most locality of The Bays Precinct. Future uses of Rozelle Rail Yard identified in the *Transformation Plan: The Bays Precinct Sydney* includes a mix of different housing, including affordable housing, as well as public spaces and employment uses. The Rozelle Rail Yards is of particular importance to the WestConnex proposal as this is the proposed location for the Rozelle Interchange, providing connections to the Anzac Bridge, Victoria Road and, subject to planning and approval, a second Harbour Crossing and a Northern Beaches motorway. While this stage of WestConnex is currently marked as a tunnel, the detailed planning for Stage 3 has not yet commenced and it is uncertain how WestConnex may impact on the planned renewal of The Bays Precinct, including potential development yields, commercial and residential uses, and urban design outcomes.

Reference to the Bays Precinct in the *Updated Strategic Business Case* is limited to Section 7.2. Here, WestConnex's impact on the Bays Precinct is explained as:

- The Rozelle Interchange 'transforming' the former Rozelle Rail Yard
- The interchange having the potential to reconnect areas to the north and south of the Rail Yard and improving connectivity from Lilyfield to the harbour and Bays Precinct.

While residents and workers of The Bays Precinct may benefit from arterial road access, the proposed realignment of WestConnex Stage 3 to include an interchange at Rozelle connecting to the Anzac Bridge and future Western Harbour has significant implications for traffic flow and congestion in and around The Bays Precinct.

While no population, dwelling or employment numbers have been released, The Bays Precinct encompasses 95 hectares of land planned for 'transformation' and offers potential for significantly higher numbers of people living and working in the Precinct (UrbanGrowth NSW 2015). Traffic in and around The Bays Precinct along the City West Link, Victoria Road and the Anzac Bridge is already considerably congested. Congestion on Victoria Road has a significant negative impact on Sydney's productivity and economic output, with a delay cost per lane kilometre of \$1.73 million (Infrastructure Australia 2015, 143). This is forecast to increase to a delay cost per lane kilometre of \$4.69 million by 2031 (Infrastructure Australia 2015, 144). The *Updated Strategic Business Case* found that an additional 20,000 vehicles are forecast to use the Anzac Bridge on an average weekday (NSW Government 2015, 39) and Victoria Road will experience increased traffic volumes due to an introduced toll on the M4



(NSW Government 2015, 39). Introducing an interchange at Rozelle before the construction of the Western Harbour Tunnel is complete is a significant risk to the project and has the potential to exacerbate adverse traffic impacts for these main arterial routes and local streets as these main roads struggle to accommodate additional traffic demands.

The vision for The Bays Precinct is to be a hub for knowledge economy jobs. To ensure the maximum economic output and benefit from the knowledge economy, an efficient, effective mass public transit and active transport network is required to support and attract highly skilled workers (Lakshmanan 2011, Committee for Sydney 2015a, Committee for Sydney 2015b, Newman 2014, Newman et al 2013, Dirks et al 2010). These types of land uses that centre on knowledge economy workers largely do not require large motorway projects to support their operations as limited goods and freight are produced. Instead, a high quality urban environment with efficient public and active transport connections are more highly sought after for knowledge economy firms (Newman 2014, Newman et al 2013, Dirks et al 2010). Furthermore, the introduction of motorways has been found to lead to economic dispersal, limiting the clustering of knowledge economy enterprises and preventing additional jobs, ideas and innovation associated with agglomeration economies (Yu et al 2015).

By facilitating additional traffic movements into the Bays Precinct, WestConnex may in fact reduce development yield through increased car parking requirements. WestConnex may also hamper efforts to encourage sustainable transport use in the Bays Precinct through provision of car parking and access to the motorway.

Cities around the world are actively planning to remove cars from their CBDs and areas with concentration of economic activity, such as London, Singapore and Stockholm (Committee for Sydney 2015b, Newman et al 2013, Dirks et al 2010). Many cities in Europe, North America and East Asia are also removing motorways from their inner city to improve liveability, improve transport sustainability, and effectively manage traffic congestion (Lavanchy 2014, Napolitan and Zegras 2008, Kang and Cervero 2009, Cervero 2006). Establishing a motorway through The Bays Precinct appears counterintuitive to prevailing global trends and the aims of the urban renewal project to "drive an internationally competitive economy." The proposal also fundamentally acts against international best practice for urban renewal in inner city areas (UrbanGrowth NSW 2015, iii).





3 REVIEW OF ECONOMIC APPRAISAL

3.1 Introduction

Overestimates of toll road patronage and the benefits stemming from this have plagued projects such as the Lane Cove Tunnel and Cross City Tunnel in NSW to the point where these roads have been financial disasters. This section considers the economic appraisal of WestConnex, which reflect sections 12, 13 and 14 of the *Updated Strategic Business Case* and the *Economic Appraisal* (KPMG 2015).

3.2 Project costs

Costs are high and are likely to be even higher

WestConnex is estimated to cost \$16.8 billion in the *Updated Strategic Business Case*. However, this cost estimate is provided at a P50 level, meaning, there is a 50 per cent chance that the actual project cost will vary. For a project of this scale, it is common to produce a P90 cost – leading to a 10 per cent change that the actual project cost will be different.

It is also of concern that the \$16.8 billion price of WestConnex does some exclusions. The *Updated Strategic Business Case* notes that:

"capital costs exclude land acquisition, network enhancements and development costs" Source: Updated Strategic Business Case, p. 240.

These excluded costs have the potential to be significant.

In moving from the 2013 Business Case to the 2015 *Updated Strategic Business Case*, it appears that the cost for comparable sections of WestConnex has not changed (see Table 13.6 on page 240). Whilst additional road links and supporting costs have been added to the total, the cost of the remainder of the project remains at \$14.8 billion – an outcome which suggests that over two years, no additional analysis has been undertaken on project costs and inflation has not been accounted for either.

At \$16.8 billion, WestConnex would be considerably more expensive than other international and national projects on a per kilometre basis. At 33 kilometres in length, WestConnex would be approximately \$510 million per kilometre. In contrast the Channel Tunnel (UK) cost \$426 per kilometre and the Eastern Distributor was \$223 per kilometre, in 2015 dollars.

Use of a Strategic Business Case alone is not appropriate

A further layer of complexity is created by the unclear intention of the *Updated Strategic Business Case* overall. A Strategic Business Case is not mandated by Treasury NSW – only a preliminary and full business case are. To this end, it is difficult to assess the adequacy of the document as it partially meets the requirements of a Preliminary and a Final Business Case. It is of concern that a Final Business Case has not been yet been released to the public and is unclear whether one has been prepared or is being prepared, particularly in light of the fact that some works for WestConnex have begun.



3.3 Cost benefit analysis

The cost benefit analysis provided in the *Updated Strategic Business Case* and the supporting economic appraisal attachment (KPMG 2015) generally meet requirements set out in TfNSW *Principles and Guidelines for Economic Appraisal of Transport Investment and Initiatives.* However, the manner in which crash cost savings and more broadly, health and wellbeing have been included is insufficient.

The benefit cost ratio provided is incorrect based on the information shown in the *Updated Strategic Business Case.* Table 7 of the document outlines sensitivity analysis results, including the project case (Central Scenario). Here, a present value of costs of \$13,547 million and a present value of benefits of \$22,204.9 million is shown, with a net present value of \$8,657.9 and a benefit cost ratio of 1.71. However, dividing the present value of benefits against the present value of costs results in a benefit cost ratio of 1.64. This difference is too large to be the result of a rounding error.

The other results shown in Table 7 of the *Updated Strategic Business Case* show further inconsistencies, with discrepancies ranging from 0.05 to 0.31. This casts doubt over the accuracy of the calculations presented in the document and adds further uncertainty around the merit of WestConnex.

Crash cost savings – that is, reduced accidents resulting from improved traffic flow and reduced congestion, are calculated using a change in Vehicle Kilometres Travelled (VKT) and applying rates provided from Austroads and willingness to pay values from TfNSW. It could be argued that this approach is not sophisticated enough for a project as large as WestConnex. This approach does not appear to account for higher speeds resulting in more accident risk, possibly higher severity of crashes, reduced amenity of pedestrian amenity on existing roads, and increased flow of traffic as a result of on ramps to WestConnex. At the same time, this approach does not take into account potentially higher pedestrian and active transport flows resulting from urban renewal efforts along the WestConnex route.

The proposed Bays Precinct redevelopment will see significant population growth in Leichhardt City Council and in turn, a higher level of street and business activity in the area. This may increase the risk of traffic accidents resulting from WestConnex, including pedestrian-related incidents due to increased vehicular exposure, and it is possible that the positive economic impacts associated with increased foot traffic could be constrained due to the negative impact WestConnex will have the local environment.

Land acquisition costs do not appear to be included in the WestConnex project costs or in the broader cost benefit analysis. Page 240 of the *Updated Strategic Business Case* states "For the purpose of this analysis capital costs exclude land acquisition, network enhancements and development costs". The cost of these excluded elements is likely to be high. At a 2015 Budget Estimates Committee, the CEO of the Sydney Motorway Corporation, Mr Dennis Cliche, indicated that \$140 to \$150 million had been designated for land acquisition to facilitate the St Peters Interchange (General Purpose Standing Committee No. 2, 2015). This is in contrast to TfNSW *Guidelines* which states:

"Buildings or houses that have to be demolished to make way for the project should be valued at market prices (net of selling costs), plus demolition costs minus scrap or residual value. Labour costs should generally reflect market rates with an allowance for labour on-costs (generally around 30 per cent)" (TfNSW 2015, p.30).

The opportunity cost of using land for WestConnex is not recognised. TfNSW *Guidelines* recognise the need to consider opportunity cost of proposals. The methodology provided (Section 9.4.1 of the Guidelines) state:

Underlying the valuation of inputs to a project or activity is the principle of opportunity cost. The use of resources (manpower, finance or land) in one particular area will preclude their use in any other. Hence the basis for valuing the resources used is the "opportunity cost" of committing resources; i.e. the value those resources would have in the most attractive alternative use. The adoption of this principle reflects the fact that the economic evaluation of public sector projects



should be conducted from the perspective of society as a whole and not from the point of view of a single agency.

Commonly, the price paid for new capital, labour or other inputs will reflect the opportunity cost of the resources. The position may be less clear in the case of the use of existing land owned by the agency. In general it is considered that a cost equivalent to its maximum market value under current or likely realistic land-use zoning should be placed on such land.

The general principle applies even where the public sector may have access to an input at a cost different from its market value. In certain cases, where a resource has a market price, that price may not reflect the marginal social cost of using the resource.

Whilst the cost of land acquisition is not included in the *Updated Strategic Business Case*, the M4 East EIS notes that full and partial acquisition of 182 properties and 10 road reserves would be required, in addition, 98 properties owned by Roads and Maritime would be acquired (M4 East EIS 2015, p. ix). The cost of the land acquisition is not identified in the EIS. It is unclear what the market value of these properties is and what their 'highest and best use' might have been if not acquired for WestConnex's construction and operation.

