ATTACHMENT BOOKLET

ORDINARY COUNCIL MEETING

11 DECEMBER 2019

LIVERPOOL CITY COUNCIL D

FRANCIS GREENWAY CENTRE

CONTENTS

EGROW 02	WARWICK FARM PRECINCT
Attachment 1	EGROW 04 - 31 July 2019 Council report - Planning Proposal - 240
	Governor Macquarie Drive, Warwick Farm
Attachment 2	Memo to Mayor and Councillors - Planning Panel decision - Planning
	Proposal 240 Governor Macquarie Drive, Warwick Farm
Attachment 3	Letter from Sydney Western City Planning Panel - Planning Proposal
	Decision for 240 Governor Macquarie Drive, Warwick Farm 313
	Liverpool LEP Revision document
Attachment 5	Commercial-only developments planned for Liverpool city centre 337
EGROW 03	LIVERPOOL CITY CENTRE CAR PARKING STRATEGY
Attachment 1	Liverpool City Centre Car Parking Strategy 2019
EGROW 04	LIVERPOOL LOCAL STRATEGIC PLANNING STATEMENT
	Local Strategic Planning Statement
	Local Strategic Planning Statement Public Exhibition Report
Attachment 3	Summary of changes made to Local Strategic Planning Stetement post exhibition
EGROW 07	DRAFT LIVERPOOL CONTRIBUTIONS PLAN 2019 - AUSTRAL AND LEPPINGTON NORTH
Attachmont 1	
Allauninent	
Allachiment	Liverpool Contributions Plan 2019 - Austral and Leppington Precincts
CORP 02	Liverpool Contributions Plan 2019 - Austral and Leppington
CORP 02	Liverpool Contributions Plan 2019 - Austral and Leppington Precincts
CORP 02 Attachment 1	Liverpool Contributions Plan 2019 - Austral and Leppington Precincts
CORP 02 Attachment 1	Liverpool Contributions Plan 2019 - Austral and Leppington Precincts
CORP 02 Attachment 1 Attachment 2 INF 02	Liverpool Contributions Plan 2019 - Austral and Leppington Precincts

ORDINARY MEETING 31 JULY 2019 CITY ECONOMY AND GROWTH REPORT

EGROW 04	Planning proposal to rezone land at 240 Governor Macquarie Drive, Warwick Farm
Strategic Direction	Generating Opportunity Meet the challenges of Liverpool's growing population

File Ref	158005.2019	
Report By David Smith - Manager Planning & Transport Strategy		
Approved By Tim Moore - Director, City Economy and Growth / Deputy CE		
Property	240 Governor Macquarie Drive, Warwick Farm	

Warwick Farm Central Pty Ltd

WFC (Projects) Pty Ltd

EXECUTIVE SUMMARY

Owner

Applicant

VERPOOL

On 10 July 2018, Council received a planning proposal to rezone land at 240 Governor Macquarie Drive, Warwick Farm from B5 Business Development to part B4 Mixed Use and part R4 High Density Residential **(Attachment 1)**. The planning proposal also seeks to increase the floor space ratio (FSR) development standard from 0.75:1 to 3:1 (equating to approximately 87,900m² GFA) and the height of buildings (HOB) development standard from 15m to 50m and to reduce the minimum lot size from 2000m² to 1000m².

In September 2018, the Greater Sydney Commission (GSC) released the Liverpool Collaboration Area Place Strategy (Place Strategy) which designated the subject site as part of a precinct to be developed for the purposes of an innovation, research, health, advanced manufacturing precinct, excluding residential uses.

The proponent requested a rezoning review on 29 October 2018 as the planning proposal had been with Council for more than 90 days without a determination. On 15 April 2019, Council was informed by the Department of Planning, Industry and Environment (DPIE) that the proponent had withdrawn the request for a rezoning review, and that the Council should make the decision on how to proceed with the planning proposal.

An assessment of the planning proposal was completed on behalf of Council by town planning consultants City Plan **(Attachment 2)**. The planning proposal was referred to the Liverpool Local Planning Panel (LPP) for advice on 24 June 2019. The majority of the LPP agreed with the planning assessment report prepared by City Plan consultants that the proposal lacked



ORDINARY MEETING 31 JULY 2019 CITY ECONOMY AND GROWTH REPORT

strategic and site merit and provided their advice to Council that the planning proposal should not be referred to the DPIE for a Gateway determination (Attachment 3).

At its Ordinary meeting of 26 June 2019, Council endorsed the draft Liverpool Local Strategic Planning Statement (LSPS) for exhibition, which designated the subject site as part of a precinct to be investigated for a "mix of uses".

While noting the planning assessment report and the advice of the LPP, this report concludes that the strategic merit of the planning proposal is less certain compared with that outlined in the planning report and the LPP advice as a result of conflicting designations of future use of the site between the Place Strategy and draft LSPS.

It is recommended that a modified planning proposal be supported in principle by Council and forwarded to DPIE for a Gateway determination. The modifications recommended include reducing the proposed FSR to 2:1 (equating to approximately 58,600m² GFA) and the maximum height of building to 45m to provide for approximately 500 dwellings, which is consistent with the previous planning assessment and Council report completed in 2017 and the existing R4 zone in Warwick Farm.

In addition, it is recommended that an updated planning agreement be negotiated with the proponent and a site specific Development Control Plan (DCP) be prepared containing site specific controls to address urban design, building massing and addressing potential environmental impacts including overshadowing. Once the planning proposal has been amended, it is recommended that the proposal be forwarded to DPIE for a Gateway determination.

RECOMMENDATION

That Council:

- 1. Note the advice provided by the Liverpool Local Planning Panel;
- 2. Endorses in principle the planning proposal for 240 Governor Macquarie Drive, Warwick Farm, subject to the applicant submitting a modified proposal with a maximum floor space ratio (FSR) of 2:1 equating to approximately 58,600m² GFA or 500 dwellings, apply the bonus FSR provisions contained within Clause 4.4 (2B) of the Liverpool Local Environmental Plan (LEP) to the site, a maximum height of buildings of 45m and the preparation of a site specific Development Control Plan;
- Delegate to the CEO authority to negotiate a revised VPA offer with the proponent, agree the terms of the offer with the proponent and report back to Council the details of the VPA prior to exhibition of the planning proposal, consistent with Council's Planning Agreements Policy;



ORDINARY MEETING 31 JULY 2019 CITY ECONOMY AND GROWTH REPORT

- 4. Endorses in principle the potential public benefit contributions of the VPA, to be further negotiated, include:
 - Monetary contributions towards the cost of local road improvements;
 - Funding appropriate road works including a 2.5m wide shared path, public domain improvements including street trees and landscaping along Governor Macquarie Drive between Hume Highway and Munday Street in accordance with Council's design plan for the Hume Highway/Governor Macquarie Drive intersection upgrade and Warwick Street between the Hume Highway and Manning Street;
 - Improved pedestrian and bicycle access to and from the site and Warwick Farm railway station and north and south of the Hume Highway;
 - Provision of 5% of the dwelling yield as affordable housing (to be dedicated to Council) to be managed as affordable rental housing by a community housing provider; and
 - Providing a retail/commercial space in the development for a period of 5 years at a reduced commercial rent for a community organisation/s to be agreed between the proponent and Council; and
- 5. Delegate authority to the CEO to finalise the above amendments to the planning proposal and submit the planning proposal to the Department of Planning, Industry and Environment for a Gateway determination with a recommendation that detailed traffic modelling, an economic impact assessment, a noise mitigation strategy and a site specific DCP be included as Gateway conditions to be satisfied prior to public exhibition.

REPORT

The site

The subject site, 240 Governor Macquarie Drive, Warwick Farm (Lot 1 DP 1162276), is a 2.93 hectare triangular-shaped allotment bound by Governor Macquarie Drive, Munday Street, Manning Street, and Warwick Street (depicted in Figure 1 below). It is approximately 20m south of the Hume Highway and the entire site falls within 350m of Warwick Farm train station, which is to the west.

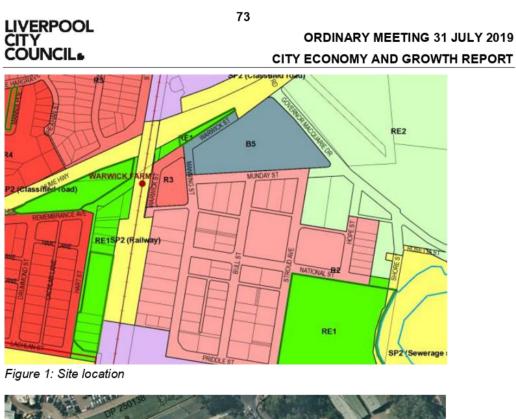




Figure 2: Aerial photograph of site

Locality

The subject site is located in Warwick Farm and is surrounded by a number of different land uses. As illustrated in Figure 1, the area immediately to the south is largely low density residential and predominantly occupied by horse stables and training facilities associated with the Warwick Farm Racecourse, located immediately to the east, across Governor Macquarie Drive. To the west, next to Warwick Farm train station, is a small clustering of two-storey townhouses. Also in proximity to the subject site is an industrial area, just south of the horse-training precinct, supporting operations such as Direct Freight, Visy and Liverpool Hospital's



ORDINARY MEETING 31 JULY 2019 CITY ECONOMY AND GROWTH REPORT

bulk distribution facilities. Within the south-east section of this local area is Rosedale Park and Sydney Water's sewerage treatment facility.

Background

The subject site was previously part of the Australian Turf Club (ATC) Warwick Farm Racecourse landholding. To improve the racecourse facilities, the ATC undertook a rationalisation of their landholdings and disposed of residual land to assist in consolidating and financing upgrades to the racecourse and thoroughbred horse facilities.

Liverpool Local Environmental Plan (LLEP) 2008 (Amendment 18) was gazetted on 9 December 2011, which rezoned the subject site from part RE2 Private Recreation and part R2 Low Density Residential to B5 Business Development. The amendment was supported by Council on the grounds that there was a local and regional level demand for bulky goods retailing.

As part of Amendment 18, a VPA between the ATC and Council required upgrades to the intersection of Governor Macquarie Drive and Munday Street, including traffic lights to accommodate additional traffic volumes. This work has been completed.

Following the LEP amendment, development consent was granted in February 2013 (DA-1321/2011) for a home improvement centre (a Masters development). The Woolworths Group has not developed the site and instead entered into contractual arrangements with the current applicant who is seeking to rezone the site to high density residential and mixed use. As a result, the site remains vacant.

In November 2015, a planning proposal was lodged with Council seeking to rezone the site from B5 Business Development to R4 High Density Residential, as follows:

- Rezone the site from B5 Business Development to part R4 High Density Residential and part B4 Mixed Use;
- Increase Height of Building (HOB) from 15m to part 45m and part 100m;
- Increase Floor Space Ratio (FSR) from 0.75:1 to 3.5:1 (to facilitate approx. 950 residential units); and
- Permit an additional use provision allowing up to 5,000sqm of retail floor space.

A report was presented to Council at its Ordinary meeting of 22 February 2017, which recommended that Council support a revised version of the proposal that included a reduced residential density with a maximum floor space ratio (FSR) of 2:1 (equating to approximately 500 residential dwellings). The report also recommended a reduction in height of buildings to no more than 45m. Council resolved to defer consideration of the planning proposal until it had adopted a broader precinct-wide strategy for Warwick Farm and directed the report be brought back to Council in July 2017.

At its Ordinary Meeting of 26 July 2017, a report was presented to Council on the draft Warwick Farm Precinct Strategy. Council resolved:



ORDINARY MEETING 31 JULY 2019 CITY ECONOMY AND GROWTH REPORT

That Council:

- Prepare a draft Warwick Farm Precinct Strategy which reflects a mixed use zoning (specifically for the horse racing precinct), with the input of Councillors and residents;
- Endorse in principle the planning proposal for Lot 1 Governor Macquarie Drive, Warwick Farm, subject to the applicant submitting a modified proposal with a maximum floor space ratio (FSR) of 2.2:1 which equates to approximately 500 residential units of which 10% will be dedicated to retail;
- Delegates to the CEO the authority to finalise the modified proposal and submit to DPE for Gateway approval with a recommendation that detailed traffic and flood modelling be included in Gateway conditions;
- 4. Notes that the CEO will finalise negotiations regarding the proposed VPA and public benefit offer and any other relevant conditions as required to support the proposal, with a report to be presented to a future Council meeting; and
- 5. Notes that funds will be sought in the Capital program in the 2017/18 budget to progress land acquisitions for the bypass road.

At its Ordinary meeting of 30 August 2017 Council resolved:

That the resolution relating to DPG 07 Draft Warwick Farm Precinct Strategy from the Council meeting 26 July 2017 be rescinded.

At the same meeting Council also resolved:

That Council endorses a **vision for mixed use development** comprising employment, housing and retail for the Warwick Farm Precinct.

The proponent lodged a request for a rezoning review with DPIE on 10 October 2017. The proposal was considered by the Sydney Western City Planning Panel on 5 February 2018, which decided that the planning proposal should not be submitted for a Gateway determination, deciding that the proposal demonstrated strategic merit but not site-specific merit. The Panel determined:

The proposal did not demonstrate adequate site-specific merit because of the proposed excessive height and scale which is inappropriate in this location, and would be contradictory to the scale of residential development planned and emerging closer to the Liverpool CBD.



ORDINARY MEETING 31 JULY 2019 CITY ECONOMY AND GROWTH REPORT

On 10 July 2018, Council received a revised planning proposal seeking to rezone the site from B5 Business Development to part B4 Mixed Use and part R4 High Density Residential, with increased development yield, as described in detail below.

In September 2018 the Greater Sydney Commission (GSC) released the Liverpool Collaboration Area Place Strategy (Place Strategy), which designated the subject site as part of an area to be developed for the purposes of an innovation, research, health, advanced manufacturing precinct, excluding residential uses.

The proponent requested a rezoning review on 29 October 2018 on the current planning proposal because the planning proposal request had been with Council for more than 90 days without a determination. On 15 April 2019, Council was informed by the Department that the proponent had withdrawn the request for a rezoning review.

An assessment of the proposal was completed on behalf of Council by town planning consultants City Plan. The planning proposal was referred to the Liverpool Local Planning Panel (LPP) for advice. The majority of the LPP agreed with the City Plan assessment that the proposal lacked strategic and site merit and advised that the proposal should not be referred to the Department for a Gateway determination.

At its Ordinary Meeting of 26 June 2019, Council endorsed the draft Liverpool Local Strategic Planning Statement for exhibition, which designated the subject site as part of a precinct to be investigated **"for a mix of uses"**.

The current proposal

This planning proposal seeks to amend the LEP to facilitate a mixed-use development comprising residential development, commercial development and open space. It is envisaged that the proposed development would support approximately 830 dwellings, 5,000m² of retail commercial floor space (including a supermarket) and 7,000m² of open space. The proposal would be achieved by the following amendments to the LEP:

- An amendment to the Land Zoning Map to rezone the site from B5 Business Development to part B4 Mixed Use and part R4 High Density Residential (shown in Figure 3);
- An amendment to the FSR Map from 0.75:1 to 3:1;
- An amendment to the HOB Map from 15 metres to 50 metres; and
- An amendment to the Lot Size Map from 2 Hectares to 1,000m²

The planning proposal does not seek to apply any statutory controls to ensure the indicated mix of commercial, residential and open space land uses.

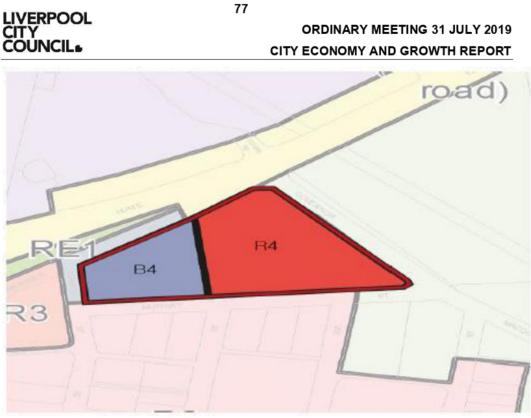


Figure 3: Proposed land zoning map (looking north)



Figure 4: Proposed massing (view from the Hume Highway looking south)



4.5 Illustrative Masterplan

ORDINARY MEETING 31 JULY 2019 CITY ECONOMY AND GROWTH REPORT



Figure 5: Illustrative Masterplan



Figure 6: Artist impression of plaza



ORDINARY MEETING 31 JULY 2019 CITY ECONOMY AND GROWTH REPORT

Voluntary planning agreement offer

The proponent has provided a letter of offer regarding a voluntary planning agreement (VPA) which includes the following:

- Provision of 5% of dwelling yield realised as affordable housing (to be retained in the ownership of the developer but managed as affordable housing by a housing provider to be agreed with Council for the life of the development);
- Landscape embellishment of land between Warwick Street and the Hume Highway between Manning Street and Governor Macquarie Drive; and
- A retail/commercial space for a period of 5-10 years at a reduced commercial rent for a community organisation/s to be agreed between the proponent and the developer.

The VPA is offered in addition to the required Section 7.11 development contributions, payable as part of any future development applications, in accordance with Council's Liverpool Contributions Plan 2009.

City Plan consultants has provided the following advice relating to the offer:

Through the VPA, the applicant proposes 5% of the dwelling yield to be provided as affordable rental housing. This would represent approximately 41 dwellings based on the concepts that have been prepared in support of the planning proposal. The dwellings would remain in the ownership of the applicant but would be managed as affordable housing by a housing provider to be agreed with Council for the life of the development.

Considering the existing economic disadvantage in the locality and uplift intended to be achieved by the applicant, Council considers that a minimum of 10% affordable housing would help achieve the optimum benefit for the community. With regards to relevant affordable housing policy, it is understood that the GSC are developing Affordable Rental Housing Targets and that Council will establish affordable housing demand as part and local housing strategy which is due for exhibition in July 2019. Until the targets and demand have been established, it is considered a 5% provision is acceptable at this time.

It is considered that the VPA offer should be expanded to include at a minimum:

• A monetary contribution toward the cost of local road improvements. The Council report of February 2017 noted that the proponent had earlier offered a contribution of \$10,000 per unit for similar purposes, an amount relevant to VPA negotiations in relation to the current proposal. This contribution could be directed towards local road improvements such as:



ORDINARY MEETING 31 JULY 2019 CITY ECONOMY AND GROWTH REPORT

- Traffic calming and new vehicle routes to address the current heavy vehicle traffic conflicts within the Warwick Farm horse training precinct; and
- A potential new connection between Newbridge Road and GMD, via a new bridge over the Georges River and potential development sites within Moore Point, south of the river.
- Funding appropriate road widening and a 2.5m wide shared path, public domain improvements including street trees and landscaping along Governor Macquarie Drive between Hume Highway and Munday Street in accordance with Council's design plan for the Hume Highway/Governor Macquarie Drive intersection upgrade and Warwick Street between the Hume Highway and Manning Street
- Improved pedestrian and bicycle access to and from the site and Warwick Farm railway station and north and south of the Hume Highway.
- Provision of 5% of the dwelling yield as affordable housing (to be dedicated to Council) to be managed as affordable rental housing by a community housing provider.
- Providing a retail/commercial space in the development for a period of 5 years at a reduced commercial rent for a community organisation/s to be agreed between the proponent and Council.

This report recommends that Council delegate to the CEO authority to negotiate a revised VPA offer with the proponent and report back to Council the details of the amended VPA prior to exhibition of the planning proposal.

Assessment of the current proposal

According to *A guide to preparing planning proposals* published by DPIE, a planning proposal must have strategic and site merit to warrant the issue of a Gateway determination. In order to have strategic merit, a planning proposal must be consistent with higher order planning strategies (regional and district planning strategies) and the LSPS. Strategic planning for this precinct is not yet finalised, but is characterised by the Western City District Plan, the Place Strategy and the draft LSPS.

Planning Priority W2 of the Western City District Plan (WCDP) states that Collaboration areas are a "non-statutory initiative". The Place Strategy itself specifically states in Chapter 11 that "implementing the Liverpool Collaboration Area Place Strategy requires collective action and joining of resources from all stakeholders, various levels of government and the private sector. The Strategy is a decision support tool that recognises that State agencies and Council will undertake their own review and prioritisation processes before committing to infrastructure investment".

Chapter 11 of the Place Strategy also states that the GSC will include the Place Strategy's objectives and actions in future updates to the WCDP giving them a statutory basis. The



ORDINARY MEETING 31 JULY 2019 CITY ECONOMY AND GROWTH REPORT

WCDP has not been amended and therefore the Place Strategy, as a non-statutory initiative and decision support tool, may not be afforded the statutory weight of that plan.

The draft LSPS is currently on public exhibition and has not yet been finalised. Nevertheless, it has been endorsed by Council and therefore must also be afforded the weight of a draft local strategic planning statement for assessment purposes.

Strategic Merit

The Greater Sydney Regional Plan (*A metropolis of three cities*) and the WCDP were finalised by the Greater Sydney Commission in March 2018.

Section 3.8(2) of the Environmental Planning and Assessment (EP&A) Act 1979 requires that:

- In preparing a planning proposal under section 3.33, the planning proposal authority is to give effect:
- (a) to any district strategic plan applying to the local government area to which the planning proposal relates (including any adjoining local government area)

The current planning proposal to rezone the site must therefore "give effect" to the Western City District Plan, which in turn must give effect to the objectives, strategies and actions specified in the regional strategic plan, *A Metropolis of Three Cities*.

Objective 5 of *A Metropolis of Three Cities*, "Benefits of growth realised by collaboration of governments, community and business", describes the objective of the Collaboration Areas as being a place based process.

WCDP Planning Priority W2, Working through collaboration, identifies the Liverpool Collaboration Area as follows:

Liverpool's Central Business District (CBD), the health and education precinct and nearby residential and industrial land areas. It considers the Warwick Farm Precinct; the Moorebank Intermodal Terminal, which is under-construction; and the draft Georges River Masterplan

The underpinning objective of the Place Strategy was to facilitate strong employment growth in the Liverpool Collaboration Area. Section 4.1 states, "The collaborative process concluded that a profile providing strong employment growth in Liverpool is preferred, requiring retention of employment lands in strategic locations". In line with this preference, the Place Strategy designated the subject site as part of an innovation, research, health, advanced manufacturing precinct, described as "a high-tech, transit-oriented, advanced manufacturing business park that leverages the growth of the health, education and equine sectors, excluding residential development." The designation is illustrated in Figure 7 below.

EGROW 02Warwick Farm PrecinctAttachment 1EGROW 04 - 31 July 2019 Council report - Planning Proposal - 240 Governor Macquarie Drive,
Warwick Farm

82

ORDINARY MEETING 31 JULY 2019 CITY ECONOMY AND GROWTH REPORT



Figure 7: Liverpool Collaboration Area Place Strategy

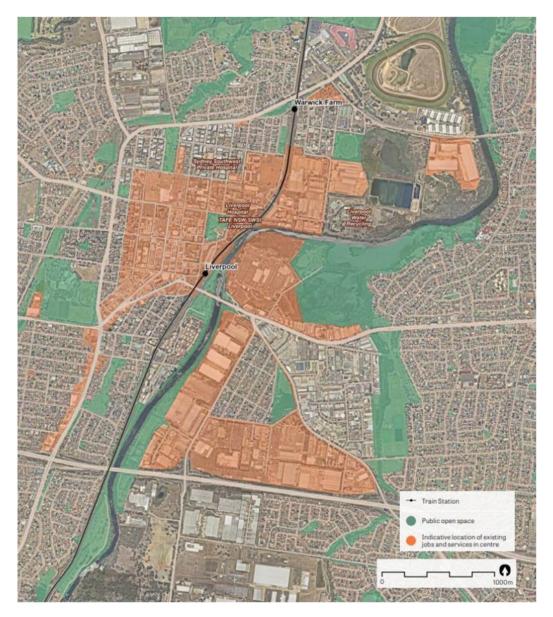


ORDINARY MEETING 31 JULY 2019 CITY ECONOMY AND GROWTH REPORT

Priority 7 of the Place Strategy, relates to the role and function of employment and urban services land and includes the following Action:

Action 21: Protect employment land on the western side of the Georges River (Scrivener Street and Munday Street) to support health related advanced manufacturing, med-tech and educational facilities.

Planning Priority W9 - Growing and strengthening the Metropolitan cluster - identifies the site as an, "Indicative location of existing jobs and services in centre", as illustrated in Figure 8 below.





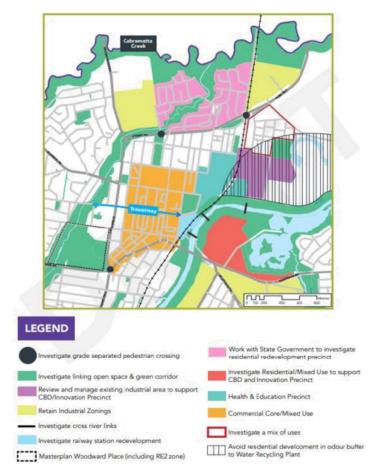
ORDINARY MEETING 31 JULY 2019 CITY ECONOMY AND GROWTH REPORT

Figure 8: Extract form WCDP – Priority W9 - Location of existing jobs and services WCDP Planning Priority W10 - Maximising freight and logistics opportunities and planning and managing industrial and urban services land - describes land currently zoned for employment uses (including subject site) within the Liverpool Collaboration Area as being "Review and Manage", indicating that:

The Greater Sydney Commission will review all industrial and urban services land under this approach to either confirm its retention (as described in the approach above) or manage uses to allow sites to transition to higher-order employment activities (such as business parks) and seek appropriate controls to maximise business and employment outcomes.

Draft Liverpool Local Strategic Planning Statement

At its Ordinary meeting of 26 June 2019, Council resolved to endorse the draft LSPS and placed it on public exhibition for a period of 6 weeks. The draft LSPS describes the subject site being part of an area to, "**investigate a mix of uses**", as depicted in Figure 9 below.





ORDINARY MEETING 31 JULY 2019 CITY ECONOMY AND GROWTH REPORT

Figure 9: Liverpool City and Surrounds Structure Plan from draft LSPS

LSPS local planning priority 7, Housing choice for different needs, with density focused in the City Centre and centres well serviced by public transport, states that Council will "Concentrate residential development in ... existing centres with high amenity that are well serviced by public transport". This planning proposal is generally consistent with the above local planning priority as the site is well serviced by public transport.

Section 3.9 of the *EP&A Act 1979*, Local strategic planning statement of councils, contains subsection (3A) which states,

The council for an area that is in the Greater Sydney Region must not make a local strategic planning statement unless the Greater Sydney Commission has advised the council in writing that the Commission supports the statement as being consistent with the applicable regional and district strategic plans..."

The draft LSPS is currently on exhibition and has been afforded the weight of a draft plan for the purposes of the assessment of this planning proposal.

Advice of the Liverpool Local Planning Panel (LPP)

Council engaged town planning consultancy City Plan to undertake an assessment of the merits of the proposal and prepare a planning assessment report. City Plan's assessment of the proposal was completed prior to Council endorsing the draft LSPS and did not therefore consider this in its assessment of the proposal. City Plan's assessment also afforded statutory weight to the Place Strategy.

City Plan's assessment concluded that the proposal lacked strategic merit. The assessment was based primarily on the fact that the proposed rezoning contradicts the Place Strategy, but also on a perceived inconsistency with WCDP Planning Priority W10 and the imperative to retain urban services land (i.e. employment land).

Based on City Plan's assessment, the majority of the LPP concluded that the proposal lacked strategic merit. A minority (1 of the 4) of the LPP considered that the Place Strategy did not hold strategic weight as it is not a statutory document and determined that the proposal did have strategic merit considering the proximity of the subject site to the Warwick Farm railway station.

The advice of the LPP is as follows:

The majority of the Panel agrees with the consultant's assessment of strategic and site specific merit of the proposal. While the strategic policy context of the site might be uncertain given the elected Council's decision not to endorse the Greater Sydney Commission Place Strategy, the planning proposal must be assessed against the place strategy and district plan as they presently stand. The planning proposal does not have strategic merit having regard to the place strategy.



ORDINARY MEETING 31 JULY 2019 CITY ECONOMY AND GROWTH REPORT

One of the Panel members does not endorse the consultant's assessment and recommendation. The member considers that the highest and best use of the site given its proximity to Warwick Farm railway station is mixed use including high density residential. There is no evidence to support the demand for high density employment use on this site.

It is noted that LPP's advice was provided prior to Council endorsing the draft LSPS and they did not take the draft LSPS into account in their deliberations. It is clear that the proposal is not supported by the Place Strategy (which has not been endorsed by Council, but has been adopted by the GSC), which views the subject site for employment uses only. By contrast, the draft LSPS (which has been endorsed by Council) and is currently on exhibition, seeks to investigate the potential for a mix of uses at and around the subject site. Neither the place strategy nor the draft LSPS are to be afforded definitive/statutory planning weight for the reasons discussed above.

Site specific merit

The report prepared by City Plan concluded that the proposal lacked site-specific merit. In its advice to Council regarding the planning proposal, the majority of the LPP endorsed City Plan's assessment and concluded that the proposal lacked strategic and site merit.

As noted above, a report was considered by Council at its February 2017 meeting, which assessed the merits of a similar proposal at the subject site, which sought to rezone the subject site from B5 Business Development to R4 High Density Residential. The February 2017 report recommended that Council give in principle support to the proposed rezoning, but only on the basis of a more modest outcome of a floor space ratio of 2:1, a maximum height of buildings standard of 45m resulting in approximately 500 dwellings.

The consideration that informed the 2017 Council report to reduce the proposed density was:

The subject site adjoins a number of non-residential land uses. It is also separated from other high density residential areas by the Warwick Farm railway station. By way of comparison, the northern edge of the Liverpool CBD in existing R4 areas has an FSR of 1.5:1 - 2:1 and a HOB of 35m-45m. The planning proposal as submitted is seeking a density (FSR) and building heights that that would be twice that of the northern edges of the Liverpool City Centre. When considering the urban context of the Liverpool CBD and the spatial hierarchy of the city, the scale of the proposed development in proximity to the CBD would undermine the predominance, legibility and orderly planning of the Liverpool City Centre as a 'strategic centre'.

The proposed reduced density of an FSR of 2:1 will result in a built form outcome which is more compatible with surrounding development and more appropriate in this location.



ORDINARY MEETING 31 JULY 2019 CITY ECONOMY AND GROWTH REPORT

It is further noted that the Western Sydney City Planning Panel, in its consideration of a rezoning review lodged for the subject site with respect to the previous proposal in February 2018, decided that the proposal lacked site merit. It determined that:

The proposal did not demonstrate adequate site-specific merit because of the proposed excessive height and scale which is inappropriate in this location, and would be contradictory to the scale of residential development planned and emerging closer to the Liverpool CBD.

While the current proposal seeks to rezone the subject site as part B4 Mixed Use and part R4 High Density Residential, the assessment of the site-specific merits of the proposal are consistent. A reduced density of 2:1 would result in a built form outcome more compatible with surrounding development and more appropriate in this location. The February 2017 Council report also recommended that a maximum height of building standard of 45m be permitted on-site, to minimise adverse impacts on surrounding lower density residential areas.

It is therefore recommended that Council support an amended planning proposal by reducing the FSR to 2:1, equating to an approximately 500 dwellings and building height to no more than 45m and delegate authority to the CEO to revise the planning proposal prior to submission to DPIE for a Gateway determination.

Flooding

With respect to the natural environment, the assessment report notes that the subject site is flood prone, as follows:

The site is located on the floodplain of Georges River and is wholly affected by flooding under the 1% Annual Exceedance Probability (AEP) event. The planning proposal is accompanied by a Flood Impact Assessment (FIA) by FloodMit which confirms the proposal seeks to fill the majority of the site to the 1% AEP level. The FIA confirms that the impact of the proposed filling is not significant and provides alternative mitigation options to mitigate against any adverse impacts of flooding. The applicant has considered filling part of the site and providing compensatory excavation on-site.

The Place Strategy requires that a comprehensive flood study be prepared for the Georges River. The assessment report by City Plan states that as the flooding study has not yet been prepared, the proposal is premature. However, Council's Floodplain and Water Management team consider that the planning proposal can be supported on flooding grounds as long as it is carried out in compliance with the requirements of Council's Flood Policy and the NSW Floodplain Development Manual (2005).

The subject site is located on the floodplain of Georges River and it is affected by flooding under the 1% Annual Exceedance Probability (AEP) event. The flood impact assessment by FloodMit demonstrated that the impacts of filling of floodplain for the proposed development is not significant and assessed alternative mitigation options to mitigate adverse impacts of flooding. The consultant has proposed filling part of the site and providing compensatory excavation on-site. The proposed mitigation option is considered satisfactory.

302



ORDINARY MEETING 31 JULY 2019 CITY ECONOMY AND GROWTH REPORT

The flood impact assessment by FloodMit demonstrated evacuation strategy of the site during design flood event for the proposed development. Council consider that flood evacuation strategy should be developed considering broader development context of the area of Warwick Farm and Liverpool and should be supported by the SES.

In view of manageable risks associated with flooding on future developments of the site, the subject rezoning proposal can be supported subject to development of the site be carried out in compliance with the requirements of Council's Flood Policy and the NSW Floodplain Development Manual (2005).

It is anticipated that were the proposal to receive a Gateway determination, the concurrence of the State Emergency Services (SES) would be required to enable the proposal to proceed.

Traffic and Transport

The assessment report prepared by City Plan noted that,

Action 1 of the Place Strategy requires an integrated transport strategy to be prepared that applies movement and place and addresses the transport challenges associated with delivering the vision, shared objectives and growth profile. The outcome of the transport strategy is fundamental to establish the capacity and viability of land and infrastructure to support the future growth within the Collaboration Area. The transport strategy will be led by TfNSW/RMS and supported by Council. While the Place Strategy identifies the strategy will be completed by mid-2019, TfNSW has confirmed it is expected to take a year (i.e. mid-2020) to complete.

Should Council support the proposal and it receives a Gateway determination, it is likely that DPIE will require the proposal be referred to TfNSW for comment. Considering the fact that the integrated transport strategy has not yet been prepared for the Collaboration Area, it is further possible that TfNSW may require the developer to make "satisfactory arrangements" via Clause 6.4A of LLEP 2008 to help fund improvements to regional transport infrastructure.

Council's traffic and transport team have identified the following issues pertaining to traffic impacts related to the proposed rezoning which the proponent will need to address in a revised planning proposal.

Traffic Generation

The planning proposal assesses a projected traffic generation of 286 vehicle trips per hour (vtph) (AM peak) and 290 vtph (PM peak) for the proposal, similar to the approved Masters development with 276 vtph (AM peak) and 385 vtph (PM peak). This is based on traffic generation rates of 0.15 and 0.21 vehicles per hour per apartment for high density dwellings during weekday morning and afternoon peak hours respectively.



ORDINARY MEETING 31 JULY 2019 CITY ECONOMY AND GROWTH REPORT

These rates are based on surveyed sites within close proximity to public transport service and high percentage of public transport mode share such as Parramatta, Chatswood and Strathfield areas. ABS Census data (2016) indicates that approximately 55-60% of residents in the immediate surrounds of Warwick Farm station use a car to travel to work, whilst areas such as Strathfield and Parramatta are in the region of 20-30%.

Based on the travel model splits data for Warwick Farm from Transport for NSW (TfNSW) Journey to Work (JTW) datasets, a trip generation rate of 0.29 vehicles per hour per apartment is considered the appropriate rate (rather than 0.15 and 0.21 vehicles per hour). Based on this revised traffic generation rate, the development site would generate a much higher traffic volume which will need to be reflected in an updated traffic impact assessment prior to exhibition of the planning proposal.

Impacts on the transport network

Due to the additional traffic generation associated with residential and retail uses at the site (including a supermarket), the RMS has previously expressed concerns regarding the potential impacts of the development on the traffic control signals at the intersection of the Hume Highway and Governor Macquarie Drive due to queue spill back from the right turn bay on the Governor Macquarie Drive and Munday Street intersection. The right turn bay at the intersection of Governor Macquarie Drive and Munday Street was also designed to accommodate Masters (a bulky goods facility).

In order to fully assess and therefore mitigate the impacts of the proposal on the road network, intersection layouts will need to be reviewed based on the updated traffic generation potential of the site and will need to be reflected in an updated traffic impact assessment prior to exhibition of the planning proposal.

Proposed Access Arrangements

The access arrangement consists of a loop road off Munday Street, opposite Bull and Stroud Streets.

Regarding the proposed access ways, a Sidra Traffic Modelling Analysis is required to address the post-development 'Level of Service' in terms of queue lengths, delays, storage bays and traffic management in terms of turning movements at the proposed access off Munday Street. Proposed intersection treatments for the access ways with Munday Street also needs to be provided prior to exhibition of the planning proposal.

The proposed basement parking and access will be via a new four-way intersection, replacing the existing T-junction of Munday Street and Bull Street. It is recommended that the proposal be modified so that this access accommodates indented on-street parking spaces and service vehicles. This can be addressed in the preparation of a site specific DCP.

304



ORDINARY MEETING 31 JULY 2019 CITY ECONOMY AND GROWTH REPORT

Bicycle and pedestrian facilities

A 2.5m wide shared path is required along the Governor Macquarie Drive frontage of the development site between Munday Street and the Hume Highway and along Warwick Street between the Hume Highway and Manning Street. Through the preparation of a site specific DCP, appropriate facilities for pedestrian and bicycle access to and from Warwick Farm railway station will be identified.

Noise

Should the proposal receive the support of Council, any Gateway determination subsequently issued should require the proponent to indicate how they will respond to noise from the Hume Highway and the rail line, and provide a noise mitigation strategy with measures in accordance with *EPA Development near rail corridors and busy roads – interim guideline* and the requirements of the SEPP Infrastructure (2007).

Economic impacts

Council's City Economy department has noted that there is no economic assessment provided for this planning proposal. The planning proposal indicates a potential 5,000m² of commercial/retail and community space within an overall site of over 20,000m². In summary, City Economy recommends that an independent economic impact study be provided by the proponent, before any further comment could be made as to the benefits or otherwise of the proposal.

Should Council resolve to support the proposal, and it subsequently receives a Gateway determination, it is recommended that the Gateway determination be conditioned to require the proponent to provide an independent economic impact assessment of the retail, social enterprise and commercial uses proposed and a detailed analysis of likely job creation resulting from this proposal (compared with the current zone) prior to public exhibition.

Urban design

The assessment report prepared by City Plan noted that:

The properties adjoining the site to the west and south are predominantly low-density one to two storey residential dwellings, with a substantial number supporting equinerelated activities. The shadow diagrams submitted with the planning proposal will result in significant overshadowing of the properties to the south. Moreover, having regard to Part 3.7 of the Liverpool Development Control Plan 2008, it is unlikely that the adjoining residential properties to the south would receive a minimum of three hours of sunlight between 9am and 5pm on 21 June to at least one living, rumpus room or the like and 50% of the private open space.



ORDINARY MEETING 31 JULY 2019 CITY ECONOMY AND GROWTH REPORT

In the absence of any plan or strategy to redevelop this adjoining area at a similar urban form and density, the proposed scale of the proposal is considered to be inappropriate.

Any future proposal will need to address SEPP 65 Design Quality of Residential Apartment Development. Detailed testing of the FSR relative to the proposed height and building efficiency should be provided.

It is recommended that a site specific Development Control Plan (DCP) be prepared containing site specific controls to address urban design, building massing and addressing potential environmental impacts including overshadowing prior to exhibition of the planning proposal.

Conclusion

In order to proceed to a Gateway determination a proposal must have both strategic merit and site specific merit. As noted in the report, the proposal in its current form lacks sufficient site merit to proceed. However, should the proposal be amended as recommended, site-specific merit would be established and the proposal could proceed.

It is therefore recommended that Council endorse a modified planning proposal that:

- Reduces the proposed floor space ratio to 2:1 (approximately 58,600m² GFA);
- Reduces the proposed height of buildings to 45m (to enable approximately 500 dwellings);
- Includes a site specific DCP containing controls to address urban design, building massing and addressing potential environmental impacts including overshadowing;
- Provides an Economic Impact Assessment demonstrating the number of jobs likely to be delivered following rezoning compared to the current B5 zone;
- Amends the traffic impact assessment report to increase vehicle generation rates to 0.29 vehicles per apartment per hour and provide detailed intersection layouts, performance analysis and treatments including parking controls based on this higher rate;
- Provides a noise mitigation strategy; and
- Provides an updated VPA offer.



ORDINARY MEETING 31 JULY 2019 CITY ECONOMY AND GROWTH REPORT

CONSULTATION

Should the proposal receive a Gateway determination, it will detail the required consultation to be undertaken prior to finalisation of the amendment.

CONSIDERATIONS

	Further develop a commercial centre that accommodates a variety of employment opportunities.	
Economic	Deliver a high quality local road system including provision and maintenance of infrastructure and management of traffic issues. Facilitate economic development.	
Environment	There are no environmental and sustainability considerations.	
Social	ial Regulate for a mix of housing types that responds to different population groups such as young families and older people.	
Civic Leadership	Encourage the community to engage in Council initiatives and actions.	
Legislative	Environmental Planning and Assessment Act 1979	

ATTACHMENTS

- 1. Planning Proposal (Under separate cover)
- 2. Planning Assessment Report (Under separate cover)
- 3. Local Planning Panel Advice (Under separate cover)
- 4. Community Benefits Analysis (Under separate cover)
- 5. Preliminary Flooding Assessment (Under separate cover)
- 6. Traffic Report (Under separate cover)
- 7. Urban Design Report (Under separate cover)
- 8. VPA Offer (Under separate cover)

LIVERPOOL CITY COUNCIL

8.4	_		_
Μ	е	m	Ο
	-		

То:	The Mayor and Councillors
Cc:	Executive Team
From:	David Smith, Manager Planning and Transport Strategy
Date:	13 September 2019
Subject:	Former Masters Site Planning Proposal, 240 Governor Macquarie
-	Drive, Warwick Farm – RZ-7/2018
Reference:	235487.2019

As advised in a memo to the Mayor and Councillors on 28 August 2019, the proponent for the proposed rezoning of former Masters site at 240 Governor Macquarie Drive, Warwick Farm, sought a rezoning review following Council's consideration of the proposal at its Ordinary Meeting of 31 July 2019.

The rezoning review was considered by the Sydney Western City Planning Panel (SWCPP) on 10 September 2019. The SWCPP published its decision on 13 September 2019 wherein it determined that the proposal <u>should not be</u> submitted for a Gateway determination as the proposal has not demonstrated strategic merit.

In its decision, the SWCPP noted an earlier version of the proposal had previously (in February 2018) been rejected by the Panel, owing to its lacking site-specific merit, with reference to its "*excessive height and scale*". While noting that the most recent planning proposal lodged for the site was of reduced height and scale, the Panel noted *that*:

the strategic position in which the current proposal must be assessed has changed substantively since consideration of the initial proposal.

In particular, the panel noted that, "The Western Sydney District Plan is considered to be the central strategic policy against which this proposal must be evaluated."

The panel decision went on to note that the planning proposal is inconsistent with *Planning Priority* W10 — Maximising freight and logistics opportunities and planning and managing industrial and urban services land, stating that:

The proposal is considered inconsistent with the important strategic position of the Western District Plan of retaining, managing and safeguarding industrial and urban services land from competing pressures especially residential and mixed-use zones. The proposal would rezone employment generating land and install potentially non compatible residential/mixed-use zoning resulting in a loss of urban services land. The panel notes that there is currently no employment lands study to provide guidance in this regard.

With regard to site specific merit, the panel noted the following:

It is noted that a detailed flood impact study has not been prepared for this proposal. It is further noted that the Collaboration Area Place Strategy requires a Georges River flood

2

study to be prepared. Council's advice is that such a flood study has not yet been undertaken and is not due for completion for at least 12 months.

Similarly, the Place Strategy identifies the need for an integrated transport strategy addressing capacity and viability of infrastructure is to support future growth within the Collaboration Area. Council's independent rezoning review advises this work is not due for completion until the end of 2019.

It is considered that given these site-specific constraints, adoption of the planning proposal would be premature.

A copy of the SWCPP letter to Council and its determination is attached. Supporting documentation is available at:

https://www.planningpanels.nsw.gov.au/DevelopmentandPlanningRegister/tabid/62/ctl/view/mid/ 424/JRPP_ID/4157/language/en-AU/Default.aspx.

The decision of the SWCPP not to submit the proposal for a Gateway determination means that the proposed rezoning will not proceed.

If you have any questions in relation to the review, please contact me on 8711 7610.

David Smith Manager Planning and Transport Strategy

Attachment:

- 1. Letter to Council advising of Panel decision
- 2. Rezoning review record of decision

309

3

Attachment 1: Letter to Council advising of Panel decision



Ms Kiersten Fishburn Chief Executive Officer Liverpool City Council 33 Moore Street Liverpool NSW 2170

Attn: David Smith (Manager, Strategic Planning)

13 September 2019

Dear Ms Fishburn

Request for a Rezoning Review - Panel Ref - 2018WCI006 - RR_2018_LPOOL_002_00

I refer to the request for a Rezoning Review for a proposal at Lot 1 Governor Macquarie Drive, Warwick Farm to amend the to amend the Liverpool Environmental Plan 2008 to rezone Lot 1, Governor Macquarie Drive, Warwick Farm, from B5 Business Development to part R4 High Density Residential and part B4 Mixed Use and amend associated development standards.

The Sydney Western City Planning Panel has considered the request for a Rezoning Review together with the advice provided by Council and recommended that the proposal should not be submitted for a Gateway determination. This decision is final and there are no opportunities for it to be reconsidered or challenged on its merits. A copy of the panel's decision is attached.

Although the proponent's request for a Rezoning Review has been unsuccessful, the proponent may still lodge a new proposal for the site in the future. Therefore, I have encouraged further liaison directly with Council, if the proponent would like to pursue this matter further.

If you have any queries on this matter, please contact Stuart Withington, Manager, Planning Panels Secretariat on (02) 8217 2062 or via email to stuart.withington@planning.nsw.gov.au

Yours sincerely

Bruce McDonald Acting Chair, Sydney Western City Planning Panel

encl. Rezoning Review Record of Decision

Planning Panels Secretariat 320 Pitt Street Sydney | GPO Box 39 Sydney NSW 2001 | T 02 8217 2060 | www.planningpanels.nsw.gov.au

310

4

Attachment 2: Panel Decision

RECORD OF DECISION SYDNEY WESTERN CITY PLANNING PANEL

DATE OF DECISION	13 September 2019
PANEL MEMBERS	Bruce McDonald (Acting Chair), Mark Grayson and Nicole Gurran
APOLOGIES	Nil
DECLARATIONS OF INTEREST	Ms Waller and Mr Harle advised that they have a conflict in this matter as this planning proposal has previously been to Council.
	Mr Doyle advised that he has acted in a case against Al Maha Pty Ltd.

REZONING REVIEW

Panel Ref - 2018WCI006 - LGA - Liverpool - RR_2018_LPOOL_002_00 (AS DESCRIBED IN SCHEDULE 1)

Reason for Review:

- The council has notified the proponent that the request to prepare a planning proposal has not been supported
- The council has failed to indicate its support 90 days after the proponent submitted a request to prepare a planning proposal or took too long to submit the proposal after indicating its support

PANEL CONSIDERATION AND DECISION

The Panel considered: the material listed at item 4 and the matters raised and/or observed at meetings and site inspections listed at item 5 in Schedule 1.

Based on this review, the Panel determined that the proposed instrument:

- should be submitted for a Gateway determination because the proposal has demonstrated strategic and site specific merit
- should not be submitted for a Gateway determination because the proposal has not demonstrated strategic merit

has demonstrated strategic merit but not site specific merit

The decision was unanimous.

REASONS FOR THE DECISION

STRATEGIC MERIT

Earlier Consideration of Site Rezoning Proposal

This site has previously been subject of a rezoning proposal review by the Sydney Western City Planning Panel. The Panel saw strategic merit in a mixed-use development near Warwick Farm Rail Station, however the proposal was not supported as it lacked site-specific merit. The development was considered inappropriate in this location due to excessive height and scale. The Panel also considered the current heavy vehicular traffic on Munday Road and the flood affectation of the area. These were significant issues that would need to be resolved.

While this proposal is of reduced height and scale the strategic position in which the current proposal must be assessed has changed substantively since consideration of the initial proposal. Critical to that context the Liverpool Collaboration Area Place Strategy has been completed. This strategy is the measure to progress the planning of Liverpool to deliver its strategic role as a metropolitan city cluster.

Western City District Plan

5

The Western Sydney District Plan is considered to be the central strategic policy against which this proposal must be evaluated. Issues central to that evaluation are considered to be;

Planning Priorities

<u>Planning Priority W10</u>—The proposal is considered inconsistent with the important strategic position of the Western District Plan of retaining, managing and safeguarding industrial and urban services land from competing pressures especially residential and mixed-use zones. The proposal would rezone employment generating land and install potentially noncompatible residential /mixed use zoning resulting in a loss of urban services land. The Panel notes that there is currently no employment lands study to provide guidance in this regard.

Planning Priority W2 -Working through collaboration; Planning Priority W9-Growing and Strengthening the Metropolitan Cluster

These priorities are considered to be central to determination of this proposal.

Liverpool is included as one of four centres that will deliver the metropolitan functions of concentrations of higher order jobs and has accordingly been identified as a Collaboration Area centred on a place-based approach to planning the centre. The Liverpool Collaboration Area under the District Plan includes this element of Warwick Farm Precinct within which the subject site is located. The Liverpool Collaboration Area Place Strategy has now been finalised by the GSC and has identified the element of Warwick Farm in which this site is located as a higher order employment area to support health related activities, advanced manufacturing, mid-tech and educational facilities.

The Liverpool Collaboration Area Place Strategy will be the vehicle for delivering the District Plan objectives. Thus consistent with the District Plan Priority W10 (outlined above), lands designated in the Strategy for industrial and urban services should be safeguarded from competing pressures, especially residential and mixed use zones.

SITE SPECIFIC MERIT

In consideration of the earlier planning proposal for this site the Panel agreed with Council's assessment that the heavy vehicular traffic on Munday Road and flood affectation were significant issues that would need to be resolved before any future rezoning.

It is noted that a detailed flood impact study has not been prepared for this proposal. It is further noted that the Collaboration Area Place Strategy requires a Georges River flood study to be prepared. Council's advice is that such study has not yet been undertaken and is not due for completion for at least 12 months.

Similarly, the Place Strategy identifies the need for an integrated transport strategy addressing capacity and viability of infrastructure to support future growth within the Collaboration Area. Council's independent rezoning review advises this work is not due for completion until the end of 2019.

It is considered that given these site-specific constraints, adoption of the planning proposal would be premature.

Further there is no demonstrated urgency or need to rezone the site in the interest of adding further housing supply/ opportunity given the extent of land closer to the CBD available for housing development.

PANEL MEMBERS	
Olular	A

Bruce McDonald (Acting Chair)	Mark Grayson
N.g.	
Nicole Gurran	

		SCHEDULE 1
1	PANEL REF – LGA – DEPARTMENT REF - ADDRESS	Panel Ref – 2018WCl006 - LGA – Liverpool – R_2018_LPOOL_002_00 Lot 1 Governor Macquarie Drive, Warwick Farm
2	LEP TO BE AMENDED	Liverpool Local Environmental Plan 2008
3	PROPOSED INSTRUMENT	The rezoning review request seeks to amend the Liverpool Environmental Plan 2008 to rezone Lot 1, Governor Macquarie Drive, Warwick Farm, from B5 Business Development to part R4 High Density Residential and part B4 Mixed Use and amend associated development standards.
4	MATERIAL CONSIDERED BY THE PANEL	Rezoning review request documentation Briefing report from Department of Planning and Environment
5	BRIEFINGS AND SITE INSPECTIONS BY THE PANEL/PAPERS CIRCULATED ELECTRONICALLY	 Site inspection: 5 February 2018 Panel members in attendance: Justin Doyle (Chair), Bruce McDonald and Nicole Gurran Department of Planning and Environment (DPE) staff in attendance: Mark Dennett and Adrian Hohenzollern Site inspection: 10 September 2019 by Mark Grayson Briefing meeting with Department of Planning and Environment (DPE): 10 September 2019 from 1.40pm Panel members in attendance: Bruce McDonald (Acting Chair), Mark Grayson and Nicole Gurran DPE staff in attendance: Ashley Richards Briefing meeting with Council and Proponent: 10 September 2019, from 2.05pm Panel members in attendance: Bruce McDonald (Acting Chair), Mark Grayson and Nicole Gurran DPE staff in attendance: Ashley Richards Briefing meeting with Council and Proponent: 10 September 2019, from 2.05pm Panel members in attendance: Bruce McDonald (Acting Chair), Mark Grayson and Nicole Gurran DPE staff in attendance: Ashley Richards Council representatives in attendance: Graham Matthews, Ian Stendara and Charles Wiafe Proponent representatives in attendance: Scott Barwick, Jonathan Knapp, Josh Holli and Antoine Bechara. Papers were circulated electronically between 12 September 2019 and 13 September 2019



Ms Kiersten Fishburn Chief Executive Officer Liverpool City Council 33 Moore Street Liverpool NSW 2170

Received by

18 SEP 2019

Attn: David Smith (Manager, Strategic Planning)

Records & Archives

13 September 2019

Dear Ms Fishburn

Request for a Rezoning Review - Panel Ref - 2018WCI006 - RR_2018_LPOOL_002_00

I refer to the request for a Rezoning Review for a proposal at Lot 1 Governor Macquarie Drive, Warwick Farm to amend the to amend the Liverpool Environmental Plan 2008 to rezone Lot 1, Governor Macquarie Drive, Warwick Farm, from B5 Business Development to part R4 High Density Residential and part B4 Mixed Use and amend associated development standards.

The Sydney Western City Planning Panel has considered the request for a Rezoning Review together with the advice provided by Council and recommended that the proposal should not be submitted for a Gateway determination. This decision is final and there are no opportunities for it to be reconsidered or challenged on its merits. A copy of the panel's decision is attached.

Although the proponent's request for a Rezoning Review has been unsuccessful, the proponent may still lodge a new proposal for the site in the future. Therefore, I have encouraged further liaison directly with Council, if the proponent would like to pursue this matter further.

If you have any queries on this matter, please contact Stuart Withington, Manager, Planning Panels Secretariat on (02) 8217 2062 or via email to stuart.withington@planning.nsw.gov.au

Yours sincerely

Bruce McDonald Acting Chair, Sydney Western City Planning Panel

encl. Rezoning Review Record of Decision

Planning Panels Secretariat 320 Pitt Street Sydney | GPO Box 39 Sydney NSW 2001 | T 02 8217 2060 | www.planningpanels.nsw.gov.au



REZONING REVIEW RECORD OF DECISION SYDNEY WESTERN CITY PLANNING PANEL

DATE OF DECISION	13 September 2019
PANEL MEMBERS	Bruce McDonald (Acting Chair), Mark Grayson and Nicole Gurran
APOLOGIES	Nil
DECLARATIONS OF INTEREST	Ms Waller and Mr Harle advised that they have a conflict in this matter as this planning proposal has previously been to Council.
	Mr Doyle advised that he has acted in a case against Al Maha Pty Ltd.

REZONING REVIEW

Panel Ref - 2018WCI006 - LGA - Liverpool - RR_2018_LPOOL_002_00 (AS DESCRIBED IN SCHEDULE 1)

Reason for Review:

- The council has notified the proponent that the request to prepare a planning proposal has not been supported
- The council has failed to indicate its support 90 days after the proponent submitted a request to prepare a planning proposal or took too long to submit the proposal after indicating its support

PANEL CONSIDERATION AND DECISION

The Panel considered: the material listed at item 4 and the matters raised and/or observed at meetings and site inspections listed at item 5 in Schedule 1.

Based on this review, the Panel determined that the proposed instrument:

- should be submitted for a Gateway determination because the proposal has demonstrated strategic and site specific merit
- should not be submitted for a Gateway determination because the proposal has
 not demonstrated strategic merit
 has demonstrated strategic merit but not site specific merit

The decision was unanimous.

REASONS FOR THE DECISION

STRATEGIC MERIT

Earlier Consideration of Site Rezoning Proposal

This site has previously been subject of a rezoning proposal review by the Sydney Western City Planning Panel. The Panel saw strategic merit in a mixed-use development near Warwick Farm Rail Station, however the proposal was not supported as it lacked site-specific merit. The development was considered inappropriate in this location due to excessive height and scale. The Panel also considered the current heavy vehicular traffic on Munday Road and the flood affectation of the area. These were significant issues that would need to be resolved.

While this proposal is of reduced height and scale the strategic position in which the current proposal must be assessed has changed substantively since consideration of the initial proposal. Critical to that context the Liverpool Collaboration Area Place Strategy has been completed. This strategy is the measure to progress the planning of Liverpool to deliver its strategic role as a metropolitan city cluster.

Western City District Plan

The Western Sydney District Plan is considered to be the central strategic policy against which this proposal must be evaluated. Issues central to that evaluation are considered to be;

Planning Priorities

<u>Planning Priority W10</u> –The proposal is considered inconsistent with the important strategic position of the Western District Plan of retaining, managing and safeguarding industrial and urban services land from competing pressures especially residential and mixed-use zones. The proposal would rezone employment generating land and install potentially noncompatible residential /mixed use zoning resulting in a loss of urban services land. The Panel notes that there is currently no employment lands study to provide guidance in this regard.

Planning Priority W2 -Working through collaboration; Planning Priority W9-Growing and Strengthening the Metropolitan Cluster

These priorities are considered to be central to determination of this proposal.

Liverpool is included as one of four centres that will deliver the metropolitan functions of concentrations of higher order jobs and has accordingly been identified as a Collaboration Area centred on a place-based approach to planning the centre. The Liverpool Collaboration Area under the District Plan includes this element of Warwick Farm Precinct within which the subject site is located. The Liverpool Collaboration Area Place Strategy has now been finalised by the GSC and has identified the element of Warwick Farm in which this site is located as a higher order employment area to support health related activities, advanced manufacturing, mid-tech and educational facilities.

The Liverpool Collaboration Area Place Strategy will be the vehicle for delivering the District Plan objectives. Thus consistent with the District Plan Priority W10 (outlined above), lands designated in the Strategy for industrial and urban services should be safeguarded from competing pressures, especially residential and mixed use zones.

SITE SPECIFIC MERIT

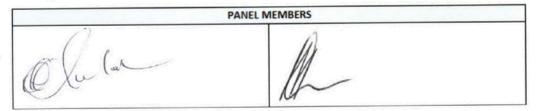
In consideration of the earlier planning proposal for this site the Panel agreed with Council's assessment that the heavy vehicular traffic on Munday Road and flood affectation were significant issues that would need to be resolved before any future rezoning.

It is noted that a detailed flood impact study has not been prepared for this proposal. It is further noted that the Collaboration Area Place Strategy requires a Georges River flood study to be prepared. Council's advice is that such study has not yet been undertaken and is not due for completion for at least 12 months.

Similarly, the Place Strategy identifies the need for an integrated transport strategy addressing capacity and viability of infrastructure to support future growth within the Collaboration Area. Council's independent rezoning review advises this work is not due for completion until the end of 2019.

It is considered that given these site-specific constraints, adoption of the planning proposal would be premature.

Further there is no demonstrated urgency or need to rezone the site in the interest of adding further housing supply/ opportunity given the extent of land closer to the CBD available for housing development.



Bruce McDonald (Acting Chair) Mark Grayson

		SCHEDULE 1	
1	PANEL REF – LGA – DEPARTMENT REF - ADDRESS	Panel Ref – 2018WCl006 - LGA – Liverpool – R_2018_LPOOL_002_00 Lot 1 Governor Macquarie Drive, Warwick Farm	
2	LEP TO BE AMENDED	Liverpool Local Environmental Plan 2008	
3	PROPOSED INSTRUMENT	The rezoning review request seeks to amend the Liverpool Environmental Plan 2008 to rezone Lot 1, Governor Macquarie Drive, Warwick Farm, from B5 Business Development to part R4 High Density Residential and part B4 Mixed Use and amend associated development standards.	
4	MATERIAL CONSIDERED BY THE PANEL	Rezoning review request documentation Briefing report from Department of Planning and Environment	
5	BRIEFINGS AND SITE INSPECTIONS BY THE PANEL/PAPERS CIRCULATED ELECTRONICALLY	 Site inspection: 5 February 2018 Panel members in attendance: Justin Doyle (Chair), Bruce McDonald and Nicole Gurran Department of Planning and Environment (DPE) staff in attendance: Mark Dennett and Adrian Hohenzollern Site inspection: 10 September 2019 by Mark Grayson Briefing meeting with Department of Planning and Environment (DPE): 10 September 2019 from 1.40pm Panel members in attendance: Bruce McDonald (Acting Chair), Mark Grayson and Nicole Gurran DPE staff in attendance: Ashley Richards Briefing meeting with Council and Proponent: 10 September 2019, from 2.05pm Panel members in attendance: Bruce McDonald (Acting Chair), Mark Grayson and Nicole Gurran DPE staff in attendance: Ashley Richards Briefing meeting with Council and Proponent: 10 September 2019, from 2.05pm Panel members in attendance: Bruce McDonald (Acting Chair), Mark Grayson and Nicole Gurran DPE staff in attendance: Ashley Richards Council representatives in attendance: Graham Matthews, Ian Stendara and Charles Wiafe Proponent representatives in attendance: Scott Barwick, Jonathan Knapp, Josh Holli and Antoine Bechara. Papers were circulated electronically between 12 September 2019 and 13 September 2019 	

Liverpool LEP Revision

1 Purpose

The primary purpose of this document is to set out the quantitative justification for changes to the LEP for the Liverpool City Centre. In order to do this, the gross floor area has been estimated for a range of uses and for a number of 'scenarios' in the subject area:

317

- existing gross floor area in the subject area;
- the existing floor area with the addition of a number of proposals for particular sites that have not gained approval termed 'current proposals';
- the potential 'supply' under current planning controls, taking into account sites that are unlikely to be redeveloped; and
- the potential supply under the proposed changes to the local environmental plan that would allow a significant
 increase in the amount of residential in the city centre.

This 'supply' is then related to 'demand' for various land uses. This document is not intended to provide a detailed reconciliation of demand and supply. Its purpose is to highlight the abundance of supply of commercial floor space even if the zoning were changed from B3 to B4 - mixed use with built form controls appropriate for the various precincts.

2 Rationale

Current Metropolitan planning policy has identified Liverpool as a 'regional city' in the centres hierarchy. The policy requires that 'regional cities' have areas reserved for the B3 Commercial Core zone, in order to provide a land supply for 'higher order' employment; business services and the like.

This prescriptive approach is reflected in the current LEP that was initiated in 2006 and reviewed in 2008.

This normative approach to land use planning and zoning does not reflect the level of actual demand for this type of development. The rationale for the 'reservation' of this amount of centrally located land that has very good access to amenities, services and transport is questionable.

There is a high demand for residential development in the city centre, while the demand for commercial is limited, particularly for large floor plate office functions. There is also a wide range of estimates for additional retail demand, and this is made even less certain due to the unknown quantity of retail in and around the Western Sydney Airport, suggestions there may be an additional centre at north Bringelly, and the amount of retail that may eventuate in Leppington and Edmondson Park. All of these issues are in flux. However, these developments are likely to reduce demand in the Liverpool city centre.

Conversely, the demand for health related services, education, and cultural and entertainment activities are likely to increase. These other activities would benefit from a higher residential population in the city centre.

Most importantly, the proposed changes to the LEP reflect the shift in planning theory that has started to recognise the importance of the 'liveability' and attractiveness of a centre as means of attracting business, including office location. In other words, the effect of increasing the residential population in centres not only has a direct effect by increasing patronage and spending in the centre but makes the place more attractive to workers and therefore to businesses overall.

The underlying economics of the region, the fundamentals, will be strengthened by the commitment to the Western Sydney Airport, but this potential needs to be catalysed by improved amenity and increased population in the city centre.

This has been evident in the revitalisation of Parramatta and in particular the evolution of its 'eat street' and commitment to public domain improvements.

The theoretical development capacity for commercial floor space is arguably less important than attracting and stimulating business location and investment decisions.

There is no point in having the capacity if no one is interested in developing it.

The idea of a 'central business district' comprised entirely of commercial and retail premises does not fit with the Liverpool market or the aspirations of the Liverpool population. The centre of Liverpool is already well used and would benefit from a higher population in the centres itself.

It is also important to recognise the potential of nearby areas to accommodate a range of different types of employment if the objective is to strengthen Liverpool overall.

The secondary purpose of this document is to provide a guide to the wide ranging analysis and design work that underpins and supports changes to the LEP, and to position these changes in relation to the broader strategic context.

Businesses and landowners across the river from the city centre have been considering relocation and redevelopment, and this has been accelerated by the announcement of the Western Sydney Airport. It is important to recognise that the redevelopment of the eastern bank is not simply to provide additional land for employment within 250m of the Liverpool rail station, but is also critical to reorientation and connecting the city to the river which has been inaccessible since the construction of the railway.

Although detailed planning is yet to be undertaken, indicative yields that may be achievable on these nearby sites are included to provide a broader context.

Similarly, it is important to recognise the different industry sectors and their locational preferences in the city centre, the characteristics of land and land ownership, and the overall structure of the city centre that is emerging: eat street, hospital and educational precincts, the mall and fine grain retail on Macquarie Street, as well as the potential of service ways and lane to provide a rich and complex urban environment. Each of the precincts has the potential to accommodate a range of different types of businesses. The overall approach to the planning may therefore be summarised as 'bottom –up' as much as top down.

The patterns of ownership, owner's expectations and subdivision patterns also need to be recognised as factors that strongly affect the ability to develop different areas: there is simply insufficient incentive for small business owners to shut up shop and redevelop, and there are no developers wishing to develop commercial space in the 'fine-grain' subdivision along Macquarie Street in any case. Furthermore, the fine grain subdivisions, in the southern part of Macquarie Street, have been recognised as being very important to a sense of authenticity both now and in the future. Therefore encouraging amalgamations may not be desirable in any case.

It should be recognised that large sites that are in Government ownership, including the school, bus interchange, Council library and car park, Scott Street, all have considerable potential for redevelopment or intensification as commercial premises should the demand for large floor plate offices eventuate. The hospital also has the potential to expand eastwards and Westfield has the potential to be redeveloped to include commercial premises- particularly related to health services.

3 Scenarios

A number of scenarios were modelled to allow comparison of yield and mix of uses. Refer to Table 1

Scenario 0 – EXISTING

This is the existing condition with estimates of the retail, commercial (office and business), community and residential floor space that exists in the subject area.

Scenario 1 – EXISTING +CURRENT PROPOSALS

There are a number of proposals for sites currently being considered. The floor space of these proposals has been estimated and the net increase added to the balance of the existing floor space. The redevelopment of the Council library site for commercial development has been included

Scenario 2 – CURRENT LEP BASE FSR

Sites that are considered 'undevelopable' for a range of reasons: heritage, substantial existing development, essential infrastructure etc. have been identified and assumed to remain as is. The lowest permissible floor space ratio in the current LEP has been applied to the balance of the 'developable' sites, with land uses permissible under current zoning. It has been assumed that 70% of the ground floor would be occupied by retail. In the mixed use B4 zone it has been assumed that 10% of the remaining allowable floor space above ground level would be developed as commercial space, with the remaining 90% of the balance being developed as residential. It should be noted that this tends to inflate the amount of retail and decrease the number of estimated jobs as retail has been assumed to have an intensity of 1 job per 50sqm while other commercial has been assumed to have an intensity of 1 job per 25sqm.