High expansion factors are used. A key assumption in the cost benefit analysis is the use of an expansion factor which converts daily calculated benefits into an annual one. The *Updated Strategic Business Case* uses an expansion factor of 345. This suggests that vehicle movements on an 'average' day on WestConnex would be replicated 345 days per year. This is likely to overstate benefits, as there are 260 weekdays in a calendar year and school holidays and public holidays take up a further 68 days per year. This effectively leaves only 192 days where peak periods on WestConnex would be replicated by the transport model.

A more realistic expansion factor would be a weighted 320. This would use the following assumptions:

- 192 normal weekdays at 100% of traffic calculated
- 104 weekend days at 70%
- 11 public holidays at 65%, and
- 57 school holidays at 85%.

If a lower expansion factor of 320 is used, the BCR would fall from the recalculated 1.64 to 1.54. This is considered through the sensitivity analysis in the KPMG 2015 (table 11) through using an expansion factor of 300.

Travel time savings are likely to be overestimated. Travel time savings form the majority of user benefits generated by WestConnex. According to Table 12.6 of the *Updated Strategic Business Case*, the discounted value of travel time savings is \$12,902.9 million in benefits (discounted) – 58 per cent of the present value of benefits.

Using transport modelling results from the Zenith Model (which produces similar results to the WestConnex Transport Model), the distribution of travel time savings are estimated. The data for 2026 generated by the Zenith model shows that a total of 832,000 trips will gain a travel time saving from WestConnex, but that the majority (60 per cent) will have a saving of up to 2.49 minutes. The following chart displays average travel time savings by number of trips in 2026 for users of WestConnex.



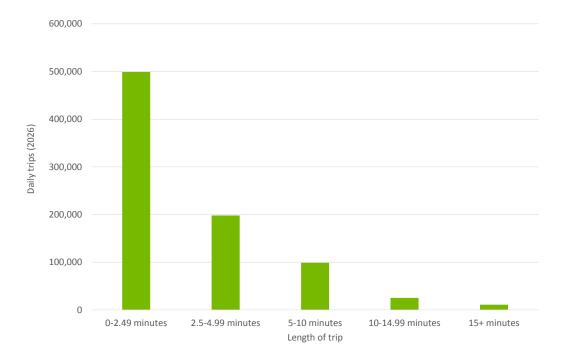


FIGURE 4. TRAVEL TIME SAVINGS BY NUMBER OF TRIPS WITH WESTCONNEX (2026)¹

The low level of time saved by a majority of motorists is concerning as there is a risk that this time saving will not be discernible to WestConnex users. Small travel time savings or 'inframarginal' travel time savings were one of the issues with the Lane Cove and Cross City Tunnels, where Roads and Maritime Services (RMS) described that "the majority of travel time savings were less than five minutes (which are often not realised and can be considered inframarginal in economic terms)" (RTA 2010). Inframarginal means that they are within the margin of error of the modelling or/and cannot be observed by road users. In the case of the Lane Cove Tunnel, when travel time savings of less than five minutes were removed from the analysis, this BCR decreased by approximately 50 per cent.

The change to the net present value of benefits by excluding any benefits based on a travel time saving of five minutes or less is a fall from \$12.9 billion to \$5.9 billion – reducing the BCR from the recalculated 1.64 to 1.12.

The rationale for the large proportion of business trips is unclear. WestConnex benefits are primarily driven by travel time savings (58 per cent of total benefits). Section 12.5.1 of the *Updated Strategic Business Case* shows that WestConnex generates \$22.4 billion in total benefits, \$20.5 billion in user benefits and \$12.9 billion in travel time savings. These are shown, by vehicle type, in the following chart.



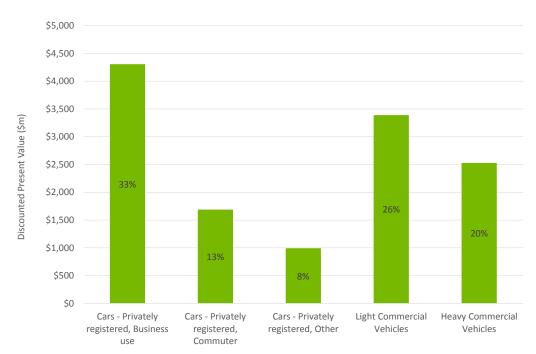


FIGURE 5. PRESENT VALUE TRAVEL TIME BENEFITS BY VEHICLE TYPE

Source: Adapted from Table 12.6 of Updated Strategic Business Case

As shown, 33 per cent of travel time benefits are attributed to cars – privately registered, business use. This comprises 19.4 per cent of total benefits for WestConnex. Part of this high benefit value is driven by the cost of time applied to business travellers (\$53.60 per hour compared to commuters at \$21.32 per hour) which is in line with Austroads advice. However, it is unclear why so many business car users have been included in the analysis – justification is not provided in the *Updated Strategic Business Case*. If these users were instead converted into commuters, then benefits would fall by \$2.6 billion reducing the BCR from the recalculated 1.64 to 1.45.

Linked to the issue of business trips is how Wider Economic Impacts are estimated. The agglomeration component of Wider Economic Impacts is on the basis of firms interacting with each other more due to improved accessibility. The high value of travel time benefits for business motorists suggests that a sizeable agglomeration benefit would be calculated – a typical estimate would be 20 to 30 per cent of transport benefits overall. However, agglomeration benefits in the *Updated Strategic Business Case* are seven per cent of transport benefits – a misalignment with the very large time travel benefits for business travellers.

3.4 Consideration of health, wellbeing and land use impacts

The economic appraisal of WestConnex in the *Updated Strategic Business Case* uses a traditional cost benefit analysis framework which focuses on travel time improvements and vehicle kilometres travelled to estimate user benefits (value of time) and externalities such as increased/decreased accidents, carbon emissions and noise pollution. This approach to assessing the impact of a proposed road is well established and accordingly, guidelines and values are provided for in *TfNSW Guidelines*.

However, for a road as significant as WestConnex in terms of scale and cost, it could reasonably be expected that more extensive analysis would be prepared. This analysis, whilst not specifically required by the *Guidelines*, would reduce uncertainty generated by documents released to date, and would help to establish the strategic merit of WestConnex – something has not been achieved to date.



The manner in which crash cost savings (see Section 3.1 of this review) have been treated in the economic analysis does not appear to consider the broader ramifications of how WestConnex will affect non-users of the road. Further to this, analysis of health and wellbeing impacts does not form part of the *Updated Strategic Business Case*. It is noted that the M4 East and Stage 2 EIS do assess *localised* impacts, but there is a significant gap in material released to date around the impact of WestConnex on how residents and workers will interact with the road as pedestrians or cyclists, and whether the negative impacts of the road (due to perceived safety, noise, visual pollution and so on) will affect their travel patterns. This may have impacts on local businesses (examined in the EIS documents), but more broadly, could reduce the appeal, and thus rates of active transport.

A 2008 (Medibank, 2008) study into the cost of physical inactivity showed that across Australia:

- \$719 million per annum in direct net costs were attributable to physical inactivity
- Direct mortality costs of physical inactivity reached \$3,812 million, and
- The total economic cost of physical inactivity in 2008 was \$13,830 million.

It is possible to suggest that WestConnex will reduce rates of physical activity or at the very least, hamper continued improvements in rates of physical activity due to creating unpleasant local environments and through further entrenching car dependency.





4 TRANSPORT IMPACTS

4.1 Introduction

The comments in this section are based on the *Updated Strategic Business Case* and the supporting *Traffic Technical Paper* (Appendix 1) with a particular emphasis on the approach and assumptions that have been applied. The renewal of Parramatta Road is also considered here, as is the relationship between WestConnex and public transport patronage.

4.2 Issues in the analysis

The traffic modelling methodology is inconsistent. The description of the modelling applied is opaque and confusing. It is understood that in summary, the methodology applied followed these steps:

- Road travel trip matrices for 2012 (base year) were extracted from the Sydney Transport Model (STM);
- 2. The 2012 trip matrices were then modified using matrix estimation;
- 3. Trip matrices for future years were estimated using the base year matrices and "future year traffic growth assumptions sourced from the STM (that takes account of data like demographics and transport networks)" (Technical Paper 1, Appendix A, page 2, dot point 4);
- 4. Induced trips were added to the project case trip matrices using travel time elasticity;
- 5. Matrices were assigned to the road network using the toll choice model to separate trips into various categories of vehicle class and toll/non-toll use using the toll road choice assignment model.

There are several areas of concern with this approach which are noted below:

- Base and future population and employment data was based on a September 2014 release by the Bureau of Transport Statistics, but the base year for matrix estimation is 2012. This inconsistency is not identified anywhere in text.
- Description of the development of the WRTM project model repeatedly makes reference to driver behaviour (see Appendix A, page 2) which is not a valid representation of the model – they represent statistical characteristics of a transport network, not driver behaviour.
- Reference to the 'WestConnex Scheme Study Area" is unclear as it is not defined anywhere in the Updated Strategic Business Case
- The reason for not using STM matrices more fully is not explained and not obtaining forecast matrices for 2021 and 2031 is questionable. STM matrices would have accounted for induced trips more adequately (negating the need to use elasticity-based calculations), and
- The absence of a 2041 or 2046 model year is concerning.

The treatment of induced demand is questionable. Infrastructure Australia highlighted that the original WestConnex Business Case had failed to account for induced demand. The *Updated Strategic Business Case* documents (Section 10.5 and Section 5.3.1 of the Technical Paper) state that induced trips make up only 0.4 per cent of the total WRTM network. However, this statement is not correct. The Auditor-General review of the initial WestConnex Business Case in fact noted that the road would generated significant additional traffic particular where congestion already exists in peak periods and further growth is expected.



Using '0.4 per cent of the total WRTM network' downplays the overall number of induced trips generated by WestConnex, as total network trips pertain to Sydney as a whole, rather than the study area specifically.

Examining Screenlines provided in Appendix A shows that induced trips make up nearly 80 per cent of traffic crossing Screenline 2 (morning peak), and 53 to 65 per cent of traffic crossing Screenlines 2 and 3 in terms of daily traffic volumes. 94 to 125 per cent of heavy vehicle traffic (daily) crossing Screenlines 2 and 3 are induced trips. These forecasts are concerning, as they suggest a very high level of new trips will be induced by WestConnex. Complicating this analysis is a lack of evidence of the source of the increased volumes and unclear presentation of charts.

In contrast, daily volumes crossing Screenline 8 (which includes the M5 East) are forecast to reduce total volumes by 5 per cent and heavy vehicle volumes by 22 per cent. As a result, the M5 East and new M5 motorways together will lose around 25,000 vehicles per day but this counterintuitive result is not explained. Projected volumes on surface roads do not increase substantially and do not account for the reduction in vehicles across the Screenline. This suggests that the M5 East motorways will have reduced traffic as a result of Stages 1 and 2 of WestConnex and Sydney Gateway, raising the question of whether the new M5 is in fact needed.