Scenario 3 – CURRENT LEP BONUS FSR

This scenario is similar to #2 but it is assumed that ALL sites have been amalgamated to be a minimum of 2500sqm in accordance with the LEP that would allow the higher 'BONUS' FSR to apply. It should be noted that this is very unlikely to be achieved and therefore should be recognised as an upper theoretical limit, rather than an achievable target.

Scenario 4 – PROPOSED LEP

This scenario also assumes that sites that are considered 'undevelopable' for a range of reasons: heritage, substantial existing development, essential infrastructure etc. will remain as is. Built forms that respond to the character of the different parts of the city centre and in particular the desired street form and potential to address rear lanes have been modelled and quantified. It should be noted that the proposed built form should allow individual sites to be developed without amalgamation. An average of two levels of car parking below ground has been assumed with significant amounts of above ground parking in major development sites to take advantage of their site depth. There is no parking in the 'fine-grain' area. Very approximate estimates of demand and supply are included.

Scenario 5

This scenario is similar to #4 but towers have been added to the 'mid rise' podiums wherever possible. It should be noted that this will require site amalgamations. Like scenario 3, it should be noted that this is very unlikely to be achieved and therefore should be recognised as an upper theoretical limit, rather than an achievable target.

Table 1 Scenarios modelled

		Total GFA	Retail	Commercial	Community	Residential
0	EXISTING	269,858	68,054	146,914	42,732	12,157
1	EXISTING Ind CURRENT PROPOSALS	605,261	61,755	325,378	32,488	185,640
2	CURRENT LEP BASE FSR (Total)	964,821	119,751	528,798	29,625	286,647
3	CURRENT LEP BONUS FSR (Total)	1,324,650	119,751	685,150	29,625	490,124
4	PROPOSED LEP (Total)	1,083,612	107,787	322,177	29,625	624,023
5	PROPOSED LEP+TOWERS (Total)	1,534,269	112,414	476,554	48,758	896,541

Table 2 Scenarios modelled

		Total	Retail iobs	Commercial iobs	Community jobs	Residential units
0	EXISTING	8,092	1,361	5,877	855	135
1	EXISTING Ind CURRENT PROPOSALS	14,900	1,235	13,015	650	2,063
2	CURRENT BASE FSR (Total)	24,139	2,395	21,152	593	3,185
3	CURRENT BONUS FSR (Total)	30,394	2,395	27,406	593	5,446
4	PROPOSAL (Total)	15,635	2,156	12,887	593	6,934
5	MID RISE TOWER (Total)	22,286	2,248	19,062	975	9,962

C:\Users\MatthewsG\AppData\Local\Hewlet-PackardIHP TRIMTEMP\HPTRIM.6412\1310152015 150528_RS_draft report_ Liverpool LEP amendment (3).DOCX

Table 3 Scenarios modelled

Table 5 Sce	nanos modelled					
Scenario	0	1	2	3	4	5
	Existing	Existing +Proposals	Current LEP Base FSR	Current LEP Bonus FSR	Proposed LEP	Proposed LEP+towers
Component s	A+B+C	A+B+D	A+D+E	A+D+F	A+D+G	A+D+G+H
A	Non-developable sites (heritage, substantial buildings, special sites remain as is)					
В	Existing GFA on 'developable' sites	Existing GFA on 'developable' sites				
с	Existing GFA on sites with current proposals					
D		Current proposals				
E			Residual 'developable' sites have base FSR and permissible land use applied			
F				Residual 'developable' sites have Bonus FSR and permissible land use applied		
G					GFA derived from proposed finegrain and mid rise	
н						GFA derived from proposed finegrain and mid riseAdditional GFA from towers above mid rise

Note: Component refers to parts of the model that are added to make the individual scenario

C:\Users\MatthewsG\AppData\Local\Hewlet-Packard\HP TRIM\TEMP\HPTRIM.6412\131015.2015 150528_RS_draft report_Liverpool LEP amendment (3).DOCX

4 Detailed methodology for estimating floor space

Estimating the effect on the development potential of the Liverpool City Centre is an important part of the process and justification for the changes to the LEP. The entire city centre has been modelled in 3D from information gained from site inspections, Google Street View and Bing Aerial Obliques, however the focus of this part of the methodology is only concerned with the existing B3 zone and some of the areas immediately adjacent to it; the 'subject area'.

321

The overall question and issue is whether there will be sufficient supply of commercially zoned land for the projected demand and whether this supply is of the right type and in the right location. These questions are addressed in relation to strategic land use and sectoral demand in more detail subsequently.

The purpose of this section is set out the methodology used to estimate the potential yield in the focus area and the results.

4.1 Overall approach

- Define the public domain based on, and incorporating the Building Our New City projects.
- Define the desired built form to define streets and take advantage of large sites while recognising the desirability of
 retaining and enhancing the fine grain, and developing distinct characters for the different precincts identified in the
 BONC process: 'eat street' at the south, the mall, and Bigge Park.
- · Recognise the need for additional public car parking in the southern part of the city
- Quantify the resulting built form in terms of residential, retail and commercial floor space and car parking.
- Estimate the number of jobs and residential units that may be possible within the modelled built form.

4.2 Detailed methodology

- Define the subject area: it is important to recognise that there is considerable development potential outside the B3 zone and that this could accommodate commercial office space: refer to Figure 1.
- Define a number of small areas according to the current zoning, heights and permissible FSR- this facilitates a
 comparison of the proposed changes and the development potential under current controls: refer to Figure 3.
- Define the sites that are 'non-developable' for a range of reasons: substantial relatively new buildings, essential infrastructure, longer term potential, heritage etc. Refer to Figures 4.
- Identify current proposals and council sites that require special attention. This includes current proposals that may
 not yet have planning approval.
- Define desirable built form for the different precincts in relation to impacts on public domain and adjoining residential properties.
- Model the desired built form and quantify the resulting floor area with assumed efficiencies for converting the 'Gross Envelope Area' (GEA), the total floor area that is indicated by the outside building envelope, to Gross Floor Area (GFA), in accordance with the Standard LEP definition.
- Define assumptions relating to employment intensity, car parking rates and unit sizes in according with recent ministerial clarification and assumed apartment mix.

Ρ5

4.2.1 Define the subject area;

It is important to recognise that there is considerable development potential outside the B3 zone and that this could accommodate commercial office space; refer to Figure 2

Figure 1 Subject area and proposed changes to the zoning.



Figure 2 Current FSR and heights



4.2.2 Define a number of small areas according to the current zoning, heights and permissible FSR- this facilitates a comparison of the proposed changes and the development potential under current controls; refer to Figure 3

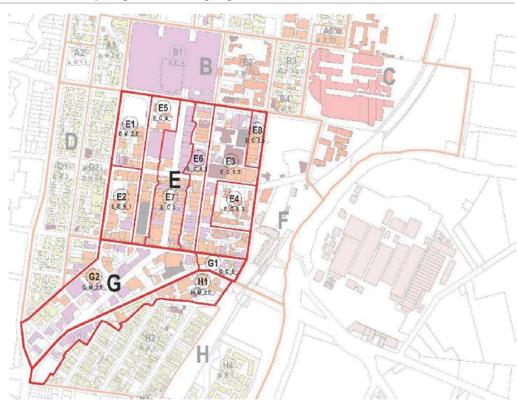


Figure 3 Smaller areas corresponding the different zoning, heights and FSR

C:\Users\MatthewsG\AppData\Local\Hewlet-PackardIHP TRIMTEMPIHPTRIM.6412\131015.2015 150528_RS_draft report_Liverpool LEP amendment (3).DOCX

Ρ7

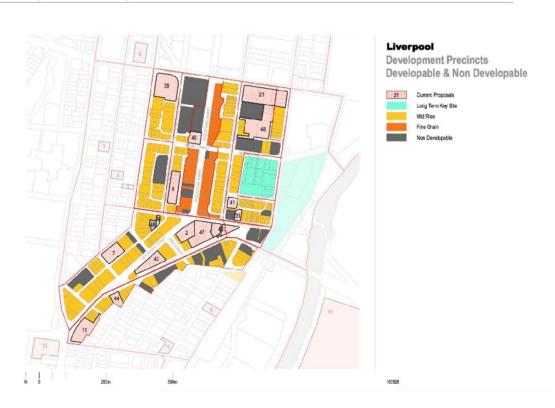
4.2.3 Model existing development

Figure 4 Existing development



4.2.4 Define the sites that are 'non-developable' or need to be considered on an individual basis. The sites are 'non-developable' for a range of reasons: substantial relatively new buildings, essential infrastructure, longer term potential, heritage etc; refer to figures 4-

Figure 5 Developable and non developable sites

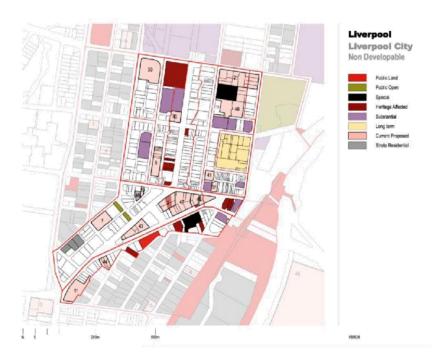


4.2.5 Identify current proposals and special sites.

This includes council sites, and current proposals that may not yet have planning approval.

325

Figure 6 Types of 'non-developable' sites



Note: Current proposals include council owned sites. The library site is included due to its potential for large floor plate commercial development in an appropriate location.

Figure 7 Current Proposals

C:\Users\MatthewsG\AppData\Local\Hewlet-PackardHP TRIMTEMPIHPTRIM.6412\131015.2015 150528_RS_draft report_Liverpool LEP amendment (3).DOCX



Table 4 Type and amount of floor space in 'current proposals'

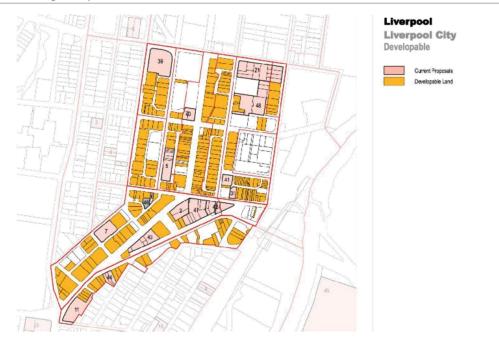
AREA	Proposal Reference Number	Retail	Commercial	Community	Residentia
E1	39	4,653	19,778		25,798
E3	21	-	33,698		24,40
E3	31	-	5,600		
E3	41	-	8,638		
E3	47	2,834	31,324	-	15,00
E5	5	2,790	17,334		
E7	40	437	1,067	-	7,27
E8	21	-	1,555		17,024
G1	42	-	814		16,346
G2	48	2,834	66,165	-	
G2	2	-	2,763	-	5,52
G2	7	-	3,870	-	15,16
G2	30	-	1,248		
G2	42	-	1,067		5,96
G2	43	-	1,200		19,914
G2	46	-	-		
H1	11	1,257	-		14,542
H1	44		350		6,534
		14,804	196,471		173,483

 Note:
 Sites 5, 47 and 48 are council owned sites and are not strictly 'current' proposals.

 Site 5 is the Bathurst Street car park, for which some capacity studies have been undertaken.
 Site 47 is the Scott street redevelopment site for which some capacity studies have been undertaken.

 Site 48 is the existing Library site,
 Sites 47 and 48 have the potential for large floor plate office development due to their size and location

C:\Users\MatthewsG\AppData\Local\Hewlet-PackardIHP TRIMTEMPIHPTRIM.6412\131015.2015 150528_RS_draft report_Liverpool LEP amendment (3).DOCX

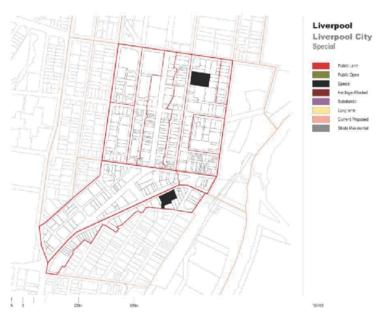


327

Figure 8 Remaining 'developable sites'

Note: 'developable' simply means that a generic approach to the built form or application of FSR can be applied.

Figure 9 Special sites



Note: Special sites are essential infrastructure: the telephone exchange and courthouse.

P 11

Figure 10 Substantial existing development



P 12

Figure 11 Developable public land

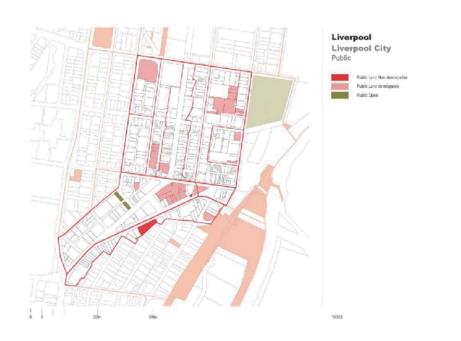


Figure 12 Heritage



Figure 13 Long term developable area

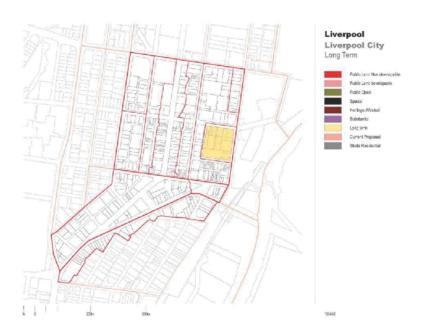


Figure 14 Existing development in the subject area



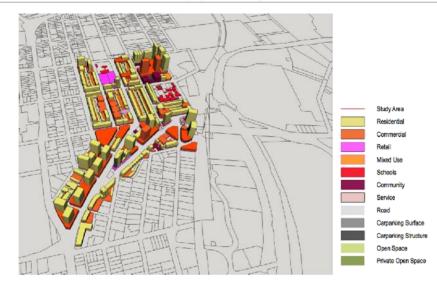
Figure 15 Current proposals



Figure 16 Current proposals plus fine grain



P 15



332

Figure 17 SCENARIO 4 PROPOSED LEP Current proposals + Fine grain + Mid-rise

Table 5 SCENARIO 4 PROPOSED LEP

	Total GFA	Retail	Commercial	Community	Residential	Cars above ground	Car below ground	Total Cars
E1	87,286	12,298	19,778	-51	55,260	-	17,349	17,349
E2	60,849	11,342	11,933	-	37,574	-	21,539	21,539
E3	199,183	9,785	94,149	21,626	73,624	-	23,657	23,657
E4	5,178	-	-	5,178	-	-	2,322	2,322
E5	44,664	9,330	20,304	1,392	13,639	-	8,376	8,376
E6	71,021	13,466	10,031	-	47,524	-	29,427	29,427
E7	95,672	20,853	25,439	-	49,380	-	14 14	-
E8	64,611	3,374	713	-	60,524	-	7,245	7,245
G1	37,405	-	1,559	-	35,846	-	266	266
G2	316,911	13,681	120,164	774	182,293	-	54,969	54,969
H1	100,834	13,659	18,107	707	68,360	-	24,576	24,576
	1,083,612	107,787	322,177	29,625	624,023	-	189,725	189,725
		empl	empl	empl	units	cars	cars	cars
Total Employees	15,635	2,156	12,887	593	6,934	-	5,421	5,421

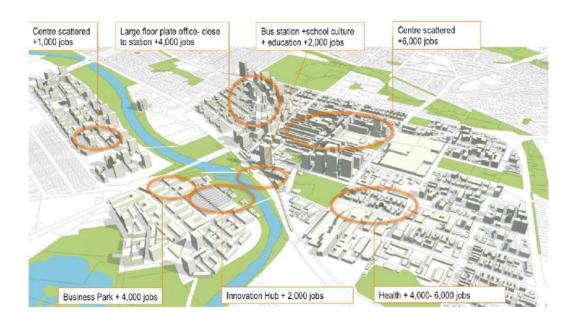
Figure 18 SCENARIO 5- PRPOSED LEP + TOWERS



Table 6 SCENARIO 5- PROPOSED LEP + TOWERS

	Total GFA	Retail	Commercial	Community	Residential	Cars above ground	Car below ground	Total Cars
E1	143,762	12,298	32,074	-	99,390	11,862	17,349	29,211
E2	157,712	11,342	27,735	-	118,634	12,617	21,539	34,155
E3	310,060	12,644	110,721	28,934	157,762	8,994	23,657	32,651
E4	5,178	-	-	5,178	-	-	2,322	2,322
E5	38,893	7,944	19,669	1,392	9,889	-	8,376	8,376
E6	52,855	8,994	13,011	448	30,402	12,883	29,427	42,310
E7	114,529	21,160	26,327	17,663	49,380	-		-
E8	18,579	-	1,555	-	17,024	-	7,245	7,245
G1	19,268	-	2,922	-	16,346	-	266	266
G2	163,975	6,469	80,729	2,383	74,394	64,541	54,969	119,510
H1	118,269	9,624	17,669	707	90,269	14,713	24,576	39,289
	1,143,080	90,475	332,412	56,703	663,490	125,611	189,725	315,335
	······································	empl	empl	empl	units	cars	cars	cars
Total Employees	16,240	1,809	13,296	1,134	7,372	3,589	5,421	9,010

333



5 Neighbouring major sites

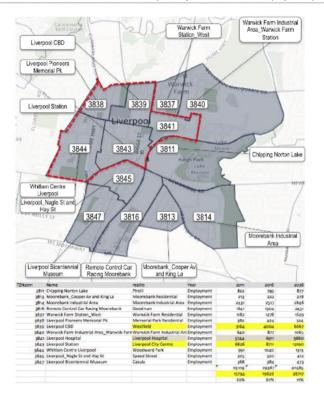
6 Employment projections and floorspace demand

The following figures provide an overview of employment projections and their relationship to land use and format of buildings likely to be required.

Key points:

- Most growth is projected to be in health
- Very small component of growth in sectors that require large floor plate office format, bearing in mind that a single floorplate of 1,000sqm accommodates 40-60 workers in current densities of occupation.
- Employment projections for retail from BTS do not align with projected demand for retail estimated by HillPDA (low estimate of 20,000sqm extra) of Leyshon Consulting (high estimate). Both of these predate WS Airoport announcement.

Figure 19 Travel zones associated with Liverpool city centre and total employment projects.



Travel Zones

BTS uses names that are counter intuitive: 'Liverpool CBD' is actually dominated by Westfield and

'Liverpool Station' is the CBD.

Note that there is a small section of land near the Hoxton Park intersection that is in TZN 3844, but this is relatively small and would not include many employees.

Employment is concentrated in 3 Travel Zones:

3839 Liverpool CBD (Westfield)

3841 Liverpool Hospital 3843 Liverpool Station (the actual centre)

From the BTS figures, employment target for the 25 years 2011-2036 are for an additional 13,900 jobs in TZN 3838,3839,3841,3843,3844 which are considered to comprise the 'Liverpool Regional City' in Metropolitan Planning

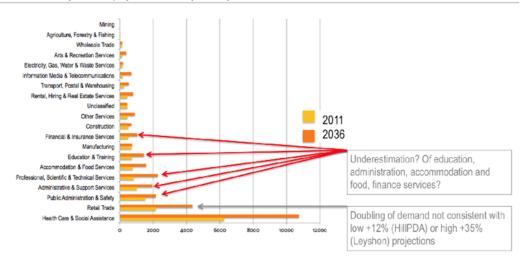
Figure 20 Projected Employment Growth by Industry Sector

Liverpool City Centre	2011	2016	2036	BTS uses names that are counter intuitive:
Mining	0	0	0	
Agriculture, Forestry & Fishing	3	4	4	'Liverpool CBD' is actually dominated by Westfield and
Wholesale Trade	111	109	128	westherd and
Arts & Recreation Services	120	222	380	'Liverpool Station' is the CBD.
Electricity, Gas, Water & Waste Services	142	155	198	
Information Media & Telecommunications	171	384	691	Note that there is a small section of land near
Transport, Postal & Warehousing	246	355	545	the Hoxton Park intersection that is in TZN
Rental, Hiring & Real Estate Services	447	586	796	3844, but this is relatively small and would not include many employees.
Unclassified	460	411	433	include many employees.
Other Services	461	622	889	Employment is concentrated in 3 Travel
Construction	505	545	687	Zones:
Financial & Insurance Services	506	714	1,045	
Manufacturing	690	750	725	3839 Liverpool CBD (Westfield)
Education & Training	718	891	1,454	3841 Liverpool Hospital
Accommodation & Food Services	764	1,010	1,569	3843 Liverpool Station (the actual centre)
Professional, Scientific & Technical Services	830	1,396	2,270	
Administrative & Support Services	1,007	1,185	1,946	From the BTS figures, employment target for
Public Administration & Safety	1,516	1,612	2,151	the 25 years 2011-2036 are for an additional
Retail Trade	2,154	2,806	4,355	13,900 jobs in TZN 3838,3839,3841,3843,3844 which are
Health Care & Social Assistance	6,255	7,036	10,745	considered to comprise the 'Liverpool Regional
	17,106	20,793	31,011	City' in Metropolitan Planning

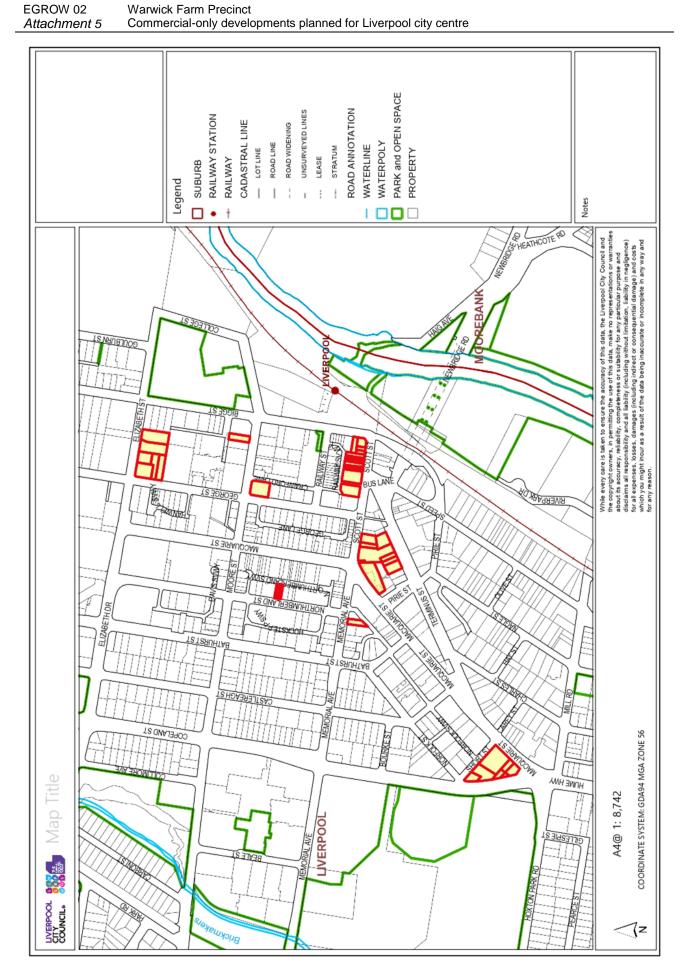
Source: BTS 2014 Update



Projected Employment Growth by Industry Sector

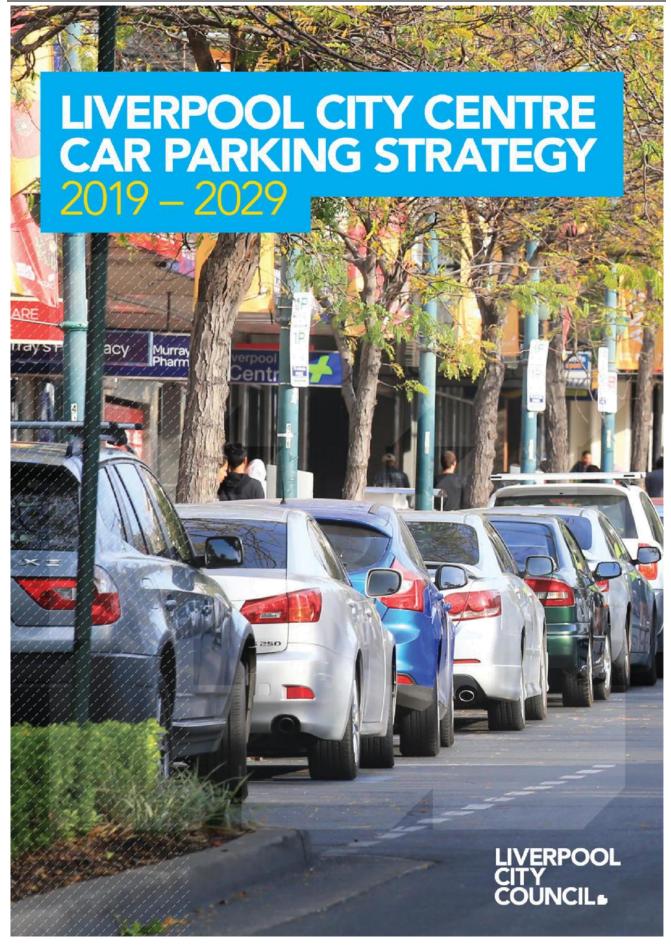


Source: BTS 2014 Update





338 Liverpool City Centre Car Parking Strategy Liverpool City Centre Car Parking Strategy 2019





COPYRIGHT NOTICE

Liverpool City Council is the copyright owner of this document. You may download, display, print and reproduce any written material in unaltered form only (retaining this notice) for your personal, in-house or non-commercial use, unless any other use of copyright material is expressly permitted under the Copyright Act 1968. Apart from the personal, in-house or non-commercial use of copyrighted written material, you may not reproduce any material, including photos and images, without the permission of Liverpool City Council.

AUTHORISED BY

The Liverpool City Centre Car Parking Strategy was authorised as a policy of Council by Council resolution on XXXXXX

EFFECTIVE FROM

The Liverpool City Centre Car Parking Strategy became an effective policy of Council on XXXXXX

DEPARTMENT RESPONSIBLE

The directorate and unit of Council that is responsible or accountable for the administration of the policy:

Planning and Transport Strategy

REVIEW DATE

This document is intended to be a live document that can be updated as conditions change, or as certain actions are completed. However, the policy must be reviewed at minimum, every five years. It must be revoked and replaced with a new strategy 10 years from its effective date.



340

Executive Summary

The Liverpool City Centre Car Parking Strategy enables greater car parking capacity within the Liverpool City Centre. In addition to outlining methods to increasing parking supply, the strategy also demonstrates the need to provide residents and visitors with high-quality alternative travel choices, to reduce parking demand.

Since 2010, Council has undertaken a number of projects to optimise parking within the Liverpool City Centre. Some of the notable examples are provided below:

- July 2010: Introduction of pay and display parking;
- January 2011 August 2012: Construction of Collimore car park (496 spaces);
- January 2012: Introduced parking meters in the city centre core;
- March 2015: Refurbishment of the Northumberland Street car park, to extend building life;
- August 2015: Introduced a Residential Parking Permit Scheme;
- March 2019: Council resolved to increase the number of parking spaces within proximity of the city centre at 68 Speed Street and the Whitlam Centre at Woodward Park;
- October 2019: Introduction of the 'Park n Pay' app in the city centre.

The Strategy is aligned with key Council and State Government policies, including the Sydney Region Plan, Western City District Plan and the Liverpool Local Strategic Planning Statement, which are used to inform the principles, objectives and actions of the strategy. These aims include optimising existing parking infrastructure, providing new parking, improving parking signage, identifying funding sources, and providing benchmarks for the future provision of public parking.

The Strategy includes ten deliverables designed to increase the availability of parking within the city centre, or provide a better customer experience for those visiting the Liverpool City Centre. The deliverables include projects which Council has made a commitment to deliver, including:

- Construction of a new multi-storey parking structure on the city periphery and identification of other suitable locations for additional parking;
- Investigation of opportunities to provide parking signage which is easier to understand; and
- Providing parking improvements consistent with the Liverpool City Centre Public Domain Master Plan.

The city centre also accommodates a large number of private car parking spaces within commercial, residential and mixed use developments. The amount of private parking is assessed with each development application, relative to parking rates specified in the Liverpool Local Environmental Plan. Based on the city centre's development potential, private car parking spaces are forecast to increase from the existing 5,325 spaces to approximately 14,000 spaces, an increase of approximately 8,676 spaces.

LIVERPOOL CITY CENTRE CAR PARKING STRATEGY 2019 - 2029

Contents

1.	Abo	out the Strategy	. 5			
1	.1	Principles	. 5			
1	.2	Strategic objectives	. 6			
1	.3	The study area	. 7			
1	.4	Related strategies and studies	. 8			
2.	Bac	kground	11			
2	.1	Initiatives undertaken	11			
2	.2	Initiatives not completed	12			
3.	Cur	rent issues	12			
3	.1	Journey patterns	13			
3	.2	Off-street parking	16			
3	.3	On-street parking	20			
3	.4	Parking permits	21			
3	.5	Car park pricing	21			
3	.6	Wayfinding signage	22			
4.	Fut	ure Issues	25			
4	.1	Growth of Liverpool	25			
4	.2	Land use and parking supply	25			
4	.3	Collaboration area	26			
4	.4	Liverpool Civic Place	26			
4	.5	Technology impacts	27			
4	.6	Demand for recreational areas	27			
4	.7	Public Domain Masterplan	27			
4	.8	Potential redevelopment of key sites	28			
5.	Act	ions	28			
6.	Deli	very Plan	29			
D	1: Pi	ublic parking rate benchmarks	29			
D	2: In	vestigate further opportunities to provide angle parking	30			
D	3: Co	ollimore/Woodward Park carpark upgrades	31			
D	4: In	troduce a car share scheme into Liverpool City Centre	33			
D	D5: Dynamic parking guidance system34					
D	6: Pr	ovide simplified parking signage	35			
D	7: Ca	ar parking pricing	37			
D	8: O	ptimising usage of car parking spaces	38			
D	9: Co	onstruct new Bathurst Street car park (between Terminus and Macquarie Street)	39			



	'
Appendix B – Previous implementation plans 2010 - 201742	2

Figures

Figure 1: Study area – Liverpool City Centre	. 7
Figure 2: Residential location of workers working in the Liverpool LGA	
Figure 3: Existing wayfinding signage locations to key off-street car parking areas (Council	
Owned)	22

Tables

Table 1: Consistency with key strategic plans	8
Table 2: Journey to work: Place of work	15
Table 3: Warren Serviceway data	15
Table 4: Total existing publicly accessible off-street parking supply	16
Table 5: Summary of off-street car parking design issues	18
Table 6: Parking fare comparison	21
Table 7: Existing car park wayfinding signage	23
Table 8: Future land uses	25
Table 9: Future parking demand	
Table 10: Actions	



343

1. About the Strategy

The purpose of the Liverpool City Centre Car Parking Strategy 2019-2029 (the Strategy) is to address and manage existing and future parking demand and supply in the Liverpool City Centre over the next 10 years.

The Strategy establishes a baseline of the city's parking environment, acknowledges current and future issues, and includes a Delivery Plan to manage these issues based on current research, land/funding availability, and planning principles.

The Strategy has been developed to:

- Improve the effectiveness of current parking provision;
- Seek opportunities to create new parking and repurpose existing parking where there is a benefit in doing so;
- Reduce the demand for parking where viable; and
- Suggest practical methods to increase capacity where warranted.

1.1 Principles

To ensure that the parking strategy does not undermine the intent of other policies and strategies, a series of fundamental principles have been developed. These are:

- P1. Optimise the capacity of short-term and long-term parking within the Liverpool City Centre.
- P2. Strike an appropriate balance between parking provision and demand for public space by ensuring that pedestrian priority and amenity is maintained on all streets.
- P3. Ensure that significant disruptions and decisions that may cause negative economic impacts on local businesses are minimised.
- P4. Provide an urban environment and transport network which provides for public and active transport choices to reduce parking demand.
- P5. Provide a clear, accessible car-parking environment.
- P6. Ensure adequate provisions are made for motorcycle, bicycle and mobility impaired users.
- P7. Ensure that management of parking responds to changing transport systems and services, and is adaptable to disruption technologies such as car-sharing and Mobility as a Service (MaaS).
- P8. Align with other relevant NSW Government and Council strategies.

Mobility as a Service: Moving beyond focusing on infrastructure and assets, the future of mobility is customer-focused, data-enabled and dynamic. Personal mobility includes traditional 'modes' supplemented with technology platforms and new service offerings like on-demand, car share, rideshare and smart parking. (TfNSW, *Future Transport 2056*, 2018)



344

1.2 Strategic objectives

To fulfil the purpose of the Strategy, and in keeping with the principles, the following objectives have been identified:

- O1. Identify the appropriateness of providing increased car parking within the Liverpool City Centre.
 - Identify the theoretical and desirable parking capacity within the Liverpool City Centre to achieve best practice urban design, mode-shift and congestion reduction outcomes.
 - ii. Explore locations suited to an increase in on-street parking with angled parking.
 - iii. Advise on the best approach and preferred locations to accommodate a clustering of motorcycle parking areas to service this transport mode.
- O2. Further evaluate the concept of concentrating public parking on the fringe of the Liverpool City Centre, including complementary transportation, impacts on passing trade, effectiveness, and user acceptance of this approach.
 - i. Devise a project plan to implement this approach.
- O3. Provide parking infrastructure that responds to land use changes, population and economic growth in the Liverpool City Centre over the next 10 years.
 - i. To create a vibrant city centre which prioritises pedestrian amenity, maximises the productivity of the city, and makes the city centre a safe walking and cycling environment.
 - ii. To support public domain improvements, access to public open space and landscaping.
 - iii. Identify future trends in public transport and ensure that infrastructure is adaptable to be redeveloped for other uses if the demand for parking falls.
- O4. Improve parking accessibility (general and special needs) for shoppers, visitors, trades people and local businesses to support economic growth.
 - i. To increase the number of accessible parking spaces at key destinations in the Liverpool City Centre.
 - ii. To reduce parking demand and increase active transport and public transport mode share.
- O5. Explore and deploy smart parking technologies to support an efficient and innovative city centre
- O6. Provide a delivery framework to improve parking over the next 10 years, including a recommended number and location of car spaces.



1.3 The study area

The Strategy primarily focuses on the Liverpool City Centre as defined by the Liverpool Development Control Plan 2008 (outlined in Figure 1), as well as opportunities for commuter parking on the periphery of the city centre. The Liverpool City Centre is divided into three subprecincts, the CBD core area (where most retail activity occurs), the public use precinct (dominated by schools and hospitals), and the non-core area which is predominately residential.

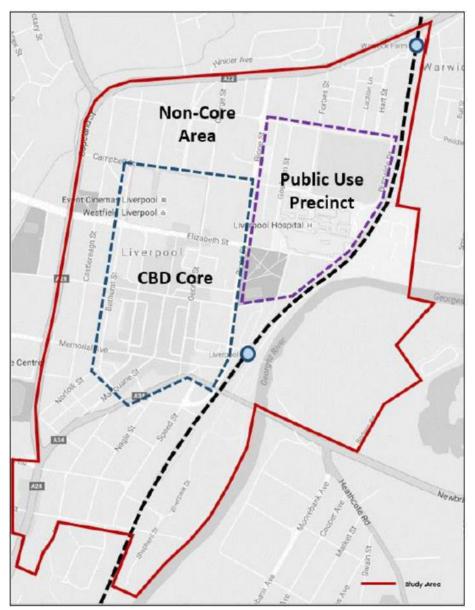


Figure 1: Study area -- Liverpool City Centre



1.4 Related strategies and studies

The Strategy addresses endorsed Council strategies, State government strategies, and other relevant information, including:

- Western Sydney City Deal;
- Future Transport 2056;
- A Metropolis of Three Cities Sydney Region Plan;
- Western City District Plan;
- Liverpool Community Strategic Plan;
- Liverpool Local Strategic Planning Statement Connected Liverpool 2040;
- Liverpool City Centre Collaboration Area Place Strategy 2018;
- A Transport Strategy for Liverpool City Centre 2017;
- Liverpool City Centre Precinct Car Parking Strategy 2017;
- Liverpool City Centre Parking Strategy 2013;
- Liverpool City Centre Open Space Analysis Report (November 2018 Draft);
- Draft Liverpool City Centre Public Domain Master Plan; and
- Destination Management Plan 2019-2023.

Table 1 summarises the links between State government and Council strategies and specific actions in the Liverpool City Centre Car Parking Strategy.

Table 1: Consistency with key strategic plans

Strategy	Directives	Link to Actions/Deliverables
Metropolis of Three Cites: Greater Sydney Region Plan	<u>Objective 3:</u> Infrastructure adapts to meet future needs.	 A1: Provide a benchmark for the appropriate supply of public parking; A2: Improve and simplify parking signage; A3: Optimise existing on-street parking provision; A4: Investigate opportunities to move long-term parking to the City Centre periphery; and A8: Investigate and identify alternative uses for car parks.
	Examples: -Design transport and infrastructure that responds to demand for use; -Promote digital technology to improve the provisions of services; and -Design car parks and drop off bays that can be adapted to alternative uses	 D1: Public parking rate benchmarks; D3: Collimore/Woodward Park carpark upgrades; D5: Dynamic parking guidance system; D8: Optimising usage of car parking spaces; D9: Construct new Bathurst Street car park (between Terminus and Macquarie Street); and

Э

LIVERPOOL CITY CENTRE CAR PARKING STRATEGY 2019 – 2029

Strategy	Directives	Link to Actions/Deliverables
	(commercial uses, storage, logistics hubs, depots or community uses) in the event that autonomous vehicles reduce the requirements for car parking.	D10: Construct new car park at 68 Speed Street.
	<u>Objective 4:</u> Infrastructure use is optimised.	 A2: Improve and simplify parking signage; A3: Optimise existing on-street parking provision; A6: Review Council's parking prices; and A7: Investigate all funding sources for additional parking in the City Centre.
	 <u>Examples:</u> Adopting new technologies such as smart traffic management systems; -Changing user behaviours by flexible pricing and other policies; and -Developing and implementing travel plans to encourage the use of sustainable transport choices. 	 D5: Dynamic parking guidance system; D7: Prepare a pricing strategy for on and off street parking; D8: Optimising usage of car parking spaces; D9: Construct new Bathurst Street car park (between Terminus and Macquarie Street); and D10: Construct new car park at 68 Speed Street.
	<u>Objective 12:</u> Great places that bring people together.	 A2: Improve and simplify parking signage; A5: Investigate the potential for ridesharing facilities in residential areas; and A8: Investigate and identify alternative uses for car parks.

LIVERPOOL CITY CENTRE CAR PARKING STRATEGY 2019 – 2029

Strategy	Directives	Link to Actions/Deliverables
	Strategy 12.2: -Investigating opportunities for precinct-based provisions of adaptable car parking and infrastructure in lieu of private provision of car parking; -Ensuring parking availability takes into account the level of access by public transport; and -Incorporating facilities to encourage the use of car sharing, electric and hybrid vehicles including charging stations.	 D3: Collimore/Woodward Park carpark upgrades; D4: Introduce a car share scheme into Liverpool City Centre; D5: Dynamic parking guidance system; D8: Optimising usage of car parking spaces; D9: Construct new Bathurst Street car park (between Terminus and Macquarie Street); and D10: Construct new car park at 68 Speed Street.
Western City District Plan	<u>Planning Priority W1:</u> Planning for a city supported by infrastructure.	 A1: Provide a benchmark for the appropriate supply of public parking; A4: Investigate opportunities for long-term parking to be located at the periphery of the city centre; and A8: Investigate and identify alternative uses for car parks.
	Actions: -Align forecast growth with infrastructure; -Sequence infrastructure provisions using a place based approach; -Consider the adaptability of infrastructure and its potential shared use when preparing infrastructure strategies and plans; and - Maximise the utilities of existing infrastructure assets and consider strategies to influence behaviour changes, to reduce the demand for new infrastructure, including supporting the development of adaptive and flexible regulations to allow decentralised utilities.	D1: Public parking rate benchmarks; D3: Collimore/Woodward Park carpark upgrades; and D8: Optimising usage of car parking spaces.
	<u>Planning Priority W7:</u> Establishing the land use	A3: Optimise existing on-street parking provision; and

LIVERPOOL CITY CENTRE CAR PARKING STRATEGY

Strategy	Directives	Link to Actions/Deliverables
	and transport structure to deliver a liveable, productive and sustainable Western Parkland City.	A8: Investigate and identify alternative uses for car parks
	<u>Actions:</u> -Designing adaptable infrastructure such as more flexible design of streets and public spaces, for example through car parking strategies.	D2: Provide angled parking; D3: Collimore/Woodward Park carpark upgrades; and D8: Optimising usage of car parking spaces.
Liverpool Community Strategic Plan	<u>Direction 3:</u> Generating Opportunity.	A2: Improve and simplify parking signage; and A3: Optimise existing on-street parking provision.
	<u>Community wants:</u> Improved traffic management.	D5: Dynamic parking guidance system; D6: Provide simplified parking signage; and D8: Optimising usage of car parking spaces.
Liverpool Local Strategic Planning Statement: Connected Liverpool 2040	<u><i>Planning Priority 1:</i></u> Active and public transport.	A1: Provide a benchmark for the appropriate supply of public parking.
	<u>Action 1.1:</u> Update the Liverpool City Centre Parking Strategy.	D1: Public parking rate benchmarks.

2. Background

Council has prepared a number of parking strategies since 2010, including the 'Liverpool City Centre Parking Strategy' (adopted February 2010, amended 26 June 2013) and the 'Liverpool City Centre Precinct (LCCP) Car Parking Strategy Report' (adopted July 2017). The recommendations of each strategy are included in Appendix B.

2.1 Initiatives undertaken

Council has successfully implemented the following demand management measures:

• Jul 2010: Introduced "Pay and Display" ticket parking in the Northumberland Street and Bathurst Street car parks

LIVERPOOL CITY CENTRE CAR PARKING STRATEGY

• Jan 2011-Aug 2012: Upgraded Collimore park to provide 496 parking spaces

350

- Jan 2012: Introduced parking meters (including ticketing via number plate recognition) on streets in the inner core for on-street parking, in the area bounded by Bathurst, Elizabeth, Bigge, Scott and Macquarie Streets, and Macquarie Street North to Lachlan Street
- Mar 2015: Refurbished the Northumberland Street Car Park to rectify structural issues and prolong its life
- Aug 2015: Introduced a Residential Parking Permit Scheme in suitable and defined parking zones close to homes
- Mar 2019: Resolved to increase the number of parking spaces within proximity of the Liverpool City Centre at 68 Speed Street and the Whitlam Leisure Centre at Woodward Park.
- Oct 2019: Collaborated with the NSW Government to introduce a 'Park n Pay' smartphone app which allows drivers to pay for parking and top up using their smart phones

2.2 Initiatives not completed

Some major car park infrastructure projects from previous strategies are yet to be completed, have been altered, or are no longer necessary. The proposed demolition of the Northumberland Street car park and construction of replacement parking on the same site (or in a new location) has not been undertaken as the car park was refurbished in 2015.

A multi-storey car park has yet to be constructed at Collimore Park. Council is in the early planning phase for this project, involving amendments to the Liverpool Local Environmental Plan (LLEP) 2008 to permit construction of a multi-level car parking building on the site. Subject to further investigation, it is also recommended that a multi-storey carpark is considered at Woodward Park in conjunction with any redevelopment of that site, with the Woodward Place master plan identifying suitable locations.

3. Current issues

To effectively manage parking in the Liverpool City Centre, the underlying factors surrounding demand must be understood. Most people travelling to the Liverpool City Centre by car, do so because of one or more of the following factors:

- It is convenient;
- It is faster than alternative transport modes;
- It is cheaper than using public transport;
- Amenity of using active transport is poor;
- The benefits of active transport are not realised;
- Travelling via public or active transport is not an option or too difficult;
- A mobility or other impairment makes travel other than by private vehicle not feasible;

LIVERPOOL CITY CENTRE CAR PARKING STRATEGY 2019 - 2029

- · Perceptions of poor safety or feeling uncomfortable using active or public transport;
- There is a perception of availability of parking (even if constrained).

The management of car parking supply and demand involves prioritising parking for users who require it the most and providing viable alternatives for others, whilst addressing the factors listed above.

3.1 Journey patterns

Travel patterns can assist in analysing whether areas have a car parking demand or car parking supply issue (or both).

Journey to work by location

Australian Bureau of Statistics (ABS) Journey to Work data indicates that approximately 37.8% of persons employed within the Liverpool LGA live within the Liverpool LGA. Of the remaining 62.2% of the workforce, many come from neighbouring LGAs (as shown in Figure 2) including:

- Campbelltown 10.9%
- Fairfield 10%
- Camden 6.3%
- Bankstown 6.0%
- Sutherland Shire 3.2%
- Penrith 2.8%
- Wollondilly Shire 2.2%



<image><figure>

Figure 2: Residential location of workers working in the Liverpool LGA

Given that a large portion of Liverpool workers are travelling from urban areas within the LGA, or from neighbouring Council areas, it is reasonable to assume that a commute into the Liverpool City Centre by public transport would be possible. As such, it is important to also consider improvements to public/active transport to improve patronage and reduce parking demand and congestion.

Journey to work by mode

Data from the ABS reveals that approximately 73% of workers accessing the Liverpool City Centre are doing so via private vehicle. Approximately 11.5% of workers are using public transport and 3.5% are using active transport. Table 2 demonstrates that while the proportion of workers accessing the city by car (and presumably parking in the city centre) is lower than Fairfield, it is still higher than that of Parramatta, and substantially higher than that of the Sydney CBD. As Sydney's next CBD, the proportion of workers accessing the Liverpool City Centre by cars must steadily decline to provide for sustainable transport choices and to avoid further congestion in the Liverpool City Centre.



Table 2: Journey to work: Place of work

	Liverpool	Fairfield	Parramatta	Sydney
Travel Mode	Count (%)	Count (%)	Count (%)	Count (%)
Public Transport	2,251 (11.53)	399 (7.17)	18,445 (36.72)	227,512 (70.91)
Vehicle	14,268 (73.08)	4,585 (82.45)	24,628 (49.03)	43,212 (13.47)
Active Transport	701 (3.59)	101 (1.82)	2,076 (4.13)	21,708 (6.77)
Other Mode	45 (0.23)	33 (0.59)	119 (0.24)	1,136 (0.35)
Worked at home*	2,052 (10.51)	385 (6.92)	4,487 (8.93)	24,812 (7.73)
Mode not stated	222 (1.14)	63 (1.13)	470 (0.94)	2,456 (0.77)
Total	19,523	5,561	50,228	320,828

* Includes persons who stated they 'Did not go to work'. (Source: ABS, 2016, Journey to Work to Place of Work)

Data from the Warren Serviceway carpark

The Warren Serviceway carpark is a multi-storey parking facility located in the centre of the Liverpool City Centre on Warren Serviceway. It provides all day parking in the city centre for a fee of \$16.00/day or a 1 month pass can be purchased for \$130.00.

Operation of the car park includes the collection of the post codes of those who use it. The data is a small sample of commuters accessing the Liverpool City Centre, and has been analysed to determine the distance and direction in which motorists are travelling. This data is tabulated below:

	Direction o	f Travel to Li	verpool		
Proximity to Liverpool	North	South	East	West	Total
Less than 1.5km	-	-	-	6	6
	(0%)	(0%)	(0%)	(2.6%)	(2.6%)
1.5 – 5 km	5	1	14	30	58
	(2.2%)	(0.4%)	(6.2%)	(13.2%)	(25.6%)
5 – 10km or direct	4	9	13	51	77
rail	(1.8%)	(4%)	(5.7%)	(22.5%)	(33.9%)
10km +	16	39	24	15	94
	(7%)	(17.2%)	(10.6%)	(6.6%)	(41.4%)
Total	25	49	51	102	227
	(11%)	(21.6%)	(22.5%)	(44.9%)	(100%)

Table 3: Warren Serviceway data

- 2.6% of drivers using this parking facility are people who reside in the suburb of Liverpool.
- 25.6% of users live within a 5km radius of the Warren Serviceway Carpark.
- 33.9% of users live within 5 10km of the carpark.



While active transport will not be desired or viable for a large number of these users (those travelling over 5km), if high quality and frequent public transport is available, mode shift from private vehicles to public transport can become a reality.

The Sydney Region Plan, the Western City District Plan and the Liverpool Local Strategic Planning Statement contain objectives and actions to achieve a 30-minute city. Given that the average speed of a Sydney bus (including stops) is 35km/h, 10km represents a catchment in which people can likely walk to a bus stop, catch a bus and reach their destination in about 30 minutes (provided the bus achieves these average speeds, and provided a bus stop is convenient to homes). Trains are substantially faster, so have a larger catchment.

To effectively manage car parking demand, more emphasis is needed on encouraging mode shift from cars to public transport.

3.2 Off-street parking

Approximately 10,502 car parking spaces are provided within the Liverpool City Centre. This includes 7900 off-street spaces, including hospital spaces, Council-controlled facilities, and commercially-operated facilities.

On-site observations indicate that current parking demands within off-street car parking areas is high, with facilities in the CBD core typically reaching capacity in the early morning (i.e. prior to approx. 10am).

Off-street parking numbers within the city centre and associated time restrictions and fees are summarised in Table 4.

Number	Parking Station	Payment Method	Type of Restriction	Owner (Operator)	Supply** (No. of Spaces)
1	33 Moore Street	Paid	Permit Parking only	Liverpool City Council	51 ^[1]
2	Liverpool Plaza	Limited free parking, then paid parking	1.5-hour free parking, paid parking thereafter	Perpetual Trustee Company (Point Parking)	230
3	Westfield	Limited free parking, then paid parking	3-hour free parking, paid parking thereafter	Westfield	3438 (incl. 500 leased)
4	Norfolk Serviceway	Paid	1-hour limit	Liverpool City Council	26

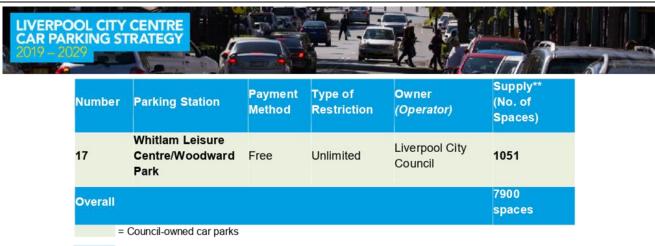
Table 4: Total existing publicly accessible off-street parking supply

EGROW 03 Attachment 1 355 Liverpool City Centre Car Parking Strategy Liverpool City Centre Car Parking Strategy 2019

LIVERPOOL CITY CENTRE CAR PARKING STRATEGY 2019 – 2029

					T
Number	Parking Station	Payment Method	Type of Restriction	Owner (Operator)	Supply** (No. of Spaces)
5	52 Scott Street (Crunch Gym)	Limited free parking, then paid parking	2-hours free parking and fee thereafter	Liverpool City Council (Elders Real Estate)	179
6	Warren Serviceway	Paid	Unlimited	Liverpool City Council	640 (incl. 120 reserved spaces)
7	Northumberland Street	Limited free parking, then paid parking	2-hr ground floor All day Level 1 & 2, All day and 3-hour free Levels 3 &4	Liverpool City Council	440
8	Bathurst Street (North)	Paid	3-hour limit	Liverpool City Council	240
9	Bathurst Street (South)	Free	2-hour limit (M-F) 1-hour limit (Sat)	Liverpool City Council	49
10	Collimore Park	Free	Unlimited	Liverpool City Council	496
11	Speed Street	Free	3-hour limit	Liverpool City Council	87
12	Warwick Farm	Free	Unlimited	Rail Corporation NSW	328
13	Liverpool Railway Station	Free	1-hour limit (15-min limit in peak times)	Rail Corporation NSW	124
14	Liverpool Hospital	Paid	Unlimited	NSW Health	324 ^[2]
15	Sydney Southwest Private Hospital	Paid	Unlimited	Healthscope Ltd (Wilson Parking)	87
16	Lighthorse Park	Free	Unlimited	Liverpool City Council	50

EGROW 03Liverpool City Centre Car Parking StrategyAttachment 1Liverpool City Centre Car Parking Strategy 2019



356

= Privately owned car parks

** Information relating to parking supply dated as of 2019.

[1]A total of 274 spaces are provided at 33 Moore Street, with 223 spaces allocated to Council and UOW and 51 spaces available to the public (subject to parking permit).

[2]A total of 1343 spaces are provided at the Hospital on-site, with 1019 spaces allocated to Hospital staff and employees and 324 spaces available to the public.

The existing off-street parking spaces are considered to be generally satisfactory for their intended use (i.e. city or town centre parking).

Appropriate pedestrian amenity within the car parks is limited, typically with no separated paths between pedestrians and vehicles. In some instances, where internal stairs are not provided, pedestrians were observed to travel via the internal car park ramps to access/exit the car park.

A summary of the key off-street car parks are documented in Table 5.

Table 5: Summary of off-street car parking design issues

Car Park	Access points	Internal vehicle circulation	Pedestrian access	Recommendation / Comments
Bathurst Street	 Main access provided from Northumberland Street via single two-way driveway Separate entry and exit provided from/to Bathurst Street 	 Line marking to indicate circulation Signage outlining entry and exit points 	No dedicated pedestrian path	 Parking demand at capacity Difficult to locate available parking easily Prime City Centre location with restricted access Recommend installing wayfinding signage to indicate multiple exit locations (e.g. "Exit via Bathurst Street/Exit onto Northumberland Street")

357 Liverpool City Centre Car Parking Strategy Liverpool City Centre Car Parking Strategy 2019

LIVERPOOL CITY CENTRE CAR PARKING STRATEGY 2019 - 2029

		and the second se		
Car Park	Access points	Internal vehicle circulation	Pedestrian access	Recommendation / Comments
Warren Serviceway	 Single driveway access off Warren Serviceway (via Bigge Street and George Street) Single egress into Warren Serviceway 	 One-way internal circulation Reversed ingress/egress movements on lower ground floor Express exit lane 	No dedicated pedestrian path	 Narrow internal ramps, difficult to circulate with larger vehicles Parking spaces are narrow Inconsistent wayfinding signage on approach
52 Scott Street (Crunch Gym)	 Single 11.3m wide two-way driveway, with access off Terminus Street Boom-gate ticketed control upon entry and exit 		No dedicated pedestrian path	 Poor public domain interface with Terminus Street
Northumberland Street	 Four single one-way access points (two "in" and two "out") Ground floor – one entry and one exit point Upper levels – one entry and one exit point 	 One-way internal circulation Reversed ingress/egress movements within internal ramps Line marking to indicate "in" and "out" movement 	No dedicated pedestrian path	 Parking spaces are narrow Poor visibility at exit (vehicle/pedestrian conflicts) Additional signage indicating vehicle circulation recommended
Collimore Park	 Two driveway access points off Moore Street and Collimore Avenue 	 Two-way circulation Several parking sections 	No dedicated pedestrian path	 Low parking occupancy of disabled parking spaces Large area, multiple intersection points within car park – potential vehicle conflict points Tight turn around bends Occupies public open space Located in a residential neighbourhood (GTA Consultants, 2017)

LIVERPOOL CITY CENTRE CAR PARKING STRATEGY

Expansion of existing multi-storey carparks

The expansion of existing multilevel car parking structures will need to account for the updated Australian Standard AS3600:2018 for concrete structures. This standard requires any modified multi-level car parking structures to be strengthened. Implementation of the Australian Standard has potential implications, as additional bracing could result in the removal of multiple existing car spaces. For example, it was proposed to add two additional levels to the Warren Service Way car park, however modelling showed that around 100 existing car spaces would need to be removed as a result of strengthening work requiring to comply with AS3600:2018. The additional two levels were intended to provide for 160 parking spaces, therefore the loss of 100 spaces meant the upgrade was not considered to be viable. Due to the new standard requirements, the cost of providing additional spaces in an existing car park could be higher than the construction of a new car park.

358

3.3 On-street parking

Approximately 10,502 car parking spaces are provided within the City Centre including 2602 on-street spaces. The majority of on-street car parking spaces are in high demand, with only isolated areas of moderate to low occupancies recorded in the south-eastern part of the city centre.

Parking observations indicate an existing demand of 9662 spaces during the typical weekday peak period (92% occupancy). This demand includes 2234 on-street spaces (86% occupancy) and 7347 off-street spaces (93% occupancy). (GTA Consultants, 2017)

Of the existing parking provision, a number of 'speciality spaces' exist and were observed to experience the following occupancies during the peak period as follows:

- Disabled: 37 spaces (97% occupied)
- Loading: 9 spaces (100% occupied)
- Mail: 1 space (0% occupied)
- No Parking (Police Excepted): 15 spaces (93% occupied)
- Taxi: 12 spaces (92% occupied)

(GTA Consultants, 2017)

Most parking areas within the city centre reach typical capacity by 10am. Existing peak parking demands generally comprise of people visiting retail shops, commercial and services precincts (including the library and hospitals). As a result, short-term parking is at a premium. This is exacerbated by allowing for all day parking within the city centre core.

Demand exceeding capacity results in excessive circulation for users attempting to locate a vacant space. All other modes of transport in the network are subsequently impacted by the increased traffic movements, which impacts traffic efficiency and the amenity of the city. Parking management intervention is required to manage existing demand for car parking.

Broadly, spaces closest to the CBD core are restricted to stays of one hour or less, with two hour restrictions around the retail and services precincts and unrestricted parking provided in non-core and residential areas.



Existing car parking demands across the city centre are high, with an overall occupancy rate of 86% at peak times. This represents a typical demand of approximately 2234 vehicles, with approximately 368 vacancies being available. (*GTA Consultants, 2017*)

It is noted that a large portion of these vacancies exist within the outer periphery of the city centre, generally within the non-core area which largely comprises residential land uses.

3.4 Parking permits

The purpose of a parking permit scheme is to provide a parking demand management mechanism for homes and businesses in the area during times of peak parking demand whilst minimising adverse impacts on commercial activities, particularly during peak business hours. It also serves to provide exemptions from parking restrictions.

Careful planning is required to ensure that applications for permits do not exceed car parking supply, and that any permits are only issued in extenuating circumstances (i.e. there are no off-street parking spaces in the vicinity).

3.5 Car park pricing

Council car park pricing in the Liverpool City Centre is similar to other Sydney CBDs such as Parramatta. However, the all-day off-street parking fees are lower than that of the Parramatta CBD. Table 6 compares the minimum and maximum parking fees for Council controlled off-street and on street parking.

	Parramatta		Liverpool	
	Off Street	On Street	Off Street	On Street
Maximum all-day	\$26.00	\$9.50	\$16.00	N/A
Minimum all-day	\$14.00	\$8.00	\$11.00	N/A
Maximum per- hour	\$3.00	\$4.00	\$3.00	\$2.70
Minimum per hour	N/A	\$2.00	\$2.20	\$2.70

Table 6: Parking fare comparison

Source: Fees and Charges Schedule

A typical Liverpool car space is priced at approximately \$2.20 to \$2.70 per hour (short-term parking) which is lower than public transport fares within the locality. For example, a short bus ride up to 3km costs \$2.90 (adult fare), while a short train ride up to 10km costs \$3.61 (peak adult fare). Relatively inexpensive car parking reduces the incentive to adopt alternative transport modes, such as public transport.

There is scope to increase parking fees, which can be a powerful demand management tool. Raising the price of parking incentivises mode shift to public transport, active transport, or the use of car and bike share operators, equalising the perceived variable costs of car travel and making alternative transport modes more attractive.



Additionally, increasing parking fees also represents a tangible reflection of local policy and attitudes towards private vehicle travel and mode choice, prioritising amenity over vehicle movement and aligns Council policy with other state and district policies.

It is also noted that Council currently provides 15-minutes free on-street parking in the city centre.

3.6 Wayfinding signage

Wayfinding signage is located along key roads to provide directional guidance for motorists to major off-street car parking areas within the city centre, as shown in Figure 3.

It is noted that wayfinding signage for privately operated off-street car parks has not been reviewed i.e. Westfield Shopping Centre, Liverpool Plaza and Hospital etc.



Figure 3: Existing wayfinding signage locations to key off-street car parking areas (Council Owned)

While the broad strategic location of wayfinding parking signage (as nominated in Figure 3) is generally considered satisfactory, the adequacy of specific sign placement is investigated further in Table 7. Another notable issue is the consistency of the design of wayfinding signage. Signs should be co-ordinated with similar styles and colours so that they are easily recognisable.

361EGROW 03Liverpool City Centre Car Parking StrategyAttachment 1Liverpool City Centre Car Parking Strategy 2019



Table 7: Existing car park wayfinding signage

Photograph	Car Park (CP)	Issue/Status
	Bathurst Street CP via Bathurst Street access	This sign is located just before a traffic signal, and may block motorists' view of the signal on approach.
	Bathurst Street CP via Northumberland Street access	There is relatively little advanced warning of this car park.
	Liverpool Plaza & Northumberland Street CPs	Multiple off-street car parks have been included on the sign. This may cause some confusion for motorists who are not familiar with the area.
	Liverpool Plaza & Bathurst Street & Warren Serviceway & Northumberland Street	Similarly, multiple parking locations have been included in the wayfinding sign, which may cause confusion for motorists unfamiliar with the area.

362EGROW 03Liverpool City Centre Car Parking StrategyAttachment 1Liverpool City Centre Car Parking Strategy 2019



Photograph	Car Park (CP)	Issue/Status
	Warren Serviceway CP	Sign is difficult to see due to the presence of an existing tree on Bigge Street.
Synty of Heatington	Northumberland Street CP	Wayfinding sign is not made apparent due to the significant signage clutter on this post, particularly due to the sign positioned in conjunction with two larger road signs.
	Liverpool Plaza, Warren Serviceway & Northumberland St CPs	Multiple parking locations have been included in the wayfinding sign, which may cause confusion for motorists unfamiliar with the area.
TREPOR TREIO N 7 DATS	Northumberland Street CP	Sign is located on the opposite side of the street to the carpark entry, despite being a one- way street.

(GTA Consultants, 2017)



4. Future Issues

4.1 Growth of Liverpool

The Liverpool City Centre is positioned as Sydney's next CBD - an active and mixed use city. Significant development opportunities are now being taken up for high rise commercial and mixed use developments, including a proposed redevelopment of the Westfield Liverpool shopping centre.

The Western City District Plan has also identified the Liverpool City Centre as a Health, Research and Education Precinct. The University of New South Wales has had a teaching presence at Liverpool Hospital for 30 years, and the University of Wollongong and Western Sydney University have established campuses in the City Centre and will continue to grow.

Future Transport 2056 (Transport for NSW) has identified a number of public transport upgrades over the next 20 years and beyond, to encourage increased public transport use and to reduce private vehicle dependency, including the following:

- Express train services between the Liverpool City Centre and the Sydney CBD and beyond; •
- The Sydney Southwest Metro extension from Bankstown to Liverpool; .
- A rapid bus route between the Liverpool City Centre and the Western Sydney (Nancy-Bird Walton) International Airport (WSIA);
- A safe cycleway network between 10km of Greater Penrith, Liverpool, Campbelltown-• Macarthur and Western Sydney Aerotropolis; and
- The Leppington to Western Sydney Aerotropolis and Western Sydney Aerotropolis to • Campbelltown-Macarthur train links.

A business-as-usual approach that provides for all parking to meet demand linked to forecast growth will limit the achievement of broader objectives for a liveable, vibrant, innovative, accessible and green city centre.

4.2 Land use and parking supply

The current B4 Mixed Use zoning within the Liverpool City Centre is expected to generate an increase in development within the city centre as follows:

Land Use	Retail	Commercial	Residential
Existing	68,054 m ²	146,915 m ²	5485 dwellings
Future	107,788 m ²	322,177 m ²	12,385 dwellings
Difference	+39,734m ²	+175,262m ²	+6900 dwellings
		(Gr	eater Sydney Commission 2017

Table 8⁻ Future land uses

(Greater Sydney Commission, 2017)

Given the projected future development yields within the Liverpool City Centre, car parking supply is also expected to increase dramatically under a business-as-usual approach. The estimated existing and future parking supply within the city centre is summarised in the table below:



Table 9: Future parking demand

Land Use	Parking Rate	Minimum Parking Requirements		Net Difference (Future –
		Existing	Future	Existing)
Retail	1 space per 100m ²	681 spaces	1078 spaces	+397 spaces (58%)
Commercial	1 space per 150m ²	980 spaces	2148 spaces	+1168 spaces (119%)
Residential	 0.4 spaces per 1-bedroom 0.7 spaces per 2-bedroom 1.2 spaces per 3-bedroom 1 space per 7 units (visitor parking) 	3664 spaces	10,775 spaces	+7111 spaces (194%)
	Total	5325 spaces	14,001 spaces	+8676 spaces (163%)

For the purpose of estimating parking supply, residential parking rates have been assumed based on high density residential development with an apartment mix of 10% 1-bedroom, 80% 2-bedroom and 10% 3-bedroom or more.

Parking rates for non-residential uses have been based from the Liverpool LEP 2008, with residential uses based off the Roads and Maritime Services' Guide to Traffic Generating Developments

Taking into consideration the above parking rates within the city centre, parking supply is expected to increase by 163%.

The modelling above has not considered the impacts of increased parking on the amenity and congestion on local streets in Liverpool, rather it highlights a substantial increase in off-street parking that will provided in the Liverpool City Centre under current policy settings.

4.3 Collaboration area

The Greater Sydney Commission has adopted the Place Strategy for the Liverpool Collaboration Area which includes the Liverpool City Centre. It is estimated that the Liverpool Collaboration Area will cater for approximately 18,800 additional dwellings (including 1800 dwellings in Warwick Farm, north of the Hume Hwy).

4.4 Liverpool Civic Place

Located at 52 Scott Street, Council's proposed mixed-use Liverpool Civic Place development will anchor and activate the southern end of Liverpool City Centre by providing new public spaces, community facilities and job opportunities. Liverpool Civic Place will include:

- A 24-level mixed-use tower combining commercial, retail and educational spaces
- · A nine-level 126 room hotel or student accommodation building
- New council offices



• A new 5,000sqm city library

The site will provide 285 car spaces (of which, approximately half would be used for Council staff / vehicles during business hours). Subject to obtaining development consent, construction is expected to commence in early 2020 and take two to three years to complete.

4.5 Technology impacts

Technological advances in parking guidance technology have improved the ability for car parking users to be matched with available spaces, therefore reducing the gap between car parking demand and perceived supply. Dynamic signage and in-ground sensors can guide users to empty spaces and reduce circulation. New technologies such as number plate recognition in Westfield Liverpool shopping centre will increase the efficiency of entering and exiting the car park. Phone based parking apps can also help users to identify places to park and view costs. Some operators enable users to view the availability of parking, pay for parking, or pre-book a space via an app before the user leaves their point of origin. The data collected from smart technologies can provide parking operators with the information they need to optimise the use of their space, and reduce customer frustration, and aligns with principles of Mobility as a Service.

4.6 Demand for recreational areas

As the population within the city centre increases, the location of recreational areas will need to be considered in conjunction with the location of any proposed car parking. Car spaces should not impede upon existing recreational areas such as public open space and other areas where people congregate. Parking spaces should be adaptable to meet the increased demand for open space and ensure that they can also be used to host various events when needed. Opportunities should be undertaken to incorporate public open space into any new parking structures (i.e. roof top open space on multi-deck parking).

4.7 Public Domain Masterplan

The Liverpool City Centre Public Domain Master Plan outlines a ten year plan of improvements for the public domain (streets, plazas and service ways) across the city centre. The plan specifies improvements to encourage pedestrian movements into and out of the city centre, with improved pedestrian pavements, improved connectivity, additional shade through street trees and vegetative separation along busy thoroughfares. Additionally, improved bicycle infrastructure will encourage mode shift, particularly for short distance journeys within and into the city centre.

The master plan has been developed collaboratively to ensure proposed outcomes align with community needs. Studies completed for prior traffic studies have been considered in the development of the master plan. Accordingly, any parking initiatives within the city centre should not compromise the implementation of the masterplan.



4.8 Potential redevelopment of key sites

Council is considering potential redevelopment options at a number of key sites in the city centre. These include:

- Council owned car parks at Northumberland and Bathurst Street
- Liverpool Train Station and Bus Interchange
- Liverpool City Library and Council Administration Building 33 Moore Street
- Liverpool Civic Place

Although substantial plans have yet to be prepared for some of these sites, parking would need to be reorganised to accommodate any proposed land use changes. Any potential redevelopment should not result in the net loss of parking spaces in the city centre.

5. Actions

For this Strategy to be successful, it must manage parking demand by creating additional capacity where appropriate and reducing demand through mode shift to active and public transport. The Strategy proposes eight actions as follows:

Table 10: Actions

	Action	Description
A1	Provide a benchmark on the appropriate supply of public parking	A benchmark is to be developed to determine how much public car parking should be supplied by Council in the Liverpool City Centre.
A2	Improve and simplify parking signage	Improve signage for parking in the Liverpool City Centre to reduce confusion and the number of drivers circulating local streets in search of parking.
A3	Optimise existing on- street parking provision	Increase the availability of on-street parking by utilising methods to increase turn-over. Investigate a range of methods to reduce demand and increase supply if warranted.
A4	Investigate opportunities to move long-term parking to the city centre periphery	Investigate suitable sites for long-term car parking, to allow City Centre core parking to be repurposed for short-term parking or other suitable purposes.
A5	Implement car-share services	Car share operators have identified Liverpool as a feasible location to establish services.
A6	Review Council's parking prices	Conduct a comprehensive review of the pricing structure for on-street and off-street parking

EGROW 03 Liverpool 0 Attachment 1 Liverpool 0



		demand whilst respecting social equity.
A7	Investigate all funding sources for parking in the city centre	Identify the source of funding for all projects, including user pay systems, development contributions, grant funding, general revenue, or redevelopment opportunities. Funding of parking must assess whole-of-life costs including construction, maintenance, demolition/conversion to other uses, and cost of doing nothing.
A8	Investigate and identify alternative uses for car parks	Investigate and prioritise opportunities for parking infrastructure to cater for multiple user groups, are adaptable to pop-up/temporary events, and which provide for other public benefits in addition to parking.

6. Delivery Plan

To fulfil the actions above, Council will need to explore a number of options to reduce demand, increase appropriate supply and consider other projects which will assist in addressing parking issues. The deliverables identified below represent individual projects which can address one or more of the actions above, whilst noting how they relate to the strategic objectives and actions identified in the Strategy. A summary of the Delivery Plan can be found in Appendix A.

D1: Public parking rate benchmarks

Link to Actions

A1: Provide a benchmark for the appropriate supply of public parking.

A4: Investigate opportunities to move long-term parking to the city centre periphery.

A7: Investigate all funding sources for additional parking in the city centre.

Link to Strategic Objectives

O1: Identify the appropriateness of providing further parking opportunities within the Liverpool City Centre.

O3: Provide parking infrastructure that responds to land use changes, population and economic growth in the centre over the next 10 years.

O4: Improve parking accessibility (general and special needs) for shoppers, visitors, trades people and local businesses to support economic growth.

O6: Provide a delivery framework to improve parking over the next 10 years, including recommended number and location of car spaces.

Project Objectives



- To provide a numerical benchmark for the provision of public car parking spaces to support businesses and other uses in the City Centre.
- To define Council's role in facilitating additional car parking in the Liverpool City Centre.

Project Description

Liverpool City Council has an ambitious goal of becoming Sydney's third CBD. New developments in the city centre will provide their own private off-street parking, or provide Council with suitable funds to construct parking elsewhere through development contributions.

To provide the optimal amount of public car parking in Liverpool, a benchmark must be developed, by using current research on the supply and demand of public parking (for short-term and all-day parking) in modern, vibrant city centres. The benchmark exercise should look at how other contextually similar cities are responding to pressures to increase the availability of public parking, particularly given that some historic development did not provide parking, or cannot accommodate parking on-site. The benchmark must recognise the source of demand for public parking (such as the hospital, commuters, and retail premises which cannot provide parking), the mobility of the local population, and the availability of alternate transport modes. The benchmark must also recognise constraints in the regional road network, and how additional Council parking facilities within the city centre will impact the efficiency of the road network.

The benchmark can be utilised to determine the amount of parking which is the responsibility of Council to fund, build and operate, whilst providing commentary on the need to manage existing demand and for new development to cater for parking demand.

Project Timeline

2020-2021

D2: Investigate further opportunities to provide angle parking

Link to Actions

A3: Optimise existing on-street parking provision.

A7: Investigate all funding sources for additional parking in the City Centre.

A8: Investigate and identify alternative uses for car parks.

Link to Strategic Objectives

O1: Identify the appropriateness of providing further parking

opportunities within the Liverpool City Centre.

O3: Provide parking infrastructure that responds to land use changes, population and economic growth in the centre over the next 10 years.





O4: Improve parking accessibility (general and special needs) for shoppers, visitors, trades people and local businesses to support economic growth.

O6: Provide a delivery framework to improve parking over the next 10 years, including recommended number and location of car spaces.

Project Objectives

 Indicate where angled car parking bays can be located in accordance with the City Centre Public Domain Masterplan and car parking rate benchmarks.

Project Location

Streets within the city centre

Project Description

The Liverpool City Centre is generally devoid of angled parking bays, except for the portion of Macquarie Street north of Westfield. Angled parking, where the carriageway is sufficiently wide, provides a higher parking capacity than parallel parking and cars can more quickly enter or exit spaces (depending on whether vehicles drive in forward or in reverse). Where streets are sufficiently wide to be able to be reconfigured, angled parking can provide for additional parking bays. The decision to include angled parking bays must reflect the Liverpool City Centre Public Domain Masterplan, and be consistent with the benchmarks provided in Deliverable 1. The benchmarks can be used to determine if it is feasible to use the parking bays for alternate purposes such as outdoor seating after hours.

Project Costs and Considerations

The cost of implementing this action depends on whether the work is limited to changing linemarking or whether kerbs and landscaping bays require reconstruction. Cost will be determined on a project-by-project basis. Any new car spaces should be consistent with the Liverpool City Centre Public Domain Master Plan.

Project Timeline

2020-2029

D3: Collimore/Woodward Park carpark upgrades

Link to Actions

A4: Investigate opportunities for long-term parking to be located at the periphery of the city centre.

A7: Investigate all funding sources for additional parking in the city centre.

A8: Investigate and identify alternative uses for car parks.

Link to Strategic Objectives

O2: Further evaluate the concept of concentrating public parking at the outer fringe of the city centre.

O3: Provide parking infrastructure that responds to land use changes, population and economic growth in the centre over the next 10 years.

LIVERPOOL CITY CENTRE CAR PARKING STRATEGY 2019 – 2029

O6: Provide a parking improvement delivery framework, to guide Council to carry out parking improvement works over next 10 years.

370

Project Objectives

- Provide long-term parking outside of the city centre in at-grade or multistorey car parking facilities.
- Improve accessibility to the city centre from satellite parking facilities via upgraded pedestrian and cycling infrastructure and advocacy for a permanent shuttle bus.
- Ensure that the quality of existing public open space and other elements of the public domain is not decreased but enhanced.
- Maintain residential amenity.

Project Location

Collimore Park is located to the west, outside of the city centre, and is bounded by Elizabeth Drive, Collimore Avenue, Moore Street, and Brickmakers Creek.

Woodward Park is located to the west, outside of the city centre, and is bounded by Memorial Avenue, the Hume Highway, Hoxton Park Road and the T-way

Project Description

Establish a multi-deck car park at Collimore Park and/or Woodward Park to provide all-day parking for city centre employees and University students, in addition to providing timed parking for motorists who attend appointments in the medical precinct.

The present at-grade car park in Collimore Park provides a total of 496 spaces, including (9) nine accessible parking spaces.





The potential for Woodward Park to accommodate additional commuter parking is another option, as the site is currently subject to a master planning exercise. The park currently includes the Whitlam Centre, several sporting fields, and car parking.

Project Costs and Considerations

LIVERPOOL CITY CENTRE CAR PARKING STRATEGY 2019 – 2029

The cost of a single at-grade parking bay (including costs for drainage, circulation space, design, etc.) is approximately \$6000; this rises to \$30,000 for above ground facilities or \$60,000 per bay for basement parking. As such, an additional 1000 spaces on Collimore Park or Woodward Park would likely cost approximately \$30million. This does not include operational costs.

371

Council's contributions plan currently has approximately \$6 million allocated for city centre parking improvements. Part of the construction costs could be derived from development contributions, although that these funds are also committed to projects such as the Speed Street car park and improvements at Woodward Park. Council would likely need to source additional funding from general revenue. User-pay systems could be provided to cover the costs of operation and potentially offset costs of construction. A revised contributions plan for the city centre may be required to raise additional funds.

The parking facilities at Collimore Park and Woodward Park are located on land that is zoned for public open space. There is a Council resolution and planning proposal to facilitate the construction of a multi-level parking facility at Collimore Park. Several Council events and sporting clubs utilise Woodward Park on weekends, which generates demand for parking. The site is bound by heavily-trafficked roads such as the Hume Highway and Hoxton Park Road.

Whilst located near the city centre, construction of a multi-storey carpark at Collimore Park will concentrate additional traffic on residential streets, as accessibility into Collimore Park is severely restricted by turn-bans from the Hume Highway and Elizabeth Drive. Woodward Park has more opportunities to cater for alternative users, given weekend demand, compared to Collimore Park, and has better access to higher-order streets, reducing traffic movements on residential streets. Integration of a commuter car park on this site in association with a broader masterplan may result in no net loss of open space whilst providing additional parking and the potential for better connectivity to the city centre via a pedestrian bridge.

Project Timeline

2020-2024

D4: Introduce a car share scheme into Liverpool City Centre

Link to Actions

A5: Implement car-share services

Link to Strategic Objectives

O1: Identify the appropriateness of providing further parking opportunities within the Liverpool city centre.

O3: Provide parking infrastructure that responds to land use changes, population and economic growth in the city centre over the next 10 years.

O4: Improve parking accessibility (general and special needs) for shoppers, visitors, trades people and local businesses to support economic growth.

O5: Explore and deploy smart parking technologies to support an efficient and innovative city centre.



Project Objectives

- Encourage Mobility as a Service (MaaS).
- Reduce the demand for parking and car ownership in the city centre.
- Promote alternate transport options for residents within the city centre by reducing motor vehicle ownership/dependence.
- To encourage public and active transport use and facilitate interaction facilitating cohesive residential communities.

Project Location

Liverpool City Centre

Project Description

Work with car-share operators to facilitate the roll-out of car-sharing services within the Liverpool City Centre. Identify the location of dedicated car parking spaces for these vehicles if there is deemed to be market interest.

Project Costs and Considerations

Whilst there is no cost to Council associated with attracting car share schemes, there may be some costs associated with converting regular spaces to car share spaces (painting and signage).

Council may need to revise its parking permit policy as a result of implementation.

Project Timeline

2020-2021

D5: Dynamic parking guidance system

Link to Actions

A2: Improve and simplify parking signage.

A7: Investigate all funding sources for additional parking in the city centre.

Link to Strategic Objectives

O5: Explore and deploy smart parking technologies to support an efficient and innovative city centre.

O6: Provide a delivery framework to improve parking over the next 10 years, including recommended number and location of car spaces.

Project Objectives

• Minimise vehicle circulation and which contributes to congestion.



LIVERPOOL CITY CENTRE CAR PARKING STRATEGY

- Reduction noise and air pollution.
- Reduce driver frustration.
- Provide signage that is consistent in design with other signage in the Liverpool City Centre.

-

373

Project Location

Wayfinding would be provided at the main entry points to and from and within the city centre, directing motorists to car parks and primary businesses and medical facilities.

Project Description

Provide motorists with electronic/dynamic directional wayfinding to off-street parking facilities (with the potential to include onstreet facilities as this becomes available) including the number of available parking spaces. The signs will be linked to a mobile phone app to alert drivers of parking opportunities.

Project Costs and Considerations



The costs associated with the initial installation of a dynamic parking guidance system (with signage) is estimated to be in the region of \$1 million. This assumes that 20% of all parking spaces in the city centre will be fitted with sensors. However, there may be potential additional monthly costs for ongoing maintenance of the system.

NB: It will need to be investigated whether it is feasible to roll out such technology in older facilities such as the Northumberland Street car park.

Project Timeline

2020-2029

D6: Provide simplified parking signage

Link to Actions

A2: Improve and simplify parking signage.

Link to Strategic Objectives

O5: Explore and deploy smart parking technologies to support an efficient and innovative city centre.

O6: Provide a delivery framework to improve parking over the next 10 years, including recommended number and location of car spaces.

Project Objectives

- · Provide simple parking restriction signs within the Liverpool City Centre
- Reduce driver frustration.



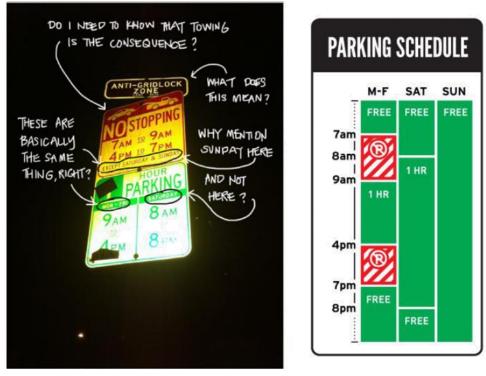
Provide signage that is consistent in design with other signage in the Liverpool City Centre

Project Location

New signage would need to replace all existing wall and pole mounted signs.

Project Description

Many motorists and residents can be confused by standard parking restriction signage. This can lead to vehicles parked in areas that are prohibited, causing congestion and/or dangerous road conditions. Visitors are also fined when parking contrary to these regulatory signs, some of which could be avoided by replacing such signage with clearer directions. Beginning in Los Angeles, several cities have begun using clearer and easier to understand signs.



(Source: nikkisylianteng.com)

It is recommended that signage design be considered as part of the Liverpool City Centre Public Domain Master Plan. However, due to current regulations, the simplified signage could only be used in conjunction with the current regulatory signage and cannot replace the existing signs. Continued advocacy to allow new signage should be explored.

Project Costs and Considerations

The costs associated with implementation of simplified parking signage is estimated to be in the region of \$10,000 (assumes 400 signs throughout the city centre). The signs should be consistent with the Liverpool City Centre Public Domain Master Plan, and consideration should be given to collaborating with the NSW RMS to permit such signs in Liverpool.

Project Timeline

2020-2021



D7: Car parking pricing

Link to Actions

A1: Provide a benchmark for the appropriate supply of public parking.

A3: Optimise existing on-street parking provision.

A4: Investigate opportunities to move long-term parking to the city centre periphery.

A6: Review Council's parking prices.

A7: Investigate all funding sources for additional parking in the city centre.

Link to Strategic Objectives

O1: Identify the appropriateness of providing further parking opportunities within the Liverpool City Centre.

O2: Further evaluate the concept of concentrating public parking at the outer fringe of the city centre.

O3: Provide parking infrastructure that responds to land use changes, population and economic growth in the city centre over the next 10 years.

O4: Improve parking accessibility (general and special needs) for shoppers, visitors, trades people and local businesses to support economic growth.

O5: Explore and deploy smart parking technologies to support an efficient and innovative city centre.

Project Objective

- · Ensure parking pricing manages parking demands in the city centre.
- Provide an evidence-based approach to identify a minimum parking charge required to recover Council's costs while catering for competitive public transport pricing.
- Find a balance between meeting the community's expectations regarding parking prices and using prices to increase turnover of parking spaces while encouraging mode-shift.

Project Location

On-street and off-street parking areas in Liverpool City Centre.

Project Description

A review of current parking prices for on-street and off-street parking areas. The review will set up a short to long-term pricing framework which guides Council's set up for parking fees over the next 10 years.

Project Costs and Considerations

While there is no direct cost to Council in reviewing parking prices, there may be secondary costs if patronage reduces due to prices increase, or reduced income should prices decrease significantly.

Consideration should be given to how this will align with Council's Parking Permit Policy, contributions plan and other funding mechanisms.

LIVERPOOL CITY CENTRE CAR PARKING STRATEGY

Project Timeline

2020-2021

D8: Optimising usage of car parking spaces

Link to Actions

A3: Optimise existing on-street parking provision.

A7: Investigate all funding sources for additional parking in the city centre.

A8: Investigate and identify alternative uses for car parks.

Link to Strategic Objectives

O1: Identify the appropriateness of providing further parking opportunities within the Liverpool City Centre.

376

O2: Further evaluate the concept of concentrating public parking at the outer fringe of the city centre.

O3: Provide parking infrastructure that responds to land use changes, population and economic growth in the centre over the next 10 years.

O4: Improve parking accessibility (general and special needs) for shoppers, visitors, trades people and local businesses to support economic growth.

Project Objectives

- To increase turnover of on-street parking spaces in the city centre.
- To support local business and the night time economy.
- To promote short-term stay (business and shopping trips) in the city centre core area and long-term stay (employee and commuter trips) in designated parking areas such as Council-owned car parks.
- Discourage all day parking in areas where there is a demand for higher parking turn-over.
- Ensure alternative options are provided for all-day parkers to offset a loss in all day parking.

Project Location

On-street parking spaces in the City Centre.

Council car park - 33 Moore Street.

Project Description

Encourage turnover of parking spaces within the city centre by increasing parking fees for onstreet parking (longer than two hours); prioritising parking near health facilities; introducing timed parking restrictions (three or four hour parking) to unrestricted parking areas; and reevaluating parking restrictions in the city centre core (change from one hour to 30min).

Project Costs and Considerations

The costs associated with implementing this initiative would be approximately \$10,000. Consideration must be given to the availability of parking for disabled permit holders and to reviewing the Parking Permit Policy to minimise conflicts.



Project Timeline

2020 - 2029

D9: Construct new Bathurst Street car park (between Terminus and Macquarie Street)

Link to Actions

A4: Investigate opportunities for long-term parking to be located at the periphery of the city centre.

A7: Investigate all funding sources for additional parking in the city centre.

A8: Investigate and identify alternative uses for car parks.

Link to Strategic Objectives

O2: Further evaluate the concept of concentrating public parking at the outer fringe of the city centre.

O3: Provide parking infrastructure that responds to land use changes, population and economic growth in the centre over the next 10 years.

O4: Improve parking accessibility (general and special needs) for shoppers, visitors, trades people and local businesses to support economic growth.

Project Objectives

· Increase parking availability at the southern end of the city centre.

Project Location

350-354 Macquarie Street, Liverpool

Project Description

Redevelop an existing at-grade car park. The new multi-storey car park could comprise of approximately 290 car spaces across seven levels. This proposal is subject to a Council resolution for design consideration.

Project Costs and Considerations

The costs associated with developing this carpark would be approximately \$18 million.

Project Timeline

Following construction of Civic Place or as determined by Council.

LIVERPOOL CITY CENTRE CAR PARKING STRATEGY

D10: Construct car park at 68 Speed Street

Link to Actions

A4: Investigate opportunities for longterm parking to be located at the periphery of the city centre.

A7: Investigate all funding sources for additional parking in the city centre.

A8: Investigate and identify alternative uses for car parks.

Link to Strategic Objectives



O2: Further evaluate the concept of concentrating public parking at the outer fringe of the city centre.

O3: Provide parking infrastructure that responds to land use changes, population and economic growth in the centre over the next 10 years.

O4: Improve parking accessibility (general and special needs) for shoppers, visitors, trades people and local businesses to support economic growth.

Project Objectives

• Increase parking availability at the southern end of the city centre.

Project Location

68 Speed Street, Liverpool

Project Description

Demolish an existing disused community facility and construct an at-grade carpark comprising of approximately 75 car spaces.

Project Costs and Considerations

Approximately \$450,000-\$500,000

Project Timeline

2020-2021

LIVERPOOL CITY CENTRE CAR PARKING STRATEGY

Appendix A – Delivery Plan summary

Deli	Deliverable		Action	Time frame
D1	Investigate and establish benchmarks for the amount of public parking desired in Liverpool.	01, 03, 04, 06		Short-term 2020/2021
D2	Investigate opportunities to provide angle parking on some streets as part of other public domain improvements.	01, 03, 04, 06	A3, A7, A8	Short to long-term 2019/2029
D3	Investigate the appropriateness, cost and provide a concept design for a multi-storey car park at Collimore Park or Woodward Park. Identify other potential locations for peripheral parking stations, including Moore Point	O2, O3, O6	A4, A7, A8	Short to medium- term 2019/2024
D4	Identify opportunities for car share schemes, for the Liverpool City Centre.	01, 03, 04, 05	A5	Short-term 2019/2020
D5	Provide a concept electronic/dynamic parking guidance system.	O5, O6	A2, A7	Short to long-term 2019/2029
D6	Provide a simplified on-street parking signage strategy.	O5, O6	A2	Short-term 2020/2021
D7	Undertake a review of all Council carpark fees and parking permits, and prepare a pricing strategy to control demand and fund future infrastructure for on and off street parking.	01, 02, 03, 04, 05	A1, A3, A4, A6, A7	Short-term 2020/2021
D8	Investigate and implement changes to long-term on-street parking.	01, 02, 03, 04	A3, A7, A8	Short-term 2020/2021
	Investigate opportunities to change core on- street parking areas from 1hr to 30 minutes.			Short-term 2020/2021
	Implement changes as the capacity for long- term parking in the periphery increases, or as alternate transport alternatives become available.			Medium to long-term 2022/2029

EGROW 03Liverpool City Centre Car Parking StrategyAttachment 1Liverpool City Centre Car Parking Strategy 2019



Appendix B – Previous implementation plans 2010 - 2017

Acti	on	Timeline	Outcome
2010			
1	Establish one free all day at-grade car park at Collimore Park outside the city centre.	Short-term (0-2 years)	Completed
2	Increase the number of available on-street spaces throughout the city centre.	Short-term (0-2 years)	Completed
3	Increase parking turnover by rationalising existing time limits with increasing time allocations allowed further away from the inner core.	Short-term (0-2 years)	Completed
4	Reduce driver confusion by providing one consistent duration of timed restrictions applying throughout the City Centre.	Short-term (0-2 years)	Completed
5	Introduce 'pay and display' ticket parking in the Northumberland Street and Bathurst Street car parks; and Devote city centre revenue from the parking fees for a period of five years exclusively to measures which improve car parking and transport in the city centre.	Short-term (0-2 years)	Completed
6	Introduce parking meters on streets in the Inner Core for on-street parking, in the area bounded by Bathurst, Elizabeth, Bigge, Scott and Macquarie Streets, and Macquarie Street north to Lachlan Street.	Short-term (0-2 years)	Completed
7	Undertake a comprehensive investigation into the practical and commercial feasibility of locating a new car park to replace the existing Northumberland Street car park in an appropriate location either on the same site, or more preferably in the peripheral areas of the southern city centre;	Short-term (0-2 years)	Not completed



Acti	on	Timeline	Outcome
	Develop a financial model for a new multi- story car park in the southern city centre area to permanently replace and if possible significantly supplement the car park currently located in Northumberland Street; and Commence the design process for the new car park.		
8	Introduce a Residential Parking Permit Scheme in suitable and defined parking zones close to residences.	Short-term (0-2 years)	Completed
9	Improve entry into the periphery of the city centre by removing the bottleneck caused by the interchange of Terminus Street, Hoxton Park Road and the Hume Highway.	Short-term (0-2 years)	Work in Progress Council is working with RMS to identify improvement works at Hume Highway/Hoxton Park/Terminus Street intersection.
10	Commence investigations to locate as many temporary car parking spaces in, or in proximity to the city centre as possible to offset the loss of parking during the construction of the replacement for the existing Northumberland Street car park.	Short-term (0-2 years)	Not completed Northumberland Street car park was not demolished
11	Undertake the demolition of the Northumberland Street car park and commence construction of its replacement, either on the same site or in a new location at the earliest opportunity.	Medium- term (2-4 years)	Not completed Refurbishment works have been completed, car park to be maintained in the short/medium term.
12	Introduce a five hour parking restriction after the construction of the multi-deck car park at Warwick Farm.	Medium- term (2-4 years)	TfNSW will not allow Council to restrict parking
13	Improve infrastructure conditions for cyclists so that more people use cycling to travel to work and undertake simple shopping trips.	Medium- term (2-4 years)	Work in progress Shared path has been constructed surrounding the city centre. More improvements are required within the city centre.
14	Investigate opportunities to implement two-storey parking structure at Collimore Park.	Long-term (4-6 years)	Work in progress
15	Investigate improvements to the Southern City Centre Ring Road.	Long-term (4-6 years)	Completed Studies completed, however Council has resolved to consider



Act	ion	Timeline	Outcome
AC		Timetine	construction of a car
			park on land identified for the Bathurst Street extension.
15	Investigate the potential for an overhead shared pedestrian and cycleway over the Hume Highway.	Long-term (4-6 years)	Completed Investigations identified locations for a potential bridge. To be further considered in the Woodward Place Master Plan.
16	Investigate the potential for improved traffic light phasing at Moore Street and Hume Highway to enable better connectivity to the city centre from the Collimore Car Park for buses. This would also enable better bus priority into the city centre as this is the main bus access point.	Long-term (4-6 years)	Not Completed The project will be part of Moore Street Transit Boulevard.
17	 Investigate traffic improvements to the arterial road network in conjunction with the RMS: Grade separation of Hoxton Park Rd/Macquarie St/Hume Highway intersection; Alternative bypass of Liverpool; and Investigate the potential for another Georges River bridge crossing into the City Centre to reduce traffic congestion. 	Long-term (4-6 years)	Work in progress Council has made presentations to RMS for the proposed grade separation, Liverpool bypass and additional Georges River bridge.
201	3		
1	Multi-storey car park at Collimore Park - 1200 free all day parking spaces.	Short term (2 years)	Work in progress Planning proposal submitted to DPIE seeking Gateway Determination.
2	Provide electronic/dynamic wayfinding signage to on and off-street parking facilities.	Short term (2 years)	Partially completed.
3	Rationalise existing time limits with increased time allocations, further away from the core.	After Collimore Park	Not Completed Relies on progression on multi-storey parking at Collimore Park.
4	Develop pricing strategy for on/off street parking.	-	Not Completed No timeframes provided for completion.

LIVERPOOL CITY CENTRE CAR PARKING STRATEGY

Acti	on	Timeline	Outcome
5	Provide standard parking time restrictions throughout CBD.	-	Not Completed No timeframes provided for completion
201	7		
1	Convert all Council-controlled off-street car parking locations within the CBD to short- term time-restricted parking of 3P or less.	Short (1-4 years)	Not Completed
2	Extend short-term parking further into the currently unrestricted adjacent on-street areas within the activity centre zone.	Short (1-4 years)	Not Completed
3	Develop peripheral parking stations for commuter and staff parking, external to the CBD area.	Medium (4 to 8 years)	Work in progress
4	Develop future customer/visitor parking supplies in precinct parking structures, located on the periphery of the CBD Ring Road.	Medium (4 to 8 years)	Work in progress
5	Prepare an electronic/dynamic signage strategy.	Medium (4 to 8 years)	Work in progress
6	Consider alterations to CBD parking pricing structure.	Long (8+ years)	Work in progress To manage demand, this should be actioned earlier.



For further information

Visit Us Customer Service Centre Ground Floor, 33 Moore Street, Liverpool, NSW 2170 Open Monday - Friday, 8.30am - 5pm

S Phone

Calling from interstate: (02) 8711 7000 National Relay Service (NRS): 133 677 (for hearing and speech impaired customers)

@ Email

🗠 Post Locked Bag 7064, Liverpool BC, NSW 1871

N Website

Subscribe



CONTENTS.///

MAYOR'S MESSAGE	4
CEO'S MESSAGE	5
OUR PEOPLE	6
ABOUT THE PLAN	7
IMPLEMENTATION TIMEFRAMES	8
WHAT WE'VE HEARD	9
LIVERPOOL TODAY	12
KEY CHALLENGES AND OPPORTUNITIES	15
VISION	18
LIVERPOOL CITY COUNCIL STRUCTURE PLAN	20
LIVERPOOL CITY CENTRE AND SURROUNDING AREA	22
PLANNING PRIORITIES	23
PLAN ON A PAGE	24
Connectivity – Our Connections	27

PLANNING PRIORITY 1 Active and public transport reflecting Liverpool's strategic significance

PLANNING PRIORITY 2 A rapid smart transit link between Liverpool and Western Sydney International Airport /Aerotropolis

PLANNING PRIORITY 3 Accessible and connected suburbs

PLANNING PRIORITY 4 Liverpool is a leader in innovation and collaboration

Liveability - Our Home

PLANNING PRIORITY 5 A vibrant, mixed-use and walkable 24-hour City Centre with the Georges River at its heart

PLANNING PRIORITY 6 High-quality, plentiful and accessible community facilities, open space and infrastructure aligned with growth

PLANNING PRIORITY 7 Housing choice for different needs, with density focused in the City Centre and centres well serviced by public transport

PLANNING PRIORITY 8 Community-focused low-scale suburbs where our unique local character and heritage are respected

PLANNING PRIORITY 9 Safe, healthy and inclusive places shaping the wellbeing of the Liverpool community

37



Productivity - Our Jobs

51

PLANNING PRIORITY 10 A world-class health, education, research and innovation precinct

PLANNING PRIORITY 11 An attractive environment for local jobs, business, tourism and investment

PLANNING PRIORITY 12 Industrial and employment lands meet Liverpool's future needs

PLANNING PRIORITY 13 A viable 24-hour Western Sydney International Airport growing to reach its potential

Sustainability - Our Environment

61

PLANNING PRIORITY 14 Bushland and waterways are celebrated, connected, protected and enhanced

PLANNING PRIORITY 15 A green, sustainable, resilient and water-sensitive city

PLANNING PRIORITY 16 Rural lands are protected and enhanced

IMPLEMENTATION, MONITORING AND REPORTING

71

ABBREVIATIONS

CAV	Connected and Autonomous Vehicles	LEP	Local Environmental Plan
СНР	Community Housing Provider	LGA	Local Government Area
CSP	Community Strategic Plan	LIP	Liverpool Innovation Precinct
DCP	Development Control Plan	LSPS	Local Strategic Planning Statement
DPIE	Department of Planning, Industry and Environment	NARCIIM	NSW and ACT Regional Climate Modelling
EP&A	Assessment Act 1979	TfNSW	Transport for NSW
		WSA	Western Sydney Airport (Company)
FAST	Fifteenth Avenue Smart Transit		Western Sydney International
IP&R	Integrated Planning and Reporting	WSI	(Nancy-Bird Walton) Airport
LALC	Local Aboriginal Land Council	WSPP	Western Sydney Planning Partnership

Front cover image: The mural featured on the front cover of Connected Liverpool 2040 is by artist Claire Foxton, and portrays University of Wollongong student and social justice advocate Adi Holmes.

MAYOR'S MESSAGE



LL

The next 20 years promise to be an exciting time for Liverpool. Connected Liverpool 2040, our Local Strategic Planning Statement (LSPS), represents the shared vision of Council and the community and will inform future land use planning for Liverpool, one of the fastest growing areas in Sydney.

Thank you to everyone who contributed to the development of Connected Liverpool 2040. We heard from a large number of residents, ratepayers and businesses during our extensive consultation on this document.

I'm looking forward to seeing Liverpool grow over the next 20 years. The new Western Sydney International (Nancy-Bird Walton) Airport will open, providing local employment, education and business opportunities for our community. Council's flagship Fifteenth Avenue Smart Transit (FAST) Corridor project will make sure our residents can take advantage of these opportunities with a short and comfortable trip to work.

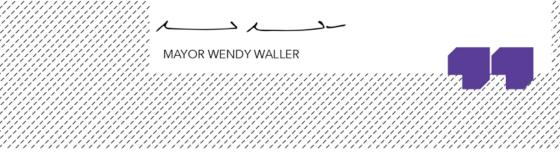
Liverpool's CBD will transform into a vibrant destination with a strong 24-hour economy. The city will be more walkable, cooler and greener, with the Georges River at its heart.

The Liverpool Innovation Precinct, anchored by Liverpool Hospital, will grow, providing high-value health, education, research and advanced manufacturing jobs for the local community.

The population will also grow, but as it does we will make sure we channel that growth into the right places, and that there are the modern, high-quality facilities, services and amenities that our residents and visitors need and deserve.

While many aspects of Liverpool are changing and opportunities abound, I am also mindful of the things about Liverpool we love and want to remain – the local character of our suburbs, our significant heritage, our fantastic bushland, our civic pride and our commitment to diversity.

The 16 priorities of Connected Liverpool 2040 capture our goals for Liverpool over the next 20 years and provide a clear plan of how we're going to achieve them. The future is looking bright.



4 Liverpool City Council's Local Strategic Planning Statement

CEO'S MESSAGE



A clear vision for Liverpool's future and a robust plan for getting there are vital if we are to harness the rapid change and growth the city is experiencing.

The nation's largest infrastructure project – Western Sydney International (Nancy-Bird Walton) Airport – is located entirely within our Local Government Area (LGA). The Western Sydney Aerotropolis is already attracting global corporations as our city centre continues its transformation into a vibrant, productive, mixed-use CBD.

We will attract more businesses, more people and more jobs. We need to make sure that the opportunities these changes create are maximised to benefit the whole community. To do this we must plan ahead, implement city-shaping projects and work to safeguard the elements that make Liverpool a great place in which to live, work and play.

The Local Strategic Planning Statement (LSPS), Connected Liverpool 2040, details our priorities over the next 20 years of development, and provides a list of actions that make sure we can meet our goals.

These actions include the completion of some of Council's most ambitious strategic projects ever attempted – realigning our CBD around the Georges River including a river-edge promenade and new river crossings; developing Woodward Park into our own 'Central Park' – an iconic lifestyle precinct that will be a thriving hub of community activity known as Woodward Place; creating a rapid transit link between the Liverpool City Centre and the new Western Sydney International Airport; and transforming our ageing stock of community facilities into a worldclass network of modern, attractive facilities that address community needs.

The LSPS is our strategic roadmap for the future. It is based on and expands upon the priorities of our Community Strategic Plan, *Our Home, Liverpool 2027*, and provides a one-stop resource for the major planning work we're doing to make Liverpool a vibrant, diverse and attractive place.

I thank the community for its contribution to developing the LSPS. We had thousands of survey responses, close to 150 formal submissions, and countless conversations that all shaped the final document making it stronger and more reflective of our shared vision for Liverpool's continued success.

CEO, KIERSTEN FISHBURN

OUR PEOPLE

Liverpool City Council acknowledges the original inhabitants of the Liverpool Local Government area being the Darug and Dharawal Aboriginal People. We acknowledge that Aboriginal culture continues to strengthen and enrich our community.

We commit ourselves to preserve past, present and future identified Aboriginal sites and cultural landscapes, and to recognise and accept the significance of the Georges River as a 'Meeting Place' for the Darug, and Dharawal Aboriginal people.

Liverpool City Council supports and encourages Aboriginal and non Aboriginal people working together towards reconciliation.

Liverpool is one of the first official settlements in Australia, built by convicts and free settlers, and has become home to people from more than 150 nations.

We recognise the diversity of many cultures who share the values of tolerance and respect for one another. This diversity of our community is a great strength and we commit to working together to advance the interests of all residents.

ABOUT THE PLAN

The Local Strategic Planning Statement (LSPS) has been created to set Liverpool City Council's strategic planning vision for the next 20 years.

It lists our planning priorities across four areas: Connectivity, Productivity, Liveability, and Sustainability. The LSPS will inform what type of growth occurs in our local government area (LGA), where it occurs and when it occurs. It sets out actions to deliver on our planning priorities in order to meet the community's future vision for Liverpool. The LSPS has been prepared in accordance with the Environmental Planning and Assessment Act 1979 (the EP&A Act). It identifies:

- The basis for strategic planning in Liverpool, having regard to economic, social and environmental matters;
- The planning priorities for Liverpool that are consistent with the Western City District Plan and the Community Strategic Plan;
- The actions required for achieving the planning priorities; and
- How Council will monitor and report on the implementation of those actions.

The LSPS gives effect to the *Greater Sydney Region Plan* and *Western City District Plan*. It also takes into consideration State Environmental Planning Policies (SEPPs) and Ministerial Directions issued under Section 9.1 of the EP&A Act.



It has also been informed by Council's Community Strategic Plan (CSP) – *Our Home, Liverpool 2027* – and aligns with the CSP's directions.



IMPLEMENTATION TIMEFRAMES

SHORT TERM Now-2020/2021

MEDIUM TERM 2021/2022-2024/2025

LONG TERM 2025/2026-2028/2029

VISIONARY 2029/2030+

WHAT WE'VE

The LSPS has been informed by extensive community consultation including:

Preliminary consultation (Feb – May 2019):

- A flyer to residents in the Liverpool LGA;
 An online survey on Council's 'Liverpool Listens' webpage
- (approximately 500 responses);
- Feedback provided at District Forums;
- Feedback provided at the Moorebank Community Forum
- Planner for a Day preschool excursion; and
- A Youth Workshop held in May 2019.

Public Exhibition (28 June 2019 - 9 August 2019):

- An online survey on Council's 'Liverpool Listens' webpage (approximately 500 responses);
- Ideas wall / interactive online map;
- Pop Ups at Shopping Centres across the Liverpool LGA;
- Drop-in sessions at libraries and community centres;
- Business and Developer Breakfast; and
- Feedback provided at District Forums.

Council has also built upon the extensive consultation undertaken when developing our Community Strategic Plan – *Our Home, Liverpool 2027.* It has also been developed in consultation with Councillors, staff, state agencies and neighbouring councils.

During the exhibition period, Council received a positive response from the community including through 147 formal submissions; 542 survey responses; and over 680 big ideas.

OVER

BIG

IDEAS

68









Liverpool City Council's Local Strategic Planning Statement 9

What makes my suburb a great place to live?



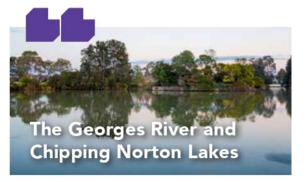


The rich history of Liverpool, recent education opportunities, an Airport in the future, and a very diverse population.

Great community, sports facilities nearby

Location, hospital, shopping malls, university, restaurants, access to main roads

The diversity of the people, the upcoming vibrant culture





Proximity to major transport routes

What would make your suburb better?







More jobs, CC less traffic and cheaper housing

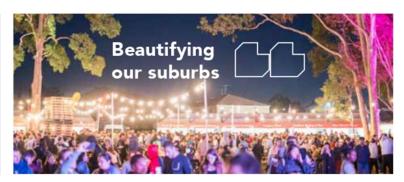
Express train to the city





Greater employment opportunities

Increase commuter parking spaces at Edmondson Park Station



LIVERPOOL TODAY OUR HOME

A growing city with a diverse community and rich heritage.

Liverpool is a growing city with a bright future. Spanning the Georges River in the east to the Nepean River in the west, it is a diverse local government area (LGA) featuring city, suburban and rural living.

Liverpool is the modern face of multicultural Australia. We are proudly one of the most culturally diverse cities in NSW with around 40% of people born overseas and half the population speaking a language other than English at home. We have high levels of refugee and migrant settlement, which Council has been vocal in supporting, so our diversity is growing. We also have a significant Aboriginal community, and celebrate the original inhabitants – the Darug and Dharawal people.

Liverpool is experiencing substantial growth, with the population expected to increase by around 60% between 2019 and 2036. This growth is due to increased residential development in our city centre and near train stations, and through new release development in our growth areas.

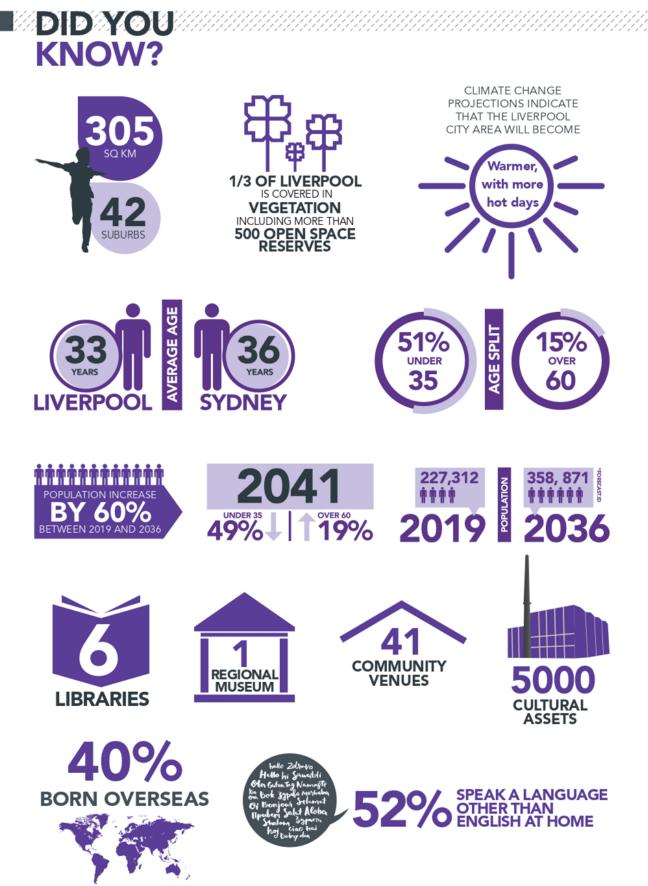
The city is working to solidify its position as a strategic centre. The Liverpool City Centre is being revitalised to support increased commercial and residential uses and will develop into a walkable, active river city with attractive open spaces and increased transport connections. A burgeoning health and education-focused innovation precinct could see additional health and knowledge workers attracted to the area, beyond the 30,000 health and knowledge workers already expected by 2036. We are also proudly home to the Western Sydney International (Nancy-Bird Walton) Airport, set to open in 2026. The airport and associated Aerotropolis are expected to generate significant employment and economic opportunities for Liverpool, including knowledge-intensive jobs. The Liverpool City Centre is equidistant from Western Sydney International Airport and Sydney Airport, making it a natural location for development supporting the new airport.

Liverpool has substantial environmental assets, with a wide variety of plants, animals and ecosystems, including a significant number of threatened species. As Liverpool grows and the effects of climate change become more pronounced, protecting our trees, waterways and open space is critical to our success as an attractive, welcoming city.

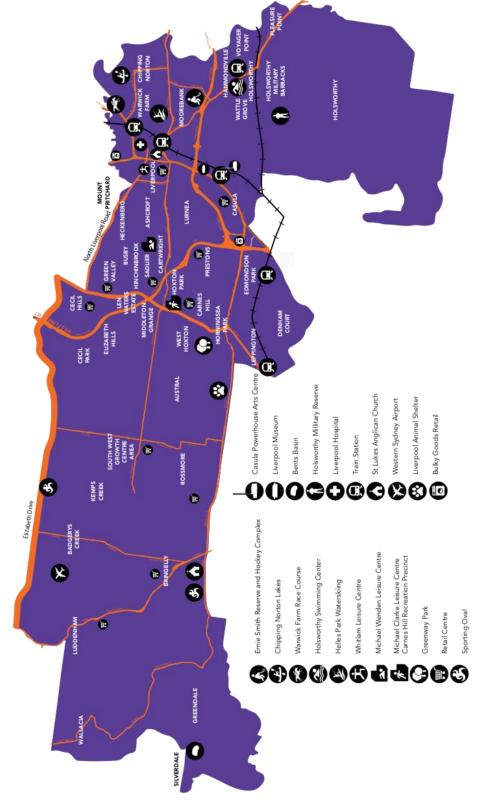
Liverpool has a rich heritage with a major cultural and arts focus. A number of significant heritage buildings and places are protected at the local and state levels, including Rosebank Cottage, Pioneers' Memorial Park, the Casula Powerhouse Arts Centre, the TAFE college building, which is formerly Liverpool Hospital (1820-1958), and St Luke's Church (1819-present). There are also significant Aboriginal sites and cultural landscapes, which we are committed to preserving.



THE ORIGINAL INHABITANTS OF LIVERPOOL ARE THE DARUG AND DHARAWAL ABORIGINAL PEOPLE



OUR HOME



KEY CHALLENGES AND OPPORTUNITIES

Transport Accessibility

Liverpool has good access to Sydney's major motorways, including the M5 and M7, providing direct routes to the wider Western City District and beyond. However, congestion during peak periods is a major challenge. Many residents use cars as opposed to public transport, and the growing population is placing demands on existing infrastructure.

Roads are being enhanced through key projects including The Northern Road Upgrade, the Bringelly Road Upgrade, the M9 and M12 motorways, and the Outer Sydney Orbital. Council also is working with external stakeholders to improve access in and around the CBD and investigate options for public parking to support growth.

Council advocates a modal shift to public transport, however new or additional, better and faster services are required to make public transport a more attractive option. Council will continue to push for new and improved public transport services that match Liverpool's status as a metropolitan cluster, as identified in the Greater Sydney Region Plan. We will also work to improve active transport options, such as cycling, that can reduce congestion while improving health.

Council's flagship project – the Fifteenth Avenue Smart Transit Corridor – will provide our residents with a rapid public transit connection from Liverpool city centre to the many opportunities provided by Western Sydney Airport, including new high-value jobs. It will also link existing suburbs such as Miller and Middleton Grange, redressing past public transport disadvantage.

City Economy

While Liverpool's rapid population growth creates momentum for new business opportunities, significant challenges exist in ensuring that local employment growth keeps pace with population growth. Currently close to 70% of Liverpool's population works outside the LGA, reflecting a long-standing structural imbalance of jobs between Western and Eastern Sydney. A key Council priority is providing local jobs for local people. As part of the Western Sydney City Deal, we are committed to supporting an increase in jobs in the Western City District by 200,000 over the next 20 years. Focus will be placed on supporting Liverpool's competitive advantages – health, education, distribution and logistics, professional services and advanced manufacturing. While we will be investing in opportunities to grow and transition industries, we will also support and nurture the significant number of skilled trade jobs operating in the LGA.

Liverpool continues to experience growth in commercial and industrial development. Its status as the key regional centre of South West Sydney, and its strong transport links to other areas of Sydney, place it in prime position to attract a range of industries. This is heightened by the new Western Sydney International Airport and Aerotropolis – which promises growth in industries such as agriculture, agribusiness, aerospace and tourism – as well as the Moorebank Intermodal Terminal.

The revitalisation of the city centre is a key Council priority to support economic growth. Council has implemented several strategies aimed at revitalising the city centre, developing key economic, cultural, recreation and entertainment activities, and creating a place in which people want to live and business wants to invest.

The Natural Environment & Sustainability

Liverpool's growth, while increasing opportunities for the community, also places pressure on our environment – a challenge Council is working to address.

Maintaining and enhancing natural values in the Liverpool LGA has the potential to increase the area's attractiveness as a place to live, work and play. Council is actively pursuing opportunities to increase connections to the Georges River and Chipping Norton Lakes, which involves improving community access to riverfront land and increasing opportunities for recreation while also protecting and enhancing environmental values such as water quality.

The Western District is noted for having significantly lower tree canopy cover, which along with geography and continued increases in impermeable surfaces associated with urban development,

KEY CHALLENGES AND OPPORTUNITIES

contributes to an urban heat island effect that makes temperatures significantly higher than in eastern Sydney areas. Climate change projections from the NSW and ACT Regional Climate Modelling (NARCliM) Project indicate that the Liverpool City area will become warmer, with more hot days and fewer cold nights. Extreme temperatures will become more severe and droughts will be more frequent and last longer. There will be slightly more rainfall overall, and storm rainfall intensity will increase, adding to flood risk. The risk of bushfire will grow. Extreme weather events are projected to become more severe. This can place human life, property and natural ecosystems at increased risk.

Council will work to both mitigate and adapt to climate change, in partnership with the State and Federal governments. Because Council has limited ability to influence sustainability outcomes for the vast majority of development, we will advocate strongly for improvements to building codes and other associated State planning instruments in order to help us to address issues of urban heat and climate change. We will also pursue opportunities to address energy, waste and water efficiency, such as the creation of solar farms, better design of precinctwide systems; increased tree canopy; and watersensitive urban design.

Approximately one-third of Liverpool's land is covered by native vegetation and the LGA contains a number of significant biodiversity values, including vegetation communities, threatened ecological communities, and threatened and migratory species and populations. This includes the critically endangered Cumberland Plain Woodlands, which are at threat from increasing suburban development. We will protect, enhance and connect areas of high conservation value bushland and corridors to offer the best chance of long-term survival of flora and fauna. It should be noted, however, that the State Government's biocertification process has a dominant influence over ecological outcomes, particularly given that the extent of biocertified land is likely to be expanded within Western Sydney. Council continues to advocate for the protection of its important high conservation value land.

Significant amounts of Liverpool's rural lands are earmarked for urban development, making it important that we protect remaining rural and scenic lands from urban development into the future, and that there are clear boundaries between urban, nonurban and scenic lands.

Social connection

Liverpool is one of the most culturally diverse cities in NSW with around 40% of people born overseas and almost half the population speaking a language other than English at home.

Liverpool is also a young LGA, with a median age of 33 and 37% of the population under the age of 25. While there is currently a lower number of people in older age groups (60+ years), demographic trends point to a rapid increase in older people over the next 30 years.

Liverpool also has a slightly higher level of disadvantage than the rest of Greater Sydney, and has a high number of households in rental and mortgage stress. This disadvantage is not evenly distributed across the LGA, with some areas featuring much higher levels of hardship, particularly in areas with high proportions of social housing, such as the 2168 District. Census 2016 data indicates 6.2% of the Liverpool population identify as living with disability and requiring some form of assistance. This is higher than the Greater Sydney average of 4.9%, suggesting that people with disability represent a significant portion of the Liverpool community.

Council acknowledges that planning plays an integral role in determining the health and wellbeing outcomes of people. It also acknowledges that socially diverse communities are inclusive, healthy and creative. Liverpool needs to continue efforts to create a harmonious society where differences are appreciated and celebrated, while working to address inequality. There is also a challenge for the Council to ensure its services reach a broad range of citizens in an equitable way while still accommodating those most in need. Council will continue to work with government, non-government organisations and community groups to create social connections among our broad and diverse population, including residents living with a disability, young people, Aboriginal communities, migrants and refugees. This is achieved through various channels and strategic community engagement mechanisms such as committees, Liverpool District Forums, community events, libraries, arts and cultural programs, and utilisation of community centres and precincts.

Local character

Liverpool is growing rapidly, putting pressure on both growth areas, which are seeing major increases in greenfield development, and established areas, where we are seeing more infill development. Council is working hard to accommodate this significant growth and the opportunities it brings while ensuring that local character and heritage are preserved and Liverpool's renowned community pride remains intact.

Key issues for Council include ensuring development is of an appropriate scale, that congestion is properly managed and that service delivery is improved – both for new suburbs where services are being rolled out and in our established areas where services need to be upgraded to ensure great liveability outcomes.

٠	Metropolitan Cluster	•	Major Urban Parkland Including National Parks and Reserves
۲	Health and Education Precinct	0	Waterways
٠	StrategicCentre	Ű,	South Creek Parkland Investigation
•	Local Centre	-	Green Grid Priority Corridor
۲	Economic Corridor		Train Station
۲	Trade Gate way	-	Committed Train Link
۲	Western Sydney Employment Area	-	Train Link/Mass Transit Investigation 0-10years
0	Industrial Land		Train Link/Mass Transit Visionary
۲	Land Release Area		Freight Rall Investigation
۲	Transit Oriented Development		City Serving Transport Corridor
۲	Urban Renewal Area	_	Motorway
11	Greater Penrith to Eastern Creek Growth Area	_	Committed Motor way
۲	Urban Investigation Area		Road Investigation 10-20 years
\bigcirc	Urban Area	****	Road Visionary
•	Protected Natural Area	-	District Boundary
•	Metropolitari Rural Area		

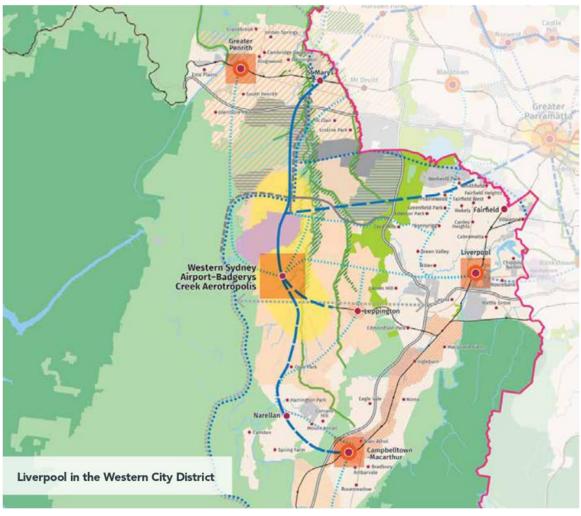


Image: Greater Sydney Commission

Liverpool City Council's Local Strategic Planning Statement 17

VISION CONNECTED LIVERPOOL 2040

A vibrant place for people that is community focused, walkable, public transport-oriented, sustainable, resilient and connected to its landscape. A place that celebrates local diversity and history, and is connected to other Sydney centres. A jobs-rich city that harnesses health, research, education, innovation and growth opportunities to establish an inclusive and fair place for all.

Liverpool in 2040 is a connected, cosmopolitan city. Anchored by a vibrant CBD in the east and a successful 24-hour Western Sydney International Airport to the west, the area is rich in opportunity.

Changes to planning controls in Liverpool City Centre have spurred significant high-quality development, with a balanced mix of housing, employment, community and retail space. Improvements to the urban domain and a focus on active and innovative transport have led to a thriving, safe, inclusive and green city centre with a strong 24-hour economy. Access to the Georges River has been improved, providing residents and visitors with cool, clean, green spaces in which to connect, play, swim and relax. A boom in local education opportunities has changed the city, with an influx of university students bringing greater life and vibrancy to the CBD, feeding into Liverpool's activated streets and enhanced night-time economy. While much has changed in the last 30 years, Liverpool still values and protects its rich heritage, be it Aboriginal, Colonial or migrant, and is renowned for its celebration of diversity and its residents' civic pride.

Liverpool has solidified its position as an innovation leader and an attractive, successful CBD. The Liverpool Innovation Precinct provides high-value health, education and research jobs for local residents and skilled workers from across Sydney. Transport infrastructure has evolved to reflect Liverpool's strategic importance, with fast, frequent connections to other key destinations in Sydney and between our suburbs, enabling people to live, work and play within a 30-minute city. Liverpool is the destination of choice for business and study, and opportunities abound for local residents.

Council's flagship project, the Fifteenth Avenue Smart Transit (FAST) Corridor, uses electric, autonomous technology to seamlessly connect residents to the vast commercial and industrial employment opportunities provided by Western Sydney International Airport, while spurring sustainable transit- and landscape-oriented development along its route. The airport and the FAST corridor showcases the unique natural identity of South West Sydney to the world. As the gateway city to the airport, Liverpool enjoys a robust commercial and visitor economy, providing office space, hotel and key worker accommodation, and lively recreation options day and night.

Liverpool's suburbs are distinct environments with a focus on local character and quality built form. Housing growth has been planned with supporting infrastructure to maximise amenity. Density has been concentrated in the CBD and centres close to public transport, while ensuring established local character is respected. In growth areas, housing development has been supported by crucial transport and servicing infrastructure. Land has only been rezoned for housing when required, and Liverpool's important contribution as a food bowl for Sydney and the export market has been protected and enhanced.

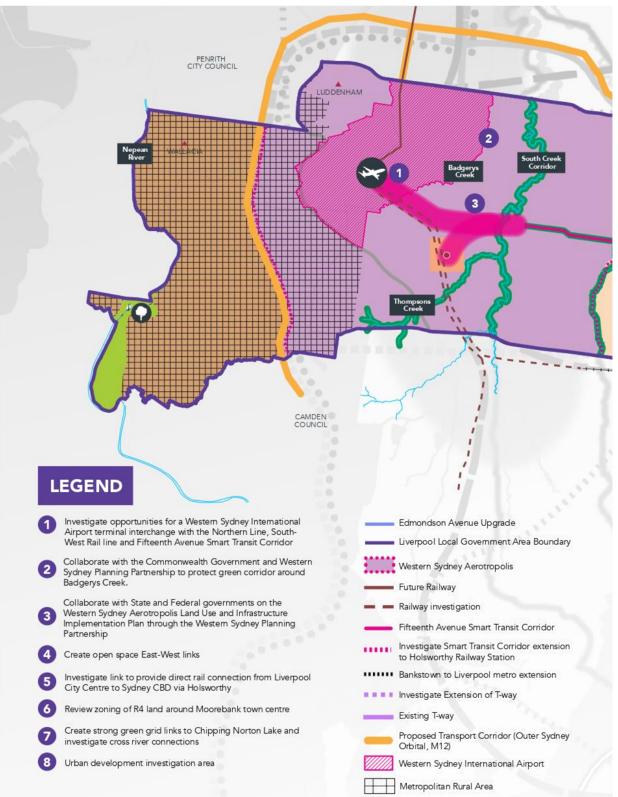
Areas of high ecological value have been protected and enhanced while high tree canopy cover exists across both established and new release areas, and active transport links have been strengthened, creating a high-quality, cooler, high-amenity environment. New housing is supported by plentiful open space, high-quality community facilities, reliable transport infrastructure and water-sensitive urban design. Liverpool has taken a strong role in meeting the State Government's net zero 2050 aspirations, and is an exemplar of sustainability and climate resilience.

While the airport has led to major changes to the western part of the LGA, Council has protected its rural lands and ensured that biodiversity, nature and sustainability are central considerations of all new development.

EGROW 04Liverpool Local Strategic Planning StatementAttachment 1Local Strategic Planning Statement



LIVERPOOL CITY COUNCIL STRUCTURE PLAN



FAIRFIELD CITY COUNCIL 500 1,000 4,000 2,000 3,000 See inset itern Sy Darldon M7 CANTERBURY BANKSTOWN COUNCIL т GREEN VALLEY 6 4 MILLER Т AUSTRAL 8 6 MOOREBANK NES HILL M5 CASULA M5 G EAST HILLS LEPPINGTON 5 O HOLSWORTHY T GLENFIELD EDMONDSON PARK MACQUARIE FIELDS CAMPBELLTOWN CITY COUNCIL Protect scenic character of Denham Court Protect and enhance established residential areas Growth Areas Major parkland Protect and enhance Rural/Agricultural land Existing industrial land Protect and link Green Corridors Disdaimer: Committed projects Western Sydney Aerotropolis core (metropolitan cluster) Western Sydney International Airport are subject to final business case. Routes Liverpool City Centre (metropolitan cluster/health & education precinct) and stops for some transport corridors/ Casula Powerhouse Arts Centre Strategic centre projects are indicative only. Investigations refer to Council-led proposals, which will be progressed in collaboration with overment pathers Town centre Bents Basin Village centre Holsworthy Commonwealth land Moorebank Intermodal Terminal government partners.

LIVERPOOL CITY CENTRE AND SURROUNDING AREA (Inset)



LEGEND



22 Liverpool City Council's Local Strategic Planning Statement

Review residential development in odour buffer to Water Recycling Plant



PLAN ON A PAGE **OUR THEMES AND** PLANNING PRIORITIES





CONNECTIVITY Our Connections

PLANNING PRIORITY 1 Active and public transport reflecting Liverpool's strategic significance

PLANNING PRIORITY 2

A rapid smart transit link between Liverpool and Western Sydney International Airport/Aerotropolis

PLANNING PRIORITY 3

Accessible and connected suburbs

PLANNING PRIORITY 4

Liverpool is a leader in innovation and collaboration

LIVEABILITY

Our Home

PLANNING PRIORITY 5

A vibrant, mixed-use and walkable 24-hour City Centre with the Georges River at its heart

PLANNING PRIORITY 6

High-quality, plentiful and accessible community facilities, open space and infrastructure aligned with growth

PLANNING PRIORITY 7

Housing choice for different needs, with density focused in the City Centre and centres well serviced by public transport

PLANNING PRIORITY 8

Community-focused low-scale suburbs where our unique local character and heritage are respected

PLANNING PRIORITY 9

Safe, healthy and inclusive places shaping the wellbeing of the Liverpool community

Priorities are not listed in order of importance. Each priority is of equal importance.



PRODUCTIVITY Our Jobs

PLANNING PRIORITY 10 A world-class health, education, research and innovation precinct

PLANNING PRIORITY 11

An attractive environment for local jobs, business, tourism and investment

PLANNING PRIORITY 12

Industrial and employment lands meet Liverpool's future needs

PLANNING PRIORITY 13

A viable 24-hour Western Sydney International Airport growing to reach its potential



SUSTAINABILITY

Our Environment

PLANNING PRIORITY 14 Bushland and waterways are celebrated, connected, protected and enhanced

PLANNING PRIORITY 15 A green, sustainable, resilient and water-sensitive city

PLANNING PRIORITY 16 Rural lands are protected and enhanced







CONNECTIVITY Our Connections

The Liverpool of 2040 is a fast, efficient and productive city connected by rapid frequent transport, high speed digital networks and strong collaboration between community, business and government, all supporting abundant opportunity.

Liverpool will grow its position as the pre-eminent capital of South West Sydney, reflecting its history, amenity, strategic location, and large concentration of jobs and services.

Today Liverpool is growing rapidly and is predicted to welcome more than 130,000 additional residents between 2019 and 2036 – close to a 60% increase on the current population. Council is committed to supporting this growth while providing the best outcomes for the local community. This means ensuring the necessary infrastructure is in place to support growth and manage congestion.

Transport connectivity is a critical element of Council's vision for a connected Liverpool. In our LSPS survey, the community told us its top transport priority is 'faster public transport services to Liverpool and other major centres'. While Liverpool is known for its strong road transport links, including proximity to the M5 and M7 motorways, Council continues to advocate for better public transport connectivity. This will be particularly important for the success of Liverpool's burgeoning Innovation Precinct, Western Sydney International Airport and Western Sydney Aerotropolis, and to help in the management of road congestion.

The development of the airport, located entirely within the local government area (LGA), provides one of our biggest opportunities. Liverpool has a unique opportunity to become the hub for the transport of goods, services and information between Sydney and the world, but we need the supporting infrastructure to deliver this vision.

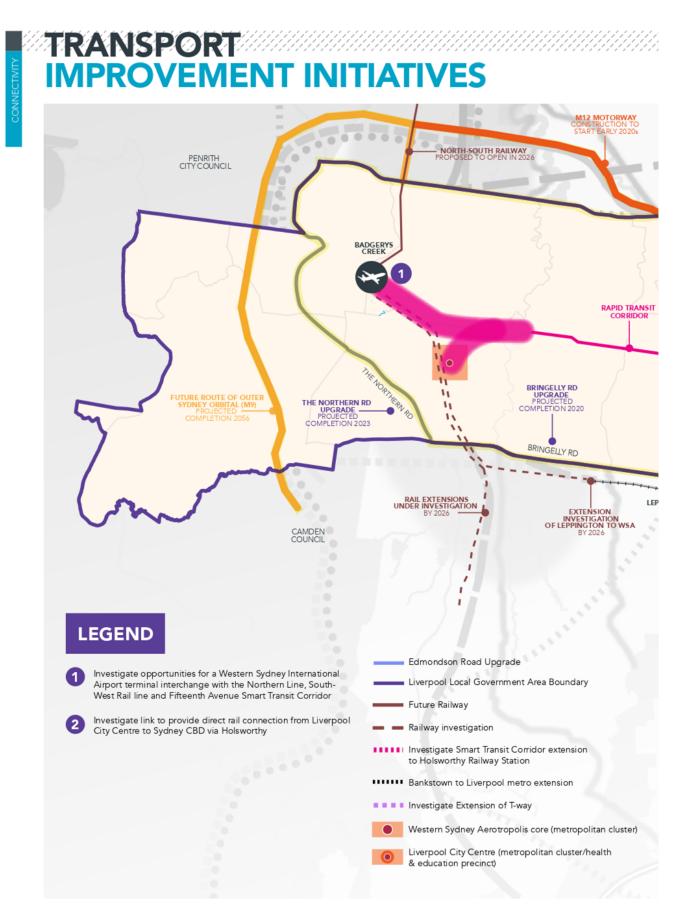
We will ensure that infrastructure projects being planned for and delivered – including the South-West rail line extension, the Moorebank Intermodal Terminal, the M12 motorway, the Outer Sydney Orbital and freight line, the Sydney Metro City and Southwest extension from Bankstown to Liverpool and the North-South rail line – benefit Liverpool's residents, and will advocate for their timely delivery. We will also progress city-shaping infrastructure such as the Fifteenth Avenue Smart Transit (FAST) Corridor project, and advocate for Liverpool to be connected to future fast rail projects.

We will also prioritise transit-oriented development opportunities. Transit-oriented development should be designed so that communities have access to a diversity of transport options and are not reliant on private car use to move around the local government area. For development to qualify as transit-oriented, Council expect that in the long term a majority (50%+) of work-related travel movements will be able to be achieved by sustainable modes due to the availability of high-quality walking and cycling paths, and micro-mobility and public transit options.

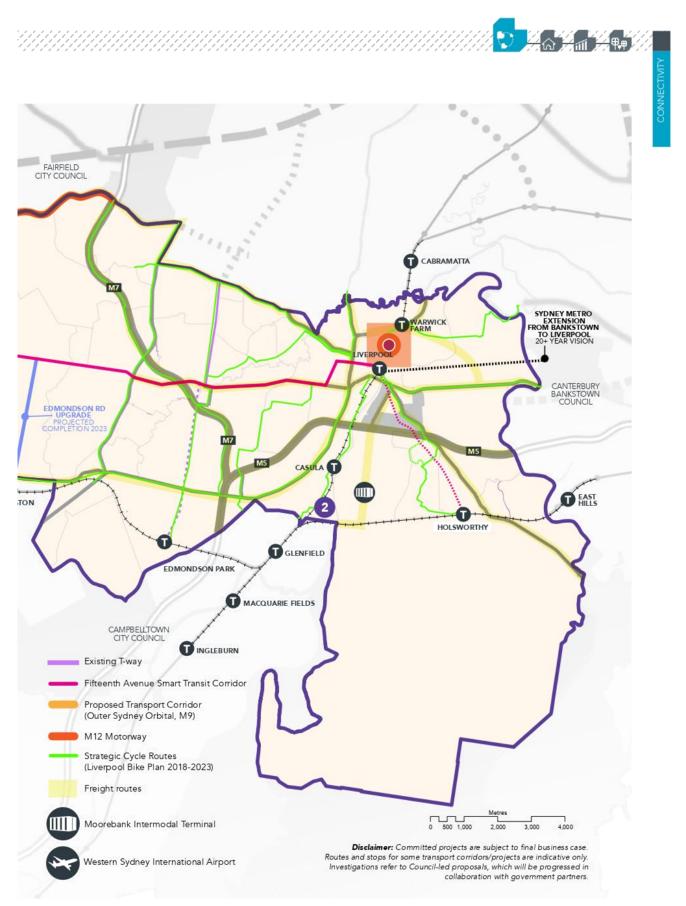
Council is committed to strengthening social connectivity as a way to improve health and wellbeing. Improving walkability of neighbourhoods can encourage greater social engagement. Council also delivers place-based initiatives, engaging residents in disadvantaged areas or areas of geographical isolation to improve social outcomes.