Many of the presented results are inconsistent. Counterintuitive results are presented for changes in average speed and vehicle capacity (V/C) ratios resulting from WestConnex (Table 5.4 of Technical Paper 1). These results may be caused by complex speed-flow calculations, but are not explained. They include:

- At Screenline 1, the M4 Motorway v/c ratio drops from 1.1 to 0.9 but the average travel speed increases to 82km/hour. At Screenline 8, the v/c ratio for the existing M5 East falls by a larger margin from 1.1 to 0.7, but average speed on the road increase to only 51km/hour, despite the two roads being reasonably similar
- At Screenline 1, Parramatta Road has a relatively low v/c ratio of 0.5 increasing to 0.6, but the average speed of travel in both cases is less than 10 km/hour, even though the road is well under capacity. By comparison, at Screenline 6, Iron Cove Bridge is well above capacity at v/c = 1.4 to 1.3, with speeds of less than 10km/hour
- At Screenline 7, the v/c ratio on Fairford Road/Joseph Street, it appears that the introduction of WestConnex will double travel speeds, from 24 to 50km/hour without any decrease in the v/c ratio, which would remain at 1.0.
- Similarly, the travel speed on Southern Cross Drive is forecast to increase substantially from 40 to 68 km/hour without any change in the v/c ratio.

Traffic forecasts are not adequately tested. Appendix A of Technical Paper 1 notes the complexity of traffic forecast modelling. However, all results in the *Updated Strategic Business Case* are presented as absolute numbers rather than in ranges. The sensitivity of the modelling should have been tested against reasonable variations to input parameters to provide credibility to the estimates.

Impact of tolls is not fully explored. The toll regime that is used in traffic forecasts is not fully explained. Some description in Section 9 of the *Updated Strategic Business Case* is provided, but it is not clear whether:

- toll capping will apply to WestConnex only
- the tolling regime for Western Harbour Tunnel will include tolling in both direction given that demand for northbound and southbound travel will vary due to the presence of alternatives.

4.3 The renewal of Parramatta Road

The renewal of Parramatta Road is identified in the *Updated Strategic Business Case* (Section 2.6). However, the description of renewal efforts appears to support WestConnex as being an 'enabling' project for Parramatta Road's renewal – this is not supported by data. The WestConnex M4 Widening



Environmental Impact Statement (EIS) showed that under WestConnex, Parramatta Road will take more traffic in the future, not less (M4 Widening EIS, Appendix D, p. 144).

The EIS also found that tolls on the newly widened M4 would result in a 35 per cent increase in the number of weekday vehicles. When tolls were removed on the M4 in 2010, traffic on Parramatta Road fell by 24 per cent in the morning peak. If tolls are reinstated on the M4, it is reasonable to assume traffic will avoid the tolled M4 and use the free Parramatta Road.

Average weekday traffic volumes on Parramatta Road will increase under WestConnex for five of the 14 sections (refer to Figures 5-5, 5-6 and 5-11 of the *Updated Strategic Business Case*). Daily traffic, morning peak traffic and daily truck volumes are all projected to increase under WestConnex east of Glebe Point Road. The impact of these increases and more broadly, changes in traffic movements across Sydney, are not analysed in conjunction with urban renewal proposals. For example, it is not understood whether development potential of the Bays Precinct and Green Square will be hampered due to WestConnex. The link between WestConnex and how it may affect future supply of employment lands and housing is critically absent.

It is recognised that the *Updated Strategic Business Case* notes the *Urban Amenity Improvement Program* will be funded as part of WestConnex, delivering a \$200 million package to improving the corridor (page 174) along its key growth precincts (see Figure 7.2 on page 173 of the *Updated Strategic Business Case*). However, the details of these improvements is not provided.

4.4 The impact on public transport patronage is low

Analysis of mode shift from public transport to roads as a result of WestConnex was undertaken for 2026. It showed that in total, around 3,500 trips would be converted from public transport to roads per day.

The following table lists changes in the number of public transport trips under a base case (no project) and a WestConnex scenario in 2026. Only LGAs with a change in public transport trips under WestConnex are shown. This table demonstrates that overall, WestConnex will not have a significant impact on public transport patronage. The Leichhardt LGA will see a small increase (2 per cent) in daily public transport trips as increased local congestion and the introduction of tolls see 800 trips a day move from road to public transport.





LGA - Origin	Base Case	WestConnex	Change in PT trips	% change
Leichhardt (A)	40,500	41,300	800	2.0%
Botany Bay (C)	37,800	38,300	500	1.3%
Waverley (A)	52,500	52,800	300	0.6%
Hunter's Hill (A)	6,300	6,500	200	3.2%
North Sydney (A)	103,700	103,900	200	0.2%
Warringah (A)	55,400	55,600	200	0.4%
Bankstown (C)	74,300	74,400	100	0.1%
Baulkham Hills (A)	73,900	74,000	100	0.1%
Hornsby (A)	75,100	75,200	100	0.1%
Lane Cove (A)	21,700	21,800	100	0.5%
Maitland (C)	13,200	13,300	100	0.8%
Marrickville (A)	63,000	63,100	100	0.2%
Mosman (A)	17,300	17,400	100	0.6%
Ryde (C)	71,100	71,200	100	0.1%
Willoughby (C)	79,000	79,100	100	0.1%
Woollahra (A)	45,600	45,700	100	0.2%
Blacktown (C)	119,200	119,100	-100	-0.1%
Burwood (A)	37,200	37,100	-100	-0.3%
Camden (A)	20,700	20,600	-100	-0.5%
Campbelltown (C)	49,000	48,900	-100	-0.2%
Canada Bay (A)	38,800	38,700	-100	-0.3%
Kogarah (A)	28,900	28,800	-100	-0.3%
Parramatta (C)	134,500	134,400	-100	-0.1%
Wollondilly (A)	4,100	4,000	-100	-2.4%
Ashfield (A)	27,500	27,300	-200	-0.7%
Hurstville (C)	51,500	51,300	-200	-0.4%
Penrith (C)	63,600	63,400	-200	-0.3%
Sutherland Shire (A)	67,000	66,800	-200	-0.3%
Auburn (A)	44,600	44,300	-300	-0.7%
Fairfield (C)	62,300	62,000	-300	-0.5%
Holroyd (C)	32,700	32,400	-300	-0.9%
Liverpool (C)	63,100	62,800	-300	-0.5%
Strathfield (A)	23,400	23,100	-300	-1.3%
Sydney (C)	853,600	850,000	-3600	-0.4%
Total	3,070,500	3,067,000	-3500	-0.1%

TABLE 3. DAILY TRIPS PUBLIC TRANSPORT - BASE CASE AND WITH WESTCONNEX, 2026

The logic behind these shifts in mode share is that the public transport network is CBD oriented, and that WestConnex does not get close enough to the city to provide an alternative to public transport. The smaller change at a CBD level appear to demonstrate that WestConnex only provides an alternative to local roads east of Stage 3, while its impact disappears west of Stage 3. Appendix A of this report provides further detail on the Zenith model which was used to develop these forecasts.



5 CONCLUSION

The construction of a major set of toll roads as proposed by WestConnex does not align with the needs of Sydney during the 21st Century. Other global cities have recognised that congestion cannot be solved by simply building more roads and in turn, these cities have focused on public transport and demand management to deal with congestion.

The WestConnex *Updated Strategic Business Case* should describe the need for the project, build the case that the project is the best solution for Sydney, measure the project's benefits and identify project costs. However, the *Updated Strategic Business Case* fails to address many of the key requirements of a business case. The purpose of WestConnex and who will benefit from the project remains unclear.

Aspects of the Updated Strategic Business Case which are of most concern are:

- The Updated Strategic Business Case does not consider any strategic alternatives to WestConnex.
- The description of the transport modelling applied to the WestConnex project is opaque and confusing and the toll regime that is used in traffic forecasts is not fully explained.
- Once the Western Harbour Tunnel and Northern Beaches Link are in operation, the Updated Strategic Business Case suggests that WestConnex will be close to capacity by 2031. If wholly completed by 2021, this would result in \$16.8 billion being spent for around ten years of marginally improved travel times.
- Establishing a motorway through The Bays Precinct appears counterintuitive to the aims of the urban renewal project to create.
- The costs of WestConnex are high and are likely to be even higher.
- The traffic modelling has a range of issues which are concerning for a project of this scale. These
 include the treatment of induced demand and its impact on the project benefits, a lack of sensitivity
 testing and the lack of modelling for more distant future year (e.g.2046).
- The benefit cost ratio of 1.71 does not add up based on information provided in the document.
 Dividing the present value of benefits against the present value of costs results in a benefit cost ratio of 1.64. This difference is too large to be the result of a rounding error.
- If travel time savings of less than five minutes is excluded, the travel time benefits are reduced from \$12.9 billion to \$5.9 billion – reducing the BCR from the recalculated 1.64 to 1.12.
- The rationale for the large proportion of business trips is unclear. 33 per cent of travel time benefits are attributed to cars – privately registered for business use. However, justification on why there are so many business car users is not provided in the Updated Strategic Business Case.
- Land acquisition costs or the opportunity cost of land being used for the project do not appear to be included in the WestConnex project costs or in the broader cost benefit analysis.
- The health impacts, local amenity impacts and related land use implications are not discussed by the Updated Strategic Business Case.



APPENDIX A

About the Zenith Model

The Zenith Model is a transport model that is based on employment and population projections compiled by the Bureau of Statistics and Analysis at Transport for New South Wales. First established in 1988, the Zenith model is a mature travel demand model that is often applied to major projects across Australia, including:

- Cross-City Tunnel (provision of expert services in legal proceedings),
- M5 Motorway (for a toll road operator),
- Lane Cove Tunnel (forecasting demand post opening for ABN Amro),
- Sydney Metro (as part of submission to Infrastructure Australia).

Other major projects include:

- East West Link Toll Road (for Victorian Government),
- Melbourne Metro Project (for submission to Infrastructure Australia),
- CityLink Toll Road (for Victorian Government),
- EastLink Toll Road (for Victorian Government).

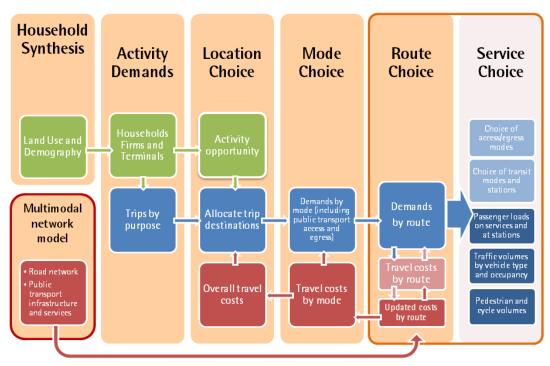
The following subsection provides an overview of Zenith. More information can be obtained from: http://www.veitchlister.com.au/zenith/overview.