Connectivity also refers to digital connectivity. As part of the Western Sydney City Deal, Liverpool will be at the forefront of digital technology, developing a Digital Action Plan and fast 5G Strategy to ensure our residents and local industries have the tools to take advantage of new economy opportunities, and for Liverpool to meet its goal of becoming a connected, smart Innovation City.

Finally, connectivity means collaboration. We have a strong relationship with residents, community groups, local businesses, Councils, state agencies, and State and Federal governments. We will continue to put collaboration and consultation at the heart of our activities to get the best outcomes for everyone.



28 Liverpool City Council's Local Strategic Planning Statement



CONNECTIVITY

LOCAL PLANNING PRIORITY 1 Active and public transport reflecting Liverpool's strategic significance

As a Metropolitan Cluster in the Greater Sydney Region Plan – A Metropolis of Three Cities and one of the fastest growing LGAs in Australia, Liverpool's transport systems must cater to existing and future development, and provide connectivity to other metropolitan centres and clusters.

While Liverpool is well connected to other major centres, it currently takes a long time to travel via public transport, thus 30-minute city outcomes are not available to many of our residents.

Our community survey indicated that 'fast public transport to Liverpool and other centres' was the most important transport desire for residents and workers in Liverpool. With the strengthening of its health, education and innovation sectors, fast public transport connectivity will be a key ingredient to success.

Our vision is to have fast and frequent connections within Liverpool LGA and to other centres, and Council is committed to advocating for the transport we need and deserve. Council will continue to make representations to the State Government on critical transport improvements in and around the Liverpool LGA, including:

- Express train services between Liverpool and Sydney CBD and beyond;
- The fast-tracked extension of the City & Southwest Metro from Bankstown to Liverpool;
- A fast-tracked Leppington to WSA-Aerotropolis train link with an interchange at the airport;
- Western Sydney Aerotropolis/Airport as a stop on any future fast rail project;
- Improvements to the road network surrounding Liverpool City Centre to support additional developments in the Liverpool Collaboration Area;
- Improved local bus services

- Road network upgrades to minimise traffic impacts from Moorebank Intermodal Terminals; and
- Heathcote Road upgrade between Infantry
 Parade and Pleasure Point

Future transport investigations include an extension to Council's proposed FAST corridor and an extension of the Parramatta-Liverpool Rapid Bus T-Way to Edmondson Park. An extension of the currently proposed FAST corridor from the city centre south to Holsworthy would allow direct interchange with the Airport & South Line (T8), providing a relatively rapid connection between Western Sydney International Airport, Liverpool City Centre, Sydney Airport and the Sydney CBD. This would provide better access to jobs and reduce road congestion. Liverpool's bus T-way priority corridor could also be extended to provide public transit connectivity from new population centres such as Edmondson Park to the FAST Corridor and airport, north to Parramatta and south into Ingleburn, which also has access to the T8 line.

We will work with Transport for NSW to support and implement travel behaviour change programs to help manage demand on the transport network, including by requiring new developments and businesses operating in key precincts to develop and implement travel plans to encourage the use of sustainable transport choices.

Council is also working to address active transport, acknowledging the health and amenity benefits of walking and cycling, by implementing the Liverpool Bike Plan 2018-2023. By 2040 there will be a complete connected network of cycle paths in new and established areas. We will also support emerging forms of micro-mobility in the LGA, including e-bikes and e-scooters.

Our vision is to have fast and frequent connections within Liverpool and to other centres.

66



COUNCIL WILL

- Collaborate with State Government to improve public transport connections and timetabling, providing Liverpool residents with fast access to other major centres and key infrastructure such as Western Sydney International Airport and the Sydney CBD.
- Work to ensure all Liverpool's residents and workers can access the benefits of the 30-minute city.
- Improve cycling and walking tracks, and prioritise pedestrian movement.
- Investigate measures required to support micromobility.
- Investigate locations of active transport bridge connections into adjoining LGAs.
- Continue to collaborate with State government to deliver more commuter car parking around train stations.
- Investigate setting mode shift targets.

HOW WE GET AROUND





ACTIONS

415

- 1.1 Update CBD Parking Strategy. (short term)
- 1.2 Develop a Transport and Mobility Plan and review Local Environmental Plan (LEP) to ensure alignment (short term)
- **1.3** Advocate the prompt delivery of the South-West rail line extension from Leppington to Western Sydney International Airport, with a terminal interchange at Western Sydney International Airport (short term)
- **1.4** Advocate a fast rail service to the Liverpool City Centre from Sydney CBD, and enhanced integration with future rail links (short term)
- 1.5 Advocate a Western Sydney Aerotropolis/Airport stop on any future high speed rail network (short term)
- 1.6 Work with Transport for NSW (TfNSW) to bring forward extension of the Sydney Metro City and Southwest and investigate a preferred alignment (short term planning, with delivery in the long term)
- 1.7 Upgrade Edmondson Avenue from Fifteenth Avenue to Bringelly Road (medium term)
- 1.8 Work with TfNSW on an extension of the T-way from Hoxton Park Road south to Edmondson Park Station (medium to long term)

CONNECTIVITY

LOCAL PLANNING PRIORITY 2

A rapid smart transit link between Liverpool and Western Sydney International Airport/Aerotropolis

RATIONALE

To assist in achieving Liverpool's goal of becoming the regional city for South West Sydney, and support its role as a Metropolitan Cluster in the Greater Sydney Region Plan, fast and regular connections to other strategic centres and key facilities is of critical importance.

Council's flagship project, the Fifteenth Avenue Smart Transit (FAST) Corridor, is a visionary cityshaping project intended to deliver a high-speed end-to-end link between the Liverpool CBD and the Western Sydney International Airport by the airport's opening in 2026. Liverpool City Council considers that rapid transit along Fifteenth Avenue needs to be high-quality, fast (a maximum 30-minute connection to the airport in order to support aspirations for a 30-minute city), supportive of compact transit- and landscape-oriented development, suitable for both workers and airline passengers (directly connecting to Western Sydney International Airport), and cost-effective. Council is designing the corridor to support a rapid transit mode that meets these criteria.

Council sees the FAST Corridor as a key gateway for visitors to Australia, and as such envisages a parkland corridor that provides multiple roles, including landscaping, city cooling and water sensitive urban design. The location of this corridor, as the gateway to Australia for international travellers, is an opportunity to showcase high-quality affordable design and the unique natural environment of South West Sydney. International travellers want to experience Australian nature, and Fifteenth Avenue – as a parkway – can be their first introduction to this (similar to the experience of arriving at Changi Airport and entering Singapore via the Eastern Parkway).

These segments will be designed to be uniquely South West Sydney. The corridor will be high-quality, inviting and vegetated, with buildings and transport infrastructure naturally forming part of the landscape. This parkway will reinforce the city's commitment to effective public transport and active transport, such as cycling.

Council will also encourage compact medium/ high-density development in appropriate locations along the corridor, which, while not common yet in Western Sydney, will be designed in a way that is familiar and approachable.

Design decisions will prioritise affordability and achievability while ensuring quality of place. Design will also integrate the circular economy – an economic system aimed at minimising waste and optimising resource use – as a fundamental design principle, along with a connection to existing natural assets (including the Western Sydney Parklands). The corridor will create places for people with a high level of amenity for current and future populations and users.

Liverpool City Council's approach to development in the area is intended to reduce sprawl, improve availability and patronage of public transport, increase walking and healthy lifestyles, and preserve the amenity and productivity of the area and rural land uses. We will investigate first and last mile active and public transport connections between new centres and established suburbs that lie adjacent. When complete, the FAST Corridor will be a catalyst for increased public transport growth in the LGA and wider region, and a shift away from car dependence.



COUNCIL WILL

- Progress the FAST Corridor to deliver a highquality rapid transit connection to Western Sydney International Airport.
- Increase connectivity to the airport to support jobs growth and airport viability.
- Create transit- and landscape-oriented development along the route at appropriate locations and at an appropriate scale.

The Fifteenth Avenue Smart Transit (FAST) Corridor is a visionary, city-shaping project

ACTIONS

- Finalise investigations into the FAST 2.1 corridor in collaboration with State and Federal government agencies (short term)
- Amend the LEP and relevant 2.2 environmental planning instruments to preserve the FAST corridor (short term)
- Investigate location of transit- and 2.3 landscape-oriented development hubs along the FAST Corridor route (short term)
- Investigate extension of FAST 2.4 corridor to Holsworthy station with consideration of appropriate station locations, including Moore Point (medium to long term)
- 2.5 Deliver the FAST Corridor (long term)

LOCAL PLANNING **PRIORITY 3**

Accessible and connected suburbs

RATIONALE

Communities in Liverpool have strong networks that extend to other suburbs and centres, and importantly to the Liverpool City Centre, which serves as the regional centre for South West Sydney. These networks include community ties as well as access to jobs and services. Sometimes the development of new areas, major roads and other infrastructure put barriers in the way of these connections.

Council is committed to ensuring these connections are retained and improved, and that new suburbs will be linked to the broader Liverpool community and region.

Neighbourhood centres are the heart of Liverpool's suburbs. Council will use placemaking principles to link these centres with other centres and the Liverpool City Centre by a network of pathways and cycleways integrated into system of parks and open space. This will include ensuring throughsite links are provided on larger blocks to improve connectivity and permeability.

An efficient public transport and road network is important to provide access to jobs and services for our community. Council will ensure that barriers are minimised by improving local infrastructure and working with State agencies to ensure that our suburbs are accessible and connected by highquality roads and public transport services.

Council will collaborate with neighbouring councils to ensure a coordinated approach to open space and transport planning to improve access to local jobs, services and recreation opportunities.



Neighbourhood centres are the heart of Liverpool's suburbs



CONNECTIVITY

COUNCIL WILL

- Link suburbs and centres with each other and Liverpool City Centre by a network of highquality pathways and cycleways integrated into system of parks and open space
- Advocate for improvements to public transport connections and timetabling for suburban areas and centres
- Use placemaking principles to ensure that public transport infrastructure and accessibility to suburban centres is optimised
- Improve local road access to suburbs and centres
- Collaborate with neighbouring councils to ensure a coordinated approach to open space and transport planning

ACTIONS

- 3.1 Collaborate with neighbouring councils to improve open space and transport connections, including active transport routes, around Chipping Norton Lakes (short term)
- 3.2 Optimise public transport infrastructure and accessibility as well as connectivity to pathways and cycleways as part of place-making for neighbourhood centres (short to medium term)

LOCAL PLANNING PRIORITY 4

Liverpool is a leader in innovation and collaboration



RATIONALE

Liverpool City Council is committed to supporting and leading innovation in our organisation and our community as we develop into a connected smart city. By creating an innovation ecosystem, testing new approaches and working with partners in government, industry and the community, we will secure Liverpool's place as the premier edge city for the Western Sydney Aerotropolis.

Liverpool City Centre will become a rejuvenated river city offering new and diverse housing and employment spaces, anchored by a world-leading Innovation Precinct providing high-value local job opportunities. This area is covered by the Liverpool Collaboration Area Place Strategy, developed by the Greater Sydney Commission in collaboration with Council and other stakeholders. We will maintain our position as an active leader in the strategy's delivery, ensuring the best outcomes are reached for our community.

Key to the success of all our plans is to collaborate and work effectively with stakeholders from the private, public and community sectors. Consultation with the community will be guided by Council's Community Participation Plan and an engagement framework that builds community capacity and social capital, allowing people to feel connected and proud of our City, and able to participate in processes and decisions that affect their lives.

Council will always collaborate with neighbouring councils, Aboriginal Land Councils, State and Federal governments, state agencies, private sector interests and the Western Sydney Planning Partnership to deliver the best outcomes.

CONNECTIVITY



- Be recognised as an innovation leader locally, nationally and globally.
- Work with other councils and the NSW and Federal Government to implement the Western Sydney City Deal.
- Improve digital connectivity.
- Ensure planning controls respond to connected and autonomous vehicles (CAV) without compromising pedestrian amenity.
- Be a leading voice in the Western Sydney Planning Partnership to deliver good planning outcomes in the development of the Western Sydney Aerotropolis.
- Work with adjoining councils to address crossborder issues.
- Involve the community in strategic planning matters.
- Involve Aboriginal Land Councils in strategic planning matters.
- Collaborate with government agencies to coordinate delivery of local and regional infrastructure.
- Support innovative approaches to the operation of business, educational and institutional establishments to improve the performance of the transport network.

ACTIONS



- 4.2 Collaborate with Greater Sydney Commission and relevant stakeholders to address the Liverpool Collaboration Area Place Strategy through amendments to the LEP (short to medium term)
- 4.3 Investigate planning control changes to support CAVs and adaptive reuse of parking infrastructure (short to medium term)

Liverpool is committed to supporting and leading innovation







420

EGROW 04 Attachment 1



LIVEABILITY Our Home

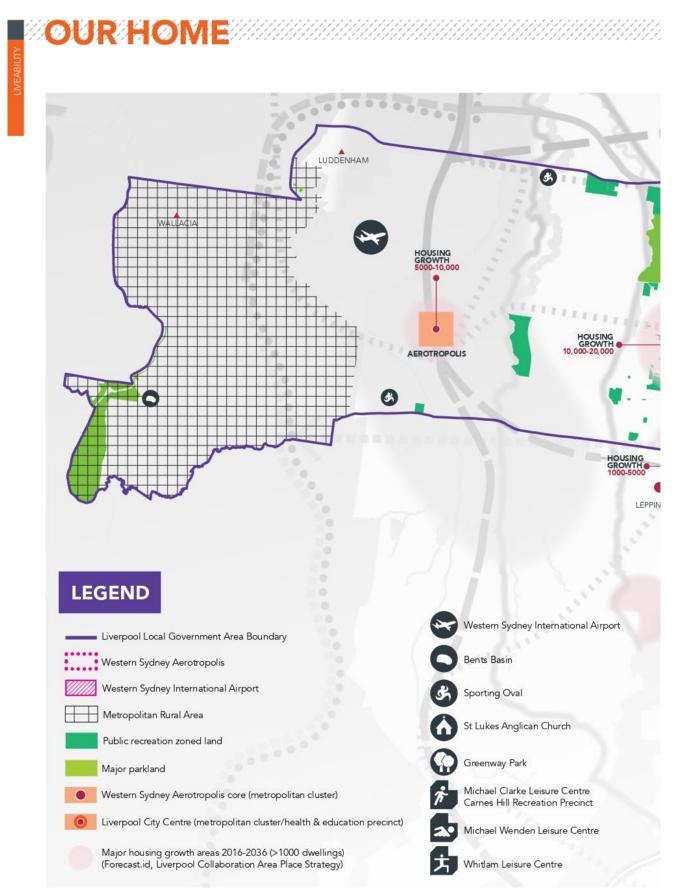
Liverpool in 2040 will become one of Australia's most liveable cities, capitalising on its youth, culturally diverse and harmonious population, proximity to Western Sydney International Airport, and a City Centre close to transport and the amenity of the Georges River.

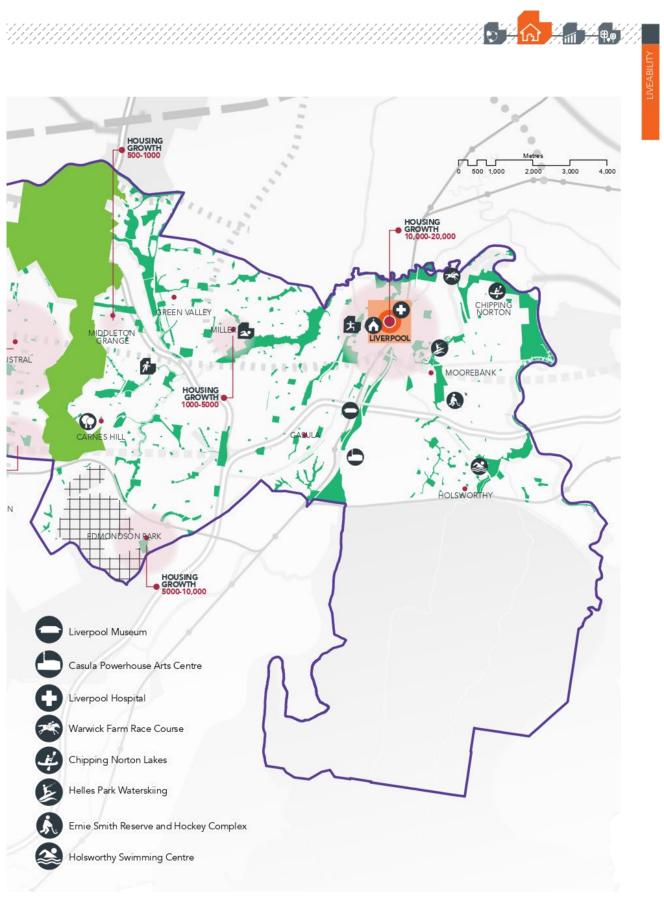
Council is working to make the entire LGA an attractive, vibrant and healthy place to live, work and play for our diverse community. Council is committed to ensuring that the LGA is accessible and inclusive to all people, including older people and people with a disability. The Liverpool community, through the Community Strategic Plan (CSP), has told Council that having a clean, attractive city with ample facilities and community activities is essential. The LSPS survey also revealed the top two liveability priorities for the community are 'access to parks and recreation options' and 'walkable neighbourhoods'.

Council is committed to ensuring the parks, facilities and amenities the community requires are of high quality and provided close to homes to create walkable suburbs. Liverpool is working to transform community hubs in new and existing suburbs to create vibrant and multipurpose facilities in which the community can connect. The activation of these hubs with sporting facilities, outdoor fitness gyms, improved pathways and lighting and children's playgrounds will provide the community with spaces to lead healthy lifestyles and spend time with friends and family to improve social connections and harmony. Through development of the Liverpool Housing Strategy, Council is also making sure the right housing is being built in the right places to cater to the many needs of the community, while ensuring local character is respected. This includes increasing affordable housing options, as Liverpool has one of the highest needs for social and affordable housing in the country.

In the City Centre, Council has already implemented Amendment 52 to the LEP, allowing mixed-use development and, along with a new City Centre Public Domain Master Plan, seeks to create a functional, high-amenity city centre with a strong 18hour economy and better opportunities for healthy active transport, such as walking and cycling. We will activate sites across the city for art, events and festivals, improve night-time activities and provide a lively environment for locals that also becomes an internationally renowned destination. By 2040 we will expand our 18-hour economy to become a dynamic 24-hour city.

While Liverpool is experiencing significant change, it is also committed to honouring its local character and rich heritage, with a number of significant buildings and sites protected at the local and state levels, and a commitment to retain the low-scale nature of existing suburbs.





LIVEABILITY

LOCAL PLANNING PRIORITY 5

A vibrant, mixed-use and walkable 24-hour City Centre with the Georges River at its heart

RATIONALE

Liverpool is working to create a vibrant 18-hour economy in the City Centre over the next decade, and then transform into a lively river city by 2040 with a strong 24-hour economy, providing ample space for jobs, homes, entertainment, recreation and education.

Council is working on an ambitious suite of plans and projects to deliver this vision. The City Centre Public Domain Master Plan will guide the development of a city centre that meets the needs of the community now and into the future. This will involve major public domain improvements, including increased urban canopy, active transport integration, wayfinding and walkability enhancements, safety improvements and better design standards. This will be complemented by City Activation and Heritage Interpretation strategies to improve the experience of Liverpool residents and visitors.

We will also be embarking on ambitious transformational projects like Woodward Place, which will see the current Woodward Park become Liverpool's own 'Central Park' – an iconic lifestyle precinct providing world-class facilities to support a healthy, connected and diverse population.

The City Centre will refocus around the amenity of a healthy Georges River, connected to parkland and open space with development that is of appropriate scale and which respects the natural character of the river environment.

With a 24-hour economy and a focus on vibrancy, we will need to ensure that extended trading hours in the CBD can occur without being affected by increased residential development and the potential for amenity impacts.

COUNCIL WILL

424

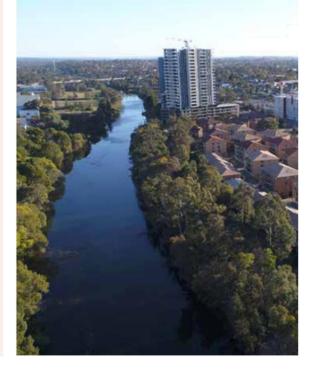
- Ensure Liverpool City Centre is a vibrant, mixeduse, pleasant and walkable city by providing a high-quality public realm and open spaces; fine grain and diverse urban form; a diverse land use and housing mix, high amenity and walkability; and recognising and celebrating the character of the place and its people.
- Foster a 24-hour economy with a lively and wellintegrated mix of activities.
- Investigate and establish destinations (interactive public places) within the City Centre to facilitate walkability and ensure sustainability.
- Refocus the City around the amenity and assets of the Georges River, while ensuring the natural character of the river is protected through development of an appropriate scale.
- Develop a high-quality Georges River and Chipping Norton Lakes open space system addressing integration with the Liverpool City Centre and the local and regional open space network.
- Reduce congestion in the CBD.
- Ensure appropriate levels of parking are available.

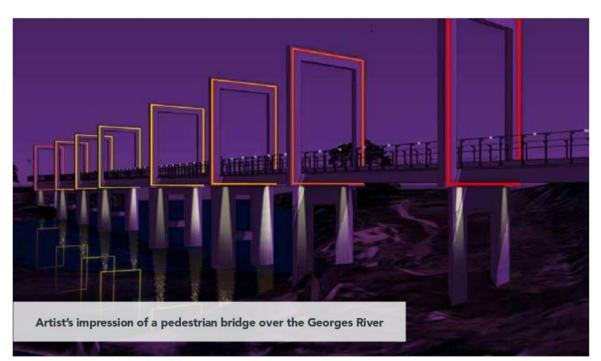
The City Centre will refocus around the amenity of a healthy Georges River

່<mark>ເພີ່</mark>ຊີ∭ີຊຸສຸ¢ັ

ACTIONS

- 5.1 Review Development Control Plan (DCP) to ensure the 18-hour economy can be suitably protected from reverse amenity issues (short term)
- 5.2 Review LEP and DCP to give effect to City Centre Public Domain Master Plan (short term)
- 5.3 Incorporate community and cultural facilities in Liverpool Civic Place (short to medium term)
- 5.4 Review LEP to support development, community facilities and linkages at key Council-owned sites in the City Centre (short to medium term)
- 5.5 Review LEP to ensure alignment and give effect to Woodward Place Masterplan (medium to long term)





LIVEABILITY

LOCAL PLANNING PRIORITY 6

High-quality, plentiful and accessible community facilities, open space and infrastructure aligned with growth

RATIONALE

Liverpool City Council is committed to the delivery of high-quality facilities and services that are attractive, flexible and address the needs of the general community. Council supports the central concept that an efficient and effective network of quality and appropriate community facilities is essential to the health, social and economic wellbeing of Liverpool. Council's vision is to create best practice recreation spaces for people that inspire and connect residents, and act as a catalyst for community life.

However, current restrictions around what types of social infrastructure Council is able to raise funds for through development contributions makes it difficult for us to provide the services the community expects in a timely fashion. Council will continue to advocate expansion of the types of facilities we can levy for, including community centres and high-quality embellished parks, and also investigate alternative sources of funding to deliver the amenity the community expects and deserves in new and existing areas.

Council is also committed to improving its open space network. While our latest Social Infrastructure Study found there is sufficient open space to meet our growing needs through to 2041 overall, there are some areas where open space access needs to be improved, including in the City Centre and New Release areas.

One of Council's most ambitious projects will be the River Connections plan, which will create a continuous network of accessible, high-quality paths along the Georges River from Casula through the City Centre to Pleasure Point. Collaboration with adjoining councils will allow extended green links to be established beyond Liverpool's LGA boundaries. The Liverpool LGA also contains part of the Western Sydney Parklands, a key open space and recreational asset for the region. Council will improve active transport connections to the Parklands and, in collaboration with the Western Sydney Parklands Trust, investigate potential improvements to the recreation, sports, tourism and community value of the area.

COUNCIL WILL

- Deliver a world-class network of community facilities.
- Deliver timely construction of community facilities in new release areas.
- Ensure community facilities, open space and recreation facilities meet the needs of a growing population across the entire LGA.
- Ensure place-based integrated services by colocating social services within neighbourhoods.
- Undertake community needs assessment and community engagement prior to constructing new facilities.
- Encourage integrated planning with community facilities for all major new and redeveloped recreation precincts.
- Prioritise a collaborative approach towards community and social infrastructure planning.
- Increase public open space and work with key stakeholders to revitalise and develop parks and open space across the Liverpool LGA.
- Strengthen and promote active transport links between centres and open space.
- Strengthen connections to Western Sydney Parklands.
- Develop the regional riverside parkland as part of a wider plan to reengage communities with the Georges River.
- Engage communities who use the Georges River on relevant projects.
- Collaborate with neighbouring councils to identify outdoor sports and recreation facilities that have a regional focus.

ACTIONS

- 6.1 Advocate changes to contributions planning and seek alternative funding mechanisms to deliver highquality facilities and infrastructure, including the FAST corridor within accelerated timeframes (short term)
- 6.2 Investigate DCP changes to encourage green open space in high-rise development (short term)
- 6.3 Collaborate with the NSW Department of Education to identify opportunities for sharing local school infrastructure with the wider community (short term)
- 6.4 Develop community and recreation hub at Phillips Park, Lurnea (short term)
- 6.5 Redevelop Lighthorse Park into a district recreation and open space destination park, including a community centre, and active and passive open spaces (medium term)
- 6.6 Review LEP to give effect to River Connections Program linking green space networks from Casula to Pleasure Point, improving accessibility and visual amenity (short, medium and long term)
- 6.7 Establish a metropolitan-scale cultural/entertainment facility in the City Centre (visionary)



66

427

Our vision is to create recreation spaces for people that inspire and connect residents, and act as a catalyst for community life





isula Parkiands Adventure Playground

428

LIVEABILITY

LOCAL PLANNING PRIORITY 7

Housing choice for different needs, with density focused in the City Centre and centres well serviced by public transport

RATIONALE

Forecast.id population projections predict that Liverpool's population will grow to 358,871 by 2036, compared with our 2019 population of 227,312 – an increase of almost 60%.

Council delivered on average 1684 new dwellings a year between 2013/14-2017/18. In the year to May 2019 completions hit a record of 2314 new dwellings. Council expects strong demand for housing to continue.

The Liverpool Local Housing Study 2019 predicts demand for an additional 43,452 dwellings between 2016 and 2036. Liverpool will need to ensure that the households built are suitable to support the growing population, and located in the right areas, which will be explored further through the development of a Local Housing Strategy.

		_			
Year	2016	2021	2026	2031	2036
Population	212,232	242,817	276,970	319,304	358,871
Total dwelling demand	67,738	77,279	87,261	99,632	111,190
Additional dwellings required over five years		9,541	9,982	12,371	11,558

Population and dwelling forecast

Sources: Population – Forecast population projections (Forecast.id); Dwellings and additional dwellings – Liverpool Local Housing Study 2019 (SGS Economics and Planning).

Taking into account existing growth areas and our recent changes to City Centre planning controls to allow for more housing, our Local Housing Study indicates that there's enough zoned land to provide for 89,652 additional dwellings, more than enough to cater for projected demand well into the future. As such, there is no pressure to zone more land for residential development over the next 20 years. Council's preference is for any increases in the density of current controls to be focused in the City Centre and close to centres with good public transport accessibility, including potential transit- and landscape-oriented development hubs along the Fifteenth Avenue Smart Transit (FAST) Corridor.

Findings from the Local Housing Study indicate there is a mismatch between the types of housing being delivered, and what is needed by the community. For example, the majority of housing in the city centre is two-bedroom apartments, however there is demand from larger family homes in the city centre with more bedrooms. In growth areas, there is a large number of 4-5 bedroom houses being delivered, however, there is demand for smaller housing, including semidetached housing such as townhouses.

Council acknowledges that a variety of homes will be needed to cater for a diverse population with different needs and incomes. In 2017/2018, less than 2% of new developments were diverse housing options. Liverpool needs housing that is suitable for young families, larger culturally appropriate housing for multi-generational families, more affordable dwellings, and housing for downsizers, seniors and those who want to age in place. Council supports increasing the diversity of housing - including 'missing middle' style developments such as terraces, townhouses and manor houses - to assist in providing more affordable dwellings, but this must respect local character and be in areas close to services and transport. For affordable housing in particular, it is critical that support services are close by.

Council also supports an increase in affordable rental housing for the community as a priority, with the LGA suffering from one of the highest rates of rental stress in the country. There are currently over 7,000 households in rental stress (meaning more than 30% of income is spent on rent) with more than 4,000 experiencing severe rental stress (more than 50% of income spent on rent). Council acknowledges the economic and social benefits created through the provision of affordable housing, including supporting job growth, encouraging greater financial prosperity for low income households, increasing social cohesion through mixed tenure developments, and reducing social isolation.

Demand for social and affordable housing is increasing at much faster rates than Sydney more broadly. By 2036 our LGA will have the highest demand for social and affordable housing in the entire Western City District. Increasing the provision of affordable rental housing will mean that Liverpool's key workers will be able to better support themselves, their families and the local economy. Council will develop an Affordable Housing Contributions Scheme, identifying new areas for higher density housing in which contributions for affordable housing can be levied. Council will also continue to deliver affordable housing through mechanisms such as voluntary planning agreements, and the provision of Council-owned land for affordable housing developments.



HOUSEHOLDS IN RENTAL STRESS LIVERPOOL 43% SYDNEY 37.5%

HOUSEHOLDS IN MORTGAGE STRESS LIVERPOOL 27.9% SYDNEY 17.5%

429

DEMAND FOR SOCIAL AND AFFORDABLE HOUSING 2016 7646 DWELLINGS 2036 16,465 DWELLINGS

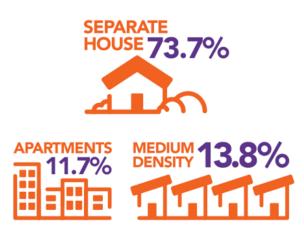
What is social and affordable housing?

SOCIAL HOUSING is affordable rental housing provided by not-for-profit, nongovernment or government organisations to assist people who are unable to access suitable accommodation in the private rental market and may be at risk of homelessness. Social housing includes public, Aboriginal and community housing, as well as other services and products. It acts as a safety net for the most vulnerable in the community.

AFFORDABLE HOUSING is not the same as social housing. It is also open to moderate income earners that may be struggling to make ends meet, and is around 20-25 per cent below market rental prices. It allows key workers whose household income is not high enough to cover market rent to live and work locally. Affordable housing can be owned by private developers or investors, local governments, charitable organisations or community housing providers (CHPs), but is managed by CHPs.

Council supports increasing the diversity of housing while respecting local character

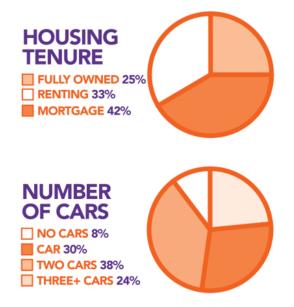
HOW WE LIVE



NEARILITY

COUNCIL WILL

- Concentrate residential development in the Liverpool City Centre, in growth areas, in transitand landscape-oriented development hubs along the Fifteenth Avenue corridor route, and in existing centres with high amenity that are well serviced by public transport.
- Ensure housing typologies are diverse and appropriately located to cater for the entire community.
- Ensure housing supports aging in place and accessibility principles.
- Ensure a greater proportion of affordable housing is delivered.
- Work with residents, government and other relevant stakeholders to renew social housing that is near end of life and build more diverse and inclusive communities.
- Deliver ongoing renewal and beautification projects in Miller, Cartwright and Ashcroft.
- Work with DPIE to deliver housing in growth areas with supporting infrastructure.



ACTIONS

- 7.1 Develop and implement a Local Housing Strategy through amendments to the LEP and DCP (short term)
- 7.2 Develop an Affordable Housing Contributions Scheme in line with Greater Sydney Commission's requirement for 5-10% affordable housing, and amend LEP to give effect (short term)
- 7.3 Partner with State Government to investigate the potential for master planned precincts (such as NSW Land and Housing Corporation properties in Warwick Farm and Green Valley) to improve and increase social and affordable housing (medium term)
- 7.4 Partner with State Government and stakeholders including TAFE to review the Masterplan for Miller Town Centre (short term)
- 7.5 Advocate to State and Federal Governments for more investment in social and affordable housing (short term)
- 7.6 Partner with State Government to investigate planning controls to address land fragmentation challenges in growth areas (short term)
- 7.7 Progress planning for sustainable, high-density transit- and landscapeoriented development along the Fifteenth Avenue Smart Transit Corridor (short to medium term).
- 7.8 Monitor, review and update the Local Housing Strategy to ensure sufficient, appropriate and diverse housing is delivered to meet community needs (ongoing)



LOCAL PLANNING PRIORITY 8

Community-focused low-scale suburbs where our unique local character and heritage are respected



RATIONALE

Our established areas feature suburbs with strong communities, low scale development and relatively affordable development, and good access to services. Consultation for the LSPS shows that residents of Liverpool's established suburbs have a strong desire for their areas to maintain their lowscale local character into the future.

Council will work to ensure development remains largely low scale and sympathetic to local character. This approach is supported by findings from the Local Housing Study that indicate further rezoning is not required to meet housing growth targets, and that housing targets can be easily accommodated without apartment developments outside of the City Centre and town centres.

In existing centres, Council will undertake designled planning using placemaking principles to ensure growth is sympathetic to local character and heritage. We're also working to improve the amenity of our suburbs. We've updated contributions plans to better enable local infrastructure that can meet needs, and we will continue to advocate changes to contributions planning to provide funds for improvements such as open space embellishment and new facilities.

> Suburbs will largely remain low scale

COUNCIL WILL

- Ensure residential development is maintained at a low scale around local centres not wellserviced by public transport.
- Preserve local character of existing suburbs.
- Improve the amenity of local centres and recognise the role of retail in establishing vibrant local centres.
- Ensure heritage, including Aboriginal heritage, is valued and protected.
- Support heritage asset revitalisation and adaptive reuse where appropriate
- Advocate for and provide social and cultural infrastructure in established and new release areas.

ACTIONS

- 8.1 Amend LEP to implement findings of review of dwelling typologies and density around Moorebank Shopping Centre (short term)
- 8.2 Review R4 zoned land around local centres to address interface issues (short to medium term)
- 8.3 Investigate Local Character Statements and Local Character overlays for areas identified as requiring more fine-grain planning responses (short term)
- 8.4 Review and update heritage provisions in LEP, and address anomalies (short term)
- 8.5 Undertake design-led planning using placemaking principles for local and district centres (medium term)

LIVEABILITY

LOCAL PLANNING PRIORITY 9

Safe, healthy and inclusive places shaping the wellbeing of the Liverpool community

rationale

The future of Liverpool is vibrant, active and healthy. While Western Sydney residents should enjoy the same health outcomes as those in other parts of Sydney, currently this is not the case, with significantly higher rates of obesity and diabetes. This is due to a number of reasons, including high car dependence, relatively lower levels of spare time due to commuting and traffic, poor access to public and active transport, and fewer recreation opportunities.

A healthy built environment is a key motivator for the future. We are working to build more walking and cycling trails, opening access to our natural assets, focusing development near public transport to encourage mode shift, and ensuring there is enough open space and recreational facilities to meet growing demand. New urban centres will be compact and transit-oriented, to maximise opportunities for walking and active transport.

Council is also committed to creating inclusive and harmonious environments. Liverpool is one NSW's most culturally diverse cities with around 40% of people born overseas. Liverpool will continue efforts to create a harmonious society where differences are appreciated and celebrated, as socially diverse communities are inclusive, healthy and creative. We will also continue to develop programs, in partnership with government and non-government organisations, to improve mental wellbeing, which is a key aspect of health and safety.

In Council's LSPS consultation, safety was indicated as a major community concern. In 2019 Liverpool was recognised as a Pan Pacific Safe Community – a strong, cohesive, vibrant community, where citizens actively participate in public life. We have identified domestic violence, road accident trauma, drugs and alcohol, and fall-and-trip-related injuries as key issues, and will work to continuously improve safety. Council is committed to embedding Crime Prevention through Environmental Design (CPTED) principles across the LGA. This crime prevention strategy focuses on the planning, design and structure of cities and neighbourhoods in order to reduce opportunities for criminal behaviour. The DCP has been developed to encourage safe design, and Council will continue to provide highquality environments in which our residents feel safe and secure, including through building design, maintenance works, landscaping, lighting, and open and public space design.

Council will also be improving the safety of our residents during natural disasters by ensuring hazard data is up to date, not locating development in high hazard areas, and addressing environmental issues that place the community at risk, such as the urban heat island effect.









COUNCIL WILL

- Support the health and wellbeing of the community through healthy urban design and placemaking.
- Consider child-friendly planning strategies and aging in place principles in LEP and DCP reviews.
- Advocate better public transport outcomes.
- Focus development close to public transport.
- Ensure new centres are compact and transitoriented.
- Ensure community and social support services are located near areas of need.
- Work with stakeholders to reduce road trauma.
- Work with partners to reduce crime.
- Ensure the built environment incorporates CPTED principles.
- Facilitate the development and promotion of integrated walking and cycling networks within and between centres.
- Prioritise pedestrian movement in the CBD and beyond.
- Investigate locations of active transport connections into adjoining LGAs.
- Continue to update hazard mapping to ensure safety, including flood and bushfire mapping.
- Address the urban heat island effect.

ACTIONS

- 9.1 Amend DCP to better respond to urban heat (short term)
- 9.2 Liaise with Fairfield and Canterbury Bankstown councils to implement active transport routes around Chipping Norton Lakes, including bridge and road connections (medium term)



Liverpool City Council's Local Strategic Planning Statement 49





PRODUCTIVITY Our Jobs

Liverpool in 2040 will be the premier edge city to Western Sydney International Airport – a jobs-rich, attractive destination drawing in jobs, business, study, tourism and investment, supporting the operation of a successful 24-hour international airport.

Liverpool has a long-standing role as the regional centre for the South West, reflecting its history and strategic location near major transport infrastructure, such as the M5 and M7 motorways, and T2, T8 and freight lines.

The City boasts a major health and education precinct including Liverpool Hospital – the largest standalone hospital in NSW – three major universities and two TAFE campuses. It also supports a significant manufacturing and logistics sector.

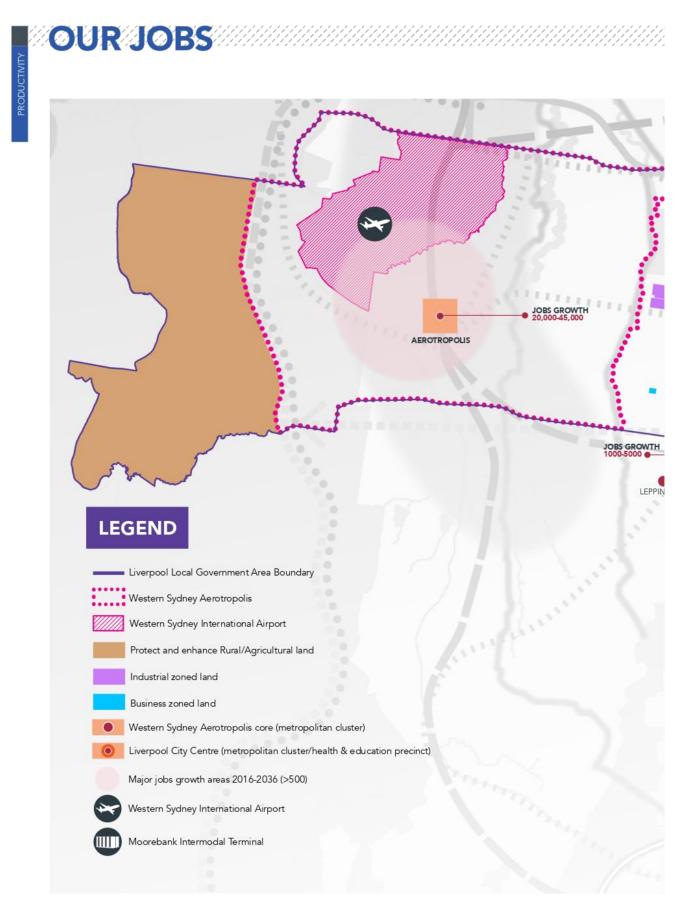
Recent infrastructure announcements mean that Liverpool has significant potential to strengthen its productivity and capitalise on its status as an attractive, jobs-dense centre. The opening of the Western Sydney International Airport will catalyse investment in a wide range of knowledge-intensive industries. The Western Sydney Aerotropolis will also generate significant employment and economic opportunities for Liverpool and the broader South West region.

Changes to Liverpool's City Centre planning controls means that Liverpool is well-placed to accommodate additional jobs and housing growth. With its position on the Georges River, and following additional rail and rapid transit connections set out in the State Government's Future Transport 2056 Strategy are complete, there is opportunity to create a high amenity Centre that will be the natural location for businesses related to the airport. Liverpool will become the premier edge city to Western Sydney International Airport.

A key challenge for Liverpool's productivity is managing the infrastructure and employment land needed to sustain projected population growth and economic opportunities. A key action will be investigating ways to increase or better manage existing industrial and employment lands to cater for the jobs of the future.

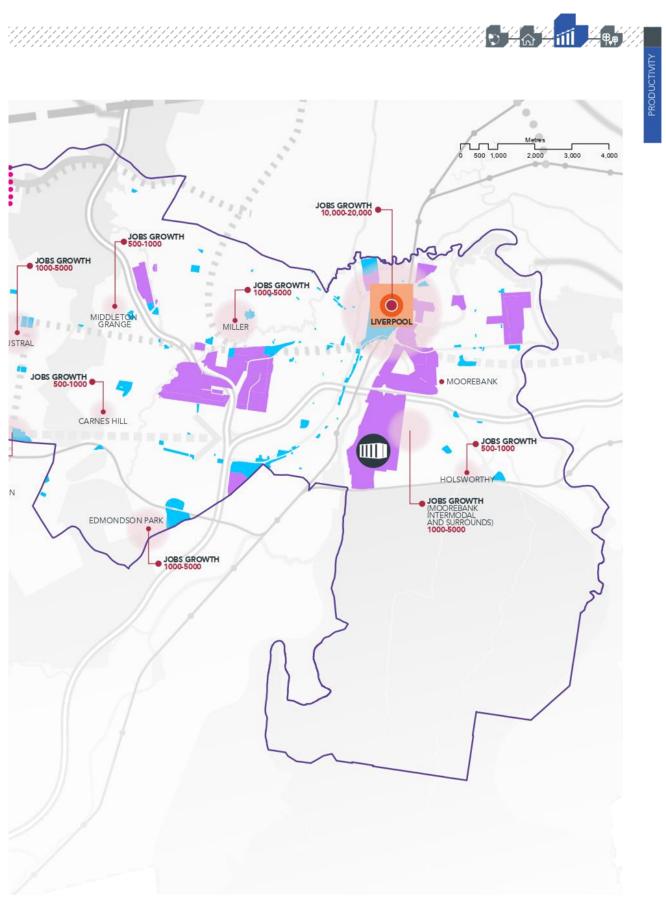
Another challenge is poor access to knowledge jobs due to long journey times to other centres and significant road congestion. While Liverpool has a goal of increasing opportunities to work in the LGA - and our LSPS survey indicated that the community's number one Productivity priority is 'creating more jobs in the local area' – the reality is that many residents need to leave the LGA for employment. Currently close to 70% of Liverpool's residents leave the LGA for work. Liverpool will work to ensure that these residents can reach their jobs in a satisfactory time, and that workers outside the LGA can reach the abundant opportunities provided by Liverpool with ease. With a significant migrant and refugee intake, Liverpool will also work to increase opportunities for our new residents.

We will advocate for delivery of transport commitments and attract new business investment to support an increase in jobs of 200,000 in Western Sydney over the next 20 years, as part of our commitment to the Western Sydney City Deal. Council will also work to meet its stated jobs target of 2500 per year, as part of our Economic Development Strategy 2019-2029.



52 Liverpool City Council's Local Strategic Planning Statement





PRODUCTIVITY

LOCAL PLANNING PRIORITY 10 A world-class health, education,

research and innovation precinct

RATIONALE

Health and education play a significant role in Liverpool, with Liverpool Hospital, Ingham Institute of Applied Medical Research, the University of NSW (UNSW), Western Sydney University (WSU), University of Wollongong (UOW), South West Private Hospital and TAFE NSW in the local area. There are more than 15,000 health and knowledge workers in the LGA, accounting for about 20% of all workers. This could increase to 30,000 by 2036 and even higher if the right actions are taken.

Liverpool City Centre has significant advantages that could reinforce its position as a health leader and help it to develop a world-class health, education, research and innovation precinct based around Liverpool Hospital. This includes close access to a train line, a river providing significant amenity potential, availability of commercial land and a diverse population.

Liverpool also has potential to improve its standing as an education destination, building upon its network of outstanding government and nongovernment schools, a nationally recognised trade training centre, and multiple university campuses. Student numbers are growing rapidly. In the next 5-7 years, it is expected Liverpool will be home to more than 5000 university students and 8000 TAFE students. The number of university students is expected to grow to more than 10,000 over the next 10 years.

COUNCIL WILL

research

 Lead development of the Liverpool Innovation Precinct.

Liverpool will capitalise on these advantages, and grow its Innovation Precinct to cater for the

significant growth in health and knowledge workers expected in the next 20 years, and become a global

leader in collaboration for health, education and

- Ensure land use planning supports the operation and growth of the pr ecinct for all in the health, education and innovation ecosystem.
- Support tertiary institutions, including vocational and technical training opportunities.
- Collaborate with tertiary institutions to encourage appropriate student housing.

ACTIONS

- 10.1 Investigate LEP changes necessary to support the operations and growth of the Liverpool Innovation Precinct (short to medium term)
- 10.2 Amend LEP applying to Warwick Farm to support the existing horse training facilities, and provide for innovation/employment uses and an appropriately located residential component (short term)

Collaborate with universities, TAFE, the Department of Education and other education providers to support growth (short term)





10.3



RODUCTIVITY



LOCAL PLANNING PRIORITY 11 An attractive environment for local jobs, business, tourism and

investment

RATIONALE

Liverpool is quickly becoming a business and commercial destination of choice. Due to its proximity to the Western Sydney International Airport, Liverpool's attractiveness as a location for commercial and industrial enterprise will grow significantly over the next 30 years, including in aerospace, agribusiness, education, health, and logistics and transport sectors. Liverpool's goal is to create a domestically thriving, globally known business landscape that prioritises the expansion and innovation of industry to promote its identity to the world.

Liverpool's Community Strategic Plan (CSP) directs Council to generate opportunity across Liverpool, while our LSPS survey indicated a demand for local, high-paying jobs. The Liverpool City Centre is an attractive destination for knowledge intensive industries and has a large capacity for commercial office floor space. Council is committed to attracting business for economic growth and employment opportunities, and have set an ambitious growth target of 2500 new jobs a year to 2029.

We have already changed planning controls in the city centre to facilitate new jobs and housing. Council has completed an Economic Development Strategy to create new job opportunities, develop local capacity, market Liverpool as a business destination, and activate and develop vibrant places to attract new residents, visitors and workers. We have also created a Destination Management Plan and International Trade Engagement Strategy to leverage opportunities from the Western Sydney International Airport and market the potential of Liverpool to the world.

With about 70% of residents currently leaving Liverpool to get to work, a focus for Council will be to increase the number of job opportunities closer to home. We will continue to advocate the fast and frequent public transport services needed to boost Liverpool's attractiveness as a place for jobs, business, tourism and investment.

The LGA has a number of centres differing in size and function. The concentration of retail within centres plays an important role, yet the function of centres extends beyond providing for the dayto-day and specialised retail needs. Centres act as important focal points for the local community, especially when co-located and well integrated with gathering places such as cafes, restaurants and social infrastructure. In turn, the increase in foot traffic from these other uses contributes to the vibrancy of the centre and supports retail uses. Centres also provide opportunities for local employment and are an important part of establishing the 30-minute city when co-located with high quality public transport.

The Liverpool LGA also has 'stand-alone centres' that contain either a supermarket or another large retail role, such as bulky goods retailing. Whilst these stand-alone centres meet the retail needs of the community, they do not provide multi-function community gathering places. As there is limited demand for new centres within the LGA, Council will prioritise the future expansion of retail within local or town centres rather than stand-alone centres.



Liverpool has significant advantages that could reinforce its position as a health leader



Liverpool City Council's Local Strategic Planning Statement 55

PRODUCTIVIT



COUNCIL WILL

- Create an environment to attract, train and retain a skilled workforce to support contemporary business needs.
- Reduce the proportion of people leaving the LGA for work and study.
- Investigate updates to procurement policy to preference local workers.
- Grow jobs in the health and education sectors.
- Support small businesses including start-ups.
- Provide opportunities for refugee and migrant populations to enter the workforce.
- Continue advocacy for city shaping transport infrastructure to boost jobs growth.
- Provide infrastructure, facilities and services needed to support and facilitate visitor economy and tourism growth in light of the opportunities provided by Western Sydney International Airport.
- Enhance tourist attractions, including beautification of Georges River and developing Chipping Norton Lakes.
- Improve connections from the City Centre to the Georges River, and open and active space networks.
- Strengthen Casula Powerhouse's position as the leading Arts Centre in South West Sydney.
- Establish a hierarchy of centres and determine anticipated retail supply and demand to guide future planning.
- Investigate planning controls to allow retail centres in Liverpool to keep up to date with technology and retail trends such as online shopping and electric trucks.
- Investigate a review of trading hours to establish late night trading to support the city centre as a dining destination.



ACTIONS

- 11.1 Develop a Centres and Corridor Strategy, and review LEP and DCP to ensure alignment (short term)
- 11.2 Investigate amendments to LEP to rezone Georges River precinct north of Newbridge Road as a mixed-use zone to support the Liverpool CBD and Innovation Precinct, with an extensive open space system and cross-river linkages (short to medium term)
- 11.3 Amend LEP to increase land-use flexibility for festival uses (short term)
- 11.4 Work with Transport for NSW and RMS to create links from Liverpool Train Station to the Georges River and investigate opportunities for transport interchanges at Moore Point (CBD extension east of the Georges River) (short to medium term)

Liverpool is quickly becoming a business destination of choice







Prospects for industrial and employment projects in Liverpool are strong, given proximity to transport links such as the M5 and M7, and large projects including Western Sydney International Airport and the Moorebank Intermodal Terminal. Council is committed to safeguarding existing industrial and urban services land from competing pressures, aside from land marked for investigation on the Inset map to support the CBD and Innovation Precinct.

Council has conducted a number of industrial land studies, which indicate that there will be a future lack of zoned and serviced industrial land, requiring Council to investigate suitable areas in the LGA. New industrial land around the Western Sydney International Airport will contribute to meeting demand in the medium to long term for larger industrial uses. However there is a projected shortage of land zoned for local service related industrial uses after 2026. We will develop an Industrial and Employment Lands Strategy to ensure there is enough serviced employment land to sustain projected population growth. This strategy will also be flexible enough to support the needs of future businesses including knowledge-based activities, creative industries and advanced manufacturing.

We will focus on opportunities provided by the establishment of the airport, as well as strengthening our health, education and innovation precinct. Council will also look to facilitate the strengthening of established industrial precincts, guided by the new Industrial and Employment Lands Strategy.

With the development of the Western Sydney Airport, Aerotropolis and Moorebank Intermodal Terminal, as well as increased population growth, managing freight movement through the LGA will become of increased importance. Council is committed to collaborating with State Government and private industry to manage the freight task, protect important freight routes and reduce impacts on the local community. Land for LARGER INDUSTRIAL USES refers to IN1 (General Industrial) and IN3 (Heavy Industrial) zones, and include uses such as manufacturing, freight, logistics, warehousing and distribution.

Land for LOCAL SERVICE RELATED INDUSTRY refers to the IN2 (Light Industrial) zone, and includes uses such as maintenance and repair uses and services supporting building and construction.



PRODUCTIVITY

We will focus on opportunities provided by the airport, and strengthen our Innovation Precinct

COUNCIL WILL

- Monitor land development to ensure there is enough serviced employment and industrial land to meet future need for a number of price points from start-ups to multinationals.
- Prepare flexible planning controls to ensure businesses of the future are not unduly restricted.
- Leverage opportunities created by Western Sydney International Airport to promote agribusiness, food export and tourism.
- Strengthen connectivity between Liverpool City Centre and neighbourhood and district centres.
- Collaborate with TfNSW to address the growing freight task and support actions the State Government and industry need to take for the efficient, safe and sustainable movement of freight, in line with the NSW Freight and Ports Plan 2018-2023.
- Manage the interfaces of industrial, trade and intermodal facilities to reduce adverse impacts.
- Collaborate with TfNSW, DPIE and private industry to support the urban consolation of freight.

ACTIONS

- 12.1 Develop Industrial and Employment Lands Strategy and review LEP and DCP to ensure alignment (short term)
- 12.2 Review the LEP and DCP to ensure statutory planning controls protect key freight routes and employment lands from sensitive land uses (short to medium term)
- 12.3 Investigate provision of new industrial land, including light industrial (IN2), between the airport and the CBD, including extension of industrial zoned land in Austral, to ensure ongoing supply (short to medium term)



LOCAL PLANNING PRIORITY 13 A viable 24-hour Western Sydney International Airport growing to reach its potential

RATIONALE

Liverpool supports the delivery of Sydney's first 24-hour international airport, and is dedicated to ensuring the comparative advantage of a curfew-free airport is protected.

Inappropriate development around Western Sydney International Airport could constrain airport operations over the long term, affecting the region's productivity, while also having negative impacts on local communities due to aircraft noise. For these reasons, Liverpool City Council advocates a precautionary approach to the consideration of all land around the airport, recognising that extensive international experience has shown that development, particularly residential development, in proximity to airport operations acts as a constraint to and limitation on the success and opportunities of an airport.

Council will continue to collaborate to ensure that a precautionary approach and best-practice measures are put in place to protect any new residential communities and the viability of the airport.





Liverpool supports the delivery of Sydney's first 24-hour international airport

COUNCIL WILL

- Collaborate through the Planning Partnership to protect the airport's competitive advantages as a curfew-free airport.
- Identify employment lands in line with industrial and commercial demand and development needs.
- Collaborate through the Planning Partnership to ensure a precautionary approach is taken to noise-sensitive development in the Aerotropolis.

ACTIONS

- 13.1 Ensure through the Western Sydney Planning Partnership that future planning in the Aerotropolis supports the airport's economic potential and reduces conflicting uses that could inhibit future growth and the curfew free status of the airport (short term)
- 13.2 Work collaboratively with the Western Sydney Planning Partnership to implement the Western Sydney City Deal and ensure the best planning outcomes for the Aerotropolis (short to medium term)





SUSTAINABILITY

SUSTAINABILITY Our Environment

The Liverpool of 2040 is green, clean, safe, sustainable and vibrant. Tree cover and greenery have been greatly expanded, native habitat has been strengthened and protected, waterways are healthy, and climate change and urban heat are well managed.

Liverpool is rich in nature and this will be protected into the future. Bordered by the Georges and Nepean Rivers, it has significant and unique bushland, biodiversity, and green and blue networks. However, Liverpool is currently one of the fastest growing cities in NSW, and therefore the natural environment is exposed to pressures from development and urban sprawl.

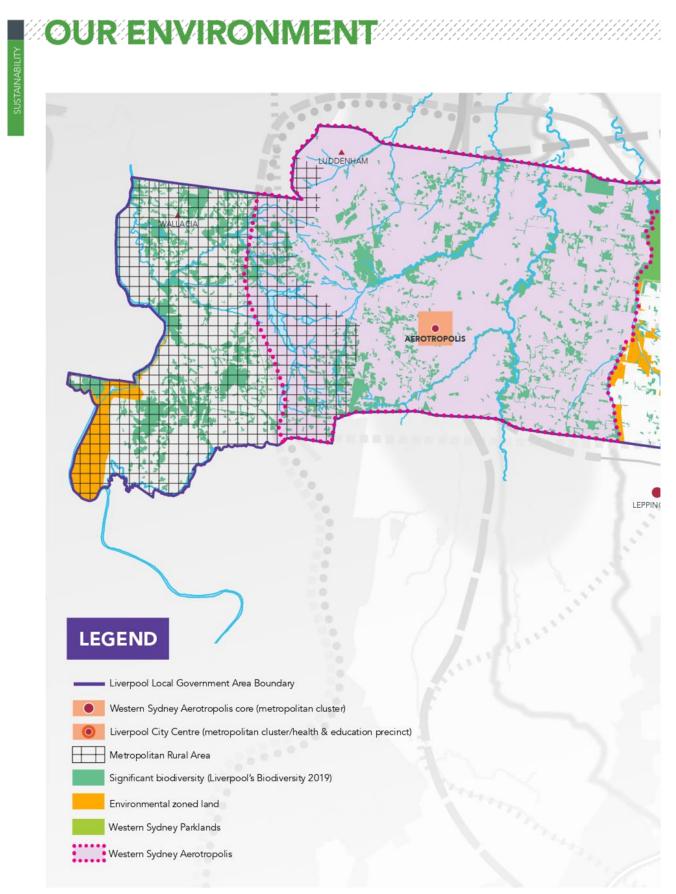
Liverpool City Council recognises the importance of protecting our natural environment and using our resources wisely. Indeed, \$27 of every \$100 in operational expenditure goes towards the environment.

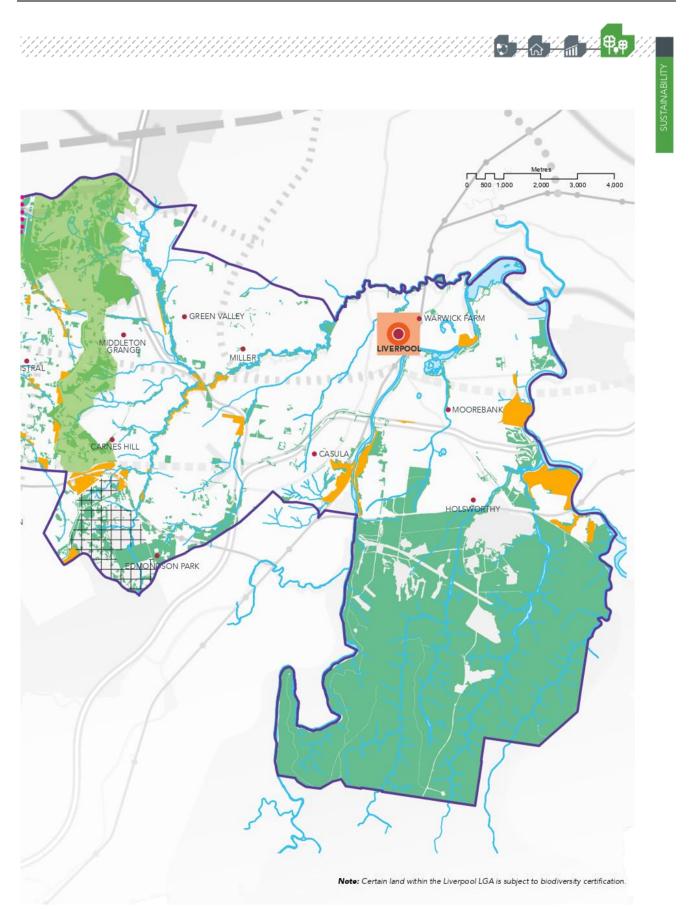
We are working towards fostering a partnership with our community to better protect, support and conserve our natural resources and environment. A key direction in Council's CSP – Our Home, Liverpool 2027 – is 'Strengthening and Protecting our Environment', with the following goals:

- Manage the community's disposal of rubbish;
- Protect and enhance bushland, rivers and the visual landscape;
- Encourage sustainability, energy efficiency and the use of renewable energy;
- Exercise planning controls to create high-quality, inclusive urban environments; and
- Develop, and advocate for, plans that support safe and friendly communities.

Through the LSPS survey, the community has said the top priorities are 'having plentiful trees and canopy cover' and 'improved access to nature and waterways'. Council is working on plans to protect and increase tree canopy cover in order to improve amenity, reduce air pollution and tackle the urban heat island effect.

Council also acknowledges the risks posed by climate change and is committed to playing its part in mitigating climate change and adapting to the threats posed by climate change, particularly implementing measures to reduce the urban heat island effect.





SUSTAINABILITY

LOCAL PLANNING

PRIORITY 14 Bushland and waterways are celebrated, connected, protected and enhanced

RATIONALE

Extensive green and blue corridors traverse the Liverpool LGA. Liverpool sits within the Cumberland Plain, home to a rich array of wildlife and plants. Approximately one-third of our land is covered by native vegetation, supporting extensive biodiversity, including 10 threatened ecological communities, 12 threatened flora species and 57 threatened fauna species. Council will work to protect and restore naturally occurring ecosystems and habitat based on best-practice biodiversity conservation principles. The Liverpool LGA covers substantial portions of the Georges River catchment and the Hawkesbury-Nepean River catchment. It also covers significant tributaries of the Hawkesbury-Nepean River system, including South Creek, Kemps Creek and Badgerys Creek. The health of our waterways is under pressure from development, catchment disturbance, land use transformation and land clearing. With rapidly expanding development, it is vital that waterways, open space and bushland are better protected.

There are significant opportunities to protect, restore and connect areas of high-value bushland, particularly around waterways, that can increase the sustainability and resilience of communities in the LGA. As part of implementing the State Government's Green Grid, Liverpool will work to increase green space, canopy cover, connectivity and recreation opportunities, particularly along the Georges River/Chipping Norton Lakes system, Cabramatta Creek and South Creek. Increasing urban tree cover and Green Grid connections will provide for healthier communities and more resilient, liveable cities.

South Creek has been identified in the Western City District Plan as a key structural element of the Western Parkland City. Council will work with State Government through the Western Sydney Planning Principle to ensure a landscape-led approach to development in the Aerotropolis is undertaken. It will also work with the State Government to implement the Cumberland Plain Conservation Plan, when finalised. This plan is being designed to protect the region's threatened plants and animals and support the needs of the community through the creation of conservation lands and green spaces.

Council is also committed to incorporating Water Sensitive Urban Design (WSUD) principles that consider and preserve the natural water cycle, and reduce stormwater impacts on waterways. Council's WSUD Guideline is used by both Council and developers in implementing WSUD in the LGA. As part of a review of WSUD principles in Austral and Leppington North, Council is now proposing an alternative approach that uses on-street rain gardens to treat pollutants closer to the source. Council will collaborate with State Government agencies to review the application of these principles more broadly across the LGA, which should lead to an improvement in waterway health. In 2017/2018 the Mid Georges River was given an average ecological health rating of B+, and Council will work to continually improve river health and implement WSUD, with a view to making the Georges River swimmable in the future.



COUNCIL WILL

- Protect and restore naturally occurring ecosystems and habitat based on best practice biodiversity conservation principles.
- Minimise threats to listed species, populations and communities.
- Establish and enhance a Green and Blue Grid corridor network.
- Support implementation of South Creek Green Grid Corridor.
- Improve gateway entry experience into LGA, including through landscaping.
- Substantially increase tree canopy cover.
- Implement water-sensitive urban design.
- Improve catchment management and ensure policies and planning instruments work to improve river and waterway health.

449

- Work towards reinstating more natural conditions in highly modified urban waterways.
- Enhance the ecological health of the Georges River to make it swimmable.
- Create visible, safe and accessible points of entry to the Georges River.
- Collaborate with Western Sydney Planning Partnership to ensure a landscape-led approach to development is taken within the Aerotropolis.
- Collaborate with DPIE to implement the Cumberland Plain Conservation Plan.
- Manage flood risk by limiting development in the 1 in 100 year flood level and collaborating with key stakeholders to implement the Hawkesbury-Nepean Valley Flood Risk Management Strategy for the western edge of the LGA.

ACTIONS

- 14.1 Review Environmentally Significant Land overlay in LEP to ensure protection of areas of high ecological conservation value (short term)
- 14.2 Review LEP and DCP to ensure protection of biodiversity and waterway quality, and implement the Green Grid (short to modium term)
- 14.3 Develop a strategy to increase tree canopy cover in the LGA (short term)
- 14.4 Collaborate with Department of Defence and neighbouring councils to investigate a koala habitat protection corridor (short term)
- 14.5 Develop a Strategic Urban Biodiversity Framework, dependent on finalisation of State Government's Greener Places policy (short term)
- 14.6 Create green entryways to LGA along major road entry points (medium to long term)

There are significant opportunities to protect, restore and connect areas of high-value bushland



SUSTAINABILITY

LOCAL PLANNING PRIORITY 15

A green, sustainable, resilient and water-sensitive city

RATIONALE

Council's Community Strategic Plan (CSP) has a directive to strengthen and protect the environment, and we are working hard to create a city that has sustainability and resilience at its core. In our survey to develop this LSPS, the most repeated words when asked to describe Liverpool in the future were: clean, green, safe, sustainable and vibrant.

Liverpool faces a number of challenges on its journey to meet this vision. Western Sydney faces more extreme heat events than in the east, due to both geography and the urban heat island (UHI) effect. The UHI effect is expected to increase in Sydney as urban development continues and temperatures increase with climate change. Areas along the Georges and Nepean rivers, and many creeks, face significant flood risk. There is also significant amounts of land subject to bushfire hazard.

The community has expectations and aspirations for environments that are comfortable and pleasant, visually appealing and that contribute to health, safety and wellbeing. Through consultation, the community has said sustainable urban design is an important priority. To achieve this, the effects of urban heat need to be considered and addressed, including mitigation responses to urban heat such as design and construction techniques, material selection, and green and blue infrastructure.

Council is also working to address climate change. The highest proportion of the LGA's carbon emissions comes from residential housing. Council is committed to ensuring all development occurs sustainably, however with most residential development occurring through exempt and complying development pathways, and with restricted ability to require residential building standards to exceed that set by the State Government's BASIX controls, there is limited control in this space. However, in areas where Council does has influence, we will work to ensure sustainability and urban heat issues are addressed appropriately.

66 Liverpool City Council's Local Strategic Planning Statement

Council will also work to investigate opportunities for low-carbon, high-efficiency precincts, particularly within the Liverpool Collaboration Area and Leppington Town Centre precinct.

Where there are inconsistencies between State policy instruments and broader strategic goals – such as a commitment to reach net zero carbon emissions by 2050 – Council will advocate better alignment in order to protect amenity and sustainability. For example, Council wants to ensure low-density housing has backyards capable of supporting mature vegetation, with adequate space for recreation, stormwater filtration and attenuation of the urban heat island effect. We want our community's housing to be safe, efficient and comfortable.

Council will work to reduce emissions, considering feedback from its emissions reduction and resource efficiency study, and update relevant environmental sustainability strategies. We will seek to address air pollution issues in the LGA, noting that most air pollution issues arise from activities outside of Council's control.

We will also work to create a water-sensitive city. With changing climate and urban heat, we need to maximise water resources, increase water security and improve water management to respond to increasing temperatures, heatwaves and floods. This involves improving irrigation, water re-use and capture measures within open space areas, and implementing and integrating WSUD into all developments to better manage stormwater.



The community's vision for Liverpool is clean, green, safe, sustainable and vibrant

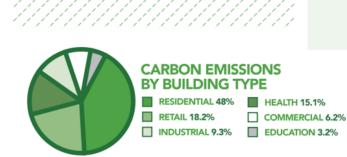


CARBON EMISSIONS BY SOURCE ELECTRICITY 60.1% TRANSPORT 26.6% WASTE 9.7%

GAS 3.6%

COUNCIL WILL

- Ensure development is located appropriately and that natural hazards such as flood and bushfire are avoided or mitigated.
- Encourage sustainability, energy efficiency and renewable energy across the LGA.
- Continue to provide education around sustainability and waste issues to the community.
- Advocate improvements to residential building codes and State planning policies to better align with State net zero carbon emission aspirations.
- Encourage water-sensitive urban design on new development, including through encouraging permeability of the public and private domain.
- Encourage transport demand initiatives that help to reduce greenhouse gas emissions.
- Support the take-up of electric vehicles and associated charging infrastructure.
- Support water efficiency and alternative sources of water for resilient whole-of-water-cycle management.
- Review landscape and street tree planting strategies and guidelines.
- Substantially increase overall tree canopy across the LGA, including the City Centre.
- Pursue opportunities with utilities to deliver integrated energy water and waste infrastructure where community benefits are delivered.
- Pursue waste outcomes that are safe, efficient, cost-effective, maximise recycling and that contribute to the built form and liveability of the community.



ACTIONS

451

15.1 Review LEP and DCP to suitably address sustainability in line with recommendations from emissions reduction and resource efficiency study (short term)

15.2 Review LEP and DCP to address sustainable waste outcomes (short term)

- 15.3 Review LEP and DCP to ensure Water Sensitive Urban Design is adequately addressed (short term)
- 15.4 Review LEP and DCP to address the Urban Heat Island Effect (short term)
- 15.5 Review DCP to encourage new commercial and industrial buildings to be rooftop solar ready (short term)
- **15.6** Review DCP to prioritise lowcarbon initiatives in future developments such as adaptive building designs, precinct-level car parking strategies and energyefficient, water-efficient, wasteefficient and energy generating precinct design (short term)
- **15.7** Advocate for changes to Exempt and Complying Development Code to ensure tree canopy cover can be increased in line with State directives (**short term**)
- **15.8** Advocate for increases to BASIX and Section J of the National Construction Code in line with the State Government's net zero by 2050 aspirations (**short term**)

LOCAL PLANNING PRIORITY 16

Rural lands are protected and enhanced



RATIONALE

Sydney's peri-urban food bowl and its city fringe farmers play a vital role in feeding the city's residents. Each year, the Greater Sydney region generates around \$660 million in agricultural produce. Liverpool's peri-urban area alone is responsible for about 12.5% of this value, with significant industries supplying poultry, fresh vegetables, mushrooms, milk and more to the local population.

The value of agricultural activity will be greatly increased due to the development of Western Sydney International Airport, particularly in the proposed Agribusiness precinct identified in the Western Sydney Aerotropolis Stage 1 Land Use and Infrastructure Implementation Plan (LUIIP). Liverpool is in a unique position to feed a growing international hunger for high-quality fruit, vegetables, meat and dairy.

Council is committed to supporting the development of new agricultural industry in the agribusiness precinct. We are also part of the new Future Food Systems Cooperative Research Centre (CRC), which will investigate ways to transform Liverpool into a regional food hub featuring high-tech agriculture and easy access to the international export market.

Liverpool's existing productive lands, however, are increasingly threatened by conflicting uses, particularly encroachment of residential. We want to ensure that this land and the jobs it provides are protected and enhanced, both to the West of the Aerotropolis, where Council's LEP shall apply, and within the LUIIP, where Council continues to advocate for the sensible protection of rural lands.

Rural land should be protected until there is a strong justification for urban development that cannot be met by existing zoned land. Solutions should be developed so that existing industries, including those rural activities east of the airport, can be maintained and their value increased as a result of the Western Sydney Aerotropolis, until needed for other urban uses. Some existing uses will not be able to transition into high-intensity production close to the airport, as envisaged by the LUIIP, for example poultry, as a 24-hour airport may have adverse effects on production, and impact viability.

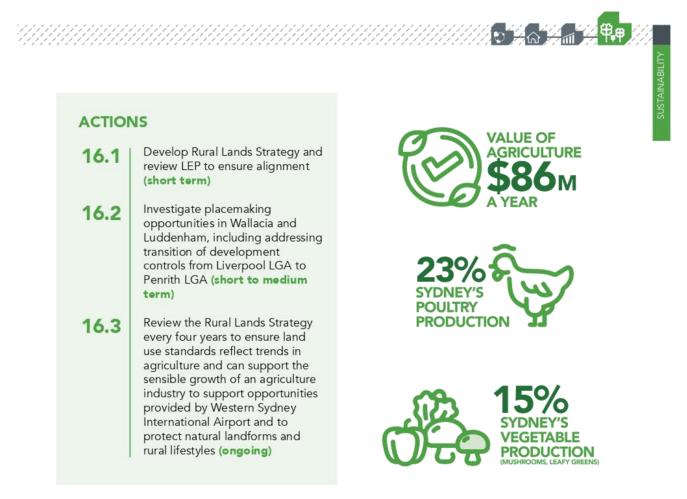
Our rural, productive lands not only support local jobs, they play a role in boosting city resilience. Having produce close to their intended market reduces supply chain waste, reduces food miles and helps protect against potential fuel price shocks. It also works to support biodiversity and lessen the urban heat island effect.

Liverpool recognises the contribution of peri-urban agriculture to city resilience, sustainability, liveability and the economy, and will work to ensure that this valuable agricultural land is protected.



COUNCIL WILL

- Ensure agricultural land is protected and enhanced to support the rural economy, ecosystem services and natural scenic landscapes.
- Manage land use conflict by supporting preexisting agricultural land uses in the case of nuisance complaints and in a manner consistent with the Right to Farm Policy.
- Advocate the sensible, staged rezoning of land in growth areas.
- Protect land from future urban expansion west of the future Outer Sydney Orbital.
- Protect and promote sustainable rural employment opportunities, including rural tourism.
- Take a lead role in the Future Food Systems CRC to support local agricultural industries.





Liverpool is in a unique position to feed a growing international hunger for high-quality fruit, vegetables, meat and dairy



IMPLEMENTATION, MONITORING AND REPORTING.

IMPLEMENTATION, MONITORING AND REPORTING

Implementation

The LSPS communicates Liverpool City Council's strategic land use planning vision for the next 20 years. It informs what type of growth will occur in the LGA, where it will occur and when. To realise this vision, amendments will be required to Council's LEP and DCPs, which provide the delivery framework for Council's strategic planning. Additional strategies will be prepared and existing strategies will be implemented and Council will advocate for new State and Federal programs and infrastructure to be delivered.

The LSPS sets out actions to deliver on the planning priorities in order to meet the community's future vision for Liverpool.

LOCAL ENVIRONMENTAL PLAN (LEP)

LEPs are the principal statutory document that establishes the land use planning controls for an LGA. Through zoning, development standards and other local provisions the LEP provides the legal framework to ensure development is appropriate and reflects the community's vision for land use in the LGA.

DEVELOPMENT CONTROL PLANS (DCPS)

DCPs are non-statutory plans that provide detailed planning and design guidelines, and development controls to support the LEP.

Monitoring and review

Council will monitor, review and report on its LSPS to ensure that its planning priorities are being achieved. Council will use the existing Integrated Planning and Reporting framework under the Local Government Act 1993 for the purpose of monitoring implementation of the LSPS.

The LSPS will play an important role in Council's resourcing strategy, with preparation of strategies and studies required by this plan funded in the fouryear delivery program and annual operational plans. Council will conduct a review of the LSPS in 2021 and again every four years to align the review period with Council's overarching community strategic planning and existing Integrated Planning and Reporting framework under the *Local Government Act.* Regular reviews will ensure that the LSPS continues to reflect the community's vision.

TEN-YEAR COMMUNITY STRATEGIC PLAN, OUR HOME, LIVERPOOL 2027

Our Home, Liverpool 2027 is Council's 10-year Community Strategic Plan (CSP). It is the highest level plan that shows where the community wants to be in 10 years' time, what needs to be done to achieve this, and how Council and the community will know when this has been achieved.

Our Home, Liverpool 2027 was created in consultation with the community of Liverpool and sets four key directions that address the quadruple bottom line. It is used by Council and other agencies and stakeholders to guide future direction, policy and service delivery.

FOUR-YEAR DELIVERY PROGRAM - 2017-2021

The Delivery Program translates the directions of the Community Strategic Plan into strategies that will guide Council for the next four years. It is the statement of commitment to the community for each newly elected term of office. The Delivery Program cascades down from the Community Strategic Plan to guide Council's for each newly elected term of office.

ONE-YEAR OPERATIONAL PLAN 2019/20

The Operational Plan is reviewed annually and details the actions that Council will undertake within that financial year. It is directly influenced by the Community Strategic Plan and Delivery Program to realise the community's prospects for the future. It also includes a detailed budget and Capital Works Program for the year.

Council will deliver actions that will work towards accomplishing the directions in the Community Strategic Plan. Council will keep track of progress in the Delivery Program and Operational Plan through:

- Six-monthly reports to Council and the community which detail program and budget progress;
- An Annual Report at the end of each financial year which includes a thorough financial report and overview of all Council's spending and operations. This will be published in a full report format as well as a short community snapshot; and
- A cumulative report at the end of Council's four-year term which details Council's financial position and progress against all the activities outlined in the Delivery Program.

Measuring Progress: Performance Measures

Council plans to use two types of indicators. These are:

COMMUNITY INDICATORS AND TARGETS

To track trends in quality of life for people in Liverpool. These are included in the Community Strategic Plan and will be reported in the Annual Report and the End of Term Report. Community indicators and targets are not intended to measure Council's performance as Council does not control all of the elements which may contribute towards it.

KEY PERFORMANCE INDICATORS

Measures which indicate whether a service is working well or is improving. Collectively, these indicators assist Council, all levels of government, business, community organisations and other stakeholders to have an understanding of conditions, experiences and priorities in Liverpool.

In addition to Council metrics, the GSC has established 'Pulse' indicators that can be used at a local government area scale.



IMPLEMENTATION FOR CONNECTIVITY

CONNECTIVITY

Measures:

- Delay from congestion
- Use of public transport
- Use of active transport
- Public transport travel times
- Infrastructure projects
- Number of partnerships developed

PLANNING PRIORITY 1

Active and public transport reflecting Liverpool's strategic significance

PLANNING PRIORITY 2

A rapid smart transit link between Liverpool and Western Sydney International Airport

PLANNING PRIORITY 3

Accessible and connected suburbs

PLANNING PRIORITY 4

Liverpool is a leader in innovation and collaboration

PLANNING PRIORITY 1

Active and public transport reflecting Liverpool's strategic significance

Relationship to other plans and policies

Metropolitan Plan Direction	District Plan Priority	CSP Direction
 A city supported by infrastructure A well connected city 	 Planning for a city supported by infrastructure Establishing the land use and transport structure to deliver a liveable, productive and sustainable Western Parkland City Growing and strengthening the metropolitan cluster Growing investment, business opportunities and jobs in strategic centres 	Generating opportunity

Action		2019/20- 20/21	2021/22- 24/25	2025/26- 28/29	2029/ 30+
1.1	Update CBD Parking Strategy. (short term)	×			
1.2	Develop a Transport and Mobility Plan and review Local Environmental Plan (LEP) to ensure alignment (short term)	~			
1.3	Advocate the prompt delivery of the South-West rail line extension from Leppington to Western Sydney International Airport, with a terminal interchange at Western Sydney International Airport (short term)	~			
1.4	Advocate a fast rail service to the Liverpool City Centre from Sydney CBD, and enhanced integration with future rail links (short term)	~			
1.5	Advocate a Western Sydney Aerotropolis/Airport stop on any future high speed rail network (short term)	~			
1.6	Work with Transport for NSW (TfNSW) to bring forward extension of the Sydney Metro City and Southwest and investigate a preferred alignment (short term planning, with delivery in the long term)	~		~	
1.7	Upgrade Edmondson Avenue from Fifteenth Avenue to Bringelly Road (medium term)		~		
1.8	Work with TfNSW on an extension of the T-way from Hoxton Park Road south to Edmondson Park Station (medium to long term)		~	~	

Liverpool City Council's Local Strategic Planning Statement 75

🚬 🖉 🖓 🖓 👬 🔆 👯 🖷 🚺

IMPLEMENTATION FOR CONNECTIVIT

PLANNING PRIORITY 2

A rapid smart transit link between Liverpool and Western Sydney International Airport/Aerotropolis

Relationship to other plans and policies

Metropolitan Plan Direction	District Plan Priority	CSP Direction
 A city supported by infrastructure A well connected city Jobs and skills for the city 	 Planning for a city supported by infrastructure Establishing the land use and transport structure to deliver a liveable, productive and sustainable Western Parkland City Leveraging industry opportunities from the Western Sydney Airport and Badgerys Creek Aerotropolis Growing and strengthening the metropolitan cluster Growing investment, business opportunities and jobs in strategic centres 	Generating opportunity

Actio	Action		2021/22- 24/25	2025/26- 28/29	2029/ 30+
2.1	Finalise investigations into the FAST corridor in collaboration with State and Federal government agencies (short term)	×			
2.2	Amend the LEP and relevant environmental planning instruments to preserve the FAST corridor (short term)	×			
2.3	Investigate location of transit- and landscape-oriented development hubs along the FAST Corridor route (short term)	×			
2.4	Investigate extension of FAST corridor to Holsworthy station with consideration of appropriate station locations, including Moore Point (medium to long term)		~	~	
2.5	Deliver the FAST Corridor (long term)			~	



Relationship to other plans and policies

Metropolitan Plan Direction	District Plan Priority	CSP Direction
 A city supported by infrastructure A well connected city 	 Planning for a city supported by infrastructure Establishing the land use and transport structure to deliver a liveable, productive and sustainable Western Parkland City 	Generating Opportunity

Acti	on	2019/20- 20/21	2021/22- 24/25	2025/26- 28/29	2029/ 30+
3.1	Collaborate with neighbouring councils to improve open space and transport connections, including active transport routes, around Chipping Norton Lakes (short term)	~			
3.2	Optimise public transport infrastructure and accessibility as well as connectivity to pathways and cycleways as part of place-making for neighbourhood centres (short to medium term)	~	~		

Liverpool City Council's Local Strategic Planning Statement 77

IMPLEMENTATION FOR CONNECTIVITY

PLANNING PRIORITY 4

Liverpool is a leader in innovation and collaboration

Relationship to other plans and policies

Metropolitan Plan Direction	District Plan Priority	CSP Direction	
2. A collaborative city	2. Working through collaboration	Leading through collaboration	

Actio	Action		2021/22- 24/25	2025/26- 28/29	2029/ 30+
4.1	Collaborate with government agencies to prepare a local and regional level infrastructure schedule (short term)	~			
4.2	Work with Greater Sydney Commission and relevant stakeholders to address the Liverpool Collaboration Area Place Strategy through amendments to the LEP (short to medium term)	~	×		
4.3	Investigate planning control changes to support CAVs and adaptive reuse of parking infrastructure (short to medium term)	~	~		



Liverpool City Council's Local Strategic Planning Statement 79

IMPLEMENTATION FOR LIVEABILITY

Measures:

- Dwelling approvals by location and type
- Net new dwellings approved and completed
- Housing costs as a percentage of household
- Percentage of affordable dwellings
- Percentage of new housing as diverse dwellings
- Number of new or upgraded community facilities
- Accessibility to open space

PLANNING PRIORITY 5

A vibrant, mixed-use and walkable 24-hour City Centre with the Georges River at its heart

PLANNING PRIORITY 6

High-quality, plentiful and accessible community facilities, open space and infrastructure aligned with growth

PLANNING PRIORITY 7

Housing choice for different needs, with density focused in the City Centre and centres well serviced by public transport

PLANNING PRIORITY 8

Community-focused low-scale suburbs where our unique local character and heritage are respected

PLANNING PRIORITY 9

Safe, healthy and inclusive places shaping the wellbeing of the Liverpool community

PLANNING PRIORITY 5

11/1

A vibrant, mixed-use and walkable 24-hour City Centre with the Georges River at its heart

Relationship to other plans and policies

Metropolitan Plan Direction	District Plan Priority	CSP Direction
3. A city for people4. Housing the city5. A city of great places7. Jobs and skills for the city	 Providing services and social infrastructure to meet people's changing needs Fostering healthy, creative, culturally rich and socially connected communities Providing housing supply, choice and affordability with access to jobs, services and public transport Creating and renewing great places and local centres, and respecting the District's heritage Growing and strengthening the metropolitan cluster Growing investment, business opportunities and jobs in strategic centres 	Generating opportunity Creating connection

Acti	Action		2021/22- 24/25	2025/26- 28/29	2029/ 30+
5.1	Review Development Control Plan (DCP) to ensure the 18-hour economy can be suitably protected from reverse amenity issues (short term)	v			
5.2	Review LEP and DCP to give effect to City Centre Public Domain Master Plan (short term)	~			
5.3	Incorporate community and cultural facilities in Liverpool Civic Place (short to medium term)	~	~		
5.4	Review LEP to support development, community facilities and linkages at key Council-owned sites in the City Centre (short to medium term)	~	~		
5.5	Review LEP to ensure alignment and give effect to Woodward Place Masterplan (medium to long term)		×	~	

<u>ſſ / "</u>###



IMPLEMENTATION FOR LIVEABILITY

PLANNING PRIORITY 6

1

11

High-quality, plentiful and accessible community facilities, open space and infrastructure aligned with growth

Relationship to other plans and policies

Metropolitan Plan Direction	District Plan Priority	CSP Direction
 A city for people A city in its landscape 	 Providing services and social infrastructure to meet people's changing needs Fostering healthy, creative, culturally rich and socially connected communities Delivering high quality open space 	Creating connection

Acti	on	2019/20- 20/21	2021/22- 24/25	2025/26- 28/29	2029/ 30+
6.1	Advocate changes to contributions planning and seek alternative funding mechanisms to deliver high-quality facilities and infrastructure, including the FAST corridor within accelerated timeframes (short term)	~			
6.2	Investigate DCP changes to encourage green open space in high-rise development (short term)	~			
6.3	Collaborate with the NSW Department of Education to identify opportunities for sharing local school infrastructure with the wider community (short term)	~			
6.4	Develop community and recreation hub at Phillips Park, Lurnea (short term)	~			
6.5	Redevelop Lighthorse Park into a district recreation and open space destination park, including a community centre, and active and passive open spaces (medium term)		~		
6.6	Review LEP to give effect to River Connections Program linking green space networks from Casula to Pleasure Point, improving accessibility and visual amenity (short , medium and long term)	~	~	~	
6.7	Establish a metropolitan-scale cultural/entertainment facility in the City Centre (visionary)				~



Housing choice for different needs, with density focused in the City Centre and centres well serviced by public transport

Relationship to other plans and policies

Metropolitan Plan Direction	District Plan Priority	CSP Direction
4. Housing the city	5. Providing housing supply, choice and affordability with access to jobs, services and public transport	Generating opportunity

Acti	on	2019/20- 20/21	2021/22- 24/25	2025/26- 28/29	2029/ 30+
7.1	Develop and implement a Local Housing Strategy through amendments to the LEP and DCP (short term)	~			
7.2	Develop an Affordable Housing Contributions Scheme in line with Greater Sydney Commission's requirement for 5-10% affordable housing, and amend LEP to give effect (short term)	√			
7.3	Partner with State Government to investigate the potential for master planned precincts (such as NSW Land and Housing Corporation properties in Warwick Farm and Green Valley) to improve and increase social and affordable housing (medium term)		1		
7.4	Partner with State Government and stakeholders including TAFE to review the Masterplan for Miller Town Centre (short term).	~			
7.5	Advocate to State and Federal Governments for more investment in social and affordable housing (short term)	~			
7.6	Partner with State Government to investigate planning controls to address land fragmentation challenges in growth areas (short term)	~			
7.7	Progress planning for sustainable, high-density transit- and landscape-oriented development along the Fifteenth Avenue Smart Transit Corridor (short to medium term)	~	~		
7.8	Monitor, review and update the Local Housing Strategy to ensure sufficient, appropriate and diverse housing is delivered to meet community needs (ongoing)	~	✓	✓	~

Liverpool City Council's Local Strategic Planning Statement 83

€¢



IMPLEMENTATION FOR LIVEABILITY

1

PLANNING PRIORITY 8

Community-focused low-scale suburbs where our unique local character and heritage are respected

111

1

Relationship to other plans and policies

Metropolitan Plan Direction	District Plan Priority	CSP Direction
5. A city of great places	6. Creating and renewing great places and local centres, and respecting the District's heritage	Strengthening and protecting our environment

Acti	Action		2021/22- 24/25	2025/26- 28/29	2029/ 30+
8.1	Amend LEP to implement findings of review of dwelling typologies and density around Moorebank Shopping Centre (short term)	~			
8.2	Review R4 zoned land around local centres to address interface issues (short to medium term)	×	×		
8.3	Investigate Local Character Statements and Local Character overlays for areas identified as requiring more fine-grain planning responses (short term)	×			
8.4	Review and update heritage provisions in LEP, and address anomalies (short term)	~			
8.5	Undertake design-led planning using placemaking principles for local and district centres (medium term)		×		

PLANNING PRIORITY 9

Safe, healthy and inclusive places shaping the wellbeing of the Liverpool community

Relationship to other plans and policies

11

Metropolitan Plan Direction	District Plan Priority	CSP Direction
3. A city for people	4. Fostering healthy, creative, culturally rich and socially connected communities	Creating connection

Acti	on	2019/20- 20/21	2021/22- 24/25	2025/26- 28/29	2029/ 30+
9.1	Amend DCP to better respond to urban heat (short term)	~			
9.2	Liaise with Fairfield and Canterbury Bankstown councils to implement active transport routes around Chipping Norton Lakes, including bridge and road connections (medium term)		v		

Liverpool City Council's Local Strategic Planning Statement 85

ណ៍ 🖁

i∏ **// ₽.**⊕]

IMPLEMENTATION FOR PRODUCTIVITY

Measures:

- Jobs by industry
- Level of employment
- Gross Regional Product
- Vacancy rates
- Land zoned for employment purposes across various industry sectors
- Visitor numbers
- Number of new businesses opened/registered



PLANNING PRIORITY 10

A world-class health, education, research and innovation precinct

PLANNING PRIORITY 11

An attractive environment for local jobs, business, tourism and investment

PLANNING PRIORITY 12

Industrial and employment lands meet Liverpool's future needs

PLANNING PRIORITY 13

A viable 24-hour Western Sydney International Airport growing to reach its potential

PRODUCTIVITY



A world-class health, education, research and innovation precinct

Relationship to other plans and policies

Metropolitan Plan Direction	District Plan Priority	CSP Direction
7. Jobs and skills for the city	 9. Growing and strengthening the metropolitan cluster 11. Growing investment, business opportunities and jobs in strategic centres 	Generating opportunity Leading through collaboration

Actio	n	2019/20- 20/21	2021/22- 24/25	2025/26- 28/29	2029/ 30+
10.1	Investigate LEP changes necessary to support the operations and growth of the Liverpool Innovation Precinct (short to medium term)	~	~		
10.2	Amend LEP applying to Warwick Farm to support the existing horse training facilities, and provide for innovation/employment uses and an appropriately located residential component (short term)	~			
10.3	Collaborate with universities, TAFE, the Department of Education and other education providers to support growth (short term)	~			



PLANNING PRIORITY 11

11

An attractive environment for local jobs, business, tourism and investment

Relationship to other plans and policies

Metropolitan Plan Direction	District Plan Priority	CSP Direction
7. Jobs and skills for the city	 8. Leveraging industry opportunities from the Western Sydney Airport and Badgerys Creek Aerotropolis 9. Growing and strengthening the metropolitan cluster 11. Growing investment, business opportunities and jobs in strategic centres 	Generating opportunity

Action		2019/20- 20/21	2021/22- 24/25	2025/26- 28/29	2029/ 30+
11.1	Develop a Centres and Corridor Strategy, and review LEP and DCP to ensure alignment (short term)	~			
11.2	Investigate amendments to LEP to rezone Georges River precinct north of Newbridge Road as a mixed-use zone to support the Liverpool CBD and Innovation Precinct, with an extensive open space system and cross-river linkages (short to medium term)	V	V		
11.3	Amend LEP to increase land-use flexibility for festival uses (short term)	~			
11.4	Work with Transport for NSW and RMS to create links from Liverpool Train Station to the Georges River and investigate opportunities for transport interchanges at Moore Point (CBD extension east of the Georges River) (short to medium term)	~	~		

88 Liverpool City Council's Local Strategic Planning Statement



Industrial and employment lands meet Liverpool's future needs

Relationship to other plans and policies

Metropolitan Plan Direction	District Plan Priority	CSP Direction
7. Jobs and skills for the city	10. Maximising freight and logistics opportunities and planning and managing industrial and urban services land	Generating opportunity

Actio	n	2019/20- 20/21	2021/22- 24/25	2025/26- 28/29	2029/ 30+
12.1	Develop Industrial and Employment Lands Strategy and review LEP and DCP to ensure alignment (short term)	~			
12.2	Review the LEP and DCP to ensure statutory planning controls protect key freight routes and employment lands from sensitive land uses (short to medium term)	~	~		
12.3	Investigate provision of new industrial land, including light industrial (IN2), between the airport and the CBD, including extension of industrial zoned land in Austral, to ensure ongoing supply (short to medium term)	~	~		

IMPLEMENTATION FOR PRODUCTIVITY

PLANNING PRIORITY 13

A viable 24-hour Western Sydney International Airport growing to reach its potential

Relationship to other plans and policies

Metropolitan Plan Direction	District Plan Priority	CSP Direction
5. A city of great places 6. A well connected city 7. Jobs and skills for the city	6. Creating and renewing great places and local centres, and respecting the District's heritage 7. Establishing the land use and transport structure to deliver a liveable, productive and sustainable Western Parkland City 8. Leveraging industry opportunities from the Western Sydney Airport and Badgerys Creek Aerotropolis	Generating opportunity Leading through collaboration

Actio	n	2019/20- 20/21	2021/22- 24/25	2025/26- 28/29	2029/ 30+
13.1	Ensure through the Western Sydney Planning Partnership that future planning in the Aerotropolis supports the airport's economic potential and reduces conflicting uses that could inhibit future growth and the curfew free status of the airport (short term)	V			
13.2	Ensure through the Western Sydney Planning Partnership that future planning in the Aerotropolis supports the airport's economic potential and reduces conflicting uses that could inhibit future growth and the curfew free status of the airport (short term)	V			



Liverpool City Council's Local Strategic Planning Statement 91

IMPLEMENTATION FOR SUSTAINABILIT

Measures:

- Tree canopy coverage
- Temperature in urban areas
- Environmental indicators
- Rural productivity and employment •

PLANNING PRIORITY 14 Bushland and waterways are celebrated, connected, protected and enhanced

PLANNING PRIORITY 15 A green, sustainable, resilient and water-sensitive city

PLANNING PRIORITY 16 Rural lands are protected and enhanced

92 Liverpool City Council's Local Strategic Planning Statement



Relationship to other plans and policies

Metropolitan Plan Direction	District Plan Priority	CSP Direction
8. A city in its landscape	 12. Protecting and improving the health and enjoyment of the District's waterways 14. Protecting and enhancing bushland and biodiversity 15. Increasing urban tree canopy cover and delivering Green Grid connections 	Strengthening and protecting our environment

Actio	n	2019/20- 20/21	2021/22- 24/25	2025/26- 28/29	2029/ 30+
14.1	Review Environmentally Significant Land overlay in LEP to ensure protection of areas of high ecological conservation value (short term)	\checkmark			
14.2	Review LEP and DCP to ensure protection of biodiversity and waterway quality, and implement the Green Grid (short to medium term)	\checkmark	~		
14.3	Develop a strategy to increase tree canopy cover in the LGA (short term)	~			
14.4	Collaborate with Department of Defence and neighbouring councils to investigate a koala habitat protection corridor (short term)	\checkmark			
14.5	Develop a Strategic Urban Biodiversity Framework, dependent on finalisation of State Government's Greener Places policy (short term)	✓			
14.6	Create green entryways to LGA along major road entry points (medium to long term)		\checkmark	~	

IMPLEMENTATION FOR SUSTAINABILIT

PLANNING PRIORITY 15

A green, sustainable, resilient and water-sensitive city

Relationship to other plans and policies

Metropolitan Plan Direction	District Plan Priority	CSP Direction
8. A city in its landscape9. An efficient city10. A resilient city	 15. Increasing urban tree canopy cover and delivering Green Grid connections 19. Reducing carbon emissions and managing energy, water and waste efficiently 20. Adapting to the impacts of urban and natural hazards and climate change 	Strengthening and protecting our environment

Actio	n	2019/20- 20/21	2021/22- 24/25	2025/26- 28/29	2029/ 30+
15.1	Review LEP and DCP to suitably address sustainability in line with recommendations from emissions reduction and resource efficiency study (short term)	~			
15.2	Review LEP and DCP to address sustainable waste outcomes (short term)	~			
15.3	Review LEP and DCP to ensure Water Sensitive Urban Design is adequately addressed (short term)	~			
15.4	Review LEP and DCP to address the Urban Heat Island Effect (short term)	~			
15.5	Review DCP to encourage new commercial and industrial buildings to be rooftop solar ready (short term)	~			
15.6	Review DCP to prioritise low-carbon initiatives in future developments such as adaptive building designs, precinct-level car parking strategies and energy-efficient, water-efficient, waste-efficient and energy generating precinct design (short term)	V			
15.7	Advocate for changes to Exempt and Complying Development Code to ensure tree canopy cover can be increased in line with State directives (short term)	~			
15.8	Advocate for increases to BASIX and Section J of the National Construction Code in line with the State Government's net zero by 2050 aspirations (short term)	\checkmark			

94 Liverpool City Council's Local Strategic Planning Statement



Relationship to other plans and policies

Metropolitan Plan Direction	District Plan Priority	CSP Direction
8. A city in its landscape	16. Protecting and enhancing scenic and cultural landscapes 17. Better managing rural areas	Strengthening and protecting our environment

Actio	n	2019/20- 20/21	2021/22- 24/25	2025/26- 28/29	2029/ 30+
16.1	Develop Rural Lands Strategy and review LEP to ensure alignment (short term)	~			
16.2	Investigate placemaking opportunities in Wallacia and Luddenham, including addressing transition of development controls from Liverpool LGA to Penrith LGA (short to medium term)	V	V		
16.3	Review the Rural Lands Strategy every four years to ensure land use standards reflect trends in agriculture and can support the sensible growth of an agriculture industry to support opportunities provided by Western Sydney International Airport and to protect natural landforms and rural lifestyles (ongoing)	V	V	V	V



If you do not understand this document, please ring the Telephone Interpreter Service (131 450) and ask them to contact Council (1300 362 170). Office hours are 8.30am to 5.00pm, Monday to Friday.

ARABIC

إذا لم تستطع فهم هذا الطلب ، الرجاء الاتصال بخدمة الترجمة الهاتفية على رقم 131 450 واسألهم أن يتصلوا بالبلدية على رقم 170 362 300 . دوام ساعات العمل هي من الساعة 8.30 صباحًا إلى 5.00 بعد الظهر من الاثنين إلى الجمعة.

CHINESE

如您看不懂此信/申請書,請打電話給「電話翻譯 服務台」(131 450),請他們聯絡市政廳(市政廳電話 1300 362 170)。市政廳辦公時間,星期一至星期五, 上午八時三十分至下午五時。

CROATIAN

Ako ne razumijete ovo pismo/aplikaciju, molimo nazovite Službu prevodilaca i tumača (Translating and Interpreting Service - na broj 131 450) i zamolite ih da nazovu Općinu (na 1300 362 170). Radno vrijeme je od 8.30 ujutro do 5.00 popodne, od ponedjeljka do petka.

GERMAN

Wenn Sie diesen Brief/Antrag nicht verstehen können, rufen Sie bitte den Telefon Dolmetscher Dienst (Telephone Interpreter Service) (131 450) an und lassen Sie sich vom Personal mit dem Gemeinderat (Council) in Verbindung setzen (1300 362 170). Geschäftsstunden sind von 8:30 bis 17:00 Uhr, montags bis freitags.

GREEK

Αν δεν καταλαβαίνετε αυτή την επιστολή/αίτηση, σας παρακαλούμε να τηλεφωνήσετε στην Τηλεφωνική Υπηρεσία Διερμηνέων (131 450) και να τους ζητήσετε να επικοινωνήσουν με το Δημοτικό Συμβούλιο (1300 362 170). Τα γραφεία του είναι ανοιχτά από τις 8.30π.μ. μέχρι τις 5.00μ.μ. από Δευτέρα μέχρι και Παρασκευή.

HINDI

अगर आप इस पत्र/आवेदन को पढ़कर समझ नहीं पा रहे हैं तो कृपया टेलीफोन संवाद-सहायक सेवा (131 450) को फोन करें और उनसे काउंसिल (1300 362 170) से संपर्क करने को कहें। कार्यालय का समय सोमवार से शुक्रवार तक प्रातः 4:३० बजे से साथ ५:०० तक है।

ITALIAN

Se non comprendi questa lettera/questo modulo di domanda, telefona al Servizio traduzioni e interpreti al numero 131 450 chiedendo di essere messo in contatto con il Comune (telefono 1300 362 170). Orario d'ufficio: ore 8.30 -17.00, dal lunedi al venerdi.

KHMER

481

មើលោកអ្នកមិនយល់ពីអត្ថន័យឬការប្រតិបត្តិនេះទេ សូម ទូរស័ព្ទទៅសេវាបកប្រែកាសាតាមទូរស័ព្ទ (លេខ 131 450) ហើយស្នើសុំឲ្យគេទាក់ទងសាលាក្រុង (លេខ 1300 362 170)។ លេលម៉ោងធ្វើការគឺម៉ោង ខ កន្លះព្រីកដល់ម៉ោង 5 ល្ងាច ពីថ្ងៃច័ន្ទដល់ថ្ងៃសុក្រ

MACEDONIAN

Ако не го разбирате ова писмо/апликација, ве молиме да се јавите во Телефонската преведувачка служба на 131 450 и замолете ги да стапат во контакт со Општината на 1300 362 170. Работното време е од 8.30 часот наутро до 5.00 часот попладне од понеделник до петок.

MALTESE

Jekk ma tifhimx din I-ittra/applikazzjoni, jekk joghġbok ċempel lis-Servizz ta' I-Interpretu bit-Telefon (131 450) u itlobhom jikkuntattjaw il-Kunsill (1300 362 170). Il-hinijiet ta' I-Uffiċċju huma mit-8.30a.m. sal-5.00p.m., mit-Tnejn sal-Ġimgha.

POLISH

Jeśli nie rozumiesz treści niniejszego pisma/podania, zadzwoń do Telefonicznego Biura Tłumaczy (Telephone Interpreter Service) pod numer 131 450 | poproś o telefoniczne skontaktowanie się z Radą Miejską pod numerem 1300 362 170. Godziny urzędowania: 08.30-17.00 od poniedziałku do piątku.

SERBIAN

Ако не разумете ово писмо/апликацију, молимо вас да назовете Телефонску преводилачку службу (131 450) и замолите их да контактирају Општину (1300 362 170). Радно време је од 8.30 ујутро до 5.00 поподне, од понедељка до петка.

SPANISH

Si Ud. no entiende esta carta/solicitud, por favor llame al Servicio Telefónico de Intérpretes (131 450) y pídales que llamen a la Municipalidad (Council) al 1300 362 170. Las horas de oficina son de 8:30 am a 5:00 pm, de lunes a viernes.

TURKISH

Bu mektubu veya mūracaati anlayamazsaniz, lütfen Telefon Tercüme Servisi'ne (131 450) telefon ederek Belediye ile (1300 362 170) ilişkiye geçmelerini isteyiniz. Çalışma saatleri Pazartesi - Cuma günleri arasında sabah saat 8:30 ile akşam 5:00 arasıdır.

VIETNAMESE

Nếu không hiểu thư/đơn này, xin Quý Vị gọi cho Telephone Interpreter Service (Dịch Vụ Thông Dịch Qua Điện Thoại), số 131 450, và nhờ họ liên lạc với Council (Hội Đồng), số 1300 362 170. Giờ làm việc là 8 giờ 30 sáng đến 5 giờ 00 chiều, Thứ Hai đến Thứ Sáu.





For further information



Visit Us Customer Service Centre Ground Floor, 33 Moore Street, Liverpool, NSW 2170 Open Monday - Friday, 8.30am - 5pm



Phone 1300 36 2170 Calling from interstate: (02) 8711 7000 National Relay Service (NRS): 133 677 (for hearing and speech impaired customers)

@ Email lcc@liverpool.nsw.gov.au

Post Locked Bag 7064, Liverpool BC, NSW 1871

Website www.liverpool.nsw.gov.au

Subscribe

CONNECTED

DRAFT LOCAL STRATEGIC PLANNING STATEMENT (LSPS) PUBLIC EXHIBITION REPORT



Table of Contents

Executive Summary
Background4
Overview of draft LSPS4
Initial consultation and preparation of the draft LSPS4
Objectives of Exhibition5
How feedback will be used5
LSPS Communication and Engagement Actions
Summary of actions5
Public Information displays7
Newspaper Ads7
Facebook Posts8
Flyer & Stakeholder letters8
Pop Ups9
Community Drop-in sessions10
Business community and developer breakfast10
Online Engagement11
What we heard12
Survey Findings12
Overview of survey12
Summary of survey results13
Big Ideas snapshot15
Warwick Farm consultation17
Formal submissions
Conclusion
Attachments19

ÌΨ̈́̈́́́

Executive Summary

The purpose of this report is to outline the results of the public exhibition of the draft Local Strategic Planning Statement 'Connected Liverpool 2050' (Draft LSPS).

485

The LSPS sets Liverpool City Council's long term strategic planning vision, priorities and actions.

While the draft LSPS was informed by initial consultation, the public exhibition provided an important opportunity to ensure that the LSPS aligns with community and stakeholder feedback.

Public exhibition

The draft LSPS was exhibited over a six week period (28 June 2019 - 9 August 2019). The LSPS Engagement Action Plan (attached) identified the need to go above and beyond the legislative requirements to ensure that Liverpool's diverse community and stakeholders have had a genuine opportunity to contribute to the process.

In summary, the engagement actions for the LSPS exhibition included an online survey, pop ups and drop-ins in key locations, public information displays, an online ideas board / interactive mapping tool, and consultation at relevant District Forums.

Council received an overwhelmingly positive response from the community including 147 formal submissions; 542 survey responses; and over 680 big ideas.



Key findings

The public exhibition has confirmed that there is broad community support for the draft LSPS.

The community survey indicates strong community support for:

- The protection of local character of our suburbs;
- New apartments should be built in the Liverpool CBD and areas close to public transport and services;
- A greater variety of housing options in the LGA;
- More local action on climate change;
- Liverpool CBD to become a vibrant centre with extended trading hours by 2050;
- · The Georges River to be at the heart of the Liverpool CBD with improved access; and
- · Enhancement and protection of our Rural Lands (West of the Western Sydney Airport).

During our face to face engagement, key community feedback for consideration in the LSPS included the need for:

- More frequent public transport (including local buses, an express train to the Sydney CBD, and support for the FAST corridor);
- More local jobs;
- More car parking (including commuter car parking);
- Density in appropriate locations (specifically, the need to downzone land around Moorebank shopping centre);
- A review of land uses in Warwick Farm (including request for a B4 Mixed Use zone in the equine precinct);



- More affordable housing; and
- More green space with trees, walking/cycle paths, and access to the river.

Detailed findings of the survey responses and the big ideas exercise are included in this report. A submission evaluation table is attached. The revised LSPS has incorporated community and stakeholder feedback where appropriate.

Council would like to thank all participants who provided input to the engagement process which will help shape the future land use within the Liverpool LGA.

Background

Council has received funding under the Western Sydney City Deal to conduct an accelerated review of the Liverpool Local Environmental Plan 2008 (LLEP 2008), including associated studies and the development of a draft Local Strategic Planning Statement (LSPS).

Overview of draft LSPS

The Draft LSPS was created to set Liverpool City Council's long term strategic planning vision. It lists planning priorities across four areas:

- 1. Connectivity
- 2. Productivity
- 3. Liveability
- 4. Sustainability

The LSPS will inform what type of growth occurs in our LGA. It sets out actions to deliver on our planning priorities in order to meet the community's future vision for Liverpool.

Initial consultation and preparation of the draft LSPS

The draft LSPS was informed by preliminary community and stakeholder consultation including:

- An online survey on Council's 'Liverpool Listens' webpage (Approx. 500 responses);
- Feedback provided at District Forums;
- Feedback at the Moorebank Community Forum; and
- A Youth Workshop held in May 2019.



In preparing the draft LSPS, Council has also built upon the extensive consultation undertaken when developing our Community Strategic Plan – Our Home, Our Liverpool 2027. It was also developed in consultation with Councillors, staff, State agencies and neighbouring councils.

487

A copy of the preliminary engagement report is attached to this report.

Following the initial consultation, the draft LSPS was prepared and included the following key priorities:

- Protecting the local character of suburbs;
- Concentrating new homes close to transport;
- Improving connections to the Georges River; and
- · Fostering more local jobs and opportunities within a 30-minute commute.

On 26 June 2019, the draft LSPS was endorsed by Council for the purposes of public exhibition. Council also resolved that a direct mail-out notification be sent to all residents of the LGA and that Council receives a further report detailing submissions received and any amendments proposed.

Objectives of Exhibition

The objectives of the public exhibition of the draft LSPS (as outlined in the Community Engagement Action Plan) were to:

- Raise awareness in the community about the public exhibition of the draft LSPS and provide opportunities for feedback;
- Engage with Council's culturally diverse community and seek feedback;
- Engage with key interest groups, government and non-government organisations; and
- Inform the business community and development industry and collect feedback.

How feedback will be used

In addition to finalising the draft LSPS and LEP Review, feedback received will be used in informing other Council projects and plans, including the development of a new Community Strategic Plan.

Engagement Actions

Summary of actions

The LSPS Engagement Action Plan (attached) identified the need to go above and beyond the legislative consultation requirements to ensure that Liverpool's diverse community and stakeholders have a genuine opportunity to have their say and contribute to the process.

The communication and engagement actions for the LSPS are outlined in the engagement timeline on page 6.

488

DRAFT LOCAL STRATEGIC PLANNING STATEMENT (LSPS) PUBLIC EXHIBITION REPORT



ACTIONS DATE Preliminary Engagement FEB - MAY (including Moorebank drop in, community survey, presentation at each District Forum, and youth engagement session). PUBLIC EXHIBITION FORMALLY STARTS **28 JUNE** Public information displays in libraries Website content available to public (including survey) Facebook post 2 JULY Stakeholder letters sent **3 JULY** Half page newspaper advertisements in Liverpool Leader and Champion 4 JULY Pop Up - Macquarie Mall Flyer distribution (81K across the LGA) 5 JULY Facebook post Pop up – Ćasula Mall Facebook post 8 JULY Pop up - Miller Shopping Centre Half page ads in Liverpool Leader and Champion Pop up – NAIDOC, Bigge Park 10 JULY Pop up - Luddenham Shops Drop in - Warwick Farm Forum, Liverpool Library **11 JULY** Email to community groups (with flyer attached) 12 JULY Pop up - Wattle Grove Shopping Centre EXHIBITION PERIOD **15 JULY** Direct mail out to all ratepayers 16 JULY Facebook Post 17 JULY Half page ads in Liverpool Leader and Champion Drop in - Liverpool City Library (afternoon and evening) **18 JULY** Drop in - Rural District Forum LSPS Presentation, Bringelly Community Centre 21 JULY Facebook post 22 JULY Pop Up - Carnes Hill Market Place 23 JULY Drop In - Green Valley Library Half page ads in Liverpool Leader and Champion 24 JULY Facebook post 25 JULY Drop in - Moorebank Community Centre (afternoon and evening) Developer & Business Breakfast 26 JULY Drop in - Casula Library **31 JULY** Half page ads in Liverpool Leader and Champion 1 AUGUST Drop in - Carnes Hill Library 3 AUGUST Pop Up - Chipping Norton, Liverpool Growers Market Half page ads in Liverpool Leader and Champion 7 AUGUST Facebook post Pop up - Macquarie Street, Liverpool 8 AUGUST Pop Up - Customer Experience, Liverpool City Council 9 AUGUST **EXHIBITION FORMALLY CONCLUDES**

20 AUGUST

Eastern District Forum Presentation (extension to submission timeframe granted)

Public Information displays

During the exhibition period, information displays, flyers and copies of the draft LSPS were available at the following locations:

- Council customer service 33 Moore Street, Liverpool
- Liverpool City Library 170 George Street, Liverpool
- Australia Post Luddenham Shop 6/2140 The Northern Road, Luddenham
- Moorebank Library Nuwarra Rd & Maddecks Ave, Moorebank
- Casula Library 39 Ingham Drive, Casula
- Green Valley Library 179 183 Wilson Road, Green Valley
- Miller Library 180a/90 Cartwright Ave, Miller
- Carnes Hill Library 600 Kurrajong Road, Carnes Hill
- Casula Powerhouse Arts Centre 1 Powerhouse Road, Casula



Newspaper Ads

In addition to Council's normal public notice page in local newspapers, weekly half page newspaper advertisements were used to promote the LSPS.

The advertisements included a summary of the draft LSPS, exhibition dates, website link, and the dates for community drop in sessions.





Facebook Posts

Council posted regularly about the LSPS exhibition, encouraging the broader community to get involved and have their say.

There were various posts including text, images and video content. Posts included information about the LSPS, exhibition dates, survey links and drop-in details.



Flyer & Stakeholder letters

A flyer was sent out to approx. 81,000 households across the Liverpool LGA to notify landowners and residents about the exhibition of the draft LSPS and to invite feedback. The flyer included translation for the top 3 languages for lower English proficiency (i.e. Arabic, Chinese and Vietnamese).

Flyers were also sent to key community groups (including culturally and linguistically diverse communities (CALD) to inform them about the exhibition and to invite feedback.

Formal letters were sent to key stakeholders to invite feedback. Stakeholders included:

- State agencies / public authorities;
- Local Aboriginal Land Councils;
- · Adjoining Councils; and
- Business / industry groups.



Pop Ups

Council's strategic planning team held Pop Ups (information sessions) at shopping centres across the LGA at various times.

The purpose of the pop ups were to:

- · Raise awareness of the draft LSPS in the wider community; and
- Collect feedback (i.e. survey / ideas wall).

LOCATION	DATE
Macquarie Mall (Inside)	4 July 2019
Casula Mall	5 July 2019
Miller Shopping Centre	8 July 2019
Prestons Place	9 July 2019
Luddenham Shops	10 July 2019
Bigge Park - NAIDOC	10 July 2019
Wattle Grove Shopping Centre	12 July 2019
Carnes Hill Market Place	22 July 2019
Chipping Norton	3 August 2019
Macquarie Street (Outside)	7 August 2019
Liverpool Council (Customer Experience)	8 August 2019



Community Drop-in sessions

Community drop-in sessions were held in various libraries / community centres across the Liverpool LGA. Interested community members were given the opportunity to have in-depth conversations with Council's strategic planners about the draft LSPS. There was also an opportunity at the Liverpool drop-in session for people with lower English proficiency to have their say.

The drop-In sessions were promoted using flyers, newspaper Ads, Facebook posts, and emails to those who had completed past surveys (including the preliminary LSPS survey and the Moorebank R4 survey).

LOCATION	DATE
Warwick Farm Consultation	11 July 2019
Liverpool City Library	18 July 2019
Bringelly Community Centre (Following the Rural District Forum)	18 July 2019
Green Valley Library	23 July 2019
Moorebank Community Centre	25 July 2019
Casula Library	26 July 2019
Carnes Hill Library	1 August 2019



Business community and developer breakfast

The Casula Powerhouse Arts Centre was the venue for the LSPS Developers and Business Breakfast on Friday 26th July 2019. Council provided an opportunity for key business leaders and developers in the Liverpool LGA to come together and discuss the Draft LSPS and other key projects.

Over 20 representatives attended on the day. Attendees were given the opportunity to ask questions of the planning team during a Q&A session and encouraged to lodge formal submissions.



Online Engagement

Council's 'Liverpool Listens' webpage (listens.liverpool.nsw.gov.au) was a key component of the public exhibition.

The page included:

- A call to action video to encourage people to have their say;
- A copy of the draft LSPS document;
- A downloadable copy of the draft LSPS;
- Explanatory information and FAQs;
- An online survey;
- An ideas wall;
- A tool to pin ideas on a map; and
- Instructions (and online tool) to make formal submissions.







What we heard

Survey Findings

Overview of survey

An online survey was available on Liverpool Listens which received 542 responses.

The purpose of the survey was to ensure that the key priorities and actions were supported by the wider community.

494

The questions were shaped around what Council had already heard and what matters needed further input alignment with community values and priorities.

Survey participants were asked whether they agree or disagree with the following statements.

- 1. The local character of our suburbs should be protected with existing height limits and density maintained.
- 2. New apartment buildings should be built in the Liverpool City Centre and other areas close to public transport and services.
- There should be a greater variety of housing options in the Liverpool LGA (e.g. terraces and townhouses, one bedroom apartments for singles/couples, larger apartments for families, student housing, executive housing and affordable rental housing).
- Council should do more to address climate change and reduce excessive heat in our city including planting more trees.
- 5. By the year 2050, the Liverpool CBD should become a vibrant centre with a wide range of retail and commercial businesses operating for extended trading hours.
- 6. The Georges River should be at the heart of the Liverpool CBD with improved access to the river and with a wide range of leisure and recreation opportunities.
- 7. Our rural lands (West of the Western Sydney International Airport) should be enhanced and protected.

Participants were provided with text boxes under each question to provide further comment.

Participants were also asked to provide any additional feedback on how they would like Liverpool to develop over the next 30 years.

Participants were also asked to provide an email address if they wished to be kept informed of the progress of the project. Almost 200 people provided an email address to be kept informed.

The survey findings are summarised on pages 13 - 15 of this report.





11.1% 10.79

13.3% 7.2%

14.0% 5.9%

Q4

Council should do more to address climate change and reduce excessive heat in our city including planting more trees.

The majority of survey respondents identified the need for Council to do more to address climate change and reduce excessive heat.

Many respondents think there needs to be adequate green spaces and more trees planted. Other suggestions were to encourage more solar panels, improve waste management and create green pathways. There were concerns that smaller residential blocks did not allow room for trees. There were also concerns that more growth would increase pollution.

There were also concerns about the maintenance of trees and bushland.

78.2%

Q5

By the year 2050, the Liverpool CBD should become a vibrant centre with a wide range of retail and commercial businesses operating for extended trading hours.

Survey respondents were generally positive about Liverpool CBD becoming more vibrant with businesses operating for extended trading hours.

Respondents suggested more eateries and quality retail options. Respondents also noted

that there was a need for more local job opportunities.

80.1%

79.5%

Concerns were raised in relation to community safety, the need for more frequent public transport, more parking, and the impact on residents / family life.

Q6

The Georges River should be at the heart of the Liverpool CBD with improved access to the river and with a wide range of leisure and recreation opportunities.

There was wide support for improving access to the Georges River.

Respondents highlighted the importance of river activation (including tourism, lifestyle, recreation, more eateries etc.)

Concerns were raised in relation to maintenance and water quality.

14.0%

Q7

Our rural lands (West of the Western Sydney International Airport) should be enhanced and protected.

There was wide support for protecting and enhancing our rural lands.

Respondents identified that the rural land could be a tourism opportunity, taking advantage of the scenic landscape. Respondents also said that they valued local fresh food and future opportunities for recreation. Concerns were raised in relation to the proximity of the airport and the quality of rural roads.

80.3%

Community members who disagreed believed that development around our rural lands require careful planning to benefit from economic growth.

Survey respondents were also asked to provide additional feedback on how they would like Liverpool to develop over the next 30 years. Common themes from responses to this question included:

497

- Concern about high rise and over development;
- Housing needs to be supported by infrastructure;
- The need for more frequent public transport
- The need to improve community safety;
- Increase car parking;
- Concern about city presentation;
- Concern about traffic congestion;
- More retail opportunities;
- More walking and cycle paths; and
- The need for wider streets



Big Ideas snapshot

The community were asked to post or map their big ideas in response to the question "What should Liverpool look like in year 2050?" This engagement activity was available online and was replicated by the face to face street team during the pop ups and at library displays. The community could:

- · Pin a big idea for Liverpool on a board or map;
- · Say what they love about Liverpool; and
- · Describe what they want to change.

In total, Council received over 680 big ideas from residents across the entire LGA. The map on page 16 highlights the key themes in the six district areas.

Note: Specific issues identified in the ideas / mapping tool were logged as customer requests and forwarded to the appropriate section of Council to action.

BIG IDEAS SNAPSHOT BRINGELLY MILLER **CITY CENTRE** Increase frequency of buses/ More car parking More frequent public transport . transport services Express fast train to Sydney CBD . More local job opportunities Protect and maintain rural lands Plant more trees More parking (e.g. build a multi-٠ and local character Improve accessibility (e.g. story car park at Collimore) . Improve rural amenities (e.g. Less high rise in Liverpool disability and prams) community center activation) Improve disability access More affordable housing Provision of community buses More / improved public toilets. Improve safety/build a sense of to decrease rural isolation harmony (e.g. shopping trips, medical More community activities / **CHIPPING NORTON** appointments etc.) things to do. Improve access to Georges Upgrade roads (e.g. Elizabeth River Drive) More cafes/shops Address the issue of urban heat Improve safety (road/ (e.g. Lighter colored roofs). pedestrian) **GREEN VALLEY** More green space / More frequent public recreational activities UDDENHAM transport More trees and less A modern local library Improve rural amenities pollution . Limit high rise Infrastructure delivery Improved transport options Dog parks . before growth (including cycling). Improved community facilities 0 2168 DISTRICT RURAL DISTRICT NEW RELEASE DISTRICT Ċ ESTABLISHED DISTRICT EASTERN DISTRICT CARNES HILL Increase commuter car parking at train stations More frequent bus services Local roads should be wider There is a need for a shopping Centre at Middleton Grange. Limit high rise at Liverpool CBD Public swimming pool/water parks at Carnes Hill. More parks and green spaces. WARWICK FARM PRESTONS (The Warwick Farm precinct needs Increase commute car parking at Edmonson Park to be mixed use B4 train station. More cafes/shops ٠ More community facilities (e.g. Community Improve safety (road/pedestrian) centers, libraries, parks and sporting fields). Improve access to Georges River More trees More green space / recreational • Highlight and enhance multicultural connections activities. (e.g. Make Liverpool a multicultural food destination). **MOOREBANK** CASULA Rezone R4 land (concern about high More parking options. (e.g. Free parking areas and park and ride options) rise)

498

- A cleaner looking city. (e.g. Less rubbish and tree maintenance) Improve frequency of public transport Increase car parking and relieve traffic
- Preserve the local character Improved public transport
- More trees and less pollution.

More parks, green space and trees Improve water quality.

congestion

Warwick Farm consultation

On 29 May 2019, Council resolved to undertake community consultation with Warwick Farm residents, landowners and other stakeholders about the future of the Warwick Farm Equine Precinct.

499

In response to Council's resolution, a consultation session was held on Thursday 11 July 2019 at the Liverpool City Library. The session was held as a 'drop-in', where community members could speak to Council's planning team and attending Councillors. The session was promoted using letters, flyers, newspaper Ads, and Facebook posts. Approximately 40 community members attended the session.

Community members were encouraged to undertake the LSPS survey, complete feedback forms, map their connection to Warwick Farm and identify what land uses they would like to see in the Warwick Farm precinct using maps and sticky notes

There was wide feedback from the Warwick Farm community that the area to be rezoned to B4 - Mixed Use. Some community members identified a preferred mix of B4 Mixed Use and R4 High Density Residential. Several attendees expressed their desire to stay within the area and move into new apartments when they are built.

A copy of the RPS engagement report is attached.





 $\int G$



Formal submissions

Council received a total of 147 submissions. A submission evaluation table is attached.

The key themes from the formal submissions are summarised below.

KEY THEMES

CONNECTIVITY	LIVEABILITY
WARWICK FARM MOOREBANKWESTERN SYDNEY AIRPORTTRANSIT ORIENTED DEVELOPMENTTRAFFIC AND PARKINGACCESSIBILITYPUBLIC TRANSPORT/ACTIVE TRANSPORTNDUSTRIAL PLANNING & FREIGHTCONNECTION TO WESTERN SYDNEY PARKLANDSMOORE POINTFIFTEENTH AVE FAST CORRIDOR	SERVICES AND PROGRAMSHOUSING GROWTHWARWICK FARMMOOREBANKCOMMUNITY FACILITIESMOOREBANKILEALTH AND WELLBEINGCONTRIBUTIONS PLANNINGPLANNING FOR DIFFERENT AGE GROUPSHOUSING GROWTHCOMMUNITY SAFETYWASTESOCIAL DIVERSITY NOORE POINTEDUCATION / SCHOOL INFRASTRUCTUREOPEN SPACE, PARKS AND SPORTING FACILITIESCONNECTION TO WESTERN SYDNEY PARKLANDS
PRODUCTIVITY	SUSTAINABILITY
MOORE POINT	GREEN GRID MOORE POINT
WARWICK FARM WESTERN SYDNEY	WARWICK FARM WASTE
AIRPORT INDUSTRIAL PLANNING EMPLOYMENT	GEORGES RIVER SUSTAINABILITY / BIODIVERSITY
& FREIGHT	WATERWAYS / FLOODING
NIGHT TIME ECONOMY	AIR QUALITY TREE CANOPY
TOURISM	AGRICULTURE KOALA PROTECTION
RETAIL / CENTRES PLANNING	BUSHLAND RURAL LANDS

Conclusion

Council received an overwhelmingly positive response from the community including 147 formal submissions; 542 survey responses; and over 680 big ideas.

The community survey indicated strong support for key LSPS priorities.

Common themes from the face to face feedback included:

- More frequent public transport (including local buses, an express train to the Sydney CBD, and support for the FAST corridor);
- More local jobs;
- More car parking (including commuter car parking);
- Density in appropriate locations (specifically, the need to rezone land around Moorebank shopping centre);
- Need for a review of land uses in Warwick Farm (including request for a B4 Mixed Use zone in the equine precinct);
- More affordable housing; and
- More green space with trees, walking/cycle paths, and access to the river.

A submission evaluation table is attached. The revised LSPS has incorporated community and stakeholder feedback where appropriate.

Attachments

- 1. Submission Evaluation Table
- 2. RPS Warwick Farm engagement report
- 3. Preliminary engagement report
- 4. LEP Review Community Engagement Action Plan

Attachment 1 - Submission Evaluation Table

_
6
ò
2
0
ă
eΓ
≥
ρ
e
S
č
E
ŏ
ĭ
Ĭ
ary – (
nary – (
nmary – (
ummar
Summary – (
ummar
Summar

₽	lssue	Comments	Officer comment	Recommendation
1	Warwick Farm zoning	Does not support Place Strategy classification of area as Innovation/ Research/Health/Advance manufacturing hub. Wants consultation and property owners' views taken into consideration.	The draft LSPS indicates that this area be considered for "a mix of uses". If Council endorses the LSPS, structure planning will be undertaken in 2020. A change to the LEP will then be pursued.	No change to LSPS
2	Warwick Farm zoning	Does not support Warwick Farm precinct rezoned to Innovation/ Research/ Health/ Advance manufacturing. In favour of a mixed use zoning including high-rise retail, office and residential	The draft LSPS indicates that this area be considered for "a mix of uses". If Council endorses the LSPS, structure planning will be undertaken in 2020. A change to the LEP will then be pursued.	No change to LSPS
m	Zoning of land in Western Sydney Aerotropolis Land Use and Infrastructure Implementation Plan (LUIIP)	Supports potential commercial district south of airport current marked as agribusiness in draft LUIIP.	The draft LSPS indicates that land subject to the LUIIP will be addressed through the Western Sydney Planning Partnership. The LSPS will be amended to reflect the outcome of this process in due course.	The LSPS will be updated to reflect the outcome of the final stage LUIIP.
4	Warwick Farm zoning	Does not support Warwick Farm precinct rezoned to Innovation/ Research/ Health/ Advance manufacturing. In favour of "mixed zoning".	The draft LSPS indicates that this area be considered for "a mix of uses". If Council endorses the LSPS, structure planning will be undertaken in 2020. A change to the LEP will then be pursued.	No change to LSPS
2	Warwick Farm zoning	Does not support Warwick Farm precinct rezoned to Innovation/ Research/ Health/ Advance manufacturing. In favour of "mixed zoning".	The draft LSPS indicates that this area be considered for "a mix of uses". If Council endorses the LSPS, structure planning will be undertaken in 2020. A change to the LEP will then be pursued.	No change to LSPS
9	Warwick Farm zoning	Does not support Warwick Farm precinct rezoned to Innovation/ Research/ Health/ Advance manufacturing. In favour of "mixed zoning".	The draft LSPS indicates that this area be considered for "a mix of uses". If Council endorses the LSPS, structure planning will be undertaken in 2020. A change to the LEP will then be pursued.	No change to LSPS
7	Warwick Farm zoning	Does not support advanced manufacturing and medical zoning applied to land in Warwick Farm equine precinct. Believes technological innovation will reduce the amount of	The draft LSPS indicates that this area be considered for "a mix of uses". If Council endorses	No change to LSPS

0
4
Ó
2
_
0
õ
×
<u> </u>
s
-
-
~
ല
5
ā
7
=
0
1
1
۲ ۲
- N-
ary -
nary -
mar
mmary -
mar
ummar
mar
ummar
Summar
Summar
ns Summar
ns Summar
sions Summar
sions Summar
sions Summar
sions Summar
bmissions Summar
ubmissions Summar
ubmissions Summar

₽	Issue	Comments	Officer comment	Recommendation
		land necessary for medical uses, and any medical uses should be located closer to the hospital. Supports mixed use in investigation zone – meaning retail, office and apartments. Suggests this is more appropriate given location near public transport. Also supports shopping centre on Masters site.	the LSPS, structure planning will be undertaken in 2020. A change to the LEP will then be pursued.	
∞	Warwick Farm zoning	Support for Munday and Manning Streets be rezoned B4 mixed use and/or R4 High Density, citing safety concerns.	The draft LSPS indicates that this area be considered for "a mix of uses". If Council endorses the LSPS, structure planning will be undertaken in 2020. A change to the LEP will then be pursued.	No change to LSPS
	Warwick Farm	Encourages Council to work with Australian Turf Club to increase on-site stabling.	Further discussions will be held with ATC as part of master planning of Warwick Farm.	No change to LSPS
6	Warwick Farm	Would like safety issues addressed quickly so as to protect future of Warwick Farm racing.	This will be addressed as part of master planning of Warwick Farm.	No change to LSPS
				'Council will' section can be amended to reflect Council's commitment to supporting tourism opportunities.
10	Tourism	Would like Liverpool to consider accommodating a theme park, namely Legoland, to increase tourism and entertainment options in the Liverpool LGA.	Council is actively working to increase tourism opportunities in the LGA. The LSPS has Planning Priority 11 – An attractive environment for local jobs, business, tourism and investment.	'Council will provide infrastructure, facilities and services needed to support and facilitate visitor accommodation <u>and tourism</u> growth in light of the opportunities provided by Western Sydney International Airport.'
11	Warwick Farm zoning	Does not believe the precinct is suitable as an employment zone due to it only being operational from 9-5 Monday-Friday. Supports a B4 mixed use zoning with retail and residential to increase use to 24/7, and also notes amenity value close to hospital, transport and Westfield.	The draft LSPS indicates that this area be considered for "a mix of uses". If Council endorses the LSPS, structure planning will be undertaken in 2020. A change to the LEP will then be pursued.	No change to LSPS

ŝ

Submissions Summary – Connected Liverpool 2040		
	Connected Liverpool 2	

₽	lssue	Comments	Officer comment	Recommendation
12	Warwick Farm zoning	Does not believe the precinct is suitable as an employment zone due to it only being operational from 9-5 Monday-Friday. Supports a B4 mixed use zoning with retail and residential to increase use to 24/7, and also notes amenity value close to hospital, transport and Westfield.	The draft LSPS indicates that this area be considered for "a mix of uses". If Council endorses the LSPS, structure planning will be undertaken in 2020. A change to the LEP will then be pursued.	No change to LSPS
13	Land for support services	Would like to see Council provide more land for places of worship, refuges, homeless, youth at risk and pregnancy counselling centres.	Council has a number of documents relating to improving social outcomes, including Council's Social Justice Policy. Additional information can be provided in LSPS.	Add to 'Council Will' section of Planning Priority 9: 'Council will ensure community and social support services are located near areas of need'
14	Community pride	Council workers should have a sense of pride in their work. Illegal dumping is left for too long.	City Presentation has recently undergone a restructure to improve sense of pride among workers. However, presentation issues are not covered by the LSPS, which is a land use planning vision. This feedback can be referred to the appropriate section.	No change to LSPS
	Parks	A playground was never replaced as promised in a park. Why not?	The LSPS includes a commitment to ensuring open space meets the needs of a growing population across the entire LGA. Council will need to follow up regarding the particulars of this matter.	No change to LSPS
15	Warwick Farm zoning	Supports rezoning area to allow for higher density residential as the area has become dangerous and would like to leave.	The draft LSPS indicates that this area be considered for "a mix of uses". If Council endorses the LSPS, structure planning will be undertaken in 2020. A change to the LEP will then be pursued.	No change to LSPS
16	Parks	Would like area at end of Erin Place Casula (RMS land adjoining M7) to be turned into playground, including pond and a car parking area. Says it is currently wasted space that could benefit the area.	The land is owned by the RMS. Council will refer this matter to RMS for further consideration.	No change to the LSPS.