How the Zenith Model works

Zenith attempts to replicate demand for travel by residents and visitors in the Sydney region, which is derived from the demand for participation in activities. Travel choices can vary based on frequency, timing and duration of participation, location of activity, mode of travel and the route that is chosen. Zenith simulates travel behaviour of households, businesses and visitors using statistics such as employment by industry, enrolments at education facilities and demographic variables such as population and number of households. The overall process of the Zenith model is shown in the following figure.



FIGURE 6 KEY STAGES OF THE ZENITH MODELS



Source: Veitch Lister Consulting

Each region is divided into several thousand travel zones to enable a high degree of resolution of forecast movements between locations. It simulates travel considering:

- When the travel is made
- Why it is made (purpose)
- Where the travel is made to and
- The mode of travel that is used.

Travel demand forecasting is not a precise science and outside factors tend to complicate outcomes. For example, changes in government policy and fuel costs can affect travel decisions.

Zenith is based on an integrated multimodal transport network. Thus frequencies and schedule of public transport services and the speed or capacity available for certain vehicles may be defined separately for each period. Buses or goods vehicles may travel on the same section of road as cars, but with different average speeds and, where separate right-of-way is provided, can be assigned separate capacities. Walking and cycling is also possible on links which do not preclude access. In general, rail infrastructure and specific public transport right-of-way is only available to public transport services.

Services may be defined by operator, line group, or any other characteristic of interest in the model. Travel times for public transport services may be derived from the speed attributed to the underlying infrastructure or by definition of timetables, and can be subject to delays due to congestion or crowding. The current version of the Zenith model defines service times from the average operating speed on each link.

With that said, whilst strategic travel models are useful tools to forecast vehicle and people movements across the transport network through freeways, arterial and sub-arterial roads and major public transport infrastructure, traffic volumes forecast on collectors, local roads and access streets, should be treated with caution. Traffic volumes on local roads heavily depend on the adopted zone system and where centroids are connected to the network. Until transport modelling is able to simulate each household and business individually, forecast volumes on these lower order roads should be treated with caution.



Further technical detail is available in the WestConnex Transport Modelling Summary Report².

² http://www.cityofsydney.nsw.gov.au/__data/assets/pdf_file/0011/232697/150427_COUNCIL_ITEM35_ATTACHMENTA.PDF



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ATTACHMENT 2:

Summary notes from five public meetings held in November 2017 & February 2018 on WestConnex Stage 3 (M4-M5 Link) construction & traffic impacts

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Introduction

At its 3 October 2017 Ordinary Meeting, Council resolved to "Convene a series of on-site meetings for residents and business owners in the immediate vicinity of the construction and dive sites proposed in the Stage 3 EIS to provide location specific, factual information to them about Council's assessment of the impacts, including air quality, traffic and construction impacts. This should include meetings to be held at Haberfield, Leichhardt, Rozelle, Camperdown and St Peters." At the meeting, Councillors had indicated that operational traffic issues should be included in the discussion.

Accordingly the following five meetings were held (all at 6:30-8pm):

- *Meeting 1:* 22 November 2017 at Lilyfield to discuss multiple construction sites in the Rozelle/Lilyfield area;
- *Meeting 2:* 28 November 2017 at Leichhardt to discuss the construction site at Darley Road, Leichhardt;
- Meeting 3: 7 February 2018 at Ashfield to discuss Haberfield/Ashfield construction sites;
- *Meeting 4:* 14 February 2018 at Petersham to discuss the Annandale/Camperdown construction site; and
- *Meeting 5:* 21 February 2018 at Newtown to discuss the construction site at Campbell Street/Road, St Peters.

For each of these meetings, residents in the vicinity of construction sites were notified in advance by letterbox drop, and notices were posted on Council's website. The Mayor, Clr Darcy Byrne, introduced each of the meetings, with the exception of the Ashfield meeting, where Clr Lucille McKenna (Leichhardt Ward) undertook this task. At each meeting, Council staff gave a PowerPoint presentation of around 30 minutes duration to explain the sites, likely impacts and issues. Each of these presentations was posted on Council's web page soon after the meeting. For the remaining time (about 50 minutes), attendees were able to ask questions and make comments during an open-mic session.

Council staff took notes during the open-mic session and a summary of questions and comments relevant to WestConnex Stage 3 construction and traffic impacts is below. These notes show questions/comments as they were made in chronological order. In attendance at all meetings was the Mayor (except for the Ashfield meeting), Inner West Councillors, Council staff, residents and business operators. State Members were in attendance at some meetings.

Summary of meeting introductions

The Mayor introduced the meetings by welcoming all in attendance, acknowledging the traditional owners of the land, stating Council's position on WestConnex and identifying Council's main Stage 3 construction and traffic issues (5-10 minutes).

A summary of the main points is as follows:

- Council has formally adopted a position of opposing WestConnex (both approved and future stages), including Stage 3. This is consistent with the positions of the former councils of Ashfield, Leichhardt and Marrickville.
- Immediately after the September 2017 Council elections, an Extraordinary Meeting was held and Council's position was reconfirmed to be one of complete opposition to the project. Council had noted that the former Administrator had adopted a position of opposing WestConnex despite being a NSW Government appointee.
- These meetings have been convened by Council to consider construction issues raised by the Stage 3 (M4-M5 Link) Environmental Impact Statement (EIS) on residents around construction sites proposed at: Lilyfield, Rozelle, North Annandale, Leichhardt, Ashfield, Haberfield, South Annandale, Camperdown and St Peters.
- The NSW Government has not provided adequate information on Stage 3 in the EIS. Council is seeking to provide residents with facts on impacts, which are serious, longterm and likely to have significant social and environmental impacts.
- The community will be greatly affected by the truck movements associated with construction. Trucks make roads unsafe, lower people's quality of life, increase noise levels and decrease residents' amenity.
- Night-works continue to impose significant impacts on residents surrounding Stage 1 and Stage 2 construction sites. Council had demanded a curfew on Stage 3 works in its EIS submission. This could have the side-effect of increasing the project's timeline, but it would seem currently that the NSW Government's timetable doesn't allow for any disruptions to the project's schedule.
- Some businesses around the Rozelle Rail Yards (RRY) site are fighting compulsory
 acquisitions by challenging Roads & Maritime Services (RMS) in the Supreme Court.
 As these sites are needed for construction only, RMS should lease them (not acquire
 them). Council will monitor progress of this court case, as it may provide useful
 information in relation to opposition to residential acquisitions.

- Council is investigating the potential to provide independent dilapidation and structural assessment reporting for home and business owners potentially affected by tunnelling for the project.
- Council had investigated alternative options for the Darley Road dive site. Council had commissioned the 'Holt report', which had recommended the western end of the RRY site as a possible lower-impact alternative.
- Council is aware of the contentious issues around negotiations for acquisition of the Dan Murphy's site on Darley Road. This matter has been referred to the State's anti-corruption watchdog by the State Member for Balmain.
- Leichhardt Against WestConnex (LAW) has also been investigating this matter in particular, the 2012 decision to grant a 20-year lease extension on the site without going to public tender.
- Stage 3 will see the largest underground interchange in the southern hemisphere constructed the Rozelle Interchange. Currently RMS is unable to find a contractor and has recently put the project out to tender again. A worst-case scenario is that the interchange would be constructed above-ground, which would be disaster for the Inner West.
- The project started with guessing the costs, which have subsequently blown out. WestConnex is a wasteful project and planning of it has been inept. Haberfield and St Peters residents are experiencing night-noise, dust, odours and all other associated construction impacts. This is affecting quality of life and residents' ability to sleep at night, and young children are being affected by dust.
- We need to stop the NSW Government granting permission to utility organisations to work unrestricted hours. Council does not want more Inner West suburbs to be subjected to this.
- Council has committed over \$2M toward the WestConnex Unit to advocate for citizens on this project. The formation of the Unit was a decision of the previous Administrator.
- There are two main components of Council's advocacy efforts on WestConnex firstly to oppose the project and secondly minimise its impacts.
- Council staff continue to respond to plans presented by SMC, and in doing so seek to mitigate impacts on our communities.
- Should Stage 3 proceed, Council will continue to fight for amelioration of construction and operational impacts.

Meeting 1: Rozelle, Lilyfield & North Annandale areas

This was the first of the five meetings - held at the Jimmy Little Community Centre, Lilyfield at 6:30-8:00pm on Wednesday 22 November 2017. Total attendance was around 150. There was a welcome by Mayor, followed by a presentation by Council staff on the main construction and traffic issues raised for Council in the areas of Lilyfield, Rozelle and North Annandale. After the Council staff presentation there was an open-mic session, where all in attendance had an opportunity to make comments and ask questions.

A summary of the main points raised during the open-mic session is as follows:

• A resident asked if Stage 3 would affect Callan Park? The Council staff response was that Stage 3 will not *directly* affect Callan Park, but there will be an impact nearby at King George Park from the Iron Cove construction site. Access to King George Park and Callan Park will be affected by this construction site.

- A resident raised concerns over the bio-retention facility to be installed near the oval in King George Park. Council staff explained that this facility was designed to catch the run-off from construction and the road to prevent pollutants entering nearby waterways.
- A resident expressed scepticism about the NSW Government taking any notice of the community's submissions on the Stage 3 EIS. It is appropriate that protest marches commence. As Stages 1 and 2 are almost built, what is the purpose of meetings like these? The Mayor responded that he supports a protest march if that is what the community is seeking, and Council will continue to oppose the project. Council has allocated over \$2M to fight WestConnex and ensure its impacts are minimised. This includes the creation of the specialist WestConnex Unit, a traffic modelling study to address the project's impacts on local roads and funding of community campaigns.
- A resident asked if the future is electric cars, why are so many ventilation stacks required to be built, when in 20 years cars will be running on electricity? Why are there now three ventilation stacks proposed the RRY site, when originally there was only one? It is unacceptable that local residents must endure an increase in the number of stacks. The height of these stacks is visually obtrusive and the design adds to visual pollution. Council staff explained that the additional stacks were required for the proposed Western Harbour Tunnel (WHT).
- A resident expressed concern over the number of geotechnical investigations being carried out for the WHT in Balmain streets.
- A resident asked is there any chance of stopping WestConnex Stage 3? Council staff's response was yes, until construction has started there is always a chance to stop Stage 3. This is particularly as it is proving difficult for the Government to find a contractor for the Rozelle Interchange, so they may need to find another solution. Council doesn't want any alternative solution to be worse than what is already proposed. Stages 1 and Stage 2 will be completed as they are funded and construction is well-advanced.
- A resident who is also a representative from Leichhardt Against WestConnex (LAW) stated that there is no rhyme or reason for this project whatsoever. It is unacceptable that once the EIS is approved, the design will only be finalised once the contractor has been engaged, without any further consultation from the community. LAW representatives have been meeting with staff from RMS, SMC and the Department of Planning & Environment (DP&E) on a regular basis, and information from these meetings has been conveyed to the community via LAW's website. The final tunnel design is still unknown, and over the past 18 months SMC has not directly answered questions from LAW. The community still does not know where things are going, and RMS seems to be distancing itself from SMC.
- A resident and LAW representative asked the Mayor what comfort and assurance can you provide to the community that you will listen and act on their behalf? The Mayor responded that he acknowledged the efforts of LAW. For the past five years, the Mayor has held a consistent position of opposition to WestConnex. Stage 3 is an issue for the community and the Mayor will not shy away from it if a rally is what the community wants, then it will be supported. The Mayor and councillors are elected to represent the people of the Inner West and they are committed to continuing to oppose WestConnex.
- A resident who is also Rozelle Against WestConnex (RAW) representative sought to move a motion on tunnelling. So many local homes are built on sandstone and tunnels proposed for Stage 3 are as shallow as 10 metres. The motion is *"Council to demand that no tunnelling whatsoever to take place under 35 metres"*. Residents should be encouraged to independently commission their own dilapidation reports and/or carry out their own assessments. Council staff responded that though this is not a formal Council

meeting where motions are passed, Council will note this motion and ensure it is in the notes, which will be forwarded to the DP&E for information.