I 2040
Liverpool
Connected
1
Summary –
ummar

₽	lssue	Comments	Officer comment	Recommendation
17	Social and affordable housing	Concerned about addressing social and affordable housing, noting the Liverpool Collaboration Area Place Strategy's Action 10: 'Investigate the potential for master planned precincts (such as NSW Land and Housing Corporation properties in Warwick Farm and rezone land) to improve and increase social and affordable housing above the targets set out in A Metropolis of Three Cities'. Says Liverpool should not have to provide more than its fair share and should not have to provide more affordable rental housing than any other LGA. Objects in principle if Liverpool intereds to contribute social and affordable areas in Liverpool interdeds: • Affordable areas in Liverpool Recommends: • Affordable areas in Liverpool Recommends: • Alfordable areas in Liverpool Recommends: • Alfordable and social housing should not be more than a set percentage in each suburb. • All Western District councils should have an equal percentage • Infrastructure and support services should be part of DA approval	The LSPS Action 7.3 states: 'Partner with State Government to investigate the potential for master planned precincts (such as NSW Land and Housing Corporation properties in Warwick Farm) by rezoning land to improve and increase social and affordable housing.' Council does not play a role in the delivery of social housing. However, an outcome of masterplanning will be to lower concentrations of social housing. However, an outcome of masterplanning will be to lower concentrations of social disadvantage, by including private and affordable housing. Generally this would not increase the number of social housing properties. Discussions about appropriate levels of social/affordable housing will occur during the master planning process. Council is also developing an affordable housing contributions scheme, which will not seek to go above the recommended GSC targets of 5-10%.	No change to LSPS
	Warwick Farm zoning	Rezone IN1 land south of Priddle St for high tech industrial park and move current industrial to new area	The current zoning of this areas allows for high- tech uses. Council is preparing an Industrial and Employment Lands Strategy that will address opportunities to further expand high-tech uses and review the LEP and DCP to ensure alignment. This matter can be addressed during structure planning for Warwick Farm. However, Council cannot compel current industrial uses to move.	No change to LSPS
		Create a road extension from Childs Road across the Georges River to site of Sewage Treatment Plant	Council will work with Sydney Water during the structure planning of the precinct. However the	No change to LSPS

ŝ

₽	Issue	Comments	Officer comment	Recommendation
			future of the Sewage Treatment Plant is a matter for Sydney Water	
		Move direct freight operations closer to airport	Locational decisions are a matter for the particular company.	No change to LSPS
		Rezone land south of Hume Highway and Governor Macquarie Drive bound by railway line and Priddle Street to B4, in accordance with State recognition that high-rise residential should be near rail stations – it is noted that all horse training facilities are willing to move onto Warwick Farm Race Course or leave area.	The draft LSPS indicates that this area be considered for "a mix of uses". If Council endorses the LSPS, structure planning will be undertaken in 2020. A change to the LEP will then be pursued.	No change to LSPS
		Move Sewage Treatment Plant to new site near Milperra bounded by Georges River, Newbridge Road and Riverside Drive – cannot have a city with a treatment plant so close to its centre.	The future of the Sewage Treatment Plant is a matter for Sydney Water. Discussions will be held with Sydney Water during structure planning for Warwick Farm, regarding future of the Sewage Treatment Plant.	No change to LSPS
		Upgrade hospital access bridge and make open to public	Discussions will be held with Liverpool Hospital and RMS during the structure planning process for Warwick Farm	No change to LSPS
		Hospital land on Warwick Farm precinct side should be developed to include advanced manufacturing.	Discussions will be held with Liverpool Hospital and this matter can be addressed during structure No change to LSPS planning for Warwick Farm.	No change to LSPS

2040
Liverpool
Connected
ubmissions Summary –

₽	lssue	Comments	Officer comment	Recommendation
		A comprehensive traffic study should be done for the CBD addressing:		
		 The Peak Hour Traffic flows on State Roads that are not entering the CBD Peak Hour Traffic for vehicles entering and leaving the CBD 		
		 The effects of opening Bathurst Street for traffic and closing Pirie Street one way or altogether. The need to increase the number of Parking provided in DA's for residential and commercial. 	Council is updating its CBD Parking Strategy, which is an action in the LSPS. A comprehensive CBD traffic study – the Liverpool	No change to LSPS
	Traffic and parking	 Look at if the Parking being investigated for Bathurst Street could not be included in the Civic Centre Plans. The need for additional access bridges across the 	City Centre Traffic Study was recently completed (in 2017).	
		 Georges River for vehicles. The Hospital needs for emergency access Hospital needs for extension to public parking with 		
		 hospital growth Bigge Street Medical services drop off and parking provision for an increasing aging population. 		
		Parking should be maximised above current controls. There should be provisions to have up to 4 car spaces per unit.	Apartment Design Guidelines through SEPP65 override Council's controls. Residential parking	-
		There should be opportunity for debundling parking. Stacked parking should be investigated.	options will be addressed further in the draft Local Housing Strategy.	No change to LSP5
18	High density development	High rise buildings need to be delivered with more green space for the elderly and children to use, and there needs to be more space between them.	Council is developing a City Centre Open Space Implementation Plan to address the current deficit and future provision of parks and green open spaces within the Liverpool City Centre. The Implementation Plan will explore opportunities to	Update LSPS at Planning Priority 6 to provide more detailed commentary on open space provision.

2040	
iverpool 2	
nnected L	
ry – Co	
Summa	
missions	
Subi	

₽	lssue	Comments	Officer comment	Recommendation
			maximise provision of parks and green open spaces in high density developments. It will also explore green open space provision controls to be incorporated within DCP and other strategic documents and policies. With consideration to the increased rate of high rise development, the Implementation Plan will also look into short to medium-long term innovative solutions such as improvising the function of parking stations to be coupled with green open spaces, roof top green open spaces and improved public domain.	Add Action 6.2: Investigate DCP changes to encourage green open space in high-rise development (short term)
	Parking	There needs to be more or larger parking stations that are serviced by public transport so people can get around easier.	Council is updating its CBD Parking Strategy, which is an action in the LSPS. Council is also continuing to advocate for the provision of more commuter car parking.	No change to LSPS.
	Parks	More community gardens where people can plant trees or a plant.	Council supports the establishment of community gardens, including through its matching grants program. Council will consider community gardens as part of its review of the DCP.	No change to LSPS.
19	Sustainability	 More rainwater tanks, solar and wind power. Education around plastic waste and biodegradable alternatives. Council waste charges should be proportional to waste produced. 	Council has committed to developing an Emissions Reduction and Resource Efficiency Study to consider such issues. Council currently has a waste service guide and information on our website as to what can and cannot be recycled. Further to this information the waste team participate in a number of education activities and campaigns including; primary school incursions, pre-school programs, pop up displays in shopping centres, social media advertising, and information stands at events.	Amend LSPS : Council Will Section of Planning Priority 15 to include 'Continue to provide education around sustainability and waste issues to the community'.

₽	lssue	Comments	Officer comment	Recommendation
			Council waste charges are based on cost of providing the service to the community as a whole. While weight based charges are currently not being investigated. Liverpool's waste charge is competitive when compared to nearby and metro councils. The LSPS 'Council Will' section of Planning Priority 15 can be updated to include 'continue to provide education around sustainability and waste issues to the community'.	
	Retail	Small shops should be encouraged, and there should be more markets where the community can interact	Agreed. Retail diversity is encouraged through council's zoning. Council is also updating its LEP to better support community uses. The LSPS can be retail environment. Update LSPS with information on the information on better support community uses. The LSPS can be retail environment.	Update LSPS with information on retail environment.
	Transport	More public transport and waterway transport.	Council's LSPS speaks to advocacy for more public transport services. Council has put forward a motion to Local Government NSW to advocate a ferry service for the Georges River, which it resolved to adopt. Council and LGNSW continue to discuss options with Transport for NSW.	No change to LSPS.
20	Parking	More car parking.	Council has committed to developing a CBD car parking strategy as part of the LSPS, as well as advocating for further provision of commuter car parking.	No change to LSPS.
21	Amenities	Please add seating along the river walk to the Casula Powerhouse Arts Centre, as it is important to older residents.	While the LSPS does not contain site-specific detail, the feedback has been referred to the appropriate Council area.	No change to LSPS.

₽	Issue	Comments	Officer comment	Recommendation
	High density development	Don't increase heights in the CBD, as like the open aspect of the area, and don't want wind tunnels and too much overshadowing.	Changes to CBD planning controls have previously been undertaken. The LSPS does not include any action to further increase CBD heights.	No change to LSPS.
	Public transport	Please lobby Transport for NSW for services that get to the city quicker – it was quicker 40 years ago.	This matter is addressed in LSPS <i>Planning Priority</i> 1 – Active and public transport reflecting Liverpool's strategic significance and LSPS Action 1.5. Council is actively advocating for faster and more frequent services to Sydney CBD, and will continue to push for the early delivery of the	No change to LSPS.
	Education	We need to educate the community about keeping the area clean, specifically litter and supermarket trolleys.	Bankstown to Liverpool metro extension. Council has significant environmental education programs. A commitment to environmental education can be reflected within Priority 14.	Update LSPS to include commitment to environmental education.
22	Public transport	Public transport is inadequate and needs to be reviewed if the 2050 vision is to be realised.	Addressed in LSPS <i>Planning Priority 1 – Active and public transport reflecting Liverpool's strategic significance.</i> Liverpool is actively advocating for improved public transport, and also progressing its FAST Corridor vision	No change to LSPS.
	High density development	Less flats	The LSPS envisages an increase in housing diversity and does not propose an extension to R4 zoned land.	No change to LSPS.
23	Liveability	More homes close to transport	Addressed in LSPS <i>Planning Priority 7 – Housing</i> choice for different needs with density focused in the City Centre and centres well serviced by public transport.	No change to LSPS.

0
Ö
4
0
\sim
0
0
õ
<u> </u>
-
2
-
~
<u> </u>
5
2
Ð
-
_
-
0
C
C
U I
U I
y - c
Ţ
Ţ
Ţ
Ţ
Ţ
mary – (
mary – (
ummary – (
mary – (
Summary – (
ummary – (
Summary – (
Summary – (
ons Summary – (
ons Summary – (
ons Summary – (
ons Summary – (
ons Summary – (
missions Summary – (
ons Summary – (
missions Summary – (
ubmissions Summary – (
missions Summary – (

₽	lssue	Comments	Officer comment	Recommendation
	Productivity	More jobs	Addressed in LSPS Planning Priorities 11 and 12.	No change to LSPS.
	Safety	More police	Police numbers are the responsibility of the State government. However, LSPS <i>Planning Priority 9</i> is Safe, healthy and inclusive places shaping the wellbeing of the Liverpool community.	No change to LSPS
	Sustainability	A cleaner environment	Council has significant environmental education programs. A commitment to environmental education can be reflected within Priority 15.	Amend LSPS to include commitment to environmental education.
	Waste	Address illegal dumping – need a new waste collection approach.	Council is aware of the significant challenge of illegal dumping and its costs to Council and the community. Council's illegal waste officers are responding to illegal dumping through a number of means. Council also offers large families a free upgrade or additional bin, as well as additional bins provided on medical grounds, to reduce the risk of dumping.	No change to LSPS.
	Parking	Address lack of parking in the City Centre or business will suffer.	Council has committed to developing a CBD parking strategy, which is reflected in Action 1.1	No change to LSPS.
24	High density development	High density development needs to be accompanied by an increase of nearby green space.	High density development is largely in the City Centre. Council is developing a City Centre Open Space Implementation Plan to address the current deficit and future provision of parks and green open spaces within the Liverpool City Centre. The Implementation Plan will explore opportunities to maxinise provision of parks and green open spaces in high density developments. It will also explore green open space provision controls to be incorporated within DCP and other strategic documents and policies. With consideration to the increased rate of high rise	Update LSPS at Planning Priority 6 to provide more detailed commentary on open space provision.

2040
iverpool.
connected L
1
nmary

₽	Issue	Comments	Officer comment	Recommendation
			development, the Implementation Plan will also look into short to medium-long term innovative solutions such as improvising the function of parking stations to be coupled with green open spaces, roof top green open spaces and improved public domain. Planning Priority 6 can be updated to better reflect Council's desire for quality open space.	
	Safety	Speeding in Orange Grove estate needs to be addressed.	This matter has been referred to the appropriate Council are for further consideration.	No change to LSPS
	City presentation	Overgrown weeds on nature strips, verges and on Council land needs to be addressed.	This matter has been referred to the appropriate Council are for further consideration.	No change to LSPS
	Traffic	Streets are too narrow for parking on both sides. Need to address issues at Marsden Road and Elizabeth Drive with lights.	This matter has been referred to the appropriate Council are for further consideration.	No change to LSPS
25	Moorebank Intermodal Terminal	The Moorebank Intermodal Terminal will add an extra 20,000 vehicles, which will impact on traffic, and also increase pollution and pose a health risk to residents.	Council understands the impact the Moorebank Intermodal Terminal has had on the community. While Council opposed the project, it will work to ensure that negative effects to residents are minimised during its development.	No change to LSPS.
	Consultation	Too many elderly people are being asked about a future that will not concern them, and Council is receiving biased feedback by targeting them.	Council conducted a wide range of consultation activities, including a number of youth-focused sessions.	No change the LSPS.
26	Moorebank	The elderly and young people benefit most from more affordable higher density housing. Economically more high density housing will encourage greater business growth.	Council has committed to ensuring density is located in areas close to transport nodes, and acknowledges its potential to improve economic outcomes.	No change to LSPS.

2040
Liverpool
Connected
7
Summary -
ummar

₽	lssue	Comments	Officer comment	Recommendation
27	Social and affordable housing	There should only be 5-15% social and affordable housing in any suburb, until such time as the District targets are increased.	The LSPS contains no plan to increase social and affordable housing above targets set in the District Plan.	No change to LSPS.
28	Moorebank	Development of the Moorebank town centre is necessary for the growth of Moorebank as a suburb. Increased housing will allow young people to access the area and have the opportunity to enter the property owner market. Increased growth of younger people will lead to increased growth of business, and incentivise the redevelopment of the town centre. The survey results indicating support for downzoning are not representative of the area.	Council's LSPS has committed to investigating the Moorebank centre with a view to downzoning select areas. There will be an opportunity to address any proposed changes to zoning and development standards when the LEP is on exhibition in 2020.	No change to LSPS.
29	Moorebank	The results of Council's survey on downsizing is not representative. It is unfair to isolate Moorebank without downzoning other areas. Most traffic issues will result from Moorebank Intermodal Terminal, not additional units. Downzoning will increase rents and house prices, and disadvantage local businesses, leading to a decrease of jobs.	Council's LSPS has committed to investigating the Moorebank centre with a view to downzoning select areas. There will be an opportunity to address any proposed changes to zoning and development standards when the LEP is on exhibition in 2020.	No change to LSPS.
30	High density development	No more R4 zoned land	Council only supports density in the city centre and centres close to public transport. There are no plans to increase the extent of R4 land at present.	LSPS to be amended to clarify the review of R4 zoned land is to address interface issues.
	Public transport	The metro line to the city should go through Moorebank.	Council will work with State government partners to address the best Metro alignment	No change to LSPS.

2040
Liverpool
Connected
7
Summary -
ummar

lssue	Comments	Officer comment	Recommendation
Amenities	Moorebank shops need to be upgraded. There needs to be a swimming centre close to Moorebank.	LSPS Action 8.4 commits Council to undertake design-led planning using place making principles for neighbourhood and district centres. This feedback has been sent to the relevant Council area for consideration.	No change to LSPS.
Amenities	There should be an open air performance space in Holsworthy/Wattle Grove.	The LSPS commits to high quality, plentiful and accessible community facilities, but does not address specific facilities. This feedback has been referred to the relevant Council area for consideration.	No change to LSPS.
Traffic	Synchronise traffic lights on Hoxton Park Road to improve traffic flow	This is not an LSPS matter, however this feedback has been referred to the relevant Council area for consideration.	No change to LSPS.
Public transport	Address lack of public transport in Carnes Hill area	The provision of public transport in a State matter. Council has committed to advocating for improved public transport in Planning Priorities 1 and 3.	No change to LSPS.
 Warwick Farm zoning	Rezone to an area of a mix of uses, excluding industrial.	The draft LSPS indicates that this area be considered for "a mix of uses". If Council endorses the LSPS, structure planning will be undertaken in 2020. A change to the LEP will then be pursued.	No change to LSPS.
Warwick Farm zoning	Rezone for a mixed uses, residential, commercial and retail.	The draft LSPS indicates that this area be considered for "a mix of uses". If Council endorses the LSPS, structure planning will be undertaken in 2020. A change to the LEP will then be pursued.	No change to LSPS.
School infrastructure	Additional areas for residential growth in the Liverpool CBD are indicated on p22. SINSW should be consulted early in planning to ensure land/asset availability to cater for increase in student numbers.	Noted. Council will collaborate with SINSW to ensure adequate provision of school infrastructure.	No change to LSPS

ol 2040	
cted Liverpo	
lary – Conne	
sions Summ	
Submiss	

₽	Issue	Comments	Officer comment	Recommendation
		Proposed Moore Point rezoning needs to include planning for school infrastructure if residential is to be included.		
	Planning assumptions	The Department of Education uses DPIE projections to inform planning (in context of p48 using Forecast.id).	Council has resolved to use Forecast. id for the basis of strategic planning work. This may be reassessed dependant on the outcomes of the Common Planning Assumption process.	No change to LSPS
	Collaboration	Action 10.3 should include the Department of Education as a collaborative education provider.	Agreed.	Amend LSPS action 10.3 to read "Collaborate with universities, TAFE, the Department of Education and other education providers to increase opportunities in the LGA"
â	Consultation	 Engage with Local Aboriginal Land Councils (LALCs) in the LGA and ensure that the LSPS supports their vision, in order to close the gap on disadvantage, build stronger economies and support rich and health communities. The LSPS should include similar goals and actions as the example LSPS, including working in partnership with LALCs to: Promote tourism Enhance the economic self-determination of Aboriginal communities through their land holdings Protect and celebrate Aboriginal culture and heritage 	There are three LALCs within Liverpool City Council's boundaries' including Deerubbin, Gandangara and Tharawal. Council wrote to the LALCs about the exhibition of the draft LSPS. The LSPS notes that Council will always collaborate with Aboriginal Land Councils to deliver the best outcomes (including in strategic planning matters). The LSPS identifies that Council will ensure that Aboriginal heritage is valued and respected. The LSPS also includes a priority (Planning Priority 11) to attract an environment for local jobs, business, tourism and investment.	No change to LSPS

₽	lssue	Comments	Officer comment	Recommendation
37	Hazards	Planning priorities 3, 7, 14 and 16 have bush fire risk implications. Strategic planning must ensure future land uses are in appropriate locations to minimise the risk to life and property from bush fire attack. Services and infrastructure that facilitate suppression also need to be considered in various stages of the planning process. Review the broad principles outlined in Section 4 of <i>Planning</i> for Bush Fire Protection 2018 in any bush fire studies undertaken.	The draft LSPS sets the strategic planning vision for Liverpool over the next 20 years. The LSPS does not rezone land. Any land that is proposed to be rezoned in the future will need to take into consideration bush fire risk and <i>Planning for Bush</i> <i>Fire Protection</i> .	No change to LSPS
38	Zoning of land in LUIIP	The Liverpool LSPS could indicate the Southern Gateway Precinct as a future employment area, such as Camden has done in its structure plan.	The draft LSPS indicates that land subject to the LUIIP will be addressed through the Western Sydney Planning Partnership. The LSPS will be amended to reflect the outcome of this process in due course.	No change to LSPS
39	Warwick Farm zoning	Area is dangerous for current use as horse training facilities. All training facilities should be moved on-site and area rezoned to mixed use, including residential and amenities such as parks, schools and day care.	The draft LSPS indicates that this area be considered for "a mix of uses". If Council endorses the LSPS, structure planning will be undertaken in 2020. A change to the LEP will then be pursued.	No change to LSPS
40	Warwick Farm zoning	Horses need to be moved onto race course and zoning changed.	The draft LSPS indicates that this area be considered for "a mix of uses". If Council endorses the LSPS, structure planning will be undertaken in 2020. A change to the LEP will then be pursued. Council will consider the matter of locating stabiling on the race course as part of the structure planning for Warwick Farm.	No change to LSPS
	Warwick Farm	Access to M5 is needed with a bridge over the Georges River to Moorebank.	Transport and access will be addressed as part of the master planning of Warwick Farm.	No change to LSPS
41	Traffic	Traffic in Warwick Farm needs to be looked at as it is unsafe.	Transport and access will be addressed as part of the master planning of Warwick Farm.	No change to LSPS

₽	lssue	Comments	Officer comment	Recommendation
42	Warwick Farm zoning	Rezone Warwick Farm B4, with high-rise near station, decreasing in height as moving away from station. Include shops and childcare etc. Remove industrial zone and use land for hospital and university.	The draft LSPS indicates that this area be considered for "a mix of uses". If Council endorses the LSPS, structure planning will be undertaken in 2020. A change to the LEP will then be pursued.	No change to LSPS
	Traffic	Traffic in Warwick Farm needs to be looked at as it is unsafe.	Traffic matters will be addressed in the master planning of Warwick Farm.	No change to LSPS
43	Traffic	Traffic is too dangerous for horses in Warwick Farm. Horses need to be moved on-site.	Traffic matters will be addressed in the master planning of Warwick Farm.	No change to LSPS
	Warwick Farm zoning	Rezone to B4. The area isn't safe for horses and families. Trainers want stables on course.	The draft LSPS indicates that this area be considered for "a mix of uses". If Council endorses the LSPS, structure planning will be undertaken in 2020. A change to the LEP will then be pursued.	No change to LSPS
44	A "mix of uses"	Council's resolution from 26 July 2017 was for "mixed use development", not a "mix of uses". Why is a mix of uses now under discussion?	At its Ordinary meeting of 26 June 2019 Council endorsed the draft LSPS for exhibition, which designated the precinct to be investigated for a "mix of uses".	No change to LSPS
	Sustainability	Horse shoe pond can be a great asset to the environment – it has wetlands and is a pelican breeding area	Council will collaborate with Sydney Water regarding Horse Shoe Pond as part of the master planning of Warwick Farm.	No change to LSPS
45	Warwick Farm zoning	Noise, traffic and dust make the area unsuitable for horse stabling. Needs to be rezoned B4 Mixed Use. Industrial area needs to be rezoned to reduce traffic generation from trucks through Warwick Farm.	The draft LSPS indicates that this area be considered for "a mix of uses". If Council endorses the LSPS, structure planning will be undertaken in 2020. A change to the LEP will then be pursued.	No change to LSPS

2040
Liverpool
Connected
mary -
Sum

EGROW 04

₽	Issue	Comments	Officer comment	Recommendation
	A "mix of uses"	Council's resolution from 26 July 2017 was for "mixed use development", not a "mix of uses". Why is a mix of uses now under discussion?	At its Ordinary meeting of 26 June 2019 Council endorsed the draft LSPS for exhibition, which designated the precinct to be investigated for a "mix of uses".	No change to LSPS
	Traffic	Lack of parking as train commuters are using streets to park in.	Planning Priority 1 states Council will continue advocating for more commuter car parking around train stations.	No change to LSPS
	Liveability	Horseshoe pond should be beautified and made available for leisure activities.	Council will collaborate with Sydney Water regarding Horse Shoe Pond as part of the structure planning of Warwick Farm	No change to LSPS
	Warwick Farm zoning	Rezone to B4 Mixed Use, not a mix of uses.	The draft LSPS indicates that this area be considered for "a mix of uses". If Council endorses the LSPS, structure planning will be undertaken in 2020. A change to the LEP will then be pursued.	No change to LSPS
46	Odour contour	The Sydney water treatment plant should be upgraded to remove any odour issues. The buffer zone should move so not to affect any existing residential areas.	This matter will be discussed with Sydney Water as part of the Warwick Farm structure planning process.	No change to LSPS
	Roads	The proposed road in Warwick Farm along the back of the oval needs to be built ASAP.	Traffic matters will be addressed in the structure planning of Warwick Farm.	No change to LSPS
47	Warwick Farm zoning	Rezone Warwick Farm to Mixed Use B4.	The draft LSPS indicates that this area be considered for "a mix of uses". If Council endorses the LSPS, structure planning will be undertaken in 2020. A change to the LEP will then be pursued.	No change to LSPS
48	Warwick Farm zoning	Rezone the stable area of Warwick Farm to Mixed Use B4.	The draft LSPS indicates that this area be considered for "a mix of uses". If Council endorses the LSPS, structure planning will be undertaken in 2020. A change to the LEP will then be pursued.	No change to LSPS

519 Liverpool Local Strategic Planning Statement Local Strategic Planning Statement Public Exhibition Report Attachment 2

I 2040
Liverpool
Connected
1
Summary –
ummar

₽	Issue	Comments	Officer comment	Recommendation
	Warwick Farm zoning	Change the horse precinct and industrial area to B4 Mixed Use, with the Visy land to be kept for future Liverpool Hospital development, and horses put on course.	The draft LSPS indicates that this area be considered for "a mix of uses". If Council endorses the LSPS, structure planning will be undertaken in 2020. A change to the LEP will then be pursued.	No change to LSPS
49	Liveability	Develop recreation area around Rosedale/swamp and Horseshoe pond/parkland along river.	This will be discussed with Sydney Water as part of the structure planning process.	No change to LSPS
	Public transport	Light rail should go through the area from Chipping Norton to Warwick Farm station, race course, hospital to the City Centre/Liverpool Station	Public transport provision is a matter for State government. Light rail is not currently listed as an area for investigation in Future Transport 2056.	No change to LSPS
20	Warwick Farm zoning	The area is too unsafe for horses and staff. Training facilities should be moved on course. The area should be rezoned Mixed Use B4, and act as a gateway to Liverpool. This should include more affordable accommodation for the people employed by horse trainers. It should be a unique area with a mix of residential, retail and business right near rail, and in walking distance to schools, the hospital, the Georges River/Chipping Norton Lakes, and Rosedale Oval.	The draft LSPS indicates that this area be considered for "a mix of uses". If Council endorses the LSPS, structure planning will be undertaken in 2020. A change to the LEP will then be pursued.	No change to LSPS
	Warwick Farm zoning	The hospital land should extend to include the current industrial area. The area should be rezoned to B4 as there are safety issues making it unsuitable as a horse training area.	The draft LSPS indicates that this area be considered for "a mix of uses". If Council endorses the LSPS, structure planning will be undertaken in 2020. A change to the LEP will then be pursued.	No change to LSPS
51	Access	Better access to the train station and hospital would make the Warwick Farm area more attractive for residential/mixed use development.	Structure planning of Warwick Farm will consider access.	No change to LSPS
	Public transport	A light rail running from Warwick Farm through to Chipping Norton and Moorebank would ease traffic congestion around the station and help parking issues.	Public transport provision is a matter for State government. Light rail is not currently listed as an area for investigation in Future Transport 2056.	No change to LSPS
	Liveability	The Rosedale Oval park should be the centrepiece for the area.	Public open space will be addressed in structure planning of Warwick Farm.	No change to LSPS

2040
Liverpool
onnected
C
U I
<u> </u>
ons Summary – (
ons Summary – (
ons Summary – (

EGROW 04

₽	Issue	Comments	Officer comment	Recommendation
	Development	Liverpool should upgrade its larger cityscape and develop areas of beauty and architectural integrity.	The LSPS states Council's vision of creating an attractive, vibrant City.	No change to LSPS
52	Warwick Farm zoning	Rezone to B4 and also move industrial out of area, and use for education etc. Move horse training on site, and there would be no loss of jobs.	The draft LSPS indicates that this area be considered for "a mix of uses". If Council endorses the LSPS, structure planning will be undertaken in 2020. A change to the LEP will then be pursued.	No change to LSPS
	Traffic	An alternate road out of area is needed, meeting up with Bridge St.	Traffic issues will be addressed through the structure planning of Warwick Farm.	No change to LSPS
53	Warwick Farm zoning	Supports rezoning the equine precinct into an area capable of sustaining mixed-use residential, commercial and retail.	The draft LSPS indicates that this area be considered for "a mix of uses". If Council endorses the LSPS, structure planning will be undertaken in 2020. A change to the LEP will then be pursued.	No change to LSPS
54	Warwick Farm zoning	As area is the gateway to Liverpool, it should be rezoned to mixed use. Trucks are currently a danger.	The draft LSPS indicates that this area be considered for "a mix of uses". If Council endorses the LSPS, structure planning will be undertaken in 2020. A change to the LEP will then be pursued.	No change to LSPS
55	Traffic	The Warwick Farm equine precinct is dangerous for horses and staff, and traffic needs to be diverted from the stable area.	Traffic issues will be addressed through the structure planning of Warwick Farm.	No change to LSPS
56	Active transport	Walking and cycling should be at the top of the transport hierarchy. Liverpool's policies and infrastructure need to encourage safe, healthier transport choices. The transport hierarchy should form the basis for planning of Council budgeting and projects.	Council's LSPS in Planning Priority 1 commits to improving cycling and walking tracks, and prioritising pedestrian movement.	No change to LSPS

-
o
4
0
$\overline{\mathbf{a}}$
_
0
õ
<u> </u>
d
_
Ð
>
_
_
_
0
d)
-
63
×.
<u><u></u></u>
-
~
0
C
O
U I
U
y - c
Ĭ
Ĭ
Ĭ
Ĭ
Ĭ
Ĭ
Ĭ
ummary – (
Ĭ
Summary – (
ummary – (
Summary – (
ons Summary – (
Summary – (
ons Summary – (
ons Summary – (
ons Summary – (
ons Summary – (
ons Summary – (
ons Summary – (
ubmissions Summary – (
ons Summary – (
ubmissions Summary – (

EGROW 04

₽	Issue	Comments	Officer comment	Recommendation
		Access by walking must be given priority in planning the public domain as well as in the approval of development on sites which can provide new connections between public streets. Pedestrian access, safety and comfort need to be prioritised in decision-making with clearly stated outcomes in the LSPS and LEP objectives and provisions.	Council's LSPS in Planning Priority 1 commits to improving cycling and walking tracks, and prioritising pedestrian movement. This will also be addressed in design-led planning using place making principles, as stated in Action 8.4.	No change to LSPS
		Planning priorities need to be reflected in strategies, policies and work plans.	Existing strategies and policies have informed the LSPS. The LSPS actions will be integrated into work plans.	No change to LSPS
		There needs to be targets and measurable performance indicators for active transport. Currently implementation measures are insufficiently concrete.	Council can update LSPS to investigate setting of appropriate targets.	Council will section updated to include investigation of targets.
		Planning Priority 1: actions do not align strongly with priority. There is a lack of walking/cycling actions/initiatives. Suggest an action that every major road include separated and protected bike land, rather than shared paths with pedestrians. This will enable bicycles, new modes like scooters and future autonomous delivery vehicles to move at an efficient speed and reduce conflict with pedestrians.	LSPS further addresses walking and cycling in Planning Priorities 3 and 9 and actions. The Bike Plan 2018-23 addresses Council's approach on active transport infrastructure provision. Active transport infrastructure on classified roads is a State matter.	No change to LSPS
		Planning Priority 2: east-west links need to be reinforced with appropriately spaced north-south links. Nodes on transport grid need to be accessible by walking and cycling.	The LSPS structure plan includes the FAST spine as a key transit corridor. Council understands the importance of appropriately spaced north-south links, which will be further investigated as the project proceeds. The LSPS also commits to investigate locations of TODs along the corridor, which will have walkability and accessibility as key outcomes.	No change to LSPS
				21

I 2040
Liverpoo
Connected
Summary –
ns

	lssue	Comments	Officer comment	Recommendation
		Planning Priority 3: Accessibility can be quantified effectively and thus the LSPS should reflect this. Indicators include measuring how many jobs, schools, shops, parks and so on can be reached in 15, 30 and 45 minutes by walking, biking, public transport and driving. Transport and land use policy should ensure that activities that can be reached by active and public transport increases, and that the ratio of activities that can be accessed by A/PT to driving increases.	Noted. The Council will section can be updated to include investigation of appropriate targets.	Council will section updated to include investigation of targets.
Ň	Warwick Farm zoning	Mixed use redevelopment of the precinct with higher density development would provide transit-oriented development, employment generation, attract and retain key workers with affordable housing, short-term accommodation to support tourism, support the Liverpool innovation precinct, and enable high quality public open space. Suggests commercial/retail uses adjacent to rail corridor; mixed use (office/resi/hotel/community) in area bound by Munday, Manning, National and Hope streets; residential at southern end of precinct; private recreation along Governor Macquarie Drive near racecourse.	The draft LSPS indicates that this area be considered for "a mix of uses". If Council endorses the LSPS, structure planning will be undertaken in 2020. A change to the LEP will then be pursued.	No change to LSPS
		The rezoning is supported by Planning priorities 4, 7, 9, 10 and 11.	The LSPS does not deal with site-specific issues.	No change to LSPS

0
4
0
\sim
8
2
<u>e</u>
š
-
ъ
ē
5
8
×
1
2
O
ř
Ţ
ry - 0
Ţ
Ţ
mary – (
Ţ
mary – (
mary – (
Summary –
ummary – (
ns Summary – (
Summary –
ns Summary – (
bmissions Summary – (
ubmissions Summary – (
bmissions Summary – (

EGROW 04

₽	lssue	Comments	Officer comment	Recommendation
		A 400m odour buffer would not constrain rezoning or development of the site. Suggests Council also consult Sydney Water to discuss odour control improvements that may be developer funded.	Sydney Water has moved from a distance-based odour buffer to an odour contour based on actual odour units, which informs its input into planning proposals. Council will discuss odour issues with Sydney Water as part of the structure planning of Warwick Farm.	No change to LSPS
		Increased bus services should be provided between the precinct and city centre to support its viability.	Council supports increasing the provision of public transport services. The LSPS advocates for improved public transport connectivity, including buses.	No change to LSPS
58	Warwick Farm zoning	Rezone the equine precinct B4. Development should be shared proportionately throughout the whole area.	The draft LSPS indicates that this area be considered for "a mix of uses". If Council endorses the LSPS, structure planning will be undertaken in 2020. A change to the LEP will then be pursued.	No change to LSPS
59	Warwick Farm zoning	Change zoning of property in equine precinct to B4.	The draft LSPS indicates that this area be considered for "a mix of uses". If Council endorses the LSPS, structure planning will be undertaken in 2020. A change to the LEP will then be pursued.	No change to LSPS
60	Warwick Farm zoning	Change zoning of equine precinct to B4.	The draft LSPS indicates that this area be considered for "a mix of uses". If Council endorses the LSPS, structure planning will be undertaken in 2020. A change to the LEP will then be pursued.	No change to LSPS
61	Warwick Farm zoning	Change zoning of equine precinct to B4.	The draft LSPS indicates that this area be considered for "a mix of uses". If Council endorses the LSPS, structure planning will be undertaken in 2020. A change to the LEP will then be pursued.	No change to LSPS

Issue		Comments	Officer comment	Recommendation
Warwick Farm zoning		Change zoning of equine precinct to B4.	The draft LSPS indicates that this area be considered for "a mix of uses". If Council endorses the LSPS, structure planning will be undertaken in 2020. A change to the LEP will then be pursued.	No change to LSPS
			Noted.	
Active transport		Supports Liveability priority for creating a vibrant, mixed use and walkable 24-hour city, however there should be more focus on improving walkability within suburbs. A key short- medium-term action should be investigating a comprehensive	LSPS addresses walkability and active transport in Planning Priorities 1, 3 and 9. This will also be addressed in design-led planning using place making principles, as stated in Action 8.4.	No change to LSPS
		walkability strategy identifying missing pedestrian/cycling links and placing strategic actions in place to rectify missing links. The Parramatta Ways Strategy may be helpful.	Active transport is a key consideration for the Green Grid Study being undertaken by Council.	
			Council's existing Bike Plan 2018-2023 identifies key missing cycle links within the Liverpool LGA.	
Tourism/ Liveability		The LSPS should have a strong focus on developing tourism opportunities for the Liverpool LGA. The structure plan or an additional plan should be included to show/identify the current and future landmarks of Liverpool, whether built or natural environment. There should be a strategy to make Liverpool an attractive visitor destination given the context of the future airport.	Planning Priority 11 refers to an attractive environment for local jobs, business, tourism and investment. The Destination Management Plan 2018/19 – 2022/23 identifies Council's priorities for the development of the visitor economy in Liverpool. This can be further elaborated.	Update P11 of the LSPS to reference the Destination Management Plan.
Warwick Farm zoning	Ð	Change zoning of equine precinct to B4.	The draft LSPS indicates that this area be considered for "a mix of uses". If Council endorses the LSPS, structure planning will be undertaken in 2020. A change to the LEP will then be pursued.	No change to LSPS
Middleton Grange		Upgrade parks in area with sails, new equipment, and improve maintenance. The new park in Gregory Hills is a good example.	Council has committed to the delivery of high- quality facilities including parks in the LSPS. This request has been referred to the appropriate Council section for further consideration.	No change to LSPS.

Issue Comments	Comments		Officer comment	Recommendation
Moorebank Development should be stopped in R4 zone while LSPS is being developed.	Development should be stoppe being developed.	:d in R4 zone while LSPS is	Council is unable to stop DAs from being lodged and assessed. The Phase 1 LEP Review Planning Proposal seeks to rezone part of the R4 land around Moorebank Shopping Centre to R3 Medium Density Residential. This Planning Proposal has been endorsed by Council and sent to the NSW Department of Planning, Industry and Environment for a Gateway Determination. Should the proposal receive a gateway determination, the proposal will be publically exhibited and affected land owners and residents will be notified.	No change to LSPS
Traffic congestion in Moorebank makes it difficult to get around, particularly in morning and evening peaks. The infrastructure is lacking to cope with increased residents. Streets are too narrow for increased levels of on-street parking from increased development.	Traffic congestion in Moorebank around, particularly in morning a infrastructure is lacking to cope v Streets are too narrow for increa parking from increased developm	makes it difficult to get nd evening peaks. The vith increased residents. sed levels of on-street nent.	Council understands the issues of traffic in the Moorebank area. Council continues to advocate for better public transport for residents, and has lodged a planning proposal to reduce the extent of R4 land, as noted above.	No change to LSPS
Unit development isn't occurring alongside an increase in Parks open space. Where are children living in these units supposed to play?	Unit development isn't occurring open space. Where are children li to play?	alongside an increase in ving in these units supposed	The draft LSPS identifies the need for open space and infrastructure to be aligned with growth. With consideration to the increased rate of high rise development, Council's City Centre Open Space Implementation Plan will look into short to medium-long term innovative solutions such as improvising the function of parking stations to be coupled with green open spaces, roof top green open spaces and improved public domain.	No change to LSPS
Warwick Farm zoning Rezone the Warwick Farm equine precinct to B4	Rezone the Warwick Farm equine p	precinct to B4	The draft LSPS indicates that this area be considered for "a mix of uses". If Council endorses the LSPS, structure planning will be undertaken in 2020. A change to the LEP will then be pursued.	No change to LSPS

₽	lssue	Comments	Officer comment	Recommendation
	LUIIP / Agricultural land	The LUIIP boundary should be extended to incorporate some land west of the proposed Outer Sydney Orbital into the LUIIP as part of the agribusiness precinct.	Council is working as part of the Western Sydney Planning Partnership to finalise the Western Sydney Aerotropolis LUIIP. The LSPS will be updated to reflect the outcome of the LUIIP once it is completed.	No change to LSPS until LUIIP stage 2 is completed
68	MRA	There is clarity needed within Council planning regulations to ensure the MRA can deliver all aspects of the government vision for the agribusiness precinct.	Planning within the LUIIP area is a matter for the Western Sydney Planning Partnership. Council's Rural Lands Study is currently being prepared and will be investigating opportunities for rural land outside of the Aerotropolis boundary to access the benefits of the airport. Council will periodically review controls covering the Metropolitan Rural Area to ensure agricultural industry can support the airport, as noted in Action 16.4.	No change to LSPS
69	Warwick Farm zoning	Rezone to B4	The draft LSPS indicates that this area be considered for "a mix of uses". If Council endorses the LSPS, structure planning will be undertaken in 2020. A change to the LEP will then be pursued.	No change to LSPS
70	Affordable housing	 Community expectation is that 15% of housing on private land and 30% on public land is provided as affordable housing. The LSPS should have a commitment to an explicit target for affordable housing of total floor space of new developments - preferably on-site and across the LGA to ensure housing mix. Language should be strengthened in the following ways: Explicitly list planning mechanisms that will be used to support delivery, ie SEPP 70, VPAs, Section 7.11 Explicitly detail planning controls and initiatives that will support a commitment to housing diversity 	Council's Local Housing Strategy will address an affordable housing contributions scheme and consider the Greater Sydney Commission targets of 5-10% of rezoned land to be affordable housing to be delivered through SEPP 70. Council also procures affordable housing through the use of VPAs, and through the provision of Council-owned land for affordable housing development. The LSPS can be updated to make this clear.	Update LSPS to make clear ways Council is addressing, and plans to address, affordable housing.

0
4
6
\sim
9
0
d
_
e
>
0
ă
4
C
Ð
ē
=
5
O
T
ĩ
- X
ry -
ary – (
nary – (
mar
nmary – (
mar
ummar
ummar
Summar
ummar
Summar
Summar
ions Summar
sions Summar
ions Summar
sions Summar
sions Summar
sions Summar
bmissions Summar
sions Summar

₽	Issue	Comments	Officer comment	Recommendation
			Council's Local Housing Strategy will provide more information on strategies Council will adopt to increase housing diversity.	
		ASA would like to partner with Council to develop an operating policy for slacklining in Council parks.	Council welcomes further discussion.	No change to LSPS
71	Recreation	Notes Objective 31 of Regional Plan: Public open space is accessible, protected and enhanced. Would like a priority to support a variety of recreational and passive uses that reflect that changing needs of the community when planning for existing and new open space.	Planning of parks and green open spaces in Liverpool LGA is heavily dependent on the demographic analysis of a particular suburb/area. The demographic analysis along with needs and demand analysis helps in understanding the current and future users of the local community, which then guides the process of identifying responsive activities and functions for the identified park or open space.	No change to LSPS
			The LSPS has the following directive: "Ensure community facilities, open space and recreation facilities meet the needs of a growing population across the entire LGA."	
72	Warwick Farm zoning	Rezone equine precinct to B4.	The draft LSPS indicates that this area be considered for "a mix of uses". If Council endorses the LSPS, structure planning will be undertaken in 2020. A change to the LEP will then be pursued.	No change to LSPS
73	Warwick Farm zoning	Mix of uses outlined in the LSPS regarding the equine precinct should include high-density residential. The site in particular (Masters site) meets a number of LSPS priorities, including Planning Priority 7 (density close to centres/transport) and Planning Priority 10 (support innovation precinct including appropriately located residential). Mixed use development on the site is consistent with regional planning.	The draft LSPS indicates that this area be considered for "a mix of uses". If Council endorses the LSPS, structure planning will be undertaken in 2020. A change to the LEP will then be pursued.	No change to LSPS

9
204
iverpool
onnected
ŭ
ummary - C
ons Summary – Co
ons Summary – Co

ndation	t suggestions nent.
Recommendation	Update LSPS to reflect suggestions made in officer comment.
Officer comment	 Section on affordable housing can be updated to reflect its role in supporting jobs growth and economic prosperity for local communities The LSPS will be updated to include action regarding Local Housing Strategy will be the place for developing affordable housing strategies This will be addressed as part of Local Housing Strategy This will be addressed as part of Local Housing Strategy The LSPS can be updated to better reflect Council's understanding of the importance of affordability issues in the LGA The LSPS can be updated to include detail on proportion of households in housing strategy will do LSPS can be updated to include ercognition of importance of affordable housing Strategy will do Council has committed to developing strategy and affordability For developing strategy will be housing to liveability The uspated to reflect what housing to liveability The updated to reflect what housing strategy will do The uspated to reflect what housing to liveability The would be housing This will be further developed through the housing.
Comments	 Strengthen the LSPS to: Acknowledge the economic and social benefits of affordable rental housing and the role it plays in supporting job growth and economic prosperity for local communities Acknowledge the directions established by the Greater Sydney Commission Plan and the affordable housing targets it proposes Acknowledge the directions established by the Greater Sydney Commission Plan and the affordable housing targets it proposes Acknowledge the directions established by the Greater Sydney Commission Plan and the affordable housing targets it proposes Commit to developing a local housing strategy quantifying housing need now and into the future and including a focus on the need for affordable rental housing through the planning system and/or by leveraging other opportunities available to Council such partnering with registered community housing providers and the NSW and federal governments to deliver affordable rental housing in their community housing providers and the NSW and federal governments to deliver affordable rental housing in their community. Hentify how the Council work in partnership with community housing providers and the NSW and federal governments to deliver affordable rental housing in their community. Iterplicitly identify affordable rental housing affordable rental housing in their communities. Include proportions of households in housing as a strategic provider and for able housing affordability is an issue within the area. Include proportions of households in housing stress, and/or proportion of very low/low income households in area.
Issue	Affordable housing
₽	74

₽	Issue	Comments	Officer comment	Recommendation
		 Recognise that increasing that amount of affordable dwellings is a key component of liveability and a strategic priority. Commit to locally appropriate strategies to grow the number of dwellings affordable to those on very low to moderate incomes. Commit to promotion or facilitation of housing diversity through planning controls and initiatives. Recognise that housing affordability is a complex issue that needs to be tackled by all levels of government, and recommend further advocacy to the NSW and Australian governments for more social and affordable housing in the local area, to be funded by mechanisms outside the planning system, such as state and federal budgets. 	7. Action 7.5 covers this point, though can be revised to include all levels of government.	
	Universal housing	The LSPS should commit to new residential development that caters to households with specific accessibility and adaptability needs	Council's LSPS supports housing that supports aging in place. This can be updated to reflect support of housing that suits a range of needs. The Apartment Design Guide also ensures that 20% of apartments reach Liveable Housing Guideline's silver level universal design features. The Local Housing Strategy will further investigate if changes are needed to better support accessibility and adaptability.	Update LSPS to reference aging in place and accessibility.
	Social diversity	The LSPS commits to social diversity. The LSPS should recognise that culturally and socially diverse communities are inclusive, healthy and creative.	The LSPS can be updated to reflect that socially diverse communities are inclusive, healthy and creative.	Update LSPS to reflect that socially diverse communities are inclusive, healthy and creative.
75	Affordable housing	Supportive of development of affordable housing contributions scheme as most effective way to capture increasing value of land.	Noted. LSPS can reference: affordable rental housing as a priority for the community. 	Update LSPS to reflect suggestions made in officer comment

0
<u> </u>
Z
2
\sim
-
0
0
d
Ð
>
-
<i>x</i>
Ĕ
5
ā
7
=
0
C
S.
U I
Ĭ
ry – c
Ĭ
Ĭ
Ĭ
Ĭ
Ĭ
ummary – (
Ĭ
Summary – (
ummary – (
ons Summary – (
Summary – (
ons Summary – (
ons Summary – (
ons Summary – (
ons Summary – (
ons Summary – (
ons Summary – (
ons Summary – (
ubmissions Summary – (

₽	lssue	Comments	Officer comment	Recommendation
		The proposed Local Housing Strategy should identify evidence around current and future needs for affordable housing, and the most appropriate way to deliver it to ensure it is financially viable and retained in perpetuity. CHIA NSW welcomes any opportunity to work with Council to explore options for delivery of affordable rental housing.	 the economic and social benefits of affordable rental housing and the role it plays in supporting job growth and economic prosperity for local communities affordable housing targets included in the Greater Sydney Commission Plan 	
		 Strengthen LSPS to: Explicitly identify affordable rental housing as a strategic priority for the community. Acknowledge the economic and social benefits of affordable rental housing and the role it plays in supporting job growth and economic prosperity for local communities Acknowledge the affordable housing targets included in the Greater Sydney Commission Plan Commit to a specific focus on affordable rental housing in the local housing strategy 	The Local Housing Strategy will further address Council's approach to affordable housing.	
76	Warwick Farm zoning	Rezone equine precinct to B4.	The draft LSPS indicates that this area be considered for "a mix of uses". If Council endorses the LSPS, structure planning will be undertaken in 2020. A change to the LEP will then be pursued.	No change to LSPS
77	Fifteenth Avenue	The Airport will rely on strong public transport links for Airport staff and travellers, including the transformational upgrade of Hoxton Park Road and Fifteenth Ave and its connection into WSI.	Noted. Council's LSPS advocates for public transport services to connect to the airport, as well as progressing the FAST Corridor.	No change to LSPS

2040
Liverpool
Connected
7
Summary -
ummar

EGROW 04

₽	Issue	Comments	Officer comment	Recommendation
		WSA is committed to working closely with Council on its aims for FAST. The LSPS could identify FAST in the context of its broader potential as a catalyst for public travel growth in the region.	Agreed. LSPS can be amended to identify FAST as a catalyst for public travel growth in the region.	Update LSPS to identify FAST in the context of its broader potential as a catalyst for public travel growth in the region.
	Roads	WSA supports an arterial road connecting The Northern Road and Elizabeth Drive to the east of the airport (ring road)	Noted. This forms part of the work undertaken as part of the LUIIP.	No change to LSPS
	Western Sydney Airport	Support emphasis on appropriate zoning of land near airport to prevent development encroachment and maintain residential amenity. Reiterating need for suitable vegetation around airport, and wanting to work with Council to ensure best outcomes in terms of visual factors and functionality, as well as other airport planning overlays.	Noted. Council will work with WSA to ensure positive outcomes are achieved.	No change to LSPS
78	Warwick Farm zoning	Rezone to B4.	The draft LSPS indicates that this area be considered for "a mix of uses". If Council endorses the LSPS, structure planning will be undertaken in 2020. A change to the LEP will then be pursued.	No change to LSPS
79	Warwick Farm zoning	Rezone to B4.	The draft LSPS indicates that this area be considered for "a mix of uses". If Council endorses the LSPS, structure planning will be undertaken in 2020. A change to the LEP will then be pursued.	No change to LSPS
80	Warwick Farm zoning	Rezone to B4.	The draft LSPS indicates that this area be considered for "a mix of uses". If Council endorses the LSPS, structure planning will be undertaken in 2020. A change to the LEP will then be pursued.	No change to LSPS
81	Warwick Farm zoning	Rezone area in Warwick Farm labelled 'mix of uses' to medium to high density residential of mixed use. It has transport connectivity, proximity to Liverpool CBD, green	The draft LSPS indicates that this area be considered for "a mix of uses". If Council endorses	No change to LSPS

I 2040
Liverpoo
Connected
Summary –
ns

Issue	Comments	Officer comment	Recommendation
	space and water access, all of which was part of the vision of the draft LSPS.	the LSPS, structure planning will be undertaken in 2020. A change to the LEP will then be pursued.	
Warwick Farm zoning	Rezone to B4.	The draft LSPS indicates that this area be considered for "a mix of uses". If Council endorses the LSPS, structure planning will be undertaken in 2020. A change to the LEP will then be pursued.	No change to LSPS
	There should be an immediate stop to any further destruction of our natural bushland.	Council agrees that bushland should be protected. However, this is largely controlled by State legislation/regulation, including the Biodiversity Conservation Act, Vegetation SEPP, and the biocertification process. Council will continue to advocate for the protection of its bushland assets.	No change to LSPS.
 Sustainability/biodiversi ty	Wants native wildlife protected under the strictest enforced guidelines.	Council agrees that wildlife should be protected. This is largely regulated through the Biodiversity Conservation Act.	No change to LSPS.
	The LSPS says there is tree canopy in old and new residential areas. This in untrue. Tree canopy is almost non-existent in new estates. How will this be addressed?	This relates to Council's vision for the future. Council understands the issues with urban canopy in new release greenfield areas, and has committed to advocating for changes to the Complying Development Code to better incentivise canopy cover. Council is also looking at ways to increase tree canopy provision on the streetscape and has committed to developing an urban canopy strategy in the LSPS.	No change to LSPS.

I 2040
Liverpool
Connected
1
Summary –
ummar

EGROW 04

₽	lssue	Comments	Officer comment	Recommendation
		Liverpool should support plant-based agriculture for the health of the planet, residents and animal welfare.	Planning Priority 16 spells out Council's support for peri-urban agriculture, including retaining significant market gardens that provide fresh vegetables to Sydney residents. Council is working through the Planning Partnership to ensure these activities continue as the Western Sydney Airport and Aerotropolis progress.	No change to LSPS.
I	Housing growth	The draft says density will be restricted to the CBD. This is not true. Moorebank is turning into a mini city. Where will people go? What impact is infrastructure going to have on residents?	The LSPS refers to any further increases in density than is currently allowed for under the existing LEP. The LSPS can be updated to clarify this point. It should also be noted that Council has committed to reviewing the extent of R4 land to ensure appropriate interfaces between lower density areas.	Update LSPS to clarify densities around_City Centre and places close to transport nodes and amenity.
84	Sports facilities	Support Planning Priority 6, but notes that 75% of playing fields are currently below playing standard and only 20% are female friendly, and notes that increased population will come with a need to increase the capacity of sporting fields across the Liverpool City Council area.	Council's LSPS commits to delivering a world-class network of community facilities under Planning Priority 6. This feedback can be shared with the appropriate section of Council.	No change to LSPS
85	Affordable housing	Supports Council's intention to look at more innovative forms of affordable housing, and commends focus on addressing social and affordable housing.	Noted.	No change to LSPS
86	General	More jobs, better streets, cleaner environment and more focus on city presentation.	Noted.	No change to LSPS
87	River city	The Mandaean community would like to be part of the transformation of Liverpool into a lively river city by 2050. Planning priority 5 should include action 5.6: "Create River Advisory Committee to include people from Liverpool	Council acknowledges that water is a symbol of purity in all rituals and religious ceremonies for the Mandaean religion. Access to flowing water is also essential in all Hindu rites and ceremonies, and it is held sacred due to its purification and cleansing powers. Council recognises the cultural	Update LSPS to reference need for engagement with community about projects that affect the communities who use the Georges River

0
=
8
_
2
0
0
d
Ð
>
ă
4
C
Ð
ē
=
5
C
-
Υ.
ĭ
Ţ
ry - (
Ţ
Ţ
mary - (
Ţ
mary - (
ummary – (
ummary - (
Summary –
ummary – (
ns Summary – (
Summary –
ions Summary – (
sions Summary – (
ions Summary – (
sions Summary – (
sions Summary – (
sions Summary – (
sions Summary – (
bmissions Summary – (

ID Issue	Comments	Officer comment	Recommendation
	community who can advise the council about projects that affect the communities who use the Georges River"	and religious significant of Georges River for our large community member from Mandaean and Hindu backgrounds. Therefore, their need for a place in Georges River to undertake baptism rituals will be investigated through the Chipping Norton Lakes Masterplan. One of the key activities of the Masterplan is to consult with the local community, inclusive of Mandaean community, as well as other cultural and religious groups to ensure their feedback and needs are captured in this process.	
Community facilities	Add action 6.5: Redevelop park area behind CPAC or Mill Park as an area different ethnic communities can use for rituals. This should also include a community centre that can be used as a museum to showcase the important contribution of the Mandaean community, which could become a tourist destination. Build an access point in the park area next to CPAC similar to access points used in boat ramps – as a short-term goal	Council has completed the Master Planning of Lighthorse Park, a short distance to CPAC, and will be staging its delivery over the next few years. An integrated community hub will be delivered at Lighthorse Park, which will be accessible by all community groups. Liverpool Regional Museum and CPAC are currently Council's dedicated spaces to host and showcase contributions made by Liverpool's diverse cultures and communities. All Council facilities are developed for inclusive use by all community groups. The Georges River water quality is not suitable for primary water activities, but Council has committed to improving the water quality of the river through the LSPS, and, in line with strategic projects along Georges River, Council will investigate treated river water pools as interim solutions to meet current community needs.	No change to LSPS

2040
Liverpool
Connected
mary -
Sum

₽	lssue	Comments	Officer comment	Recommendation
	Productivity	Add action 10.4: Establish a scientific/research advocacy group to advocate and bring research companies to the City.	The Liverpool Innovation Precinct works to develop these opportunities within the City, and includes health, education, business and government stakeholders.	No change to LSPS
	Branding	Create an icon or symbol for Liverpool City that reflects its river, people and future potential.	This is not an LSPS matter, however this can be passed onto the relevant section of Council for further consideration.	No change to LSPS
	Sustainability	Add action 14.9: Make the Mid Georges River ecological health rating of A+ by working closer with the Georges River Keeper (GRCCC), as a medium-term goal	The LSPS references the need for improving ecological health of the Georges River. While Council supports improving the health of the Georges River, as a land use planning document, the LSPS is not the correct document in which to set water quality outcomes. This will be forwarded to the correct areas for further consideration in future Council planning.	No change to LSPS
		Orange Grove Centre is incorrectly identified as industrial on the structure plan, with the legend indicating 'review and manage existing industrial land'. This is incorrect. Suggest adding area and sites adjoining to south as 'retail/business development precinct'.	Noted. The structure plan will be revised.	Update LSPS to delete Orange Grove Centre area as industrial.
88	Mapping	Centre is not identified on inset map. The inset map should also identify area as 'retail/business development precinct'.	The map will be amended to indicate the subject site as a bulky goods cluster.	Update LSPS to indicate Orange Grove Centre as a bulky goods cluster.
		The culture map should identify the Orange Grove Centre as an important retail centre. Suggests addition of 'shopping trolley' icon to the 'Our Home Our Culture' map.	Bulky goods clusters such as the subject site and Crossroads Casula can be mapped on the Culture Map as bulky goods retail.	Add onto culture map

lssue Comments	Comments		Officer comment	Recommendation
The LSPS should include some commentary on Council's retail strategy. The document is currently silent on retail planning, but additional population will require expanded retail offerings to cater for increased demand.	The LSPS should include some commentary on Co strategy. The document is currently silent on reta but additional population will require expanded r offerings to cater for increased demand.	uncil's retail Il planning, etail	Additional information on Council's approach to retail can be added.	Update the LSPS with relevant information from the centres and corridor study.
The LSPS should recognise that multi-use precincts can play aMixed usesignificant role in delivering on its objectives, includingdevelopmentdelivering housing supply, creating a '30-minute city' andenabling growth in 'smart jobs'.	The LSPS should recognise that multi-use precincts significant role in delivering on its objectives, includ delivering housing supply, creating a '30-minute cit enabling growth in 'smart jobs'.	can play a ling y' and	The LSPS notes Council's vision for the city centre to be a vibrant mixed-use hub. Action 8.4 also commits to undertaking design-led planning using placemaking principles for neighbourhood and district centres. Additional commentary is not considered necessary.	No change to LSPS
The LSPS should emphasise strategic land use and more Housing growth clearly articulate how the LGA will accommodate growth and change over the next 20 years. change over the next 20 years.	The LSPS should emphasise strategic land use and n clearly articulate how the LGA will accommodate gr change over the next 20 years.	nore owth and	The Local Housing Strategy will contain further detail on how the LGA will accommodate growth. The LSPS can also map key growth areas.	Include housing growth mapping in liveability section.
The Moore Point masterplan should be specifically acknowledged as the critical precinct to positively shape the future of Liverpool, with potential to deliver on liveability, productivity, connectivity and sustainability directions.	The Moore Point masterplan should be specifically acknowledged as the critical precinct to positively sh future of Liverpool, with potential to deliver on livea productivity, connectivity and sustainability direction	ape the bility, ıs.	The LSPS states Council's desire to refocus the City around the amenity and assets of the Georges River. Action 11.2 refers to investigating amendments to LEP to rezone Georges River precinct north of Newbridge Road as a mixed-use zone to support the Liverpool CBD and Innovation Precinct, with an extensive open space system and cross-river linkages (short to medium term). Further detail is not considered necessary for the LSPS.	No change to LSPS
Where a commitment is made to undertake further studies or detailed planning. Council should incorporate timeframes with those commitments to provide certainty to industry.	Where a commitment is made to undertake further s detailed planning, Council should incorporate timefra with those commitments to provide certainty to indu	tudies or Imes stry.	Noted. In terms of Moore Point, Action 11.2 provides a timeframe, short to medium term, which is from now-2024/25.	No change to LSPS.

2040
Liverpool
Connected
7
Summary -
ummar

₽	lssue	Comments	Officer comment	Recommendation
	Consultation	Council should re-exhibit the draft LSPS after additional information is added to ensure transparency and collaboration.	Re-exhibition is not considered to be warranted. Developed strategies will be placed on exhibition, as well as changes to LEP and DCP controls.	No change to LSPS
	Darking	The Parking Strategy must be updated in a manner that provides CBD parking on the periphery and Warwick Farm, and not the CBD. Further CBD parking is at odds with promoting a walkable CBD and modal shift. This is in line with Place Strategy Action 3. CBD parking strategy should identify a timeframe for removal of parking infrastructure in the CBD.	A CBD parking strategy is currently being undertaken. Further parking detail in the LSPS is not considered necessary.	No change to LSPS
	0	Council should amend Planning Priority 4 to clarify timing of Actions 4.3 and 1.1, as parking strategy should consider long- term goals for parking in CBD area.	CBD parking strategy currently being undertaken. Further parking detail in LSPS is not considered warranted.	No change to LSPS
		A key transport interchange should be located in Moore Point. Action 1.5 should be amended to reflect this, or it should be incorporated in the structure plan.	Council can update to LSPS to include consideration of Moore Point.	Update LSPS to reference investigation of transport interchange to be located in Moore Point
	Public transport	Council should advocate for Bankstown metro extension to Liverpool with stop at Moore Point. This should be extended to airport to provide most direct, high frequency and best integrated rail connection between airport and key destinations in metro Sydney.	Council has committed to working with TfNSW on investigating a preferred alignment for the Metro. This will determine appropriate stops.	No change to LSPS
		Action 1.7 should be updated to note short term planning and confirmation of the preferred alignment, with long-term physical delivery.	It is considered that 'short-term planning' would incorporate confirmation of alignment.	No change to LSPS

EGROW 04 Attachment 2

0
4
0
2
_
0
Ö
õ
e
>
ъ
Ð
**
S.
e
Ξ
5
0
C
1
<u>ч</u>
<u> </u>
lary –
<u> </u>
<u> </u>
mar
ummar
mar
Summar
s Summar
ins Summar
s Summar
ins Summar
ions Summar
sions Summar
sions Summar
sions Summar
Ibmissions Summar
sions Summar

₽	Issue	Comments	Officer comment	Recommendation
	FAST corridor	Council should amend planning priority 2 to include investigation of extension of FAST corridor to Moore Point, into a proposed transport interchange. Council should focus on creating a city-servicing public transport corridor between Moore Point, Liverpool CBD and the WSA.	Agreed.	Include additional text in LSPS to address investigation of future extension of FAST corridor to provide a connection to Moore Point.
	Accessible suburbs	Supports priority 3. LAC JV will implement actions 3.1 and 3.2 through Moore Point masterplan.	Noted.	No change to LSPS
	Collaboration	Planning Priority 4 should be amended to acknowledge collaboration regarding Moore Point. Supportive of acknowledgement of Place Strategy. The draft LSPS does not provide sufficient information in relation to specific measures and strategies required for delivery of Place Strategy. Council should amend priority to include additional actions addressing specific measures in Place Strategy.	Proposed additional commentary is not considered necessary. The Place Strategy provides further information.	No change to LSPS
	18 hour economy	Planning priority 5 should be amended to provide additional clarification as to the spatial challenges in ensuring an 18-hour economy.	LSPS considers issues relating to reverse amenity impacts. Proposed additional commentary is not considered necessary.	No change to LSPS
	Parks	LAC JV supports delivery of high-quality facilities. Stakeholders should be engaged to ensure any changes to contributions planning include consideration of cumulative impacts. Applauds Council for included Action 6.3 – continuous green space network.	Noted.	No change to LSPS
	Housing Strategy	Moore Point precinct should be considered as part of housing strategy, and LSPS should be updated to reflect areas contribution to meeting housing growth.	The LSPS will be updated to include a map indicating areas contributing to housing growth. Local Housing Strategy will consider Moore Point.	LSPS updated to include a map indicating areas contributing to housing growth

I 2040
Liverpool
Connected
1
Summary –
ummar

₽	lssue	Comments	Officer comment	Recommendation
		Planning priority 7 should be amended to provide further clarity on spatial opportunities for housing delivery. This should provide clarity on specific targets.	Proposed additional commentary is not considered necessary. This will be addressed in Housing Strategy. A map of housing growth areas will be provided.	LSPS updated to include a map indicating areas contributing to housing growth
		The LSPS should be re-exhibited after the Strategy is complete.	Re-exhibition of LSPS is not considered necessary. The Housing Strategy will be placed on exhibition.	No change to LSPS
	Structure plan	Draft structure plan notes Moore Point precinct as "investigate residential/mixed-use to support CBD and innovation precinct". This is inconsistent with Action 11.2: amend LEP to rezone It is unclear what further investigation is required before a decision can be made to progress a mixed-use rezoning. Council should amend the structure plan to identify the area for rezoning.	There are a number of issues that need to be resolved before rezoning can proceed, and as such the LSPS should be updated to reflect the status of the project as an investigation.	Action 11.2 amended to reflect investigation status.
	Innovation	Council should ensure there is flexibility of land uses for delivery of innovative opportunities and outcomes on the Moore Point site.	Noted.	No change to LSPS
	Сапору	Moore Point represents a significant opportunity to increase urban tree canopy cover, to assist in the Action 14.4 strategy.	Noted.	No change to LSPS
	River	Georges River waterways should be activated where possible with a transport "Blue Highway" Strategy developed by Council, linking Liverpool to downstream communities and facilities.	Noted. Council's River Connections and Green Grid programs may address waterways. Council through LGNSW is advocating investigation of a ferry service on the Georges River.	No change to LSPS
06	Seniors housing and aged care	There is no information in the LSPS regarding seniors housing, and whether this is taken into account as a 'housing typology'. Recommend that Liveability priorities/actions reflect the need for seniors housing and aged care facilities to be provided to accommodate an ageing population and appropriately located to cater for the entire community. Additional actions related	Council agrees that seniors housing is important. The LSPS can be updated to refer to types of housing that Council would like to be provided, including Seniors housing.	Update LSPS to refer to seniors housing and aging in place.

40
20
ected Liverpool
Conn
ĭ
Summary – (

EGROW 04

lssue	Comments	Officer comment	Recommendation
	to investigating the need for seniors housing may also be appropriate.		
Warwick Farm zoning	Rezone equine precinct to B4.	The draft LSPS indicates that this area be considered for "a mix of uses". If Council endorses the LSPS, structure planning will be undertaken in 2020. A change to the LEP will then be pursued.	No change to LSPS
Consultation	It is not clear whether farmers and rural land owners were consulted in the development of the LSPS	Council engaged the rural community through a pop-up event at Luddenham, a District forum at Bringelly, flyers in Luddenham shops, and direct mail to ratepayers.	No change to LSPS
Biosecurity	Biosecurity risks such as weeds and feral animals are not mentioned in the LSPS	Council understands the importance of addressing biosecurity risks, however as a land use planning document additional commentary is not considered necessary.	No change to LSPS
Rural lands	The rural lands study given effect through the LSPS in seven years old. The study should be reviewed in the short-term, rather than being a medium-long-term action, to ensure contemporary planning issues are addressed	The rural lands study referred to in the LSPS is one being undertaken in 2019, but was not complete prior to exhibition of the draft. The final LSPS will be amended to make this clear.	Update LSPS to clarify reference to Rural Lands Study
	Supports protection of rural lands and advocacy of continued protection in LUIIP area.	Noted.	No change to LSPS
General	Supports defining boundaries between urban, non-urban and scenic lands provided this protects agriculture.	Noted.	No change to LSPS
	Supports recognition of importance of agriculture in Aerotropolis and Future Food Systems CRC.	Noted.	No change to LSPS

0
4
õ
_
\sim
_
0
×
0
d
d)
2
_
-
2
Ð
**
C
d)
~
-
_
0
-
C
Ö
0
1
ī
1
1
lary – (
1
lary – (
mary -
ummary –
ummary -
ummary –
Summary –
ummary -
Summary –
ns Summary –
Summary –
ions Summary –
sions Summary –
ions Summary –
sions Summary –
sions Summary –
sions Summary –
sions Summary –
bmissions Summary –
ubmissions Summary –
bmissions Summary –

₽	lssue	Comments	Officer comment	Recommendation
		The draft LSPS should:		
8	Land use west of airport	 recognise the agritourism, agricultural retail/market and rural living potential of the Bradfield site, and its alignment with Metropolitan Rural Area. support the undertaking of a place-based planning review to determine extent/layout of recommended uses noting Bradfield vision of 'an integrated mix of agricultural and rural-based enterprises with a high- quality scenic landscape with rural/farming values' acknowledge and confirm the identifying of Bradfield and lands between Luddenham and Wallacia as future investigation areas given proximity to both villages and services, and local outside aircraft noise exposure footprint. 	A rural lands study is currently underway, which will identify potential for agritourism. Any increase in residential would have to meet requirements of MRA. Further planning consideration is required for the identified areas. Specific reference in the LSPS is not considered appropriate.	No change to LSPS
94	Zoning of Moore Point/ Newbridge Rd area	The draft LSPS now gives Council the opportunity to progress assessment of R2-04/2018 in a holistic and comprehensive manner. The proposal gives effect to many of the LSPS priorities and actions.	Council's LSPS Action 11.2 is to be amended to: "Investigate amendments to LEP to rezone Georges River precinct north of Newbridge Road as a mixed-use zone to support the Liverpool CBD and Innovation Precinct, with an extensive open space system and cross-river linkages (short to medium term)." There are a number of issues that must be addressed before rezoning of this land.	Update Action 11.2 to reflect investigation of mixed use.
95	Health	Could add information on obesity, life expectancy, diabetes, and travel to work by car.	Council acknowledges that Liverpool and South West Sydney has high rates of people living with obesity and other health issues that is impacting on their quality of life. Council is committed to providing access to high quality parks and open spaces to the local community. This is done	Add travel to work data as infographic.