- A resident stated that the community has won battles against the NSW Government in the past for example, through public demonstrations over development proposed at Callan Park. The community won by marching down Balmain Road on a Saturday. Journalists from newspapers will attend if it is a significant demonstration.
- A resident asked are there any statutory options to "press pause" on the project given the EIS process issues Council has raised? The Eastwest Link motorway in Melbourne was defeated primarily by a commitment by the opposition to tearing up the project's contracts if elected. Can Inner West residents obtain the same leverage? There should be collaboration within local government and with Western Sydney Regional Councils (WSROC), given that WestConnex will not deliver for Western Sydney.
- Council staff's response to the above question was that the Administrator had commissioned two pieces of legal advice in 2016 and 2017, available to view on Council's website. In both cases, the advice concluded that that the legislation has been set up not to allow challenges. It should also be noted that a resolution form the 12 October 2017 Mayoral Minute is "Produce a report, for consideration by Councillors, exploring all legal avenues available to Council to challenge the compulsory acquisition and approval processes for the WestConnex project."
- The Mayor pointed out that the situation in Melbourne was different in that the Eastwest Link had not commenced. It should be an objective for Council and the Inner West community to delay WestConnex as long as possible – but it looks as though the drafting of the contracts will be well underway by the next State election. Council is committed to being unrelenting in its advocacy. A meeting is scheduled between Council and WSROC, and it is agreed the Inner West needs to work collaboratively with Western Sydney.
- A resident pointed out that the NSW Government needs to have Stage 3 contracts signed so it can sell 51% of SMC to the private sector. The Government is committed to building the Rozelle Interchange and will have to pay for it regardless of whether or not it is built according to the design currently proposed. All NSW residents will pay, not just road users.
- A resident stated that even with WestConnex, access to the CBD will still be difficult as the capacity on the Iron Cove Bridge and Anzac Bridge will remain the same. There may be decreased traffic on part of Victoria Road from WestConnex, but this is not enough of a benefit.
- A resident explained that the Premier announced recently that motorists spending more than \$25 a week on Sydney's toll roads over a year will be eligible for free vehicle registration. This will cost NSW up to \$100 million in the first year and even more into the future. The Government will be paying motorists to use motorways, which is a victory for toll operators at the expense of taxpayers. The fact that this was not factored into the WestConnex business case is a misrepresentation. Can Council challenge these types of misrepresentations?
- A resident stated that there is a need for unions to come on board to oppose WestConnex, but the community must first demonstrate a commitment to opposing it.
- A resident asked Council staff what are the latest plans regarding the Sydney Gateway component of WestConnex? What research is being undertaken to see if any project of the scale of the Rozelle Interchange is being planned or constructed elsewhere?
- A resident expressed concerns about Council focusing on amelioration rather than *stopping* WestConnex. There is a need to stop Stage 3 *now*, as valuable public

transport corridors may be lost if it proceeds. Ecotransit is making residents aware that the railway corridor from the RRY site to the Balmain peninsula will be lost, and a pedestrian crossing over Victoria Road and bicycle link into Glebe are at risk. Council staff stated that these issues were raised in Council's Stage 3 EIS submission.

- A resident asked the Mayor what can we physically do to have an impact? My property
 is located on Lilyfield Road and backs onto the construction site. The Mayor responded
 that he sympathises with residents living through construction, noting that residents of St
 Peters and Haberfield/Ashfield are still experiencing significant impacts from dust and
 noise. North Shore schools are complaining about ventilation stacks proposed for the
 WHT. A meeting is planned at Rozelle Public School to discuss ventilation stack issues,
 with a view to working collaboratively with North Shore schools. There is a need for the
 media to become involved in these issues.
- A resident expressed concern about emissions from stacks and reliance on EIS modelling to understand the extent and nature of emissions. It may be true that less pollution will be emitted from the Victoria Road stack due to a shorter length of tunnel, but there was a study undertaken 15 years ago that showed there was a high level of air pollution around Iron Cove, as the air tends to settle in the cove.
- A resident from Callan Street Rozelle expressed concerns about reduced parking at King George Park because of the WestConnex bio-retention facility and formalisation of parking if Stage 3 goes ahead. WestConnex proposes only 42 spaces, whereas on Saturday 2 December 2017, with Balmain Little Athletics in progress, the number of parked cars at 11am was 106. The parking overflow affects Manning Street, forcing local residents to park in adjoining streets. Where does WestConnex think this extra traffic will be parking? Streets in this precinct are largely shared zones - it will be dangerous to have circulating cars mixing with children walking to the park. Residents are not against sporting activities at the park. Residents also like the informality of the existing car park because it allows for additional parking, reducing stress for the poor parents on the sport run. It also means the community doesn't need to make complaints about child safety and aggressive driver behaviour.
- Clr Stamolis (Balmain Ward) expressed his support for Council holding a rally against WestConnex. The Administrator stated in his final report that Council must represent the community, and the community is saying *"no to Stage 3"*. As a Council we must be committed to supporting this. WestConnex was the biggest issue in the Inner West at the September 2017 local government elections.

Meeting 2: Leichhardt area

This second meeting was held at in the assembly hall at Sydney Secondary College, Leichhardt on Tuesday 28 November 2017. Total attendance was around 90. The welcome by the Mayor was followed by a presentation by Council staff on construction/traffic issues, with a focus on the proposed dive-site at Darley Road, Leichhardt. After the Council staff presentation there was an open-mic session, where all in attendance had an opportunity to make comments and ask questions.

A summary of the main points raised during the open-mic session is as follows:

• A resident, LAW member and CEO of the Canal Road Film Centre advised that the centre is the largest film facility in Australia, and the Australian film industry has a turnover of \$58B. SMC staff were not even aware that the centre existed when they were approached about concerns that truck movements would affect access to/from Canal Road businesses.

- A resident who lives near Whites Creek asked why the Inner West Interchange is not mentioned in Council's presentation? The tunnels of this interchange are at shallow depth and should not be allowed. This interchange seems to fall under the radar. Council staff's response was that Council is aware of this interchange and it is included in one of the maps in the presentation. Council is also aware of concerns about the shallow depths of tunnels, and this was raised Council's Stage 3 EIS submission. The Inner West Interchange will feed into the Rozelle Interchange and will be entirely underground. However, as there will be tunnels on top of other tunnels, there will be places where tunnel depths are relatively shallow.
- A resident asked would Council consider closing off Francis Street as has been done with James Street? This would protect residents throughout the construction period from trucks and workers' cars. Residents would likely support having the only entry being from William Street. Council staff's response was that Council will continue to investigate traffic management options for mitigating WestConnex impacts, including temporary and permanent closures. Council needs to see what is proposed in Stage 3 traffic management plans, which have yet to be drafted and approved. Any road closure or traffic management option would certainly involve community consultation and would need to have general community support. Council's overall position has always been that Darley Road is not a suitable location for a mid-tunnel dive-site. This opposition is partly based on traffic issues.
- A resident stated that it is currently very difficult to make a right-hand turn from Norton Street onto City West Link, as there is no right-hand turn arrow. If we have extra cars and workers trying to get onto Norton Street it will be chaos, particularly during the morning peak period. What is Council doing about this issue? Also, what is Council doing to try to stop the unbearable construction noise? Council staff agreed that the traffic and noise impacts of the Darley Road dive-site would be unacceptable. As currently planned, the traffic arrangement couldn't work, with many trucks negotiating this busy and difficult intersection. Council will need to argue against RMS on this issue. The alternative preferred option advocated by Council and LAW is for the trucks to come directly off City West Link. Again, Council is of the view that the Darley Road site is simply not suitable as a mid-tunnel dive-site.
- A resident pointed out that there are many boats, trailers and advertising vehicles parked along Darley Road and asked what is Council doing about them? Council staff's response was that Council is looking to trial No Parking restrictions in other streets, but to do this in Darley Road requires RMS support as it is a State road.
- A resident asked on the WestConnex maps in the presentation there are houses highlighted in orange what does this mean? Council staff's response was that this relates to categories for noise mitigation treatments (such as double-glazing) for construction noise, not operational noise.
- A resident who is also a LAW representative advised that LAW has been meeting with SMC and RMS over the Darley Road site for over 18 months and have been repeatedly told that the issues raised would be addressed in the EIS. However this has not been the case, and there are no plans for worker parking and truck movements. There would be up to 100 trucks a day at Darley Road and work would continue at night. SMC and RMS do not listen to the community and will do nothing to address their issues. Council has to continue opposing the project and to oppose use of Darley Road site, as there is no way to make it safe. What are Councils' plans to oppose this site?
- The Mayor responded by stating he recognises the efforts of LAW, particularly in bringing out improper handling of the lease and acquisition the Dan Murphy site. Council's position will not change from complete opposition to this project. The WestConnex Unit will receive an additional resource to work with advocacy groups to

assist with the fight. It seems the NSW Government cares more about eastern and northern suburbs than the Inner West.