2040
Liverpool
Connected
summary – (
Submissions Summary – (

	Issue	Comments	Officer comment	Recommendation
			through planning and designing and activating community and recreation spaces to facilitate social interaction and participation, outdoor gym and fitness equipment, providing high quality pedestrian and cycling infrastructure to connect parks, recreation spaces, town centres, community centres and key transport modes. Council undertake comprehensive consultation with NSW Health and South West Local Health District for provision of social infrastructure, including parks and open spaces that could be utilised for health and wellbeing programs and activities.	
			Broad information on obesity is in Planning Priority 9. Travel to work data can be added	
	Parking	Encourages Council to manage car parking demand through availability and pricing controls, and match this with high frequency public and active transport infrastructure. Parking management innovation could be considered under planning priority 4. While the community want more car parking, evidence shows higher density areas have lower rates of car ownership and use more active and public transport.	Council is currently undertaking a CBD car parking strategy which will take into account the comments raised. The Local Housing Strategy will further address parking provision.	No changes to LSPS
	River	Supportive of improving community access to river though note waterways and wetlands can become a habitat for mosquitoes and increase potential for mosquito-borne disease. Recommend that Council considers strategies to reduce mosquito breeding habitats when planning access and infrastructure along waterways.	Noted. Council has recently adopted a Mosquito Management Strategy 2019 for the ongoing management of mosquitos in the Liverpool LGA.	No change to LSPS
E	Peri-urban agriculture	Support plan to protect remaining rural lands. Fresh food grown in peri-urban areas has access to local markets and provides jobs.	Noted.	No change to LSPS

0
4
õ
$\overline{\mathbf{a}}$
0
×
2
<u>d</u>
5
e
2
_
ъ
d)
-
C
e
5
ŏ
0
ř
ĭ
y - 0
1
1
1
mary – (
1
mary – (
ummary – (
mary – (
ummary – (
Summary –
ns Summary – (
Summary –
ns Summary – (
ns Summary – (
sions Summary – (
sions Summary – (
sions Summary – (
bmissions Summary – (
ubmissions Summary – (
bmissions Summary – (

₽	lssue	Comments	Officer comment	Recommendation
	Social connection	Recommend that opportunities to plan for social connection are highlighted in key challenges and opportunities section.	Agreed.	Update LSPS to refer to opportunities to plan for social connection in key challenges and opportunities section.
		The Connectivity section should focus on social connectivity outcomes. Car dependent suburbs typically have poorer outcomes compared with walkable neighbourhoods.	Agreed.	Add information on social connectivity to introduction of connectivity chapter
	Connectivity	The statement 'Council will facilitate the development and promotion of integrated walking and cycling networks within and between centres' has been placed under Liveability Priority 9, but has greater correlation to Connectivity Priority 1.	The current LSPS structure is considered to be appropriate.	No change to LSPS
		The statement 'Council will improve cycling and walking tracks, and prioritise pedestrian movement in the CBD and around Chipping Norton Lakes' is more aligned to Priority 9.	The current LSPS structure is considered to be appropriate.	No change to LSPS
	Active transport	LSPS should include targets for modal shift to walking, cycling and active travel. There should be actions that refer to the Council will section, as these will be measured and monitored.	Council can investigate the setting of modal shift targets, however this work cannot be completed in the timeframes to adopt the LSPS.	Add 'Council will investigate setting mode shift targets' to LSPS

0
4
6
\sim
9
0
d
_
e
>
0
ă
4
C
Ð
ē
=
5
O
T
ĩ
- X
ry -
ary – (
nary – (
mar
nmary – (
mar
ummar
ummar
Summar
ummar
Summar
Summar
ions Summar
sions Summar
ions Summar
sions Summar
sions Summar
sions Summar
bmissions Summar
sions Summar

₽	Issue	Comments	Officer comment	Recommendation
	FAST corridor /	Interested in positive health potential that this project can bring to residents in disadvantaged 2168 area. Council should include health impact assessment in planning process.	Noted.	No change to LSPS
	affordable housing	There is the potential for corridor to lead to gentrification. Affordable housing targets should be set for along rail and FAST corridors, and investigate a range of affordable housing types, including co-living for key workers and student accommodation.	This issue will be addressed in the Local Housing Strategy	No change to LSPS
	Collaboration	Councils should identify opportunities to collaborate on outdoor sport and recreation facilities with neighbouring councils that have a regional focus.	Agreed.	Update LSPS to reference collaboration on outdoor sport and recreation facilities with neighbouring councils that have a regional focus
	Planning for different age groups	Council should include child-friendly planning strategies in LEP and DCP reviews. A variety of housing options will also assist ageing in place.	Agreed.	Update LSPS to reference child- friendly planning strategies and ageing in place.
	Healthy places	Rationale of priority 9 could be updated to include reference to mental wellbeing, which is an important aspect of health and safety.	Agreed.	Update LSPS Planning Priority 9 to reference mental wellbeing
	Monitoring	The link between 'Council will' and actions is not clear. How will Council measure and monitor statements without corresponding actions?	Noted. The 'Council Will' section identifies ongoing planning policy directions. In addition to Council metrics, the GSC has established 'Pulse' indicators that can be used at a local government area scale.	Update LSPS to note GSC 'Pulse' indicators.

₽	lssue	Comments	Officer comment	Recommendation
	Local jobs	Recommend including a target for reducing the proportion of people leaving the LGA for work, to ensure that new local jobs are secured by local people.	Council's Economic Development Strategy contains further information on local job generation and targets, however this detail is not considered necessary for the LSPS.	No change to LSPS
	Airport	Supportive of precautionary approach to residential development near airport, as there is potential to affect resident health and wellbeing.	Noted.	No change to LSPS
	Sustainability	Supportive of vision as green, resilient, sustainable and water-sensitive.	Noted.	No change to LSPS
96	Warwick Farm zoning	Rezone equine precinct into area capable of sustaining mixed- use residential, commercial and retail development.	The draft LSPS indicates that this area be considered for "a mix of uses". If Council endorses the LSPS, structure planning will be undertaken in 2020. A change to the LEP will then be pursued.	No change to LSPS
	Health and wellbeing	Acknowledge that planning plays an integral role in socially determining the health and wellbeing outcomes of people. Engage with marginal groups like those with disabilities, young people, Aboriginal communities, and migrants and refugees.	Agreed. Planning Priority 4 seeks to ensure engagement with the community as a whole is done effectively. Additionally, collaboration with Aboriginal Land Councils is identified as an element of this priority.	Update LSPS to include additional commentary under 'Key Challenges and Opportunities', to reference 'Social Connection'.
6	Services and programs	Recognise and support delivery of human services as a core component of social infrastructure and match social investment with population growth. It is important to recognise there is both hard (facilities and urban space) and soft (services and programs) infrastructure. Council should collaborate with neighbouring councils in the delivery of hard and soft social infrastructure.	Priority 6 is concerned with the provision of a network of social infrastructure. This includes advocating further to allow Council to raise funds to deliver community facilities through developer contributions. Priority 7 is concerned with the provision of renewed social housing, the improvement of disadvantaged areas and the provision of additional social and affordable housing.	No change to LSPS.

₽	Issue	Comments	Officer comment	Recommendation
			Priority 4 is concerned with ensuring collaboration is prioritised to deliver the best outcomes.	
			Given the existing points on social and community infrastructure identified, it is deemed that the comment is sufficiently addressed within the LSPS.	
	Place-based integrated services	Developing place-based integrated services - one-stop-shop locations embedded on the principles of co-locating a number of social services delivered in a community or neighbourhood centre model – would improve community identity, skills and cohesion. A potential model Liverpool could adopt is the Rooty Hill Village, where affordable aged-care living is coupled within vicinity of multipurpose community hub.	Council acknowledges this approach to providing social services and community infrastructure. The LSPS can be updated with further information to support this.	Update LSPS under Priority 6 – Include an additional point under the heading 'Council Will': "Ensure place-based integrated services by co-locating social services within neighbourhoods."
	Affordable housing	Increase support for affordable housing, particularly those in lowest 40% of income bracket. Supportive of quantifying and measuring needs for affordable housing and developing a local housing strategy to enable better affordable housing options. Affordable housing can be a means of early intervention to minimise the risk of residents becoming homeless.	Quantitative data is provided that outlines the demand for social and affordable housing in the Local housing Study, and will be further addressed in the Strategy. The draft LSPS states Council will also develop an affordable housing contributions scheme.	No change to LSPS.
	Housing diversity	Commit to housing diversity to facilitate access for a rapidly changing community and market.	Submission is addressed within Priority 7. Priority 7 is concerned with improving housing choice for different needs. Council supports increasing the diversity of housing and an increase in affordable rental housing. Under Priority 7, there are various actions to promote housing diversity and affordability within	No change to LSPS.

0
-
2
0
\sim
_
0
0
~
0
Ð
-
_
_
0
1
Ð
÷
2
_
Ð
-
_
-
0
O
0
9
0
Ĭ
y - 0
Ĭ
Ĭ
Ĭ
Ĭ
Ĭ
Ĭ
Ĭ
mmary - (
Ĭ
ummary – (
mmary - (
ummary – (
ummary – (
ummary – (
ummary – (
ns Summary – (
ummary – (
ns Summary – (
ns Summary – (
sions Summary – (
ns Summary – (
sions Summary – (
sions Summary – (
sions Summary – (
sions Summary – (
sions Summary – (
bmissions Summary – (
ubmissions Summary – (
bmissions Summary – (
ubmissions Summary – (

lssue	Comments	Officer comment	Recommendation
		the LGA, which will be further addressed in the Local Housing Strategy.	
		Submission is addressed through Priority 1, 2 and 3.	
Public transport	Advocate for accessible transport infrastructure to reduce levels of transport disadvantage. Carers and community transport providers need facilities that support more than just pick-up and drop-off at medical and	Advocacy is a central element within the LSPS, especially around the provision of public transport infrastructure. This is effectively established within Priority 1, 2 and 3.	No change to LSPS
	community facilities. Recommend increased collaboration with local community transport provider South West Community Transport.	Carers and community transport providers are valued by Council as vital in supporting those with a disability or mobility issues. The purpose of the LSPS is to provide strategic guidance for land use planning primarily. As such, community transport is not within the scope of the LSPS.	
Western Sydney City Deal / WSA	Use the City Deal and WSA to increase social investment in people of Liverpool. Council should target population groups who may have limited employment or education opportunities.	Noted. Council is targeting such population groups with its Making the Connection program and STEM initiative with local schools, in partnership with CSIRO. Planning Priority 11 says Council will work to reduce the proportion of people leaving the LGA for work.	Update LSPS to reference investigation of adding social and sustainable procurement into
	procurement model requiring contractors to employ a procurement procurement procurement.	Council is also investigating changes to its procurement policy to include social and sustainable procurement as weighted factors.	
Housing	How achievable is it to focus growth close to city centre while maintaining low-density character of existing suburbs, given large population increase projections? Can the degree of density under contemplation happen around centres with good public transport connectivity without touching existing suburbs?	LSPS Planning Priority 7 refers to density focused in the City Centre and centres well-serviced by public transport, however it also acknowledges that significant growth will occur in growth areas.	Update LSPS to reference 'established' instead of 'existing' suburbs to better reflect that increased density will also occur in growth areas such as Austral/Leppington

EGROW 04 Attachment 2

2040
Liverpool
Connected
Summary –

₽	Issue	Comments	Officer comment	Recommendation
			There is significant zoned land in growth areas that can house a significant number of people in a low-density format. Since Amendment 52 there is also significant residential capacity in the City Centre. Council's Local Housing Study confirms that there is enough capacity under existing controls to support projected growth.	
	Employment	Industrial land is critical to job creation, which needs to keep pace with major population growth. There is an obsession led by state government, with housing targets, with comparatively little mention of corresponding jobs targets, or targets for land zoned for job-creating uses. Planning priority 12 talks about 'monitoring' and 'preparing flexible planning controls', which in the past has had little effect.	Council has a self-established jobs growth target of 2500 a year, which is referenced in the introduction to the Productivity chapter and in Planning Priority 11, and is reflected in Council's Economic Development Strategy.	No change to LSPS.
		In areas within 400m of public transport, the LSPS should note that the LEP will be amended to require a minimum target of 15% affordable housing. The housing strategy should reflect this.	Affordable housing strategy will be developed as part of the Local Housing Strategy. It will address the Greater Sydney Commission's 5-10% of up zoned land. Council will also use other levers such as VPAs, Council-owned land, and collaboration with State to increase affordable housing provision.	No change to LSPS.
66	Affordable housing	Support for development of affordable housing contributions scheme. Recommend collaboration with CHPs on its development.	Noted.	No change to LSPS.
		Collaborate with CHPs in monitoring and review of housing strategy.	CHPs will be involved in reviews of housing strategy through the engagement processes.	No change to LSPS.
		Growth in jobs identified in LSPS will lead to more demand for key worker housing. Where the LEP is amended to provide additional capacity for employment, there should also be the provision of sufficient housing.	Key worker housing will be addressed through the Local Housing Strategy, which will be placed on exhibition.	No change to LSPS.

I 2040
Liverpoo
Connected
T
Summary

₽	lssue	Comments	Officer comment	Recommendation
			The Local Housing Strategy will address nexus between employment land and housing.	
100	Site specific LEP matter	Add 1/DP1189772, 2/DP1189772 and 1/DP628824 to Area 8 marked in the LEP, offering height and FSR increase.	The LSPS is not the platform in which to pursue site specific development standard changes. A planning proposal can be submitted, which will be assessed on its merits. Council's LEP 2020 planning proposal will also be on public exhibition to make comment.	No change to LSPS.
	City centre	Add action under planning priority 5 to review LEP to ensure planning controls are consistent in City Centre and that anomalies are identified, allowing sites to meet their envisaged highest and best use.	Council is addressing anomalies through its LEP 2020 planning proposal. This will be exhibited and will allow opportunity for comment.	No change to LSPS.
101	Koala protection corridor	Defence needs to be consulted on any corridor marked on its land, including any practical implication of reserving such a corridor. At this stage the inclusion of such an overlay on the structure plan is not supported.	Noted. The overlay will be removed and replaced with text to address collaboration with Defence and adjoining councils regarding protection of koalas.	Update LSPS to remove map overlay and replace with text to address collaboration with Defence and adjoining councils regarding protection of koalas.
	Development surrounding Liverpool Military Area	Encroachment of Defence sites by incompatible surrounding land uses is a significant issue. Council should prudently assess land use or development proposals in the vicinity. Surrounding communities need appropriate buffers.	Council will continue to consult Defence regarding relevant planning proposals.	No change to LSPS
102	Retail planning	Kaufland is eager to enter the Liverpool LGA. The draft LSPS should explicitly recognise the importance of larger-format retail developments in supporting liveability and productivity planning priorities.	The role of stand-alone centres, including bulky goods retailing can be included within the LSPS.	Add wording around the role of stand-alone (bulky goods) retail within PP11.

0
4
0
\sim
0
ŏ
ã
1
š
-
-
ō
e,
^o
e
5
ŏ
Ÿ.
ĭ
- Y
I
I
I
I
ummary – (
I
ummary – (
missions Summary – (
ummary – (
missions Summary – (
missions Summary – (

₽	lssue	Comments	Officer comment	Recommendation
	Connectivity	Acknowledges lack of public transport and need to continue effort to achieve 30-minute city. Kaufland is able to assist in achieving this goal. Agrees that improving public transport and road networks is key to providing access to jobs and services.	Noted.	No LSPS action
		Support for theme, with Kaufland able to help achieve jobs and retail opportunities.	Noted.	No change to LSPS
	t sonder the second	There needs to be clearer direction in LSPS in regards to commercial development, in particular employment lands.	The LSPS can be amended to further elaborate on commercial development and employment lands.	Add text regarding commercial development (retail and office) to Planning Priority 11.
	LVCADIILY	LSPS has a focus on providing low density suburbs, though there is no strategy on how to manage sprawl of housing in respect to infrastructure and services.	Planning Priority 6 addresses the need to provide high quality, plentiful and accessible community facilities, open space and infrastructure aligned with growth.	No change to LSPS
		Suggests the LSPS has a clearer direction for the facilitation of mixed-use developments within identified centres.	The LSPS includes a short term action to review the LEP to align with the Centres and Corridors Study.	No change to LSPS
		Support for theme and Kaufland can help in meeting jobs targets and local employment targets.	Noted.	No change to LSPS
	Productivity	Would like an action relating to encouraging new retail market entrances to support population growth.	Proposed additional commentary is not considered necessary for a land-use planning document.	No change to LSPS
				50

551 Liverpool Local Strategic Planning Statement t 2 Local Strategic Planning Statement Public Exhibition Report

40
20
nected Liverpool
onr
0
s Summary – C

₽	lssue	Comments	Officer comment	Recommendation
		Further economic assessment should be undertaken to identify locations that could support a greater amount of employment generating uses. Council has indicated Edmondson Park, Middleton Grange and Austral as potential locations. The LSPS should improve alignment with Economic Development Strategy, as key findings are not reflected in LSPS.	The LSPS will be updated to include projections of major jobs growth, based on existing data. The Centres and Corridor Study will also review supply and demand in accordance with expected growth. This detail will be included in an updates strategy that will be placed on exhibition in due course.	Add Productivity map with areas of key jobs growth identified.
		Kaufland would like to be involved in review of LEP in regards to alignment of corridors and centres study.	Future planning proposals addressing this study will be placed on exhibition and open to comment.	No change to LSPS
		The LSPS should be updated to include the approximate sq m shortfall of serviced industrial land, and yearly targets to make up for the shortfall.	Council is developing an employment and industrial lands strategy in which further detail can be provided. This strategy will be placed on exhibition.	No change to LSPS
		Council should implement an appropriate land use strategy that delivers a range of small and large format retail spaces.	A Centres and Corridors Strategy is being developed and will inform the LEP as per Action 11.1.	No change to LSPS
		Kaufland expresses strong desire to be involved in development of industrial and employment lands strategy.	Industrial Lands Study has been completed, however a Strategy will be placed on exhibition for comment in 2020.	No change to LSPS
	Sustainability	Support for theme. Committed to incorporating sustainability into developments.	Noted.	No change to LSPS
103	Structure plan	The structure plan should show the upper canal corridor, and describe its function.	Noted. Proposed additional mapping is not considered necessary.	No change to LSPS
				51

2040
Liverpool
Connected
Summary –
Submissions

₽	lssue	Comments	Officer comment	Recommendation
	DUSW	There is no action related to WSUD. There should be a more explicit action that seeks to review the LEP and DCP provisions for WSUD and related stormwater management, with a view to improving these provisions to optimise uptake of WSUD across the LGA.	LSPS addresses Water Sensitive Urban Design in Planning Policy 14. This can been explained further.	Update Planning Priority 14 to contain additional information on WSUD. Add action to Planning Priority 15 to review controls to support WSUD.
	Flooding	In planning priority 15, greater emphasis should be given to the role of stormwater management and WSUD in reducing flooding risk. Adding a more specific action promoting adoption of WSUD in new development, including via LEP and DCP clauses, would help reduce adverse impacts of stormwater on flooding risks.	Planning Priority 15 can be updated to better highlight WSUD and stormwater management.	Update Planning Priority 15 in line with suggestion.
	Waterways	Actions for waterways in priority 14 are limited to LEP review with a biodiversity focus, and green grid studies. The reviews don't extend to water quality and include DCPs. Actions 14.2 and 14.3 could be expanded to include review of relevant DCP provisions. Action 14.2 could be repositioned to have regards to both biodiversity and water quality values.	Agreed.	Amend Action 14.2 to include review of relevant DCP provisions and inclusion of water quality
104	Affordable housing	Suggest revision of action 7.3: "Partner with State Government to investigate the potential for master planned precincts (such as NSW Land and Housing Corporation properties in Warwick Farm) <u>consistent with the NSW</u> <u>Government Future Directions for Social Housing policy</u> by rezoning land to improve and increase social and affordable housing (Short term)	Noted. Proposed additional detail is not considered necessary.	No change to LSPS.

2040
Liverpool
Connected
Summary –
bmissions

₽	lssue	Comments	Officer comment	Recommendation
		Add action in priority 7: "Partner with the NSW Government to investigate renewal opportunities in the wider Green Valley area (medium term)."	Agreed.	Update LSPS to reflect suggestion.
		Add action in priority 7: "Look for opportunities to maintain or increase the existing percentage of social and affordable housing in new land release areas including the Aerotropolis and surrounding growth areas (short to long term)."	Council is working as part of the Planning Partnership to address affordable housing in the Aerotropolis. Provision of social housing new land release areas including the Aerotropolis is a matter appropriately addressed by the State government	No change to LSPS.
	Structure plan	Add the two major public housing estates at Warwick Farm and Green Valley to the structure plan.	The structure plan is not intended to provide this level of detail.	No change to LSPS.
	Mapping	The LSPS would benefit from inclusion of commentary and mapping of APA's Moomba to Sydney Ethane Pipeline and associated measurement length (ML) area to ensure the Statement's vision can be met.	The LSPS mapping is not intended to include detailed information such as location of gas pipelines.	No change to LSPS.
105	DCP	The statement about concentrating residential development in growth areas is of interest as APA's area of interest includes East Leppington, Denham Court, Edmondson Park; and Horningsea Park, Preston, Glenfield, Casula. APA has position about sensitive uses not being located within ML. Council DCP should be updated to address A52885 in relation to community safety and pipeline integrity. Could expand upon current wording under s.2.3.8 of Liverpool Growth Centre	This information will be considered in Council's DCP review.	No change to LSPS
				23

₽	lssue	Comments	Officer comment	Recommendation
		Precincts Development Plan. S.2.3.8 needs to be updated following amendment to SEPP Infrastructure 2007 regarding 'pipeline corridor'.		
	City centre development	Layout of CBD should be examined against Parramatta CBD to identify strengths/weaknesses to make smart planning decisions, to encourage development of commercial buildings.	Noted. Council often examines planning controls and examples from the Parramatta CBD.	No change to LSPS
	Public transport	Advocate for free transport between Warwick Farm and Liverpool stations to encourage growth of the CBD. There should be light rail from Warwick Farm station to Inglis site and parks including Chipping Norton Lakes.	Council's LSPS states that Council will advocate for improved public transport services. This was addressed in Liverpool City Centre Traffic Study 2017. Public transport provision is a State government matter. Light rail is not currently listed as an investigation in Future Transport 2056.	No change to LSPS
106	Warwick Farm zoning	The area in the Warwick Farm equine precinct should be zoned to mixed use, as there is a considerable amount of unused land. This may be more suitable than the Moore Point area in the short term due to infrastructure and potential contamination issues. There should be a shopping centre on the current B5 zoned land. A bridge should connect Moore Point to Scriviner St.	The draft LSPS indicates that this area be considered for "a mix of uses". If Council endorses the LSPS, structure planning will be undertaken in 2020. A change to the LEP will then be pursued.	No change to LSPS
	Industrial	Current industrial land at Scriviner needs to transition to education/advanced manufacturing.	Advanced manufacture uses are currently permitted in this zone. Council is currently preparing an updated Industrial Lands Strategy (Action 12.1), that will include recommendations on embracing innovation and renewing industrial lands Uses may transition over time depending on market factors. This matter will be addressed as part of the structure planning for Warwick Farm.	No change to LSPS

2040
Liverpool
Connected
ubmissions Summary –

EGROW 04

₽	Issue	Comments	Officer comment	Recommendation
	Tourism	There needs to be a plan put in place to deal with tourism generated by the racecourse. The vision and strategy can be seen in redevelopment work at Sha Tin racecourse in Hong Kong, and Moonee Valley racecourse. These principles can be incorporated in LSPS. The equine precinct can provide permanent or serviced apartments to assist in supporting tourism, as well as retail/services.	Planning Priority 11 refers to support for tourism growth, and enhancing tourist attractions. It is considered more appropriate to refer broadly to support for tourism.	No change to LSPS
	Transport	Support of Bankstown metro extension, Fifteenth Ave as ways to meet jobs targets and encourage modal shift. Supportive of early thinking on connected and autonomous vehicles.	Noted.	No change to LSPS.
505	Housing diversity	Endorse need for more housing diversity. Ensuring suitable zoning in existing urban areas through update to LEP will provide certainty and opportunity for greater diversity.	Noted.	No change to LSPS.
Ô	Affordable housing	Welcomes affordable housing contributions scheme.	Noted.	No change to LSPS.
	Sustainability	Supports sustainability actions. Council should include achievable targets against its actions.	Noted. Council resource efficiency and emissions reduction study will suggest appropriate targets.	No change to LSPS
108	Retail	The LSPS does not adequately consider growth of the retail sector, in particularly large format retailing. The LSPS fails to discuss and recognise retail as a large provider of jobs. Council should adopt a new action in Planning Priority 11 that recognises the significance of large format retail to the local economy and that sets actions to investigate further opportunities to accommodate growth in this sector. The CSP and economic development strategy identifies retail expansion opportunities, but further research on location and	The Centres and Corridor Study is currently being developed, and will contain recommendations in relation to this type of retail development. An additional Planning Priority is not considered necessary however additional text regarding large format retailing can be included.	Update LSPS Planning Priority 11 to include additional text addressing large format retailing and jobs related to retail.

2040
iverpool
Connected L
Summary - C
ŝ

₽	lssue	Comments	Officer comment	Recommendation
		retail types needs to be conducted. Further study of the retail sector to enable the proper planning of this sector and key areas for its growth is required.		
		Specialised retail premises should be permissible in a range of land use zones to provide further flexibility.	The Centres and Corridor Study is currently being developed and will address this issue.	No change to LSPS
		Requests meeting with Council to discuss submission.	This is a thorough submission and Council has determined that a meeting is not required at this point in time.	No change to LSPS
	Mixed use zoning	Mixed use zones are supported in more areas, however the LSPS only makes reference in terms of specific areas or development types (resi/commercial). Council must ensure mixed-use zones are applied over a range of areas to permit a diversity of uses, including specialised retail.	No changes to mixed use areas are currently being proposed by Council.	No change to LSPS
109	Warwick Farm zoning	Investigation area for 'mix of uses' should be expanded to include entire racecourse site so that a land use structure plan can be prepared to provide an appropriate transition between the racecourse and future adjoining land uses. It would not be feasible for ATC to incur burden of on-site stabling facilities without benefitting from rezoning and uplift. ATC would only support rezoning and relocation of training facilities if there is a shared opportunity for uplift.	The ATC will be consulted and the Warwick Farm Racecourse will be considered in the context of a significant adjoining land use in the preparation of a structure plan for Warwick Farm.	No change to LSPS ATC to be consulted in the preparation of a structure plan for Warwick Farm
		Council should consult with ATC on any future potential land uses and development controls on racecourse and stabling facilities identified for future investigation for a 'mix of uses'.	ATC will be consulted in the preparation of a structure plan for Warwick Farm.	No change to LSPS ATC to be consulted in the preparation of a structure plan for Warwick Farm

0
¥
P
0
\sim
_
—
0
d
d)
~
_
0
d)
Ľ
0
<u>م</u>
¥
<u> </u>
ō
ŏ
Ŭ
Ŭ
Ŭ
Ŭ
Ŭ
Ŭ
Ŭ
ummary - C
Ŭ
Summary – C
ummary - C
Summary – C
Summary – C
ons Summary – Co
Ibmissions Summary – C
ubmissions Summary – C
Ibmissions Summary – C

₽	Issue	Comments	Officer comment	Recommendation
		ATC recommends consideration of B4 mixed use zoning across subject investigation area. This is appropriate due to proximity of train station, and the variety of land uses would help meet LSPS and District Plan goals.	The draft LSPS indicates that this area be considered for "a mix of uses". If Council endorses the LSPS, structure planning will be undertaken in 2020. A change to the LEP will then be pursued.	No change to LSPS
		Future land use investigations should be supported by relevant housing, land use and urban design studies to identify most appropriate land uses and development controls to benefit Liverpool LGA.	These studies will be prepared as part of the preparation of a structure plan for Warwick Farm	No change to LSPS
	Open Space	Council should consider potential dual-purpose uses of existing open space. There is opportunity for investigation of how the racecourse may be used for dual purposes that don't diminish the primary use for horse racing, but benefit residents. The structure plan fails to identify the site as a key open space asset.	The LSPS will map key public recreation space on the 'Our Home' map. Private open space has not been mapped. The racecourse can be added to the new 'Our Home' map as a recreation facility. Further planning consideration of dual uses would be necessary prior to any reference in the LSPS.	Include racecourse as icon on 'Our Home' map
	Flooding	Council should engage with landowners to identify a holistic flood strategy for the precinct to facilitate filling to unlock the land within the stabling and training facilities area and on the racecourse. A holistic flood study be undertaken to investigate compensatory flood storage solutions in the area, including within the Warwick Farm Racecourse infield as identified by FloodMit.	Flooding can be addressed as part of the preparation of a structure plan for Warwick Farm	No change to LSPS

12040
Liverpoo
Connected
- I.
Summary

EGROW 04

₽	lssue	Comments	Officer comment	Recommendation
	Exhibition	Publicly exhibit technical studies and re-exhibit the LSPS. The LSPS should not be finalised until all technical studies are prepared and the public has the opportunity to comment on an updated LSPS and supporting studies.	All studies will be made publicly available. The LSPS will be amended to refer to implantation of adopted strategies rather than studies. It is not considered necessary to re-exhibit the LSPS, as strategies developed and changes to LEP and DCP controls will undergo exhibition process.	Amend the LSPS to refer to implementation of adopted strategies rather than studies
	Contributions planning	Council should clarify what planning mechanisms are proposed to fund 'high quality facilities'.	Mechanisms are to be investigated by Council, though the LSPS notes advocacy for expansion of what Council can levy for.	No change to LSPS
		Council should consult with public and industry to identify collaborative options to fund infrastructure across the LGA.	Noted	No change to LSPS
	Consultation	Ongoing collaboration and consultation is needed with Coronation and LAC JV regarding Moore Point.	Agreed	No change to LSPS
	Public transport	Short-term action should seek to establish a preferred alignment for the Bankstown to Liverpool metro extension.	Action 1.6 adequately addresses this issue	No change to LSPS
110	Local Housing Study	Moore Point should be acknowledged in Liverpool's Housing Study 2019 as a strategic opportunity to deliver a substantial component of the centres the short, medium and long term housing.	Moore Point will be addressed in the Local Housing Strategy. The Local Housing Study only looked at existing zoned land for housing.	No change to LSPS
	Moore Point masterplan	Moore Point masterplan meets the following LSPS actions: 1.6, 1.7, 1.8, 2.3, 3.2, 4.1, 5.4, 6.1, 6.3, 7.1, 8.2, 10.1, 10.3, 11.2, 11.6, 14.2, 14.3, 14.4, 14.8.	Noted. Action 11.2 notes that investigations will continue into the Moore Point precinct.	No change to LSPS
111	Structure plan	Carnes Hill is identified in the wrong location. It is further west, along Cowpasture Rd. Additionally Kurrajong Rd is	Noted.	Structure Plan amended to position Carnes Hill appropriately

559 Liverpool Local Strategic Planning Statement Local Strategic Planning Statement Public Exhibition Report Attachment 2

0
4
2
0
2
2
e
.≥
σ
e
ច
e
E
5
ŭ
ī.
1
- V
ary
mary
nary
mary
ummary
ummary
ons Summary
is Summary
sions Summary
issions Summary
sions Summary
issions Summary
issions Summary

₽	Issue	Comments	Officer comment	Recommendation
		significant in the broader movement network, and should be identified.		
	Carnes Hill centre	The LSPS should provide additional consideration of the Carnes Hill centre, by promoting its role as an important local employment generator, and a location for promoting a diversity of land use activity, including housing diversity.	The LSPS identifies Carnes Hill as a Local Centre. Jobs growth has been added to a new 'Our Jobs' map.	Include jobs growth projections in 'Our Jobs' map.
	High-density development	There is an opportunity to add R4 zoning around Carnes Hill centre, particularly to the south. This would help to meet Planning Priorities 3, 6 and 7.	Council does not propose to provide additional R4 land in this locality	No change to LSPS
		Planning Priority 12 fails to capture the importance of the B5 lands such as Crossroads in supporting areas of business activity and employment. The priority should be amended to capture the importance that business development zones will have in enabling large format retail uses.	This issue will be addressed in the Centres and Corridors Strategy, which will be placed on public exhibition.	No change to LSPS
112	Retail	Supportive of Council's position to "prepare flexible planning controls to ensure that businesses of the future are not unduly restricted". This should be applicable to the B5 Business Development zone to ensure that these employment lands can easily adapt to changing business practices for large format retail uses in order to support its ongoing viability.	This issue will be addressed in the Centres and Corridors Strategy.	No change to LSPS
	Centres and employment studies	Studies should consider allowing a wider range of service- based uses in B5.	This issue will be addressed in the Employment Lands and Centres and Corridors strategies, which will be placed on public exhibition.	No change to LSPS
113	Skin cancer / safety / health	LSPS should include text under Liveability or Sustainability priorities related to provision of shade in order to reduce skin cancer incidence.	Noted. The provision of shade is an important design consideration and will be considered when undertaking more detailed planning.	No change to LSPS.

2040
Liverpool
Connected
ĭ
ummary
ummar
ummar

Recommendation	Update LSPS to reference Moorebank East in Structure Plan as 'urban development investigation area'	ý	S	Update LSPS at planning priority 7 to improve clarity
Recomr	Update LSPS to reference Moor East in Structure Plan as 'urban development investigation area'	No change to LSPS.	No change to LSPS	
Officer comment	Agree that Moorebank East be referenced in Structure Plan. Proposed additional Actions not necessary.	Further detailed planning is required to establish appropriate timeframes	Implementation timeframes are included in the LSPS.	Amendments to R4 zone in Moorebank has been included in an adopted planning proposal. Council has committed to reviewing R4 zones around local centres <u>to address interface issues</u> . This will be updated in LSPS for clarity
Comments	The LSPS should recognise the significant strategic potential for growth at Moorebank East, which are key for meeting Planning Priority 7. This should be reflected in structure plan, planning priorities and actions. This should include housing diversity potential and the community and recreation facility of Georges Cove Marina. This could be done as a new planning priority or as a new Action 7.8 to support the growth of the Moorebank East area; or Action 6.5 to support residential development of the precinct. The above actions should require any future development in Moorebank should take into account the proposed Moorebank East planning proposals and structure plan.	The 'Georges River precinct' needs clarity in relation to timing and outcomes. Incorporate timing alongside those commitments. The preferred land uses should be reflected in a structure plan in the LSPS.	Where a commitment is made to undertake further studies or undertake detailed planning, Council should incorporate timeframes in the LSPS.	Further clarity is required in final LSPS, as it does not elaborate on whether Council wishes to expand or reduce R4 zones. Amend action 8.1 to address this.
Issue	Moorebank East	Moore Point	Studies	R4 zones

₽	Issue	Comments	Officer comment	Recommendation
		Mirvac is unsupportive of "ensure development remains largely low scale and sympathetic to local character" as it is overly restrictive, and Council should not preclude large, consolidated land holdings from supporting growth and additional density where appropriate. Council should recognise in the LSPS the potential of site-specific planning proposals to unlock the potential of particular sites.	Noted. The LSPS supports additional housing density in the right locations (i.e. in areas well serviced by public transport).	No change to LSPS
		Council should work with the industry to develop an approach to identifying, investigating and implementing pathways to plan for sites with the potential to greatly contribute to the housing, employment and liveability objectives of Council and the LSPS.	Noted. Council is committed to working with the development community to provide good outcomes for the people of Liverpool.	No change to LSPS
	Contributions planning	A number of commitments that will increase contributions and costs associated with development. E.g. How will high- quality facilities be funded? Contributions for infrastructure funding must be transparent, certain and equitable. The cumulative impacts should be addressed, and currently certainty is not high.	Council is conscious of the need for certainty in relation to developer contributions. There are a range of infrastructure and facilities that need to be provided to service new and growing communities that are provided by NSW government, Council and the developer. This Action identifies Council's desire to improve the contributions system and ensure that, where necessary, alternate funding sources are identified, to ensure that our new and growing communities do not suffer an infrastructure deficit.	No change to LSPS

2040
Liverpool
onnected
O
U I
Summary – C
ummary - (

₽	Issue	Comments	Officer comment	Recommendation
	Housing affordability	Build to rent should be accommodated in future planning controls and recognised in PP 7, including the potential of density incentives that encourage best practice design and construction procedures. An action should be to investigate build to rent models, especially in strategic centres/commercial zones, consistent with treatment of residential uses like hotels. Build to rent should be allowed flexibility in meeting Apartment Design Guide and DCPs if it provides comparable amenity.	Build to rent models may be addressed in the Local Housing Strategy and will be considered as part of a suite of policy options to improve affordability.	No change to LSPS
	Local Housing Strategy	Housing strategy should be made publicly available prior to finalising the LSPS.	The Local Housing Strategy will be publically exhibited. The LSPS is not required to be re- exhibited.	No change to LSPS
115	Skin / safety/ health	LSPS should include text under Liveability or Sustainability priorities related to provision of shade in order to reduce skin cancer incidence. Example text has been provided.	Noted. The provision of shade is an important design consideration and will be considered when undertaking more detailed planning.	No change to LSPS
	Moorebank traffic	High rise development has led to increased traffic and the roads are too narrow to accommodate this.	The Phase 1 LEP Review Planning Proposal seeks to rezone part of the R4 land around Moorebank Shopping Centre to R3 Medium Density Residential.	
911	Parking	There is too little parking available at Moorebank shopping centre.	This Planning Proposal has been endorsed by Council and sent to the NSW Department of Planning, Industry and Environment for a Gateway Determination.	No change to LYPS

₽	Issue	Comments	Officer comment	Recommendation
	Public transport	There is not the public transport availability to justify high-rise development in Moorebank. The bus to Liverpool or Holsworthy only runs every 30 minutes.	Should the proposal receive a gateway determination, the proposal will be publically exhibited and affected land owners and residents will be notified.	
	Zoning around schools	The zoning around the school in Moorebank is R4, and is a privacy issue.		
117	Moorebank zoning	Ambience and amenity of Moorebank is being destroyed by high-density development. It has affected parking, traffic, service availability. Council needs to act.	The Phase 1 LEP Review Planning Proposal seeks to rezone part of the R4 land around Moorebank Shopping Centre to R3 Medium Density Residential. This Planning Proposal has been endorsed by Council and sent to the NSW Department of Planning, Industry and Environment for a Gateway Determination. Should the proposal receive a gateway determination, the proposal will be publically exhibited and affected land owners and residents will be notified.	No change to LSPS
	Public transport	There is only one accessible bus service to Moorebank an hour. The M90 bus is difficult to get to for the elderly.	Noted. Council continues to advocate for improved public transport services.	LSPS Planning Priority 1 updated to include advocacy on local bus improvements
	Traffic management	Roads should be built to accommodate expected traffic 20-30 years out, rather than constant upgrades.	Noted.	No change to LSPS
118	High-density development	There should be a limit on the extent of R3 and R4 zones. R3 should only be 10-20% of a street while R4 should only go close to centres with major transport hubs.	The Local Housing Strategy will review the character and form of development within the R3 zone.	No change to LSPS

9	lssue	Comments	Officer comment	Recommendation
	Parks	Parks need better maintenance and additional equipment like gym equipment. Larger parks should have on-site kiosks/coffee shops.	Planning Priority 6 refers to Council's vision for high-quality facilities and parks. This feedback can be provided to the appropriate Council section.	No change to LSPS
			Noted. Any development within 40m of highest bank of a river, creek or estuary must seek approvals from the state government.	
	Georges River	Georges River should be protected from overdevelopment as the river is for everyone.	The protection and enhancement of the Georges River is referenced throughout the LSPS. A number of Actions are included in the LSPS to enhance the environmental qualities of the Georges River with the aim of making water swimmable.	No change to LSPS
			Council has an ambitious plan to create a continuous network of accessible, high quality paths along the Georges River from Casula to Pleasure Point. This will ensure the ongoing enjoyment of the Georges Rivers (and surrounds) for the residents and visitors of Liverpool.	
	Heritage	There should be signs in all parks explaining the history of the land and the person the park was named after.	Council is currently investigating opportunities to undertake a City Centre wide Heritage Interpretation Strategy which will seek to identify significant persons, a themes through the history of the CBD and potential interpretation options. This includes the identification of significant land grant holders. In relation to areas outside the CBD, Council currently considers potential interpretation options on a site by site basis and subject to funding. If there are any particular sites or identities of interest, this information can be	No change to LSPS

₽	Issue	Comments	Officer comment	Recommendation
			forwarded to Council's Heritage Officer who will consider this as a part of a LGA wide approach to heritage interpretation.	
			Liverpool Council recently constructed two entry statements at Warwick Farm and Casula. These are significant entry statements that contain water features and are regularly maintained.	
	City entrances	The main entrances to Liverpool should be beautified with decent well-maintained gardens, like Campbelltown.	Council is also undertaking a beautification program for medium strips and roundabouts. However these improvements are not planned until Autumn 2020 when the cooler weather is expected.	No change to LSPS
			There is a specific LSPS action 14.8 that refers to green entryways.	
	Public transport	There needs to be better rail connections to the new airport and on to Penrith, and a direct connection to Bankstown.	Liverpool Council is working on the Fifteenth Avenue Smart Transit (FAST) Corridor to connect the Liverpool CBD and the airport along the Fifteenth Avenue Corridor. Council has also advocated for an extension the Metro line from Bankstown to Liverpool.	No change to LSPS
	Parking	Parking at stations should be done up front, rather than alwavs plaving catch-up.	Car parking around train stations is the responsibility of Transport NSW. However, Council is working with Transport for NSW to increase commuter parking where we can.	No change to LSPS
			This is reinforced in the LSPS, which states that Council will continue advocating for more commuter car parking around train stations.	
				65

Submissions Summary – Connected Liverpool	2040
submissions Summary – Connect	0
submissions Summary – (nected L
ubmissions Summar	onr
Submissions	1
	ummary – (

₽	Issue	Comments	Officer comment	Recommendation
	Growth area planning	The land sizes in developing areas are too small, and there is 80-90% site coverage, with no space for grass or trees, which will create issues with stormwater runoff, parking and the ability to be self-sufficient.	There are a number of pathways new development can undertake to gain approvals such as the state government housing code or Council's DCP. Both of these provide guidance and requirements for minimum percentages of landscaped area as well and stormwater requirements. Compliance with these requirements are necessary to gain approval for development. The LSPS aims to address the Urban Heat Island Effect by providing a number of actions including the review of the LEP and DCP (Action 15.3). Council has also committed to advocating changes to state policy that allows for such site coverage.	No change to LSPS
	Moorebank	Moorebank can't cope with increased densities, as it is affecting parking, traffic and schools. R4 zoning needs to be reversed immediately. R3 zoning in surrounding streets should also be reversed. There needs to be a limit of number of multi-dwelling houses on each street. The character of Moorebank has not been maintained. High density should be confined to the CBD and the suburbs left alone.	Noted. A Planning Proposal seeking to rezone part of the R4 zone in Moorebank has been forwarded to the Department of Planning, Industry and Environment for Gateway Determination. Should a Gateway Determination be received, the Planning Proposal will be publically exhibited.	No change to LSPS
119	Building quality	Building quality should be overseen by Council inspectors and not private certifiers.	Council certifiers are employed on projects that go through a DA process. State legislation, such as exempt and complying development SEPP, determines whether private certifiers can be used in other cases. Council's fast track process incentivises coming to Council and thus using Council certifiers.	No change to LSPS

0
¥
P
0
\sim
_
0
<u> </u>
0
d
d)
5
-
_
8
d)
4
0
ā
ž
<u> </u>
-
0
0
Ŭ
Ŭ
U I
Ĭ
ry - c
Ĭ
Ĭ
Ĭ
Ĭ
Ĭ
Ĭ
ummary – (
Ĭ
ummary – (
Summary – (
ons Summary – (
Summary – (
ons Summary – (
ons Summary – (
ons Summary – (
ons Summary – (
ons Summary – (
ons Summary – (
ubmissions Summary – (
ubmissions Summary – (
ubmissions Summary – (

₽	lssue	Comments	Officer comment	Recommendation
		Housing should be better quality and more attractive, rather than the boxes built to maximise developer profit. New RFBs are slums of the future.	Council understands the importance of good design. The Apartment Design Guide provides planning and design standards for apartments across the State, including design criteria and general guidance about how development proposals can achieve the nine design quality principles identified. Council continues to encourage good design, including through its design excellence provisions for the city centre.	No change to LSPS
	Parks	No allowance has been made for parks or open space to cater for increased population growth.	Planning Priority 6 of the LSPS identifies the need for high-quality, plentiful and accessible facilities, open space and infrastructure aligned with growth.	No change to LSPS.
	Supporting studies	Reference to studies that have not been published or completed undermines the effectiveness and weight of the draft LSPS, which relies heavily on these documents. Does not support implementation of policy that haven't been put on exhibition or undergone consultation.	Reference to studies in the LSPS will be amended to strategies to be developed, which will be exhibited publicly.	Amend reference to studies in the LSPS to provide clarity on implementation
120		Documents such as the Place Strategy and City Activation Strategy are not acknowledged in the draft LSPS, particularly regarding how they relate to the City Centre Public Domain Masterplan.	Noted. The Place Strategy and City Activation Strategy are acknowledged in the draft LSPS. The City Centre Public Domain Masterplan will address its relation to these documents.	No change to LSPS
	Education	The growing education sector is not adequately supported by the ability to provide student housing in the CBD. Permit student accommodation (boarding houses) in all CBD zoning, ie in B3 zone.	The provision of student housing in the Liverpool city centre is supported. The Local Housing Strategy will investigate options for student housing, and the LSPS updated to better reflect the importance of education.	Add additional information on student number projections and Liverpool as an education destination in Planning Priority 10.
	Night time economy	Supportive. Believes Westfield can play a role in supporting vision. Council should engage with stakeholders in drafting of amended DCP.	Council will consult in its review of the DCP and continuing work regarding the night-time economy.	No change to LSPS.

040
2
Connected Liverpool
ĭ
Summary – C

EGROW 04

₽	Issue	Comments	Officer comment	Recommendation
	Liveability	Supports investigation of establishment of metropolitan scale cultural/entertainment facility. Recommends this happens nearby Westfield to create a cultural and entertainment precinct.	Council notes this support.	No change to LSPS.
	Tourism	Supportive of pursuing LEP and DCP amendments to support tourism and visitor accommodation. Westfield has future desire to have a hotel on site. Recommended this should be acknowledged.	Council notes this support, however acknowledgement of this hotel site in the LSPS is not considered appropriate for a strategic document.	No change to LSPS.
	Mt Pritchard	Part of Mt Pritchard is in Liverpool Council. Mt Pritchard was not mentioned as one of the suburbs in any of the district forums or on the map "Our Home, Our Cultures" on page 26 of the LSPS.	Council held an extensive exhibition period over a 6 week period. The closest face to face engagement to Mt Pritchard were held in the Liverpool CBD (3km away) and Miller Shopping Centre (3.3km away) over several days during the exhibition period.	Amend the "Our Home, Our Cultures" map to identify the suburb of Mt Pritchard.
121		Mt Pritchard has a lookout which could be valued and utilised better in future plans. It could be enhanced with exercise facilities/equipment, and the lookout could be recreated to reflect the city's pride in the changing skyline.	Noted. This feedback will be forwarded to the appropriate team within Council for consideration.	No change to LSPS
	Safety	 To support the "clean, green, safe, sustainable and vibrant" vision, the following is needed: Increase use of CCTV or future suitable technology. Increase patrols. Follow-up with clean-ups. Enhance cooperation between Council, police and ratepayers. 	Noted. Planning Priority 9 speaks to the importance of safety. This feedback can be forwarded to the appropriate Council section.	No change to LSPS.
122	Alignment with District Plan	Draft LSPS diverges from Region and District Plan centres hierarchy, identifying Liverpool CBD as a higher order centre to the aerotropolis. The District Plan shows Aerotropolis as a	The District Plan shows Liverpool as a Metropolitan Cluster and a Health and Education	Add to legend:

₽	lssue	Comments	Officer comment	Recommendation
		Metropolitan Cluster, and Liverpool CBD as a health and education precinct.	Precinct, and the Aerotropolis as a Metropolitan Cluster.	Western Sydney Aerotropolis Core (Metropolitan Cluster)
		All terminology should be reviewed to ensure consistency with State policy.	The same type of markings (squares/circles) have been used in the LSPS as the District/Region Plans.	Liverpool City Centre (Metropolitan Cluster/Health & Education Precinct)
			Reference to Liverpool as Sydney's third CBD will be removed.	Remove reference to Liverpool as Sydney's third CBD
	Structure plan	Structure plan does not highlight key employment nodes. Crossroads is marked as 'protect and enhance established residential areas'. Update to recognise Crossroads Logistics	Industrial land has been mapped. Additionally a new productivity map will list industrial and business zoned land as well as projected jobs	Add to Structure Map: Industrial land at Casula Crossroads
		Centre as an industrial use.	growin.	create new Our Jobs mapping.
		There is no discussion on the important role and function of local contraction of local contraction bow than the reactions bioactedue	The structure plan in the Draft LSPS identifies	Amend the Structure Plan to:
		across the LGA. For example Casula is noted as a local centre in the District Plan but not on the structure plan. The LSPS	with a sman ed up, the local centres that will undergo a review of their R4 zoned land.	Show all local centres identified within the District Plan with their
		should note the importance of local centres and reinforce a clear centre hierarchy that aligns with the Region and District		corresponding 'red dot'.
		plan. The District Plan says Council need to consider which		Amend various Parts of LSPS to:
	Centres	 Will be appropriate to accommodate additional housing as part of their housing strategy; 		Change 'neighbourhood centres' to 'local centres'
		 Will need to grow to provide for goods and services; and 		
		 Need to grow to deliver other roles, such as recreation, cultural, arts, community hubs 		
		LSPS should refer to local centres rather than neighbourhood centres to align with District Plan terminology.		
		Casula should be added to structure plan as local centre.		
				69

I 2040
Liverpool
Connected
1
Summary –
ummar

EGROW 04

₽	Issue	Comments	Officer comment	Recommendation
	R4 review	Clarification is needed behind rationale of reviewing R4 land. Confirmation is requested to confirm that amendments to the LEP will not affect R4 land surrounding Casula local centre.	Action 8.2 can be added to reference rationale of addressing interface issues. This will separate to LEP amendment being pursued under Phase 1, which is due for public exhibition in February 2020.	Planning Priority 7 amended to clarify R4 land review rationale
	Industrial lands	AMP should be engaged on any changes to IN3 land at Crossroads.	Engagement has occurred as part of the Phase 1 LEP Review.	No change to LSPS
	Technical studies	Technical studies were not published alongside draft LSPS. Lack of transparency prevents informed submissions. Draft LSPS should not be finalised until technical studies are prepared and Council has ensured all stakeholders have had the opportunity to comment on the updated LSPS.	Technical Studies are occurring alongside the development of the LSPS. The Draft Housing Strategy will be placed on public exhibition in early 2020 and other strategies will also be exhibited.	No change to LSPS
	Areas outside CBD and airport	There needs to be detailed guidance on future planning direction for areas outside CBD and airport. There is no certainty on future strategic direction for remaining areas.	Guidance on areas outside of CBD and Airport is provided throughout the document and visible within the Structure Plan.	No change to LSPS
	Contributions planning	Need to clarify what funding mechanisms are proposed to fund 'high quality facilities'. Consultation with public and industry is needed to identify collaborative options to fund infrastructure across the LGA.	These mechanisms are to be investigated by Council.	No change to LSPS
123	Housing diversity	Support for Council approach. Council should consider the policy mechanisms that will achieve this. Consideration should also be given to seniors and people with a disability. Supportive of affordable housing targets if aligned with District Plan.	Council's Local Housing Strategy will consider these issues in more detail. The affordable housing targets have been aligned with the District Plan.	Update LSPS to refer to District Plan affordable housing targets
	Sustainability	Supportive of vision. More work will need to be undertaken with respect to many of the actions, and some actions should be given a higher priority than others.	Noted.	No change to LSPS
124	Liveability	The LSPS could refer to the community and recreational hub for Phillips Park Lurnea, funded under the City Deal.	Agreed.	Add Action 6.4 to reference community and recreational hub for
				70

₽	Issue	Comments	Officer comment	Recommendation
				Phillips Park Lurnea, funded under the City Deal.
	2 Kurrajong Road	Plans for site can align with draft LSPS.	Noted. This can be reflected in a planning proposal submitted to Council for the site.	No change to LSPS
125	Casula local centre	The LSPS should support the evolution of local centres, particularly acknowledging the unrealised potential within and around the Casula local centre.	Council is undertaking a Centres and Corridors Study which looks at the role of local centres.	No change to LSPS
126	Airport development	 Placemaking for the aerotropolis and surrounding areas should include a long term visions with: People-focused streets to connect to transport, parkland and creek corridors Fifteenth Ave as a transit boulevard of civic importance A ring road and Fourteenth ave/Devonshire rd as freight efficient While the Planning Partnership will resolve, this could, in principle, be identified and explored in LSPS. 	Actions 13.1 and 13.2 has Council working collaboratively with the Western Sydney Planning Partnership to implement the best planning outcomes for the aerotropolis. Additionally, Planning Priority 2 establishes Councils position on the 15 th Ave corridor. Further detail in the Aerotropolis is not supported until work is completed through the Planning Partnership.	No change to LSPS
	Contributions planning	Business-as-usual statutory planning will not deliver LSPS vision in desired timeframes. Expand Action 6.1 or augment actions to seek alternative funding mechanisms to deliver key infrastructure, including the FAST corridor, within accelerated timeframes.	Agreed. Expand Action 6.1 or augment actions to seek alternative funding mechanisms to deliver key infrastructure, including the FAST corridor, within accelerated timeframes.	Update Action 6.1 to reflect suggestion.
127	Structure plan	Amend structure plan so site (between LUIIP and Western Sydney Parklands) is included as 'growth area'	The structure plan currently maps the western portion of the subject site as Western Sydney Aerotropolis as per the existing LUIIP Stage 1. The eastern area that borders the Western Sydney Parklands is identified as 'protect and	The current area mapped as 'Western Sydney Aerotropolis' will remain, ensuring it is consistent with the LUIP Stage 1.

2040
Liverpool
Connected I
Summary –
ubmissions

₽	Issue	Comments	Officer comment	Recommendation
			enhance established residential areas', which is incorrect. Council acknowledges this error, and will correctly map this as 'growth area'. This correctly identifies the site as subject to the Sydney Region Growth Centres SEPP, and awaiting a precinct plan for the Kemps Creek precinct.	The current area mapped as 'protect and enhance established residential areas' will be instead identified as 'growth area'.
	Industrial land	Recognise proposed rezoning to IN2 with enabling provisions for highway-oriented retailing is consistent with Planning Priority 12	The LSPS is not intended to recognise site-specific proposals' strategic merit. Part of the area falls into LUIIP planning area, which is being addressed by the Planning Partnership and will be updated upon the release of Stage 2 of the LUIP.	No change to LSPS
128	Affordable housing	Supportive of commitment to develop affordable housing contributions scheme. Believes at least 15% of floor space on private development should be affordable, rising to at least 30% on public land.	Council's Local Housing Strategy will address affordable housing including consideration of the Greater Sydney Commission's 5-10% of up zoned land. Council will also consider other levers such as VPAs, Council-owned land, and collaboration with State to increase affordable housing provision.	No change to LSPS
	Mapping	Maps need to be better with more detail.	Maps are being amended to correct anomalies and add appropriate information.	Amend LSPS mapping anomalies and create new mapping to separate out each theme.
007	Population projections	Plan is to 2050 however there is no projection of population to this time.	LSPS is amended to go to 2040 and housing projections in the Local Housing Study go to 2036.	Include housing projections in LSPS up to 2036 in line with Housing Study.
671	Public transport	Sydney metro, fast rail service and Holsworthy extension need to be made short term delivery items, to open preferably before airport. This is needed to encourage public transport use, and encourage more residents.	Short-term timeframes for the purpose of the LSPS are to be completed by end of the 20/21 financial year. It is not envisaged that public transport improvements can be delivered in this timeframe. Council will continue to advocate for early delivery of state infrastructure and	No change to LSPS

I 2040
Liverpool
Connected
1
Summary –
ummar

₽	Issue	Comments	Officer comment	Recommendation
			investigate appropriate timeframes for delivery of the FAST corridor.	
1	Active transport	Action 3.3 (Chipping Norton Lakes active transport routes) cannot be completed until delivery of metro extension.	The delivery of metro has not been confirmed by the State government. Council can investigate active transport improvements in the meantime, taking into account potential metro alignments.	No change to LSPS
		There is confusion as to whether bridge connections from Moore Point are active transport or include vehicular movement. Please clarify.	This is subject to further detailed planning and collaboration with Transport for NSW.	No change to LSPS
	Heritage	There is mention of a heritage activation strategy but there is no more detail on Council's website. Is there more detail?	Council is currently investigating opportunities to undertake a City Centre wide Heritage Interpretation Strategy which will seek to identify significant persons, a themes through the history of the CBD and potential interpretation options. This reference will be updated in the LSPS.	Update LSPS to include reference Heritage Interpretation Strategy.
		There should be a walking tour of Liverpool developed, to encourage liveability and walkability.	Noted. This feedback will be forwarded to the appropriate team within Council for consideration.	No change to LSPS
		Terminology is confusing. Council staff did not know where Moore Point was.	Noted.	Update LSPS inset map to identify Moore Point in legend
	toiot Doint	No mention of proposed zone.	The zoning for the area will be resolved during detailed precinct planning.	No change to LSPS
		Flooding, fire, noise and contamination risk needs to be taken into account.	Noted. Further detail on hazards is incorporated in Planning Priority 15.	Update Planning Priority 15 with further discussion of hazards.
		Transport connections, including fast corridor and metro, need to be taken into account in precinct planning.	Noted.	No change to LSPS

2040
Liverpool
Connected
- Y
Summar

₽	lssue	Comments	Officer comment	Recommendation
	Waste management	Are recycling systems being incorporated in new residential areas, such as in Newington.	All new residential areas have access to waste services the same as the rest of the LGA. All developments are required to submit a Waste Management Plan as part of the development process. Depending on the development, DA referrals are given to the waste team to check and make sure that adequate inclusions have been made to meet council's requirements for waste management. For example this includes bulky storage areas for multi-unit dwellings. Residents also have access to the Community Resycling Centre which accepts problem wastes for free, details and terms can be found on council's website.	No change to LSPS
	Greenery	More greenery is great but provision must be made for maintenance.	Noted.	No change to LSPS
130 LUK E	Industrial land	Council needs to change planning controls for industrial land to keep up with the shift in technology in the industrial sector. Council should consider flexibility of height restrictions in industrial zones to cater for high bay and multi-level warehouse opportunities.	Council has committed to prepare flexible planning controls to ensure businesses of the future are not unduly restricted in 'Council will' section. Council is developing an Industrial and Employment Lands Strategy and will review LEP and DCP to ensure alignment.	No change to LSPS
		Encourage changes to planning directions and controls to increase opportunities for innovation and urban services in desirable locations close to centres. Create new employment	Council is currently preparing an updated Industrial and Employment Lands Strategy (Action 12.1), that will include recommendations on	No change to LSPS

575 04 Liverpool Local Strategic Planning Statement Local Strategic Planning Statement Public Exhibition Report

I 2040
Liverpoo
Connected
Summary –
ns

₽	Issue	Comments	Officer comment	Recommendation
		generating uses that support the existing education and health sectors.	embracing innovation and renewing industrial lands in desirable locations close to centres.	
		Requests Council identify the Moorebank Industrial Precinct as a 'future investigation area' to enable consideration of alternative, more appropriate uses to that of the existing large format warehouse uses at the site (ie B4). Does not support 'retain industrial zonings' along the river site as indicated in inset map. Goodman invites Council to collaborate in the investigation of this 'future investigation area'.	This issue has been extensively reviewed by Council and the proposal to identify the Moorebank Industrial Precinct as a 'future investigation area' is not supported at this stage.	No change to LSPS.
	Exhibition	Goodman seeks to be engaged on future studies/strategies, and a re-exhibited LSPS.	The creation of strategies noted in the LSPS will involve public consultation. It is not proposed that the LSPS be re-exhibited.	No change to LSPS.
131	Parking	Action 1.1 may affect Endeavour's proposed substation at Collimore Park, currently licensed to Council until 2021. Endeavour can terminate agreement with one years' notice.	Noted. Council will engage with Endeavour Energy regarding this site and the potential for future car parking upgrades at Collimore Park.	No change to LSPS.
	Public transport	Action 1.9 may impact on Endeavour assets, and must be considered.	Noted. Endeavour Energy will be consulted throughout the process of enacting Action 1.9 to ensure assets are appropriately considered and addressed in any plans or projects.	No change to LSPS. Action 1.9 becomes Action 1.8.

Recommendation	No change to LSPS
Officer comment	The Liverpool CBD has recently had a major review of the zones and planning controls. There are no plans to review planning controls or building heights within the CBD at this stage. A planning proposal is able to be lodged if changes to the LEP are sought.
Comments	The final LSPS should require that Council investigate anomalies which exist within the LEP, and require that Council ensure that LEP planning controls remain consistent in the Liverpool City Centre for key sites. In particular, the LSPS should foreshadow a review of the planning controls for this site, to ensure it is capable of reaching Council's vision for the CBD and to maximise the potential of Memorial Avenue to serve as a Gateway to the CBD with transitioning heights to the west. Recommendation: Review the draft LSPS in light of the above, and include a new 'Action' under Planning Priority 5 to review the LEP and ensure that planning controls are consistent in the City Centre and allow all sites to meet their envisaged highest and best use, including the subject site. Council to review heights along Memorial Avenue (including the subject site).
Issue	61 Memorial Ave
₽	132

No change to LSPS

Active transport will be a consideration for the Green Grid Study.

cycleways are incorporated into the green grid. This will meet a number of liveability, connectivity, productivity and sustainability priorities.