- A resident who is also a WestCONnex Action Group representative pointed out that Council must acknowledge that residents living with Stages 1 and 2 are really suffering now. In this week's Inner West Courier there is an article on the front page: *"Sleepless in St Peters"* which highlights the awful situation of a St Peters family enduring continuous night-noise with no respite offered - not even a night at a motel for \$67. Council has committed to funding an officer to assist local groups with their advocacy. Where is this person? Council staff's response was that this process will take time as it is a legislative requirement as part of the council amalgamation process that existing staff have an opportunity to apply for this position.
- Council staff pointed out that although Council does not have a formal compliance role, the DP&E's WestConnex compliance officer works part-time from Council's WestConnex Unit. This has enabled Unit staff to learn about WestConnex complaints issues and procedures. DP&E's role is to monitor compliance with WestConnex conditions of approval, whereas the Environment Protection Authority (EPA) has a role in monitoring compliance with environmental licensing conditions and utility works that fall outside bounds of the project. DP&E and EPA representatives attend monthly meetings of Council's WestConnex Community Liaison Forum (WCLF) to brief the meeting on WestConnex compliance issues.
- A resident expressed doubts over management of trucks on Darley Road, particularly as the drivers are private contractors, not employees. This road will be choked and these drivers *"will do anything to get the trucks out of there"*. Have seen examples of dangerous behaviour with trucks operating out of the Cintra Park site in Concord for example, trucks pull out across six lanes of traffic on Parramatta Road. This type of behaviour will happen on Darley Road.
- A resident from St Peters stated that the Stage 3 EIS does not provide information on mitigation against construction noise. Construction noise is the main issue, not operational noise. St Peters now experiences a ridiculous number of truck movements.
- A resident stated that Stage 3 is not needed, and the Rozelle Interchange can't and won't be built safely.
- A resident asked who would co-ordinate truck movements? Council staff's response was that each site would have a co-ordinator who would dispatch trucks from the marshalling area. The co-ordinator would call for trucks to come when they are ready. This is the theory, but there is little evidence to show that this would actually happen. In Haberfield, the trucks just seem to drive around residential streets until the site is ready to receive them.
- Clr Mark Drury (Ashfield Ward) stated he has a passion for improving the Parramatta River and has been working with other councils and agencies for a long time to ensure the river is being monitored and looked after. He is concerned about what pollutants could potentially be pumped into Hawthorn Canal, Iron Cove Bay and then the Parramatta River from the Darley Road construction site. What is in place to prevent this? Council staff's response was that Council has raised similar concerns in the EIS submission, particularly in relation to water quality impacts on Whites Creek and Rozelle Bay. The EPA would issue a licence that would limit discharges from the Darley Road site.
- A resident stated there was a need to cut-off streets that lead into Darley Road, such as Elswick Street north. Looking at three different maps all show tunnels directly under my house. Can Council really control the streets under their jurisdiction? There is a need to slow down existing traffic in local streets. Council should take control of all the streets it

can (i.e. those not controlled by RMS) to manage traffic. The Mayor responded that these are perfectly legitimate ideas. Council will investigate closing these streets and/or implementing traffic calming measures. All this will be done with community consultation.

- A resident expressed concerns about pedestrian access to the Leichhardt North light rail stop and potential safety issues. What is being done to minimise impacts on light rail users of trucks accessing the Darley Road site? Council staff's response was that this is an important issue that was raised in Council's Stage 3 EIS submission. Council is aware of safety issues around students walking to and from Sydney Secondary College Leichhardt to the light rail. Council will continue to work with the school on this matter to ensure the safety of students.
- A resident stated that Council needs to put up *"Stop WestConnex Stage 3"* signs on the Leichhardt Council Chambers, Town Hall and other significant buildings around the Inner West Council area.
- Jamie Parker (State Member for Balmain) stated that there is complete opposition to the WestConnex project. Let's look at other tunnels built in Sydney and their viability the Lane Cove and Cross City tunnels both went bankrupt because the modelling was inaccurate, and the same modelling has been used for WestConnex. Already there are issues with the Rozelle Interchange with no successful tenderers. LAW has been contacting international companies and has been advising that they must not invest in this project. When the Government sells Stages 1 and 2, that money will fund Stage 3, which will be built by a private company. Let's build a strong campaign around these issues.
- A resident from Allan Street, Leichhardt has asked Council to ensure the following e-mail regarding her safety concerns about the Darley Road dive-site is included in the meeting notes:

"Dear Sir / Madam

I attended the Public Council meeting on Tuesday evening this week regarding the Darley Rd WestConnex development proposal and wanted to put in writing my concerns as a local resident living on Allen St, Leichhardt."

The proposed site is right beside the Leichhardt North light rail station, which I utilise frequently both to get to work and also with my toddler to visit various parks and locations along the light rail line.

It is wonderful to have access to the light rail line, which provides a necessary sustainable alternative to driving or catching buses in traffic, however I have several safety concerns regarding the impact that the WestConnex development could have on the light rail Station and I request that a safety report take place as I do not want the utility and safety of the Leichhardt North light rail Station to be in any way compromised.

Here are some of my points of concern:

Pollution - The dive sites and construction of said sites will be directly beside the station where people will be waiting to board on the station platform. The level of both noise and air pollution will be undeniably right on top of people at the station, which is both irresponsible and unacceptable.

Traffic Safety & Access Into Station - Darley Road is already very busy and access into the station is challenging at the best of times trying to get a young child into the light rail Station. Since the station's inception, it has felt there should be an easement into the station across what is currently the Dan Murphy's site. Currently the only access points into the station require travelling considerably extra distance to get the long way around into the station which is not ideal, particularly when juggling toddlers/prams along busy roads as many young families in the area are having to do. I'd like to request an easement into the station at this location be built in to any future plans of any sort moving forward to minimise time spent for pedestrians trying to access Leichhardt North Station from busy Darley Rd (there was a requirement for an easement that was originally part of the map/plans for the Dan Murphy's but unfortunately it never eventuated). Adding further traffic to the area with the huge quantity of trucks etc. during construction of the proposed dive site will only compromise the safety of pedestrians and light rail station patrons further.

Impact on Young & Elderly People - I know that many young families, school students and elderly people rely on the use of the light rail station for ease of mobility to travel to other destinations. The High School Students from the area attending Sydney Secondary College rely on the light rail for transport to the Senior Glebe Campus. Leichhardt is very much an area with many families with young children and therefore accessing the light rail Station should be family friendly. It is also very important to cater to the elderly and people with limited mobility and utmost safety should be of concern with regards to any developments directly beside a regularly accessed public station.

Please submit my concerns to the Government on my behalf. I request that these safety concerns be examined and addressed and that a safety assessment takes place of the impact that the WestConnex development could have on the Leichhardt North light rail Station - is this something that Council can look into directly or otherwise who do I need to talk to?

Resident - Allan Street, Leichhardt"

Meeting 3: Haberfield & Ashfield areas

This meeting was held at the Ashfield Civic Centre, Ashfield on Wednesday 7 February 2018. Total attendance was around 70. The Mayor was unable to attend this meeting due to another commitment, and the welcome was given by Clr Lucille McKenna (Leichhardt Ward) followed by a presentation by Council staff on construction/traffic issues around the Stage 3 constructions sites at Haberfield/Ashfield. After the Council staff presentation there was an open-mic session, where all in attendance had an opportunity to make comments and ask questions.

A summary of the main points raised during the open-mic session is as follows:

- A resident who lives one block back from Parramatta Road in Ashfield asked why is there generic objection to Stage 3? Council staff's response was that Stage 3 is a critical stage of WestConnex. Council's position of opposition to WestConnex is part of its long-standing position of opposition to inner-urban motorways. However the NSW Government continues to progress these inner-urban motorways despite the continual opposition. Beyond opposition, Council will look to improving outcomes for residents from Stage 3.
- Clr da Cruz (Leichhardt Ward) urged residents to attend the M4 East *Get involved in building your community's future* information session to be held at Club Ashfield, 1-11 Charlotte Street, Ashfield on Tuesday 13 February from 4pm-7pm. This is an opportunity for the community to speak to urban designers on the Urban Design and Landscape Plan (UDLP) as well as gain information about forthcoming construction activities.
- A resident asked is Council following up on the removal of mature trees that has taken place on Dobroyd Parade in the last two weeks? Why remove mature trees and replace them with seedlings in the same place at a later stage? There is on-going destruction, with so many mature trees already removed from Dobroyd Parade near Martin Street and Reg Coady Reserve. Council staff's response was that the Dobroyd Parade trees were identified for removal in the EIS due to the widening and realignment of the roadway. The project's tree replacement program is intended to ensure that trees

removed are replaced by plantings elsewhere. Notwithstanding, Council is against any trees or vegetation being removed. Clr McKenna (Leichhardt Ward) commented that the trees opposite Robson Park were removed by Council to realign the Bay Run. The Dobroyd Parade trees, between Waratah and Crane Streets, were planted by RMS when the City West Link was built in 2000.

- A resident asked what are the future plans for high-rise developments being built in the civil sites along Parramatta Road once WestConnex is built? Council staff's response was that any future development would be guided by land-use strategies and plans of the NSW Government and Council.
- A resident asked how does Council's relationship with WestConnex work? Does Council receive responses to queries? Council staff's response was that Council can advocate for residents on an individual and collective basis. Council can challenge decisions made by WestConnex if it believes a breach has occurred. DP&E compliance officers sit within Council's WestConnex Unit, offering advice and follow-up on enquiries from residents and Council staff. EPA also works closely with Council staff on compliance matters. Council has no formal regulatory role.
- A resident asked will the ventilation stacks on Parramatta Road be filtered? What does Council know of the temporary ventilation facility identified in the Stage 3 EIS maps? Council staff's response was that the stacks would not be filtered, and all ventilation facilities being built and that are already operating in NSW are not filtered. However, Council strongly argues that all stacks should be filtered.
- A resident stated that if Stage 3 is approved and construction commences, temporary ventilation fans will be used on the Muirs site and in Wolseley Street. They are needed to extract stagnant air from the tunnels until the tunnels are connected. These temporary jet fans are in operation now on the Brescia site and also on Northcote site for Stage 2, and the noise from them is atrocious.
- A resident asked how has Council involved Haberfield residents in the traffic modelling study? Council staff's response was that staff continue to working on this study. The community had an opportunity to meet with the study's consultants at a drop-in session in Lilyfield in early November 2017, and an online survey was also conducted by Council. Community feedback is being included in the draft traffic modelling report, which is planned to be reported a Council meeting in April 2018. Clr da Cruz (Leichhardt Ward) added that the traffic modelling is looking at traffic numbers once the different stages of WestConnex are operational.
- A resident referred to the air quality slide in Council's presentation and asked why is there so much green area which reflects improvements in air quality? Council staff's response was that ventilation stacks are tall and air from them is pumped out at a high velocity. This is supposed to disperse emissions directly into the regional air shed without having a local impact. In contrast, cars on surface roads have a direct local impact. Notwithstanding Council had argued that its Stage 3 EIS submission that all stacks should be filtered.
- A Haberfield resident who lives near the Wattle Street / Parramatta Road intersection supports Council's position of opposing WestConnex and assisting with advocacy for residents. Inner West Council, given its size, is in a good position to start negotiating for what needs to happen repair, restoration, reclamation, replanting, compensation for businesses and beautification of our shopping centres. Council needs to argue for compensation for the detrimental impact WestConnex is having on the entire Inner West area.
- Clr Porteous (Balmain Ward) responded by stating that Council staff do work hard, but residents should not rely entirely on Council to fight these issues. Council is made up of

different political positions and agendas, and there is a need for *everyone* to fight. Council is coming up with a proposal to put traffic calming on our local roads – and whilst this will bring benefits, it will also help make WestConnex work by forcing traffic into the tunnels. The community needs to be on board, and advocacy groups such as No WestConnex Public Transport are fighting the cause. Council should fund the WestConnex Community Organiser position. WestConnex is a private road that is publicly funded.

- A resident who is a parent with children at Haberfield Public School stated that when Muirs is sold and it is used as a construction site, there will need to be parking restrictions around the school. Council staff responded by explaining that a parking survey was undertaken in August 2017 and streets have been identified for a resident parking scheme. It is anticipated community consultation will take place in the first quarter of 2018 with the draft report presented a Council Traffic Committee meeting and then endorsement at a Council meeting.
- A resident stated that the WestConnex air quality map shown in Council's presentation does not take into account traffic growth. Council should consider including air quality in the traffic modelling it is undertaking. It would be good to know what the *actual* reduction in air quality will be. Cars will sit at traffic lights on Parramatta Road when they exit the tunnels. When Stage 1 was presented to the Haberfield community, we were told/promised that Stage 3 would be constructed underground. The Stage 3 Project Director said it was feasible to do this. The Muirs site is available, so why not do it? Council staff's response was that Council will continue to push for construction activity to be below-ground and to argue that construction site options should be chosen so that there is minimum overall impact on the Haberfield/Ashfield community. Council is also concerned with the proposed truck routes using Taverners Hill, Johnston Street and Liverpool Road.
- A resident from Northcote Street at Haberfield asked why isn't more done about illegal parking? Where are the Council parking rangers? Council staff's response was that Northcote Street is included in the proposed resident parking scheme, and Council parking rangers can be contacted to address parking issues.
- Clr McKenna (Leichhardt Ward) raised concerns about RMS proposing to make Liverpool Road through the Ashfield commercial centre a clearway from Milton Street to Parramatta Road. People live along this road, there are businesses and traffic needs to be slowed down - not sped up by making it a clearway. Trucks must stick to approved routes, not local roads.
- A resident stated that the Stage 3 *Submissions & Preferred Infrastructure Report* (SPIR) seems to show that WestConnex will be using selected Haberfield sites as car parks and will shuttle workers to other sites. There could be up to five construction sites in Haberfield. Council needs to object to this, as creating parking areas and all these construction sites is an extra burden for the community.
- A resident stated that using and modifying construction sites across Haberfield/Ashfield is making things worse for residents of Walker Avenue, who will be affected by almost all of the options presented. There is a need to review and monitor M4 East conditions of approval and ensure they are better for Stage 3. There is also a need a better way to undertake monitoring. Monitoring of B-doubles should be undertaken in Bland and Wolseley Streets. Complaints processes need to be easier for residents – they shouldn't be expected to provide registrations numbers and photos of trucks.
- A resident stated that the condition of roads in Haberfield (particularly Alt Street) is appalling. As a cyclist, I don't feel the roads are safe.

- A resident stated that the Rozelle site will have 517 truck movements a day using City West Link. The Darley Road site will generate 150 truck movements per day. The concept design was indicative only and the EIS based on this concept. RMS should not be able to revise the design of the Rozelle Interchange because it can't find a contractor. There were 13,000 submissions to the Stage 3 EIS and the people need to be consulted if there are any design changes.
- Clr McKenna (Leichhardt Ward) thanked staff for all their work with WestConnex and the many hours that they put in. Community recognises the work particularly with regards to the WCLF and other measures put in place by the Administrator. *"WestConnex is a challenge for all of us. It is unacceptable that residents have been placed in such a dreadful situation it's just a horror story."*

Meeting 4: Annandale & Camperdown areas

The meeting was held at Petersham Town Hall, Petersham at 6:30-8pm on Wednesday 14 February 2018. Total attendance was around 80. A welcome by the Mayor was followed by a presentation by Council staff on construction/traffic issues around the Stage 3 construction sites at the intersection of Bridge Road and Parramatta Road, Annandale. This site is at the Annandale / Camperdown border and the Inner West / City of Sydney Council border. After the Council staff presentation there was an open-mic session, where all in attendance had an opportunity to make comments and ask questions.

A summary of the main points raised during the open-mic session is as follows:

- A resident asked can Council clarify where trucks coming up Johnston Street would go should they miss the Parramatta Road entrance to the Bridge Road construction site? Council staff's response was that trucks would likely find a route by turning left at either Booth or Ross Streets. According to the SPIR, trucks will be in radio contact with the compound, although this is supposedly what happens with Stage 1 and 2 – with poor results. No contingency route was identified in the Stage 3 EIS, and Council has expressed concern about this issue.
- A resident asked what will happen to the site post WestConnex construction, and what is the 'biomedical hub'? Council staff's response was the site will be returned to an active use. The site is within a precinct that has been identified by the NSW Government's *Parramatta Road Urban Transformation Strategy* as a 'biomedical hub' because the precinct is located adjacent to Royal Prince Alfred Hospital and Sydney University.
- A resident pointed out that in the Council presentation, the slide showing potential ratrun areas does not appear to be sufficiently concerned about Camperdown and Annandale. Residents are expecting trucks will be queuing on Pyrmont Bridge Road, and this will result in rat-running in neighbouring streets. Council staff's response was that the traffic modelling project focuses on operational traffic (not construction traffic) and is covering an extensive area. Notwithstanding, staff are happy to hear from residents who may have information and ideas that can assist with this project.
- A resident was interested to hear more about the risks of cracking in houses and other buildings where tunnelling is occurring beneath. What locations/buildings are at risk? Is there more risk closer to the dive-site? Council staff's response was that this is a genuine concern, particularly where tunnel depths are shallow. Council continues to advocate for no tunnelling below residential areas and for improvements to the dilapidation reporting process. The Mayor stated that he has proposed that Council initiate a program to undertake independent dilapidation reporting, as many properties in Haberfield and St Peters have not had reports undertaken by the proponent. Council will soon consider the feasibility of offering such a service.

- A resident stated that it is outrageous in the 21st Century in a period of climate change that a 20th Century transport solution is being offered. What are we leaving for prosperity? We need to try to stop this project and move forward. How much oversight of trucks will there be? There will be 7 trucks an hour on Johnston Street, exceeding speed limits in a mostly 40-60km zoned area. Between 7am and 6pm it will be a *"free-for-all"*. Large trucks will disrupt local businesses and create dangerous road conditions outside schools and nursing homes. The massive profits that will be made from WestConnex should be put into public transport.
- A resident asked is Council aware that a concrete batching plant is proposed for Glebe Island? The trucking route for this plant includes Johnston and Booth Streets and seemingly it will become a 24-hour-a-day truck route. Trucks will filter through surrounding streets as they always do. Council needs to respond to the Glebe Island proposal and limit the movement of trucks. Council staff's response was that this is a valid concern and Council will continue to raise this issue with the NSW Government.
- A resident asked will Council be changing parking zones and/or adding clearways around the Bridge Road site? It is natural for parking demand to spill-over into Pyrmont Bridge Road, which can't handle any increased demand. Council staff's response was that at this point in time traffic/parking details are not known. It is assumed that Council will have input into the traffic management plan for the site.
- A resident asked how much time is there between the commencement of tunnelling and when it is recommended to get a dilapidation report? When will work begin? Council staff's response was that Council does not know these details. All dilapidation reports are undertaken by the project and Council has not been advised of when the project would be approved and when work would commence.
- A resident stated that with regard to compulsory acquisitions there is speculation in the community that market value is not being paid by RMS. Council staff's response was that whilst Council is aware of this issue, it has not been party to these negotiations. All properties acquired for the Bridge Road construction site have been commercial properties.
- A resident asked are there any proposals for dust mitigation on Pyrmont Bridge Road? Mitigation measures are needed to prevent dust that will be coming off the trucks as they move from the site. Council staff's response was that the main measure for containment of dust would be the proposed acoustic shed. Details have not been provided in the EIS on how dust would be contained once the trucks are on roads.
- Clr Porteous (Leichhardt Ward) thanked staff for arranging the meeting and presenting information. Serious concerns are raised about the impacts of Stage 3 on this community, particularly as Haberfield and St Peters are now *"like war zones"*. More action is needed to stop WestConnex. We need a task force of the community and Council to stop this project. Council needs strong leadership and needs to be united with the community to stop the project.
- The Mayor responded by stating that Council has funded the WestConnex Unit, and there will be a demonstration on Lilyfield Road, which was delayed due to the Fix NSW rally on 17 February 2018. The Mayor has spent the last five years campaigning against this project and will continue to advocate to stop Stage 3, particularly the Rozelle Interchange. This is about our community's health. Council needs to put differences aside to fight the project.
- A resident asked could Council put more anti-WestConnex banners on public buildings? Traffic on Johnston and Booth Streets will be dangerous. Has Council undertaken any research into accidents and fatalities at the intersection of Johnston and Booth Streets? Council staff responded by stating there are safety issues at this

intersection, and officers have been in contact with Council's Road Safety Officer to obtain statistics.

- Clr Stamolis (Balmain Ward) stated that Stage 3 is shaping up to be a debacle as there
 is still no information available on the Rozelle Interchange. What can Council do about
 the uncertainty? Council needs to continue to meet with residents to disseminate
 information as it is obtained. Council staff added that a meeting is scheduled with the
 DP&E to discuss the SPIR, where issues raised at this meeting will be raised with
 DP&E.
- A Rozelle Against WestConnex (RAW) advocate stated that Council has put up RAW's banner on Darling Street, Balmain, but more banners should be hung around the area. It is good news that Council will be holding a public demonstration. If design of the Rozelle Interchange changes substantially a new EIS will be needed, so Stage 3 may still be in the planning phase at the March 2019 State election. Council staff responded by stating that Council has produced corflute signs that can be displayed around the council area.
- A resident thanked Council representatives for arranging the information evening. These are big tunnels being constructed. Can we support an action of no dive-sites? There are so many schools along truck routes and opposite the dive-site. Why isn't there any substantial information on the health effects of this project? Council staff stated that Council has requested more research be undertaken and information be made available on the health impacts of WestConnex however there has been no response to this request.
- A resident asked is there any chance there will be a design change that would result in an on/off ramp in the Camperdown area? Council staff explained that this was proposed in earlier designs, but it has now been ruled out.
- A resident stated that if Stage 3 is approved, the ventilation stacks at the Rozelle Interchange will be 3.5m above sea level and the stacks 35m high. Orange Grove Public School and surrounding residential areas are 35m above sea level, so there will a school and many residents directly affected by what is coming out of these stacks.
- Jenny Leong (State Member for Newtown) stated that Transurban would make a large profit from WestConnex. This project can be stopped. Currently I am putting pressure on Superannuation organisations not to buy into WestConnex. Alternative plans for WestConnex need to be put into the public arena. Where experts are highlighting better road solutions, this could potentially change the tender process. Clr da Cruz (Leichhardt Ward) pointed out that there are concerns with the City of Sydney's alternative solution, with few benefits for Inner West Council. Council staff pointed out that they also had some concerns with the City of Sydney's alternative proposal.
- A resident asked what sort of crisis controls are in place for when the Rozelle Interchange comes to a halt with traffic? Council staff responded that this is a valid issue, and one which was raised in Council's submission on the Stage 3 EIS.
- A resident stated they were feeling despondent that the 13,000 submissions on the Stage 3 EIS seem to have had little effect. Are there any suggestions from Council on how to get a response from a submission? Council staff's response was that this was a difficult battle to win. Council staff are happy to forward residents' submissions to DP&E submissions if they are sent to Council.
- Clr Lockie (Stanmore Ward) stated that submissions do have an impact, and submission numbers have increased with each stage of the project. Statistics show 99% of submissions for Stage 3 are against WestConnex. Submissions can also achieve project improvements for the community.

Meeting 5: St Peters area

This meeting was held at the Newtown Neighbourhood Centre, Newtown on Wednesday 21 February 2018. Total attendance was around 90. There was a welcome by the Mayor, followed by a presentation by Council staff on St Peters construction/traffic issues. After the Council staff presentation there was an open-mic session, where all in attendance had an opportunity to make comments and ask questions.

A summary of the main points raised during the open-mic session is as follows:

- A resident asked will the Sydney Metro (rail) truck route use May Street or Unwins Bridge Road? Council staff responded that these details were not known.
- A resident pointed out there was a filtration trial on the M5 and asked what did the results of this trial show? Council staff responded by stating the results of the trial were not adopted after the trial or now. In Council's view, unfiltered stacks are not acceptable.
- A resident from May Street, St Peters asked has a business case or formal analysis of filtered versus unfiltered ventilation stacks been released, or has the State Government just said it is not feasible? Council staff responded by stating there is nothing detailed in the EIS, and the project argues it is not efficient use of resources to filter emissions as it due to high cost and the fact that the stack emissions will have a negligible impact on the regional air shed.
- A resident asked will the multiple ventilation stacks being built affect future development? Will stacks affect the ongoing rise in developments in the St Peters area which is already suffering with the recent increase in duplexes and apartment blocks, such as the seven to eight storeys that is proposed for Mary Street? Council staff's response was that the stacks would be a consideration, along with a range of other factors in the assessment process. However at this stage it is not known if or how development would be altered because of the stacks.
- A resident pointed out that major housing developments are not approved by Council but by the DP&E, and a rezoning would be needed first. The EIS recommends rezoning in the Mascot area but not St Peters. Is there any risk that rezoning will occur in and around St Peters, turning this suburb into another Mascot? The Mayor's response was that currently there are around 20 rezoning proposals being considered by Council. The NSW Government requires only consultation with Councils, who can object - but developers can go back to DP&E for a decision. This is a huge problem. There will be a Sydenham to Bankstown rally this Saturday 24 February 2018 at 12pm at the Marrickville Town Hall forecourt opposing this type of development. Council is particularly opposed to Mirvac's Carrington Road proposal for 2,600 new units with blocks as high as 35 storeys. The City of Sydney's alternative WestConnex proposal would have put 12,000 units on the St Peters interchange site. Inner West Council does not support over-development.
- A resident asked what will Council be doing about traffic spilling out at the bottom of Campbell Street going into Edgeware Road? It is acknowledged that Council is not solely responsible for addressing this issue. Council staff responded by stating that staff need resident feedback on local impacts like these so potential solutions can be investigated fully. Council has undertaken independent traffic modelling to identify possible traffic ratruns. Council investigating a wide area to ensure that measures proposed for one street would not push traffic into other streets.
- A resident asked given the existing construction issues of noise and dust, what is EPA doing in terms of regular monitoring? It is acknowledged that Council can't do much about it, but how is Council making EPA responsible? Council staff responded by saying that Council has close relationship with DP&E and EPA on WestConnex compliance

matters. Staff from these agencies attend WCLF meetings, and compliance officers from DP&E sit within the WestConnex Unit for a day or two every week. EPA issues Environmental Protection Licences (EPLs) for projects like WestConnex, which set out conditions for night works etc. DP&E issues the general conditions of approval for the project, and as such is the main regulatory body. It is apparent that the project is not always adopting best practice, and Council is concerned about that. Council wants to be more proactive with regard to compliance, and is actively seeking improvements in conditions of approval for Stage 3 compared to Stages 1 and 2.

- Jenny Leong (State Member for Newtown) thanked Council for holding the public meeting. It is depressing information, but Council should be thanked for engaging with it. In 2019 there is a State election, and it is important to determine what can (and can't) be done before then. Are there things the community can do to stop this project?
- Council staff stated that Stages 1 and 2 will be finished now no matter what happens. It looks like there will be a delay with the Rozelle Interchange part of Stage 3, and Council will be looking at the conditions of approval to see if there are any significant changes to Stage 3 from what was shown in the EIS.
- A resident asked what's going on with King Street now and in the future? Its "third world" and dangerous for cyclists, pedestrians and all non-vehicle users. Council staff's response was that work was being done to reduce the traffic at the southern end of King Street through a project known as the 'King Street Gateway'. The Mayor added that management of King Street is a challenge because one side is the City of Sydney and the other is Inner West Council. There is a need consistency in regulations – for example, the Newtown Precinct Business Association has sought consistency in trading hours. There is also a need for consistent investment in infrastructure and encouragement of small-scale arts and performance programs.
- A resident stated he has read and watched for years what has happened with WestConnex, and all stages seem to have identical issues. He has read many expert reports and has followed the responses of affected councils. Does the NSW Government care about the Inner West community? Council staff added that the NSW Government currently supports the construction of a number of inner-urban motorways that extend beyond the Inner West.
- Jenny Leong (State Member for Newtown) stated she has seen a shift in how WestConnex is treated in Parliament. At the beginning it was described by the Government in glowing terms, now it is seldom mentioned and left to the end of the session to be discussed.
- A resident who lives close to the Sydney Metro (rail) Sydenham dive-site stated this site will be operating 24/7. This is another project that is not wanted. Council needs to broaden its scope to include these projects in its discussions. More public meetings are needed on trucks and other construction issues. Council staff pointed out that Council was aware of the cumulative impact issues from WestConnex and these other projects.
- A resident stated whoever wrote the WestConnex Stage 3 EIS is living in a *"parallel universe"*. Council is dealing with a State Government that is living in a false paradise. They don't they realise that all WestConnex is going to do for local residents of St Peters is dump more cars on our doorstep.
- A resident from Haberfield stated that Council doing a great job lobbying behind the scenes, and asked what is the broader plan beyond these five meetings? The meetings are a great way to exchange information, but what is their ultimate purpose? It is understood that Council has limited powers, but with 13,000 submissions, the planned rally, social media, thirty-odd advocacy groups across Sydney it should be possible to prevent this project proceeding. Council has a great opportunity to *"take it to the next*

level" to halt this project. It is important that there is continued negative media about this project. People's perceptions of WestConnex are changing everywhere.

- The Mayor's response was that we are fighting as hard as we can. Council will continue
 with advocacy. Corflute anti-WestConnex signs are available, Council is planning a rally
 in Rozelle, and landowners are challenging compulsory acquisitions in Supreme Court,
 which will be back in court next week. We should not pretend that Council alone can stop
 WestConnex. The main purpose of these meetings is to keep the community informed of
 impacts and to gain input on practical measures for amelioration. As Mayor of Inner West
 Council, my primary concern is the residents of the Inner West. Political parties should
 unite to fight this project.
- Jenny Leong (State Member for Newtown) stated that she believed with strong community support we will see things change and welcomes the Mayor's invitation for everyone to work together to stop this project. Currently there is a campaign to stop superannuation companies from being involved in the purchase of SMC, and would like Council to support this campaign.
- A resident stated he was tired of having to report noise problems every night. There is a need more spot checks by EPA, and has little faith that these are being undertaken. Do Council's environmental officers undertake noise monitoring? Council staff's response was that Council has no formal compliance role with this project, so does not undertake noise or air quality monitoring. Nor is Council set up or resourced to undertake this task. Responsibility for monitoring rests with NSW Government agencies. Council does however play an advocacy role in compelling the agencies to be more effective in their regulatory roles.
- A resident pointed out that Sydney Metro (rail) is causing just as much noise and dust as WestConnex, and impacts from both projects are constant. My daughter is doing the HSC this year and is being exposed to constant disruption when studying. No alternative accommodation has been offered so there has been much anxiety, which isn't fair. There is almost no parking available on May Street, and this is taken when soccer games are held. What is Council doing about car parking and managing sporting events at Camdenville Park?
- A resident stated there continues to be significant impacts from dust, and EPA constantly being advised of excessive dust in the community. Is there any chance that WestConnex will be compensating residents? Council staff responded by stating that dust is a big issue in Haberfield as well as St Peters, and Council is not aware of any intention of compensation being offered. Council agrees that dust is an issue that is constantly being raised, and there is a need for compensation.
- A resident asked why isn't Council doing a health study into the impacts of WestConnex on the residents of St Peters? There has been a significant increase in respiratory issues in our community. The Mayor responded by stating that Council has undertaken an air quality assessment as part of its EIS submission, which is available on Council's website. The health impacts of WestConnex are totally unacceptable. On the issue of Council supplying compliance officers, Council has already spent \$2M on the WestConnex Unit and is investigating offering a dilapidation reporting service to residents. Council does have limits to what it can do. Council will look investigate monitoring of air quality. Council staff added that an engineering consultancy was commissioned to undertake an air quality analysis for Council's EIS submission. Council staff also attend the Air Quality Community Consultative Committees (AQCCC) for Stages 1 and 2. These committees determine the placement of the monitoring stations. Background information on these committees is available on the project's website.

- Jenny Leong (State Member for Newtown) stated that in its Stage 3 EIS submission, EPA had said they can't make constructive comments due to lack of information in the EIS.
- Clr Lockie (Stanmore Ward) asked what else can we do? I recently met with the DP&E and raised the issue of constant noise, dust and the number of breaches. DP&E has put on additional compliance resources and will be doing more spot checks. What is apparent is that people are sick of complaining – the only way to get results is to keep the pressure on the project. I urge everyone to keep complaining.
- A resident stated that parents should be aware that students sitting the HSC are being constantly disturbed by noise and dust, and the Department of Education makes no allowance for this. In 2017, applications for special consideration to the Department of Education were not approved. I have recently complained about night noise as my daughter has an assignment due which would directly contribute to her ATAR score. I was told by New M5 project staff that this is not an issue, as the HSC has not started yet.
- A resident acknowledged that Council had made a 300-page submission EIS on the Stage 3 EIS and asked if there are legal means to stop Stage 3. Council staff responded by stating that there is a need to first consider what is approved, then Council will look for opportunities to challenge. To date Council has not found any legal avenues to challenge the project.