International Airport with WSIA. Cycling and active transport

There is an opportunity to avoid mistakes of Sydney

Active transport / green connections should be included. It is recommended that

grid

		Amend LSPS to recognise both council's desire to achieve a	Council acknowledges Action 5.4 of the Campbelltown LSPS: "Undertake a feasibility study for the Georges River Recreational Trail between Wedderburn and Glenfield."	Within the rationale section of Priority 6, include an
	Green grid	continuous path over the combined length of the Georges River	Within Priority 6, there is identification of River Connections Program. Council acknowledges the value in having green links across LGA borders, including south to Glenfield.	acknowledgement of the value of collaborating with adjoining LGAs to ensure green links are established.
			Liverpool Council has been in discussions with RMS regarding the upgrade and extension of Cambridge Avenue through to Campbelltown Road and Council is generally supportive as it would relieve industrial and residential traffic heading southbound. There is an existing road reservation and the RMS have completed designs for this future project.	
Moo	Moorebank Intermodal	Drart LSPS could make note of advocating link from Cambridge Avenue to M31 to minimise through-traffic from the Moorebank Intermodal. This would improve opportunity for support for implementation, leading to mutual benefit for both councils.	If Cambridge Avenue was to be extended further to link with the M31, it would have significant potential impacts on the Crossroads Industrial Precinct in Casula. Council would require detailed investigations into possible designs for this link to the M31 before providing support for such a project.	No change to LSPS
			Council is open for future discussions with the RMS and Campbelltown Council regarding detailed investigations for a link through to the M31.	
Č	Cross-border issues	Supportive of working together on cross border issues, such as Glenfield, Bardia and Denham Court.	Council acknowledges this support in working collaboratively.	No change to LSPS

0
4
õ
$\overline{\mathbf{a}}$
0
ŏ
Š.
9
5
e
ъ
Ð
÷.
O
Ð
-
Ц
ō
O
0
1
ĩ
IIV - (
1
IIV - (
IIV - (
mary - (
ummary - (
ummary – (
Summary –
ummary – (
Summary –
s Summary – (
ions Summary – (
sions Summary – (
ions Summary – (
sions Summary – (
sions Summary – (
sions Summary – (
bmissions Summary – (
ubmissions Summary – (
bmissions Summary – (

₽	Issue	Comments	Officer comment	Recommendation
		The LSPS should further acknowledge and encourage flexibility of planning controls to recognise and accommodate	Planning Priority 11 recognises local jobs and businesses however this can be expanded to further address retail jobs.	Update LSPS to further address retailing and retail jobs in Planning Policy 11.
		the changing nature of retail, particularly under Planning Proposal 12, for example responding to online trends and blending of warehouse/retail; and electric trucks that can service outside traditional loading hours. 'Action 12.5 - Review LEP and DCP for employment lands to increase land-use flexibility for retail uses.'	Councils Centres and Corridors study is being finalised. A resultant retail strategy will be prepared in the short term that will further consider the issues raised. Additional reference to retailing can be included in the LSPS, at Planning Priority 11.	Amend LSPS Planning Priority 11 Council will: Investigate planning controls to allow retail centres in Liverpool to keep up to date with technology and retail trends such as online shopping and electric trucks.
135	Retail	The draft LSPS identifies the need to protect and enhance employment and industrial land, but is silent on other employment generating land uses, such as retail. The LSPS does not articulate the existing or future outcome for retail development. Actions should be included to grow employment land uses, including retail, increase flexibility for retail and avoid unduly restricting size or location of retail development.	Planning Priority 11 recognises local jobs and businesses however this can be expanded to further address retail jobs. Additional reference to retailing can be included in the LSPS.	Update LSPS Planning Policy 11 to further address retailing and retail jobs
		Neighbourhood and district centre vitality is underpinned by retail. Any detailed planning for centres (Action 8.4) should recognise this and should not unduly restrict size and format of retail development. The LSPS should promote and provide for sufficient retail floor space in centres by allowing for mixed-use zoning, avoiding restrictions on the size of retail premises, and considering the requirements of retailers, such as servicing, location, visibility and accessibility.	Neighbourhood and district centre vitality is underpinned by many components, including retail. Council's Centres and Corridors study is being finalised. A resultant retail strategy will be prepared in the short term that will further consider the issues raised.	 Amend LSPS planning Policy 8: Council Will: Improve the amenity of local centres, and recognise the role of retail in establishing vibrant local centres
	Moore Point	Supportive of vision for Georges River Precinct, provided size and format of retail is not unduly constrained. Certainty is needed on timing, and would encourage the provision of a staging plan with short, medium and long term opportunities, as well as a more detailed inset map, recognising location of	Noted. Detailed planning for Georges River Precinct has not been finalised.	No change to LSPS

0
4
Ö
2
_
0
0
õ
e
>
р
Ð
t
2
ž
1
5
0
C
Ť
ĩ
<u>y</u> –
1
1
1
1
mary -
ummary -
mary -
Summary –
ummary -
ns Summary –
Summary –
ns Summary –
ions Summary -
bmissions Summary –
ions Summary -

EGROW 04

₽	Issue	Comments	Officer comment	Recommendation
		different uses. Welcomes opportunity to participate in planning.		
	Development	Council should continue to identify, by working with Industry, investigate and plan sites within the LGA capable of appropriate redevelopment (including out-of-centre retail), which are outside of established centres yet can support the employment and liveability objectives of the LSPS. Out of centre retail should be supported in principle.	Council's Centres and Corridors study is being finalised. A resultant retail strategy will be prepared in the short term that will further consider the issues raised	No change to LSPS
	Local character statements	Local character statements should recognise potential for growth, not solely protect existing character. New development sympathetic to character should be supported. These would be better located in DCP, not LEP.	Local character statements will be investigated as per Planning Priority 8 and Action 8.3. Council has not come to a decision on how best to proceed with local character statements, however notes the concerns raised.	No change to LSPS
	Contributions planning	Consider cumulative impacts of development contributions and Housing Affordability Contributions Scheme on the impact on commercial development and housing affordability. More certainty is needed.	Council understands the need to consider the impact of charges on development feasibility.	No change to LSPS
	Review of LSPS	Provision should be made for out-of-cycle updates to the LSPS, or planning proposals that propose alternatives to the LSPS where it can be demonstrated that its objectives and actions have been superseded or are no longer relevant.	The LSPS is planned to be reviewed every four years, in line with the CSP and Council elections. The LSPS can also be updated as required.	No change to LSPS
	Centres and corridors study / Employment and industrial lands strategy	The studies should be exhibited in draft form for comment prior to the finalisation of the LSPS, as they are critical documents that will inform future land use decisions in the LGA.	It is proposed that the Centres and Corridors and Employment and Industrial Lands studies will be publicly available. It is also proposed the strategies developed from these studies will be exhibited for comment.	No change to LSPS
	Parking strategy	Should not preclude dedicated parking for retail. More detailed timing should be provided and the strategy should be completed to inform finalisation of the LSPS.	The LSPS is a broad strategic planning document, and the Parking Strategy will sit in conjunction with the LSPS.	No change to LSPS

lssue	Comments	Officer comment	Recommendation
Transport study	Should be finalised and exhibited before LSPS finalisation	The development of the Transport Study is a short term action of the LSPS. Rather than informing the final LSPS, the study will, if necessary, inform amendments to the LEP.	No change to LSPS
48 George St Liverpool	Site should be recognised in LSPS for its unique opportunity to provide a number of outcomes that support LSPS priorities, including 6.1 and 10.3. – educational and alled education uses (including ancillary office functions); – Place of Worship activities and associated health services including church outreach / community services and ancillary residential uses allied to the church functions; – possible Aged Care / Retirement Living; – Ancillary Office, Business and Retail uses (including allied health services); – Integrated Community Facility space / Convention or Performance space; – Public open space.	Proposed additional commentary and mapping is not considered necessary. Amendments to development standards are required to be addressed in a separate planning proposal.	No change to LSPS
Traffic and transport study	Would like to be consulted on Action 1.2, as this was cited by Council as a reason site could not be considered for development standards similar to neighbouring uses. Has conducted preliminary traffic assessment of its proposal.	Council has updated Action 1.2 to provide further clarity of intent: "Develop a Transport and Mobility Plan and review LEP to ensure alignment". There will be an engagement component in the delivery of this Plan.	No change to LSPS

0
4
Ö
2
_
0
0
õ
e
5
σ
ā)
÷
C)
e
-
Ц
0
ŏ
9
ĭ
Ţ
ĭ
Ţ
hary – (
mary – (
hary – (
ummary - (
ummary – (
ummary - (
Summary – (
ummary – (
ns Summary – (
Summary – (
ns Summary – (
ions Summary – (
sions Summary – (
sions Summary – (
sions Summary – (
bmissions Summary – (
ubmissions Summary – (
bmissions Summary – (

₽	lssue	Comments	Officer comment	Recommendation
		Consider including the following additional measures and indicators:		
		 Tenure profile of Liverpool LGA households – the proportion who own their home and the proportion who rent, either privately or rent social housing; Current supply for social housing demand including wait times for social housing in the allocation zone Rental vacancies Age profile of the community The number of people in LGA living with disability 	The Local Housing Strategy will provide further consideration of affordable and social housing. The LSPS can refer to percentage of people with a disability.	Update LSPS to include information on those with a disability.
137	Affordable housing	There should be a more explicit reference to housing affordability in addition to housing choice and housing diversity. Housing study says there will be an additional 43,452 homes by 2036. Demand for affordable housing is 16,465, representing 38% of homes needing to be social or affordable to meet demand. Given the growing and unmet demand, a more explicit reference to housing affordability is needed, along with diversity and choice.	The LSPS can be updated to make clear the affordable housing challenge.	Update LSPS to make clear the affordable housing challenge.
		Planning for the Aerotropolis needs a commitment to affordable housing. Council should advocate for a significant supply of affordable housing in the Aerotropolis.	Agreed. Council is working with the Planning Partnership to ensure affordable housing is a key consideration of Aerotropolis development.	No change to LSPS.
		Council should commit to ensuring housing growth in City Centre, growth areas and TODs include a significant provision of affordable housing.	Council is addressing requirements for an affordable housing as part of the Local Housing Strategy.	No change to LSPS.
		Where Council says it will advocate for social and cultural infrastructure in established and new release areas, it should also advocate for affordable housing in new release areas.	Council continues to advocate for increased affordable housing across the LGA.	No change to LSPS.

I 2040
Liverpoo
Connected
Summary –
ns

₽	lssue	Comments	Officer comment	Recommendation
		As well as advocating for additional social housing supply, Council should advocate for reform of no-grounds evictions to gives renters in Liverpool stability.	The LSPS is a strategic land use document and thus the issue of no-grounds evictions is not considered to be appropriate. Further consideration may be given during the development of the Local Housing Strategy.	No change to LSPS.
		Council should investigate partnerships with local Community Housing Providers.	This will be a consideration for the development of the Local Housing Strategy. As part of this process, Council has engaged with CHPs to better understand their needs.	No change to LSPS
		Council should commit to a meaningful affordable rental housing target as part of a local housing strategy. Recommends 15% for private developments and at least 30% for government-owned land.	Council will consider affordable rental housing as part of its Local Housing Strategy, however the LSPS must be consistent with the Western City District Plan.	No change to LSPS.
	Social diversity	The LSPS should recognise that culturally and socially diverse communities are inclusive, healthy and creative.	The LSPS can be updated to reflect this.	Update LSPS in key challenges and opportunities section to reference that culturally and socially diverse communities are inclusive, healthy and creative.
	Accessibility	Council should include commitments and actions to provide for well designed, well located and accessible and adaptable housing for people living with disability. Planning controls should include reference to the levels of the Liveable Housing Design Guidelines (LHGD) from Liveable Housing Australia. Recommend that LHS and DCP contain inclusion of more specific guidance around delivery or residential dwellings informed by Universal Design principles – significant proportion silver, and a proportion gold or platinum. LSOS can reference seven principles of Universal Design.	The Local Housing Strategy will address mechanisms to ensure housing is adaptable. LSPS can be updated to reflect commitment to the provision of suitable housing for all community members. The following DCP can look at ways in which Council can incentivise or require adaptable housing.	Update LSPS to reflect commitment to the provision of suitable housing for all community members.

₽	Issue	Comments	Officer comment	Recommendation
		The LSPS should include an analysis of the current and future housing needs of people living with disability in the LGA.	This analysis will be addressed in the Local Housing Strategy.	No change to LSPS.
	Technical studies	Exhibit studies that informed the LSPS.	Studies will be provided as they become available. Some studies will inform strategies, which will be placed on public exhibition in due course.	No change to LSPS.
	Review of R4 land	This should be included as an action/commitment elsewhere in the LSPS, not just in the structure plan.	Agreed. The LSPS can clarify intent and add as an action into Planning Priority 7.	Update LSPS to clarify intent and add as an action into Planning Priority 7.
	Housing supply	Additional capacity should be considered for areas and sites with specific merit outside of centres, to provide for choice/affordability. This should be based on proximity to centre/distance to green space/with large lot size and near a train station.	Council's LSPS supports increased housing choice in areas close to major transport nodes and amenity.	No change to LSPS
138		Salvation Army site at 11 Jersey St Busby, should be part of Miller Town Centre masterplan. Would like for increase in development standards and change to B4 to accommodate a greater variety of land uses.	The LSPS does not deal with site-specific requests. This can be considered during the development of the Miller Town Centre masterplan process. Otherwise a planning proposal may be submitted and will be assessed on its merits.	No change to LSPS.
	Site specific requests	R2 zone bounded by Camden Valley Way, Cowpasture Rd and two north-south creeks should be rezoned R3 to accommodate a variety of housing types outside nearby centres. SP2 zone should be amended to run along north-west boundary, or land should be acquired.	The LSPS does not deal with site-specific issues. Further to this, the area has been zoned under the Sydney Region Growth Centres SEPP. In regards to the SP2 zone, this is marked as land for acquisition. As a classified road, Council is not the acquisition authority.	No change to LSPS.
		86A Bathurst St should be amended so all site is included as same FSR and in Area 8.	The LSPS does not deal with site-specific issues. A planning proposal may be submitted and will be assessed on its merits.	No change to LSPS.

2040
Liverpool
Connected
- X
Summary
ubmissions
ົ້

EGROW 04

₽	Issue	Comments	Officer comment	Recommendation
			It should be noted, however, that part of the site is slated for acquisition as a road reservation therefore change of development standards for this part of the site is unlikely to be supported.	
		8 Banyule Court Wattle Grove should be rezoned to R3, with the zone following the more natural border of Anzac Creek and the SP2 zoned land. This can support planning priority 8 and provide housing diversity and choice outside centres.	The LSPS does not deal with site-specific issues. The Local Housing Strategy will provide further guidance on changes to zoning needed to support housing diversity. A planning proposal may be submitted and will be assessed on its merits.	No change to LSPS.
		Supportive of Council's commitment to seek to reduce air pollution. Council has opportunities through planning system to reduce emissions impacting on local and regional air quality. The major source of human-made fine particle emissions in LGA is domestic wood fire heaters. Council can mitigate this by planning for energy efficient residential development and restricting wood fire heaters.	Noted. Council's DCP review will investigate changes to controls that take into account wood fire heater pollution.	No change to LSPS.
139	Air quality	Supportive of walkability around centres and active/public transport, and increasing tree canopy. Land use conflict should also be considered in terms of air quality and residential development near major road corridors, freight hubs and industrial land. A key consideration should be approached that help prevent risks for land use conflicts. Actions would benefit from strengthening to demonstrate how Council support for health and wellbeing will be delivered through healthy urban design and placemaking. For example, review Council's development control, policies and guidelines that deliver design excellence that address management of noise and ar quality. Council may also want to include guiding principles and controls to address air quality and noise issues along major roads. Overshadowing can lead to poor public amenity, and canyoning can impact air	Council's LEP and DCP considers issues to do with land use conflict regarding residential near industrial uses or near classified roads. Additional references can be included in the LSPS addressing opportunities for support for health and wellbeing being delivered through healthy urban design and placemaking.	Include additional references in Planning Priority 9 addressing opportunities for support for health and wellbeing being delivered through healthy urban design and place making.

I 2040
Liverpool
Connected
1
Summary –
ummar

EGROW 04

₽	Issue	Comments	Officer comment	Recommendation
		quality. Parramatta Road Transformation Project could guide. EPA guidelines (attached) can also assist.		
		LSPS does not mention noise management, other than aircraft. There is opportunity in LSPS to help better understand and deliver noise management approaches to improve local amenity, eg precinct planning, reviewing development controls, public domain improvements and precinct-based sustainability initiatives. Action 28 of District Plan related to interface of industrial, trade and intermodal facilities should be addressed in LSPS.	The LSPS addresses noise concerns in terms of mixed use development in the city centre. Place based planning in neighbourhood and district centre (Action 8.4) would also address noise. Local Planning Priority 12 can be updated to discuss the interface of industrial, trade and intermodal facilities.	Include references in Priority 12 to address the interface of industrial, trade and intermodal facilities.
	Noise	Action 11.5 to increase land-use flexibility for festival uses needs to include understanding of noise management.	Council's Public Event Manual has noise considerations that cover this issue.	No change to LSPS.
		Land-use conflict with mixed use development needs to be addressed. Council may want to review existing controls to assess if they are contemporary and able to meet community expectation for new mixed use development.	Action 5.1 states Review Development Control Plan (DCP) to ensure the 18-hour economy can be suitably protected from reverse amenity issues.	No change to LSPS.
		LSPS could provide a mechanism to review key roadways or transport corridors where future change in traffic growth is predicted, and set appropriate noise controls early to guide future development. Review guidance doc (attached).	Noise requirements are set through Australian Standards and relevant SEPPS, and the LSPS is not the vehicle for including such mechanisms.	No change to LSPS.
	Water quality	To help strengthen commitments in LSPS, Council should consider reviewing WSUD or stormwater controls, policies and guidelines to make contemporary to ensure they delivery key waterway health outcomes. Council may also consider joint work with other councils on initiatives to improve waterway health.	The LSPS can be amended to update the work Council is doing in relation to WSUD, and any partnerships and future work.	Update LSPS to address the work Council is doing in relation to WSUD at Planning Priority 15.
		Council may wish to liaise with Sydney Water regarding the role of treated wastewater and stormwater as part of	Planning Priority 15 states that Council will pursue opportunities with utilities to deliver integrated	No change to LSPS.

₽	lssue	Comments	Officer comment	Recommendation
		investigation into promoting integrated water cycle management.	energy, water and waste infrastructure where community benefits are delivered.	
		Council could consider an additional action under PP15 "Increasing permeability both in public and private domains through development controls and public domain improvements where appropriate"	Council can include references to increasing permeability both in public and private domains through development controls and public domain improvements where appropriate.	Include references in Planning Priority 15 to increasing permeability both in public and private domains.
		Council may wish to explore and promote use of green building rating tolls, eg NABERS, Green Star, and programs like Sustainability Advantage. Could also investigate use of incentives to driver higher standards in key centres. Or explore precinct-based sustainability standards. Review EPA guidance notes on these topics.	Council's Emissions Reduction and Resource Efficiency Study will address these concerns. It is listed in the draft Action 15.1 as the Climate change study, however the name will be updated.	No change to LSPS
	Waste and resource	Priorities could be strengthened to include specific actions relating to key waste streams or activities. Waste management and infrastructure planning should be considered as part of LSPS.	The LEP will be updated to incorporate waste management in its design excellence provisions (Action 15.2). Waste management can be added to Action 15.5.	Update LSPS to add Waste management to Action 15.5
	recovery	Shared or community spaces present opportunities for circular economy outcomes. For example, food donation or organic waste management infrastructure (community composting) or reuse and repair centres.	Noted. Council's Resource Efficiency and Emissions Reduction Study will cover waste concerns.	No change to LSPS
	Contaminated land management	Limited information presented on urban hazards other than heat. Soil and groundwater contamination is also important. The LSPS can be used to support meeting requirements of SEPP 55. There is the opportunity to have an action to review current planning approaches undertaken for management of contaminated land, for example development of a Council policy. The LSPS could also set directions for enhanced planning controls, particularly when planning for more	The points raised are supported. However proposed level of detail is not appropriate for the LSPS.	No change to LSPS

I 2040
Liverpoo
Connected
Summary –
ns

₽	Issue	Comments	Officer comment	Recommendation
		sensitive uses such as schools and low-density residential in and around areas with the potential for pre-existing contamination. Check EPA guidance note for more information.		
		Supportive of the South-West metro extension being delivered in a timely manner.	Noted.	No change to LSPS
	Public transport	Supportive of Fifteenth Avenue corridor. Strongly supports rapid bus connectivity to facilitate early activation of land uses Noted. surrounding WSA.	Noted.	No change to LSPS
140		Supportive of Planning Priority 10 – world class innovation precinct committed to collaboration. There is a need to take a collaborative approach to the provision of student accommodation to meet demand.	Noted.	No change to LSPS
	Education	Supportive of Planning Priority 11. Council should amend its section on reducing proportion of people leaving LGA to work to also include reducing proportion of people leaving LGA to study. Could include information on educational differences between east and west. There is room for improvement, and support of the tertiary education sector is necessary to increase proportion of people with Bachelor or higher degrees.	Agreed. Amend LSPS wording to read "Reduce the proportion of people leaving the LGA for work and study".	Amend draft LSPS wording to read "Reduce the proportion of people leaving the LGA for work and study".
141	Warwick Farm	Support Council's strategic priorities to create a mixed-use master-planned precinct at Warwick Farm. Recommends LSPS is amended to clearly acknowledge that planning for the future rezoning of Warwick Farm must be undertaken on a precinct-wide basis, and site-specific proposals must clearly identify precinct-wide implications regarding traffic, flooding, housing and employment.	The draft LSPS indicates that this area be considered for "a mix of uses". If Council endorses the LSPS, structure planning for the entire area will be undertaken in 2020. A change to the LEP will then be pursued. Further detail is not considered necessary for the LSPS.	No change to LSPS

0
4
õ
_
2
-
0
0
×
<u></u>
-
e
>
_
0
Ð
C
Ð
Ē
=
5
0
O
2
1
y - 0
1
1
1
1
1
mmary - (
ummary – (
ummary – (
ummary – (
Summary –
ummary – (
ns Summary – (
Summary –
ions Summary – (
sions Summary – (
ions Summary – (
sions Summary – (
sions Summary – (
sions Summary – (
sions Summary – (
sions Summary – (
ubmissions Summary – (
ubmissions Summary – (

₽	lssue	Comments	Officer comment	Recommendation
		Transit-oriented development at Warwick Farm contributes to achieving Planning Priorities 4, 7, 9, 10 and 11. A concept master plan has been provided indicating a proposed outcome for the site consistent with the LSPS.	The LSPS does not consider site-specific proposals, however a planning proposal is still able to be lodged.	No change to LSPS
	General	Supportive of initiatives and priorities, which largely align with Future Transport, including active transport and Fifteenth Ave.	Noted.	No change to LSPS
142	Freight	 LSPS needs to: Acknowledge that all land use activities and zonings have freight, logistics or servicing requirements that need be adequately supported by planning instruments Providing suitably designed spaces on site for freight to be carried out in a safe and contained way Providing access to these spaces at flexible operating hours Designing spaces that accommodate a diverse range of vehicles and activities that support the full life-cycle of a precinct 	The LSPS can be amended to have more explicit reference to freight challenges	Update LSPS to better reference freight issues, as discussed in assurance meeting.
		The LSPS has to include more explicit alignment with the NSW Freight and Ports Plan 2018-2023 to include importance of freight transport in Liverpool, Aerotropolis and Agribusiness network planning.	The LSPS can be amended to reference NSW Freight and Ports Plan 2018-2023 to include importance of freight transport in Liverpool, Aerotropolis and Agribusiness network planning and the link between KSA and WSA.	Update LSPS to reference NSW Freight and Ports Plan 2018-2023 to include importance of freight transport in Liverpool, Aerotropolis and Agribusiness network planning and the link between KSA and WSA
		There is no articulation around urban freight, aerotropolis and Further detail of freight challenge can be added. agribusiness and the link between KSA and WSA.	Further detail of freight challenge can be added.	Update LSPS to better elaborate on freight task.

₽	Issue	Comments	Officer comment	Recommendation
		Council needs to note that Commonwealth land at Wattle Grove is the national defence logistics and warehousing site for all modes of freight transport.	Proposed level of detail is not considered appropriate for the LSPS	No change to LSPS
		Council needs to note that banning of dangerous goods vehicles from integrated motor network means there will be freight travelling on east-west road connections through LGA.	Proposed level of detail is not considered appropriate for the LSPS	No change to LSPS
		There is repeated reference to the LUIIP however Council needs to address infrastructure and associated corridor protection and new flexible land use zones unique to the aerotropolis.	These issues will be addressed in the LUIIP through the Western Sydney Planning Partnership.	No change to LSPS
		Suggest Council includes discussion recognising link between good planning for and efficient management of freight, and securing good place outcomes.	Planning Priority 12 can be updated to better reflect the freight task and reducing impacts on local community	Make change as suggested in officer comment
		Consider how Transport land can be utilised to support placemaking outcomes, enhance transport outcomes and meet local housing needs.	Council is committed to collaborating with DPIE Transport Cluster to address this matter.	No change to LSPS
		Include action to support the take-up of electric vehicles, such as charging infrastructure – support liveability and sustainability.	LSPS can be amended to reference the take-up of electric vehicles and charging infrastructure.	Update LSPS to reference the take-up of electric vehicles
		Planning Priority 5 would benefit from a discussion of last mile freight – both the role it plays helping to create a sense of place, and the importance of good planning for and management of the task to ensure it does not detract from amenity. An action should be to ensure that good planning for freight and servicing is reflected in the LEP/DCP.	Council is committed to collaborating with DPIE Transport Cluster to address this matter. Further detail on freight has been added.	Add Council will to PP12: "Collaborate with TfNSW to address the growing freight task and support actions the State Government and industry need to take for the efficient, safe and sustainable movement of freight, in line with the NSW Freight and Ports Plan 2018- 2023"
				5

040	
-iverpool 2	
inected I	
nary – Cor	
ns Sumn	
Submissio	

₽	Issue	Comments	Officer comment	Recommendation
		There needs to be more detail on the freight corridors around the agribusiness precinct. For example, freight network connections between agribusiness and Intermodals, OSO, east-west road connections.	LSPS can be amended to provide more detail on freight corridors in mapping	Update LSPS transport map to provide more detail on freight corridors
		Implementation would be medium term for freight and logistics investment, as global freight forwarders and domestic transport operators for road, rail sea and air will consider splitting or redesigning their consolidation process and infrastructure servicing hubs between KSA/WSA/ St Marys/ Moorebank, Erskine Park/Eastern Creek/ Wattlegrove defence national distribution centre.	Noted.	No change to LSPS
	Housing growth	Priority around increased density around stations will add pressure to Sydney Trains operations and add risks associated with maintenance and protection of infrastructure. Council should continue to advocate for delivery of transport infrastructure that can be well integrated into land use planning. It is recommended that Council engage and collaborate with TfNSW at each future stage of planning, including LEP amendment.	Noted	No change to LSPS
		Any changes to LEP should cover setback from rail corridor.	Noted	No change to LSPS
	Contributions planning	Sydney Trains has HV aerial powerlines in local streets which can impact on greater densities. Council should consider collecting developer contributions to underground overhead powerlines.	Noted	No change to LSPS

0
9
8
_
2
0
0
d
5
e
_
σ
e
5
20
¥
1
5
0
0
9
1
y - 0
Ţ
Ţ
Ţ
Ţ
Ţ
Ţ
ummary – (
Ţ
ummary – (

₽	Issue	Comments	Officer comment	Recommendation
	Movement and place	 A movement and place approach needs to be considered to achieve both the transport and land use (place) aspects of the LSPS, particularly outside the Collab Area. This can be done by: Mapping desired future place improvements or place outcomes Mapping major movement corridors and identify future transport needs to support place vision Overlaying two maps to identify conflicts, trade-offs, decisions or opportunities for achieving vision 	Proposed level of detail is not appropriate for the LSPS	No change to LSPS
		The LSPS should identify measures to future-proof local neighbourhoods for emerging and future forms of micromobility (such as ebikes and escooters). Walking and cycling links should be designed to comfortably cater for growing volumes and different types of mobility.	LSPS can be updated to address micromobility	Update LSPS Planning Priority 1 to reference micromobility in Rationale and Council Will section
	Active transport	Principle Bicycle Network (PBN) layers have been provided to Council. The LSPS should consider aligning bicycle network planning with the PBN to identify strategic cycling connections to inform Council's wider land use and local road network planning.	The Bike Plan has been based on the Principle Bicycle Network and as such no update is considered necessary.	No change to LSPS
		The LSPS should consider opportunities to increase rates of walking and cycling to schools.	This LSPS commits to improving active transport rates.	No change to LSPS
		 The LSPS should clearly establish principles and identify measures to encourage walking and cycling as transport options for everyday trips, including: The provision of safe, high-quality walking and cycling links that cater for local community movement Creation of through-site links through larger blocks, where new cycling and walking routes provide connectivity and permeability 	Additional information can be included in Planning Priority 3	Update Planning Priority 3 rationale to reflect concerns

2040
Liverpool
Connected
Summary –
ons

₽	Issue	Comments	Officer comment	Recommendation
	Safety	Future planning of local communities should consider and explore options to include safety upgrades at intersections to deliver safer and more controlled vehicle turning to reduce side impact crashes, particularly in areas with older and vulnerable road users.	Noted	No change to LSPS
	Vision	The LSPS refers to Liverpool as Sydney's third CBD. This is not consistent with the GSRP or District Plan, where Liverpool is one three existing centres for the Western Parkland City, which have equal weight.	Noted	Remove reference to Sydney's third CBD
	Fifteenth Ave	TfNSW will continue to work with Liverpool on the FAST corridor.	Noted.	No change to LSPS
		TfNSW will work with Council to support a rapid bus connection as committed in the Western Sydney City Deal.	Noted.	No change to LSPS
	Public transport	Suggest addition of following action to align with District Plan: "We will work with Transport for NSW to support and implement travel behaviour change programs to help manage demand on the transport network, including by requiring new developments and businesses operating in key precincts to develop and implement travel plans to encourage the use of sustainable transport choices."	Agreed	Update Planning Priority 1 rationale to include suggestion.
		Council should work with TfNSW on bus network improvement to provide better public transport connections between train stations and homes instead of only increasing commuter car parking around train stations.	Noted. Planning Priority 1 can be updated to include improved local bus connections	Update Planning Priority 1 rationale to reference local bus services.
		The LSPS refers to the South West Rail Line extension as being planned for and delivered. At this stage the extension is part of a broader strategic investigation with funding and timing unconfirmed.	The LSPS action is one of advocacy. Council is advocating for early planning and delivery of the South West rail line extension.	No change to LSPS

_
읖
6
2
0
ŏ
ā
P
\geq
σ
e
5
e
ō
\mathbf{O}
-
ĭ
y - (
Ĭ
ry - (
ummary – (
Summary – (
Summary – (
ons Summary – (
issions Summary – (
ons Summary – (
issions Summary – (
issions Summary – (

₽	Issue	Comments	Officer comment	Recommendation
		The LSPS refers to a fast-tracked City and Southwest Metro. Construction of the extension is not a government commitment. Early planning has been committed to begin over the next four years.	This is an LSPS advocacy action. Council will continue to advocate for the early commitment and delivery of the extension.	No change to LSPS
	Airport noise	The LSPS discusses the impacts of noise constraints on development around the airport. The Planning Partnership will develop precinct plans consistent with the LUIIP, which will permit residential use outside of limiting airport noise contours.	Council is advocating a precautionary approach to residential development within the LUIIP area, including as a member of the Planning Partnership. Council will continue to advocate for a precautionary approach to be taken in the finalisation of the LUIIP.	LSPS updated to make clear Council's advocacy position
	Airport	TfNSW will work with Council and Government agencies to achieve Planning Priority 13 – viable airport	Noted.	No change to LSPS
	Sustainability	Suggest adding following to Planning Priority 15 to align with District Plan: "Transport demand management initiatives including working from home, improved walking and cycling, improved access to car sharing, carpooling and on-demand transport will also be considered in helping to achieve net- zero greenhouse gas emissions."	Noted.	Updated Council will section of Planning Priority 15 to reference transport demand management
	Housing diversity	Supportive of increasing housing diversity. Suggests action that planning controls are developed to encourage a diversity of housing types in appropriate locations.	This matter will be considered as part of the development of a Local Housing Strategy.	No change to LSPS
143	Affordable housing	Council should consider incentive-based approaches to provision of affordable housing.	Affordable housing treatment will be considered as part of the development of a local housing strategy.	No change to LSPS
	Consultation	Consultation with individual property owners affected by changes proposed to their property in the draft LSPS should be undertaken.	All landowners and residents have been notified through an extensive public exhibition process (including flyers to all owners and residents).	No change to draft LSPS

0
<u> </u>
Z
2
\sim
-
0
0
d
Ð
>
-
<i>x</i>
Ĕ
3
ā
7
=
0
C
S.
U I
Ĭ
ry – c
Ĭ
Ĭ
Ĭ
Ĭ
Ĭ
ummary – (
Ĭ
ummary – (
Summary – (
ons Summary – (
Summary – (
ons Summary – (
ons Summary – (
ons Summary – (
ons Summary – (
ons Summary – (
ons Summary – (
ons Summary – (
ubmissions Summary – (

₽	lssue	Comments	Officer comment	Recommendation
			Further consultation will occur as part of Phase 1 of the LEP Review.	
		Council should undertake advocacy through its community consultation to assist in understanding the need for, and benefits of, higher density development in appropriate locations, and housing choice/diversity.	Significant community consultation has been undertaken as part of both the development and the exhibition of the draft LSPS. Survey findings form part of the Council report. The Local Housing Strategy will also be publicly exhibited.	No change to LSPS
	Contributions planning	Infrastructure funding strategies must consider the cumulative financial impact of taxes, levies, contributions and fees upon development feasibility when preparing contributions plans. This should involve consultation with stakeholders.	The draft LSPS includes an action for Council to advocate changes to contributions planning and seek alternative funding mechanisms to deliver high quality facilities. Council understands the need to consider development feasibility when reviewing contributions. Changes to contributions plans involves stakeholder consultation.	No change to LSPS
	Savings provisions	Council should include appropriate transitional arrangements to ensure that development applications and planning proposals are assessed under the controls, policies and plans which were applicable at the time the application was lodged.	The LSPS will only become a consideration for the assessment of Planning Proposals once it is endorsed. Draft Planning Proposals are only a matter of consideration once it is the subject of public consultation under the EP&A Act 1979.	No change to LSPS
	Ongoing planning	Preparation of an LSPS and new LEP should not delay processing of rezonings and development applications lodged with Council.	The LSPS will only become a consideration for the assessment of Planning Proposals once it is endorsed. Draft Planning Proposals are only a matter of consideration once it is the subject of public consultation under the EP&A Act 1979.	No change to LSPS

2040
Liverpool
onnected
O
U I
Summary – C
ummary - (

₽	Issue	Comments	Officer comment	Recommendation
	-	The LSPS should clearly address future housing targets and demonstrate commitment to future housing supply.	Housing targets will be investigated through the development of a local housing strategy. This will be placed on exhibition for comment.	No change to LSPS
	Housing targets	The draft LSPS must address future housing targets in detail, including identifying locations, heights and densities, in particular around future and existing transport hubs.	This will be addressed through the development of a local housing strategy.	No change to LSPS
	Mixed use development	Mixed use development should be supported in all strategic and local centres. Fifteenth Ave should support high density nodes. The LSPS should ensure mixed use centres are planned for and encouraged in all centres. A commercial use only approach should be avoided.	The LSPS notes that Fifteenth Ave will support compact transit and landscape oriented development. Further consideration of mixed use development will be a matter of consideration for the Centres Strategy, which will be prepared in the short term. It should be noted that Amendment 52 to the LEP included rezoning much of the City's B3 to B4 land.	No change to LSPS
	Transit-oriented development	Density and height must be maximised around transport nodes. There are no changes proposed to land use around existing stations and hubs, which will remain medium or low density. The draft LSPS should be revised to include higher densities and heights around current and future transport nodes.	This is addressed through Planning Priority 7 – "Housing choice for different needs, with density focused in the City Centre and centres well serviced by public transport"	No change to LSPS
	Industrial land	Transition of redundant industrial land to higher order uses should be encouraged. Key strategic industrial precincts should be supported and protected with appropriate planning controls. Adopt a site-by-site approach to proposed rezoning of industrial land.	Council has noted in the LSPS consideration of mixed use development for a current industrial land asset. The LSPS will also be updated to include more discussion of protection of key industrial precincts. This matter will be further considered in the Employment Lands Strategy, which will be prepared in the short term.	Update PP12 to include discussion of safeguarding key industrial precincts

12040	
Liverpoo	
Connected	
Summary -	

	Comments	Officer comment	Recommendation
	Innovation precincts must be supported by flexible planning controls. Residential should be considered in the innovation precincts. Development controls for the Liverpool Innovation Precinct should be flexible to permit a variety of development types, including residential, commercial, light industrial and others as appropriate. Strict control will inhibit the organic formation of a truly innovative precinct.	Noted. This matter will be considered in the future detailed planning of innovation precincts	No change to LSPS
Warwick Farm	Action 7.3 – partnering with State Govt to investigate master planned precinct – is a short-term action. The action is vague and contains no real timeframes, and gives no sense of what is being planned for this areas. More concrete timeframes are required for what is being considered/planned for the northern part of the Warwick Farm precinct.	The area will be subject to detailed planning that will also include appropriate delivery timeframes. The action timeframe has been amended to a medium term action and State housing assets at Green Valley added to better reflect Council's desire for renewal to occur in regards to ageing social housing stock throughout the Liverpool LGA, and a more likely assessment of when these projects would be actioned. Council supports working with Government to redevelop ageing stock, and incorporate private, affordable and social housing to reduce levels of disadvantage. Further detail will be provided in Council's Local Housing Strategy.	Change LSPS action to medium term and add Green Valley as an investigation area

EGROW 04

₽	Issue	Comments	Officer comment	Recommendation
		LAHC supports rezoning to allow for higher density development. It would make sense for this precinct to be prioritised due to its suitability for revitalisation, however it seems the equine precinct is being given preference, with the Masters site proposal being supported, with no regard for other planning proposals in the northern part of Warwick Farm, which have been identified as having strategic merit. Council staff had previously said this area had been identified for employment, not residential.	Council will continue to work with State Government, including the LAHC, to investigate residential redevelopment of the area north of the highway.	No change to LSPS
	Engagement	Residents in the northern part of Warwick Farm were not notified about the 11/7/19 meeting with residents. The communications strategy of Council fell short of what most would regard as a serious attempt to consult.	The meeting referred to was in regards to the Warwick Farm equine precinct only, and only landowners in the equine precinct area were notified by direct mail. Council sent a flyer to all residents regarding the LSPS overall, had newspaper notifications and conducted a number of forums and pop-up events to engage the community on the LSPS.	No change to LSPS
145	Green Grid	Notes the green corridor of Fifteenth Ave. Council should consider other opportunities for east-west green corridors to provide links between the Nepean, South Creek (Wianamatta) and Georges River waterways.	Council has commissioned a Green Grid Study which will identify opportunities for east-west green corridor links. The draft LSPS includes a short term action (Action 14.3) to review the LEP to implement Green and Blue grid study findings.	No change to LSPS
		Encourages Council to seek out opportunities for streets with good pedestrian amenity and wide canopy coverage in the City Centre to complete green links and enhance accessibility between recreation areas, parks and commercial centres.	Noted.	No change to LSPS
				26

2040
Liverpool
Connected
- Z
Summa

₽	Issue	Comments	Officer comment	Recommendation
	Collaboration	Supports Action 4.1 and Action 4.2, and looks forward to working together on Collaboration Area Place Strategy actions.	Noted	No change to LSPS
		Council should regularly inform Sydney Water of any changes to projected population, dwelling and employment data.	Noted	No change to LSPS
	Georges River / sustainability	Supports proposal to reengage community with the Georges River through developing regional riverside parkland. Recycled water solutions for irrigation of public spaces could lead to sustainable urban cooling, amenity and liveability outcomes.	Noted	No change to LSPS
	Airport	Supports working with Planning Partnership to implement City Deal and provide best outcomes for aerotropolis (Action 13.2).	Noted.	No change to LSPS
	Waterways	Supportive of objectives to improve catchment management and ensure policies/planning instruments improve river/waterway health. Objective to make Georges River swimmable is clear. Council's planning instruments should have appropriate controls to manage stormwater quality and retention.	Noted. Council will collaborate with Sydney Water as part of phase 2 of the LEP review and as part of the future comprehensive review of the DCP.	No change to LSPS
	Sustainability	Supportive of PP15, including WSUD, water efficiency, integrated energy and waste infrastructure and tackling urban heat. Council should in review of controls consider development controls to compel developers to connect to planned recycled water schemes for all non-potable water uses, including dedication space for metering, storage, connections and planning infrastructure.	Noted. Council will collaborate with Sydney Water as part of phase 2 of the LEP review and as part of the future comprehensive review of the DCP.	No change to LSPS

599 Liverpool Local Strategic Planning Statement 2 Local Strategic Planning Statement Public Exhibition Report

86

EGROW 04 Attachment 2

0
¥
8
_
2
0
0
0
Ð
5
-
_
-
ă
2
5
ă
ž
1
5
0
C
U
9
ĭ
Ţ
- V
1
1
1
1
mary - (
ummary - (
ummary – (
ummary - (
ummary – (
Summary –
ns Summary – (
Summary –
ns Summary – (
ions Summary – (
sions Summary – (
sions Summary – (
sions Summary – (
bmissions Summary – (
ubmissions Summary – (
bmissions Summary – (

₽	lssue	Comments	Officer comment	Recommendation
		Supports move towards waste efficiency and looks forward to collaborating on food and organic waste to energy approaches at the Waste Recycling Plant. Sydney Water currently accepts pre-consumer food waste at some wastewater treatment plants for co-digestion and can share learnings with Council.	Noted. Council staff to have further discussions with Sydney Water regarding waste efficiency.	No change to LSPS
146	Connection to Western Sydney Parklands	The Trust supports the draft LSPS and encourages Council to develop and promote improvements to accessibility with the Parklands by creating stronger connections between the Liverpool community and the Western Sydney Parklands as part of the LSPS. There is an opportunity for the LSPS to take greater advantage of the diverse experiences and natural qualities of the Western Sydney Parklands and the benefits it can provide. These may include opportunities for structured recreation and sports, business, tourism and community facilities within the Parklands, for the benefit of the community.	The draft LSPS identifies the need to create open space East-West links. A Green Grid Study is currently being undertaken to identify such opportunities. The LSPS also notes that connection to existing natural assets (namely Western Sydney Parklands) will be an important consideration for the design of the FAST corridor. It is agreed that the LSPS could be amended to provide further commentary on the opportunities associated with the Western Sydney Parklands.	Amend the draft LSPS to provide further commentary on the opportunities associated with the Western Sydney Parklands
147	Heritage	Consider how Aboriginal cultural heritage and cultural landscapes can be protected in the LEP alongside non- Indigenous heritage Consider the linkages between culture, heritage and tourism, and the opportunities culture and heritage bring for economic growth Clearly articulate heritage as it relates to the character of the city, including potentially identifying clusters of places and	The LSPS identifies that Council will ensure that heritage, including Aboriginal heritage, is valued and protected. The LSPS also includes an action to review and update heritage provisions in the LEP, and address anomalies. As the submission was received close the finalisation, major changes to the LSPS could not be undertaken. However Planning Priority 8 has	Update LSPS to refer to adaptive reuse and revitalisation of heritage in Planning Priority 8 'Council

₽	lssue	Comments	Officer comment	Recommendation
		items which contribute to the significant character of the place	been updated to reflect support for revitalisation and adaptive use of heritage assets where	
		Consider the linkages between actions and priorities, for example the ways in which heritage and culture contribute to an attractive and liveable city, as well as local employment and community wellbeing.	appropriate.	

Attachment 3 - Preliminary Engagement Report





Its
Iter
20
of(
ble
Tal

Executive Summary
Background
Engagement Touchpoints5
Stage 1 – Preliminary engagement actions6
Moorebank Engagement
Promotional material
Community Survey
Holsworthy Early Education and Care Centre visit
District Forums
Interactive Online Map
Shaping Our Future Workshop
Next Steps – Community Engagement
Attachment 1 – Key Issues by Suburb
Attachment 2 – Council report (27 March 2019) – Moorebank R4 zoning – Findings of community Engagement
Attachment 3 – 'Shaping Our Future' workshop report32

Executive Summary
Community engagement is a core component of the Liverpool LEP Review project, which includes the preparation and finalisation of the Local Strategic Planning Statement (LSPS). Throughout the project, Council will go above and beond legislative community consultation requirments to ensure our diverse community is enagaged in the process.
The purpose of this report is to outline the actions and findings of the first stage of engagement which was intended to raise awareness of the project in the wider community and collect preliminary feedback to inform the preparation of the draft LSPS.

Key actions:

- Councillor workshop
- Moorebank community engagement (including survey and pop up event)
- Promotion materials to raise awareness of the project
- Community survey
- Holsworthy Early Education and Care Centre visit
- Presentation and Q&A at each district forum
- Interactive online mapping tool
- Primary school engagement session

Key Findings:

- There is significant community opposition to the current R4 High Density zone in Moorebank;
- The top 5 things our community think will improve Liverpool are:
 - More parks, trees and green space; 0
 - Better roads 0
- Better public transport 0
- A cleaner environment 0
- More car parking 0
- The top 5 words used to describe the desired vision for Liverpool was: •
 - Clean, Green, Safe, Sustainable, Vibrant 0

A table outlining the key issues for each suburb is attached.

Background

Council has received funding from the NSW Government to undertake a comprehensive review of the Liverpool Local Environmental Plan 2008 which will include a Local Strategic Planning Statement (LSPS) and a Planning Proposal to amend the LEP to give effect to the LSPS. In addition, a number of studies are being prepared to provide an evidence base to inform the process. The LSPS is a new requirement under the *Environmental Planning & Assessment Act* to make a shift in the planning system more strategic planning informed by extensive community engagement.

The LSPS and LEP will guide land use planning across the Liverpool LGA, balancing the need for housing, jobs and services as well as parks, open spaces and the natural environment.

A Community Engagement Action Plan has been prepared to ensure that genuine consultation with the community is undertaken and the community's aspirations are reflected in the LSPS and LEP Review. A community engagement officer has been appointed to implement the Action Plan. This report outlines the actions and findings from the first phase of the Action Plan, which is intended to raise awareness of the project in the wider community and collect preliminary feedback to inform the preparation of the draft LSPS.



Figure 1 - New Release District Forum (20 May 2019)



Community consultation will occur throughout the entire LEP Review project, however there are three major touchpoints which are outlined in Figure 2 below.

This report highlights the actions and findings from Stage 1 of engagement which occurred during February to May 2019.





Stage 1 – Preliminary engagement actions

Table 1 (below) lists the preliminary engagement actions and their associated timeframes.

The intent of these actions is to raise awareness of the project and to collect early feedback to inform the draft LSPS.

Table 1 - Preliminary Engagement Actions and Timeframes

Councillor Workshop Moorebank Community Engagement (including survey and Pop Up Event) Promotion materials to raise awareness of the project Community Survey	November 2018 (Complete) February / March 2019 (Complete) February – May 2019 (Complete) February – May 2019 (Complete) February – May 2019
Interactive online Mapping Tool Primary School Engagement Session	(Complete) April – August 2019 (Open until the end of the public exhibition period) 31 May 2019

In addition, the children at the Holsworthy Early Education and Care Centre wrote to Council to have their say on Liverpool's Future. Council staff organised an excursion for the children to visit Council to build their ideas for Liverpool's future with Lego.

Moorebank Engagement

where it was resolved that Council immediately start separate On 6 February 2019, Council considered a Notice of Motion consultation with the residents of Moorebank with a view of regarding the R4 (High Density Residential) zone in Moorebank, reducing density in the R4 zone.

etter invited residents to complete an online survey and to attend a community consultation session on the 7 March 2019 at the A letter was sent to Moorebank residents on 19 February 2019. This Moorebank Community Centre to express their views on the current zoning.

and approximately 112 people attended the community consultation received were responses survey Approximately 395 session.

meeting outlining the findings of the community engagement, noting A report was considered by Council at the 27 March 2019 Council that a review of density and dwelling typologies will be undertaken as part of the LEP Review process. This report is attached.

Draft LSPS

Includes a short term action to review dwelling typologies and density around Moorebank Shopping Centre





igure 4 - Photo from Moorebank engagement event - 7 March 2019

Promotional material

The following promotional material was used to raise awareness of the project to the general public and to invite early feedback to inform the draft LSPS and LEP Review:

- Information in Liverpool Life Autumn 2019 А
- Letter sent to Moorebank residents 19 February 2019 A
- Flyers sent to households across the LGA 81,000 sent (March 2019) А
 - Facebook posts with link to the survey А
- Post 1 4 February 2019
 - 13,156 reached .
 - Post 2 7 April 2019
- 12,878 reached .

- Half page advertisements in local newspapers (March 2019) 'Have Your Say' video shared on Facebook – 4165 reached А А
 - 'Kids have their say on Liverpool's future' 1,300 views А





A community survey was made available on Liverpool Listens from February to May 2019.

We asked the community to:

- Identify their priorities (relating to transport, liveability, jobs and the environment);
 - Describe their vision for the LGA;
- What they wanted their suburb to look like in the
- future;

 Tell us what makes their suburb a great place to live;
 and
- Tel us what would make the area better.

Council received a positive response to the survey with 487 responses.

The top 5 things to improve Liverpool were:

- More parks, trees and green space
- Better roads
- Better public transport
- A cleaner environment
- More car parking

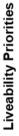
The top 5 words used to describe the desired vision for Liverpool were:

Clean, Green, Safe, Sustainable, Vibrant



Figure 6 - Key words from Community Survey (ideal vision for Liverpool)

б



The top liveability priorities identified by the community were:

- Access to parks and recreation options (17%)
 - Walkable neighbourhoods (15%)

Draft LSPS:

Includes a range of priorities and actions to address Liveability. Examples include:

- Review LEP to implement Green and Blue Grid study findings
 - Identify future significant development to occur in the Liverpool CBD and growth areas whilst ensuring existing established areas develop having regard to local character.
- Undertake design-led planning using placemaking principles for neighbourhood and district centres.

Sustainability Priorities

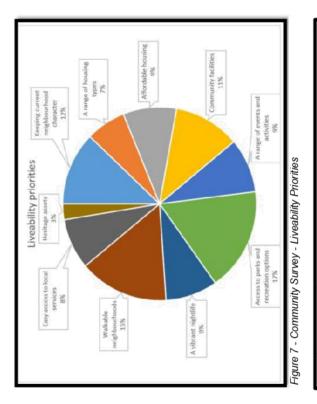
The top sustainability priorities identified by the community were:

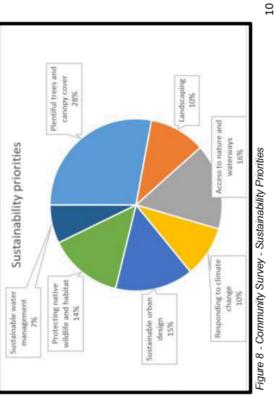
- Plentiful trees and canopy cover (28%)
- Access to nature and waterways (16%)

Draft LSPS:

Includes a range of priorities and actions to address Sustainability. Examples include:

- Develop a strategy to increase tree canopy cover in the LGA; and
- Review LEP to ensure protection of biodiversity around waterways





The top liveability priorities identified by the community were:

- Jobs in the local area (35%)
- High paying skilled jobs (19%)

Draft LSPS:

Includes a range of priorities and actions to address Productivity. Examples include:

- Review LEP to align with Centres and Corridors Study
- Review LEP to support the operations and growth of the Liverpool Innovation Precinct.

Transport Priorities

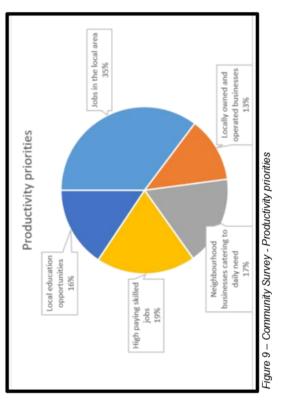
The top sustainability priorities identified by the community were:

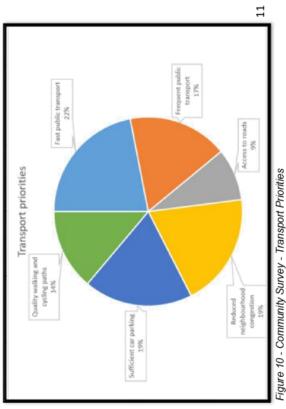
- Fast public transport (22%)
- Reduced neighbourhood congestion (19%)

Draft LSPS:

Includes a range of priorities and actions to address transport. Examples include:

- Amend the LEP and relevant environmental planning instruments to preserve the FAST corridor.
- Advocate a fast rail service to the Liverpool City Centre from Sydney CBD, and enhanced integration with future rail links.





Holsworthy Early Education and Care Centre visit

Preschool students from Holsworthy Early Education and Care Centre responded to Council's survey with drawings and letter to Council asking for:

- Somewhere to go on hot days (Water parks / swimming pools & access to swimming lessons);
 - Improved access to clean beaches;
 - Walkable neighbourhoods / walking paths;
- More parks / open spaces with BBQ / Camping facilities;
- Improved public transport and roads;
 - Pet friendly neighbourhoods;
- Improved emergency services; and
 - More houses / housing diversity.

A visit to Council to meet with the Mayor and Council planners was held on 14 May 2019.

The kids used Lego to show what they wanted Liverpool to look like in the future.

There were colourful houses, towers, farms and a jail boat to patrol the Georges River and arrest the bad guys.



Figure 11 – Children using Lego to describe what they want Liverpool to look like in the future



Figure 12 - Children visit Council to have their say on Liverpool's future

District Forums

A summary of the LEP Review project and opportunities to get involved were presented at the following District Forums:

Eastern District Forum

- 19 February 2019
 - 16 April 2019

New Release/Established District Forum

- 25 February 2019 20 May 2019

2168 District Forum

11 March 2019

Rural District Forum

9 April 2019

A Q&A session was held at each of these forums.

Feedback from the District Forums has been incorporated into the draft LSPS where appropriate.



Figure 13 - New Release/Established District Forum - 20 May 2019

Interactive Online Map

In May 2019, an interactive online map was made available on Liverpool Listens. The community are encouraged to drop a pin and post their ideas for Liverpool's future.

The online map will close in August 2019 (at the conclusion of the public exhibition period).

Some ideas so far include better connections from the railway station to the river and more public art.



Figure 14 - Screenshot of online mapping tool





A primary school engagement session was held on 31 May 2019. Year five and six students from seven primary schools across the LGA expressed their views on what Liverpool should look like in the future.

The students had many ideas such as edible plants on top of new buildings, stairs that transform into ramps for accessibility and play equipment for guide dogs.

The engagement report is attached.



Figure 15 - Students have their say on the future of Liverpool



Figure 16- Shaping Our Future artwork

Next Steps – Community Engagement

Stage 2 – Exhibition of Local Strategic Planning Statement

Objectives

- 1. Raise awareness in the community about the public exhibition of the draft LSPS and provide opportunities to provide feedback.
 - Engage with Council's culturally diverse community and seek feedback on the draft LSPS. 3
- Engage with key interest groups, Government and Non-Government organisauorits.
 Inform the business community and development industry and collect feedback on the draft LSPS.

Table 2 – Public Exhibition Actions

Action	Purpose	Timeframe
Draft LSPS on Council's website	Raise awareness in the community about the public exhibition of the draft LSPS and provide opportunities for feedback.	28 June 2019
Draft LSPS and FAQs available on Council's Liverpool Listens page with online survey/feedback option.	Raise awareness in the community about the public exhibition of the draft LSPS and provide opportunities for feedback.	During the exhibition period (July – August 2019)
Draft LSPS promoted / explained on social media and in local newspapers.	Raise awareness in the community about the public exhibition of the draft LSPS and provide opportunities for feedback.	During the exhibition period (July – August 2019)
Consultation with Warwick Farm residents, including community meeting.	Engage with the Warwick Farm community on the draft LSPS and the future of the Warwick Farm equine precinct.	First two weeks of exhibition period (July 2019)
Distribute flyer or letter	Raise awareness in the community about the public exhibition of the draft LSPS and provide opportunities for feedback.	First two weeks of exhibition period (July 2019)
FAQ (On Council's website, sent to call centre etc.).	Raise awareness in the community about the public exhibition of the draft LSPS and provide opportunities for feedback.	During the exhibition period (July – August 2019)
Pop ups at various shopping centres / malls across the LGA. Activity:	Raise awareness in the community about the public exhibition of the draft LSPS and provide opportunities for feedback.	During the exhibition period (July – August 2019)
 Ideas Wall (sticky notes) Map your ideas (local aerial map) 	Engage with Council's culturally diverse community and seek feedback on the draft LSPS.	

Community Drop in sessions at local	Provide an in-depth overview of the draft	During the exhibition period (July – August
libraries Targeted stakeholder letter (offering option	LSPS and invite feedback. Raise awareness in the community about	2019). During the first week of the exhibition
	provide opportunities for feedback. Engage with Council's culturally diverse community and seek feedback on the draft	
Online discussion board using Liverpool Listens or Facebook.	LSPS. Provide an interactive space for the community to discuss issues and ideas.	During the exhibition period (July – August 2019)
Online Interactive Mapping Tool	Provide an opportunity for the community to identify their big ideas for the Liverpool LGA	April – August 2019
Industry information session / workshop (Business community and development	Inform the business community and development industry and collect feedback on the draft LSPS	July 2019 (TBC)
inaustry). Council Meeting	Council consideration of all feedback and revised LSPS.	TBA (Following the Exhibition period).

Stage 3 – Exhibition of Planning Proposal

Objectives

Inform land owners and residents who are directly affected by any changes to the LEP, obtain feedback and invite submissions.
 Inform the wider community and obtain feedback and invite submissions.

Inform the wider community and obtain feedback and invite submissions.

Table 3 - Exhibition of Planning Proposal - Engagement Actions

Action	Piirnose	Timeframe
Council meeting	Council to consider draft Planning Proposal before gateway determination and public exhibition.	September 2019 (TBC).
Distribute flyer or letter	Inform the wider community and gather feedback.	During exhibition period (Feb/March 2020)
Draft Planning Proposal promoted / explained on social media and in local newspapers.	Raise awareness in the community about the public exhibition of the planning proposal.	During exhibition period (Feb/March 2020)
Fact Sheet / Q&A on Council's website.	To provide a clear source of general information regarding the project.	During exhibition period (Feb/March 2020)
Feedback form and / or discussion board on Liverpool Listens.	Inform the wider community and gather feedback and invite submissions. Provide an interactive space for the community to discuss issues and ideas.	During exhibition period (Feb/March 2020)

Suburb
ð
Issues
ey
ž
ī
<u>-</u>
chment

EGROW 04

Suburb	Key Issues
ASHCROFT	 Traffic congestion Concerns about city presentation (e.g. parks) Fast, reliable and affordable public transport. More local jobs.
AUSTRAL	 Fast, frequent public transport services More commuter car parking at Leppington The need for quality walking and cycling paths. The need for community facilities. Concerns about city presentation (e.g. parks).
BADGERYS CREEK	No Responses
BRINGELLY	 Frequent and fast public transport services Businesses that are locally owned and operated and cater to daily needs Easy access to local services Improved community facilities Sustainable water management
BUSBY	 Traffic congestion More local jobs. Concerns about city presentation (footpaths, potholes etc.)
CARNES HILL	 Traffic congestion More high-paying skilled jobs Improved community facilities (e.g. swimming pool)

Suburb	Key Issues
	 Overdevelopment More commuter car parking at train stations. More trees.
CARTWRIGHT	 More local jobs Improved community facilities A range of events and activities Protecting native wildlife and habitat
CASULA	 Faster public transport services Traffic congestion and noise. More commuter car parking at train stations (e.g. Holsworthy, Casula and Edmondson Park). Improved access to parks and recreation options. Improved safety (e.g. lighting). Quality walking and cycling paths More high paying jobs in the local area. More trees.
CECIL HILLS	 More local Jobs Need to maintain neighbourhood character Improve city maintenance More frequent public transport services More quality walking and cycle ways Traffic congestion
CECIL PARK	More parking Concern about traffic congestion

Suburb	Key Issues
	 More jobs in the local area Need to make our neighbourhoods more walkable A range of events and activities More trees
CHIPPING NORTON	 More local jobs. Faster public transport services Reduce traffic congestion More car parking Need to maintain local character Improved parks and cycle paths. Concerns about Mosquito problem Concerns about high rise in nearby suburbs.
DENHAM COURT	 Need for quality walking paths and cycling paths Improved access to major roads More businesses that are locally owned and operated Improved access to parks and recreational options Walkable neighbourhoods Access to nature and waterways Protecting native wildlife and habitat
EDMONDSON PARK	 More sufficient car parking More parks and playgrounds Improve the frequency of public transport Reduce neighbourhood congestion More local jobs.

Suburb	Key Issues
ELIZABETH HILLS	 Fast public transport services Reduced neighbourhood congestion More local jobs Concerns about safety (need for more lighting). Need to protect native wildlife and habitat.
GREEN VALLEY	 Faster public transport High paying skilled jobs Concern about safety (more lighting needed). Need to reduce congestion Improved access to parks and recreation options Concerns about city presentation
GREENDALE	 Sufficient car parking at Leppington station More frequent public transport Neighbourhood businesses that cater for local needs Keeping neighbourhood character Improved access to nature and waterways
HAMMONDVILLE	 Concerns about safety Need for quality walking and cycling paths Keeping current neighbourhood character Need for reduced congestion Need for neighbourhood businesses that cater for local needs Improved access to parks and recreation options Need to protect native wildlife and habitat
HECKENBERG	 More car parking Reduce traffic congestion More businesses that are locally owned and operated

Suburb	Key Issues
	 A wider range of housing types A wider range of events and activities Need to respond to climate change
HINCHINBROOK	 Reduced traffic congestion Faster public transport services More car parking More local, high paying jobs A vibrant night life and more things to do. Concerns about city presentation
HOLSWORTHY	 Frequent and fast public transport services Concerns about congestion. Need for more restaurants and entertainment More car parking More local jobs A range of housing types
HORNINGSEA PARK	 Reduced congestion More car parking More local jobs More affordable housing More schools More shops More local parks Need for more sustainable urban design
HOXTON PARK	 Concern about city presentation Reduced neighbourhood congestion More businesses that are locally owned and operated

Suburb		Key Issues
	ŀ	Improved access to parks and recreation options
	•	A wider range of events and activities
	•	Improved access to nature and waterways
	•	More sustainable urban design
KEMPS CREEK	•	No responses
LEN WATERS ESTATE	•	No Responses
LEPPINGTON	•	More buses
	•	Quality walking and cycling paths
	•	More jobs in the local area
	•	More schools
	•	Sustainable urban design
LIVERPOOL	•	Fast frequent public transport
	•	Reduced neighbourhood congestion
	•	Quality walking and cycling paths
	•	Sufficient car parking
	•	Jobs in the local area
	•	High-paying jobs
	•	Businesses are locally owned and operated
	•	Local education opportunities
	•	Affordable housing
	•	Walkable neighbourhoods
	•	Easy access to a range of events and services
	•	Access to parks and recreation options
	•	A vibrant nightlife
	•	Heritage assets
	•	Tree canopy
	•	Access to nature and waterways
	•	Sustainable urban design
	•	Protecting native wildlife and habitat
LUDDENHAM	•	No Responses
LURNEA	•	Improved community facilities

Suburb	Key Issues
	Faster and more frequent public transport Reduced neighbourhood congestion
	More local, high paying jobs
	Local education opportunities
	 Maintain current neighbourhood character
	Concern about over development.
MIDDLETON GRANGE	 Concerns about city presentation.
	Reduce traffic congestion
	 Better quality walking and cycling paths.
	 Improved access to major roads.
	 Need for a shopping centre and cafes
	Improved local parks
	 Improved public transport (i.e. more buses).
MILLER	Fast and frequent public transport services
	Reduced neighbourhood congestion
	Businesses that are locally owned and operated
	More local jobs
	Increased tree canopy
	Sustainable urban design
	Concerns about city presentation.
MOOREBANK	Need to keep current neighbourhood character
	Concerns about apartment buildings (R4 zone)
	Need for Marina to be built
	Quality walking and cycling paths
	Improve public transport
	Reduce traffic congestion
	 Improve access to nature and waterways
MOUNT PRITCHARD	Concerns about congestion
	More commuter car parking
	More jobs in the local area.
	ţ

PLEASURE POINT PRESTONS ROSSMORE SADLEIR

Suburb		Kev Issues
	•••	Walkable neighbourhoods Sustainable urban design Increased Tree canopv
SILVERDALE	•	No Responses
VOYAGER POINT	•	Need to connect Voyager Point with other suburbs (walking and cycling).
	•	Improve public transport to centres
	•	Need for express trains to the city.
	•	Access to major roads
	•	More high paying skilled jobs in the local area.
	•	Keep current neighbourhood character
	•	Protect native wildlife and habitat
WALLACIA	•	Fast and frequent public transport services
	•	Improved access to services (Water, Sewer, NBN etc.)
	•	Local high paying skilled jobs
	•	Sustainable urban design
WARWICK FARM	•	Concern about safety
	•	Sufficient car parking (including increased commuter car parking at train station)
	•	More local jobs
	•	More affordable housing
	•	Improved walkability
	•	Faster, more frequent public transport services
	•	Increased tree canopy
	•	Improved access to nature and waterways
WATTLE GROVE	•	Need for more frequent and faster public transport services
	•	Concerns about pollution
	•	Concerns about over development
	•	More car parking
	•	Concerns about congestion
		29

Suburb	Key Issues
	 More local jobs Neighbourhood businesses that cater to daily needs Local education opportunities Keeping current neighbourhood character A range of events and activities Affordable housing Community facilities Access to parks and recreation options New aquatic facility Concerns about the Intermodal.
WEST HOXTON	 More high paying local jobs Reduced neighbourhood congestion Access to major roads Fast public transport services More events and activities Access to parks and recreation options Tree canopy Access to nature and waterways Improved disability access Concerns about city presentation

Attachment 4 - LEP Review – Community Engagement Action Plan

Liverpool LEP Review Project: Engagement Action Plan



Table of Contents

Overview of LEP Review Project	3
Background	3
LEP Review Project	3
Preparation of a Local Strategic Planning Statement (LSPS)	3
Key Engagement Touchpoints	4
Action Plan	5
Stage 1a – Preliminary Engagement	5
Stage 1b – Preliminary Engagement (Moorebank)	6
Stage 2 – Exhibition of Local Strategic Planning Statement	7
Stage 3 – Exhibition of LEP Review Planning Proposal	9

Overview of LEP Review Project

Background

Council has recently received funding from the NSW Government to undertake a comprehensive review of the Liverpool Local Environmental Plan 2008 which will include a Local Strategic Planning Statement (LSPS) and a Planning Proposal to amend the LEP. In addition, numerous studies are being prepared to provide an evidence base to inform the process.

The LSPS and LEP will guide land use planning across the Liverpool LGA, balancing the need for housing, jobs and services as well as parks, open spaces and the natural environment.

This action plan is intended to help guide the community engagement process. The actions identified go above and beyond the legislative consultation requirements to ensure that our diverse community and stakeholders have a genuine opportunity to have their say and contribute to the process.

LEP Review Project

Following the release of the Greater Sydney Commission's Greater Sydney Region Plan (<u>A</u><u>Metropolis of Three Cities</u>) and <u>Western City District Plan</u>, Liverpool City Council has a legal obligation under the Environmental Planning and Assessment Act 1979 to review its LEP to ensure that it aligns with the priorities listed in these plans.

While this is a statutory requirement, it is a great opportunity for Council to examine what is working well in the current LEP, and what may need to change in order to realise our collective vision for the Liverpool of the future. It also gives Council the opportunity to collaborate with the community and incorporate their ideas, priorities and concerns into the new LEP.

Preparation of a Local Strategic Planning Statement (LSPS)

One of the major opportunities for the community to be involved in the LEP review process is through the development of a Local Strategic Planning Statement, or LSPS. The creation of an LSPS is a new requirement for councils following the NSW Government's amendment of the Environmental Planning and Assessment Act 1979 in March 2018.



Figure 1 – Planning framework

An LSPS is designed to be a simple-to-understand document that sets out a 20-year vision for land use in local areas, and planning priorities for those areas. Through comprehensive community engagement, the LSPS will describe how particular areas should develop over the next 20 years, the characteristics and values that are important to maintain, and in which places growth will be focused.

Local strategic planning statements have been introduced with the intention to shift the NSW planning system into a strategic-led planning framework. The LSPS will inform the review of the LEP, and will also need to align with Greater Sydney Commission's Regional and District plans.

Through the development of the LSPS, the following questions will need to be considered:

- Where are we now?
- Where are we going?
- Where do we want to be?
- How do we get there?

To help answer these questions and to prepare the LSPS, early community consultation will be undertaken. This consultation will collect feedback to inform the long term vision as well as the priorities and actions in the LSPS. The consultation will also help inform any future changes to planning controls.

The exhibition of the LSPS provides a further opportunity for the wider community to have their say and identify any changes needed to finalise the LSPS.

Key Engagement Touchpoints

Community consultation will occur throughout the entire LEP Review project, however there are three major touchpoints which are outlined in Figure 2 below.

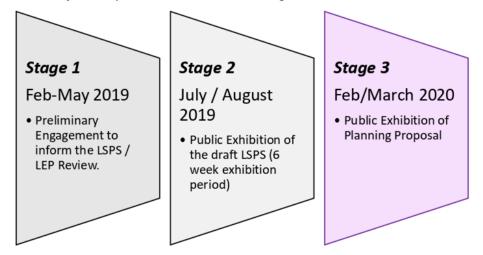


Figure 2 – Engagement Touchpoints

Action Plan

Stage 1a – Preliminary Engagement

Objectives

- 1. Generate awareness of the project in the wider community and gather feedback to inform the preparation of the LSPS.
- 2. Introduce the project to interested community members.
- 3. Engage with young people to collect their ideas about the long term vision for the Liverpool LGA.

Action	Purpose	Timeframe
Councillor Workshop	Introduce the LEP and LSPS consultation and tasks to the elected Council.	24 November 2018 – 26 November 2018
Community Survey	Collect community feedback to inform the LSPS and LEP Review.	1 February 2019 – 1 May 2019
Distribute flyer across the LGA	Generate awareness of the project and invite community to have their say via various channels.	March – April 2019
Social Media posts / video	Generate awareness of the project and promote survey.	February – April 2019
Presentation and Q&A at each District Forum	Introduce the LEP and LSPS to interested community members.	19 February 2019 - Eastern District 25 February 2019 - New Release/Established Forum 11 March 2019 - 2168 Forum 9 April 2019 – Rural Forum
Updates at Community Forums	Provide an update to the community about the progress of the project.	May – June 2019
Youth Engagement Session (Primary schools – Year 5 and 6)	Engage with young people to collect their ideas about the long term vision for the Liverpool LGA.	31 May 2019

LEP Review – Engagement Action Plan (Updated September 2019)

Action	Purpose	Timeframe
Interactive Mapping Tool	Provide an opportunity for the community to identify their big ideas for the Liverpool LGA.	April – August 2019

Stage 1b – Preliminary Engagement (Moorebank)

Background

On 6 February 2019, Council considered a Notice of Motion regarding the R4 (High Density Residential) zone in Moorebank, where it was resolved that Council immediately start separate consultation with the residents of Moorebank with a view of reducing density in the R4 zone.

Objectives

- 1. Generate awareness of the project in the Moorebank community and gather feedback to inform the LEP Review.
- 2. Provide opportunities for community feedback on the unique issues and concerns for the Moorebank community.

Action	Purpose	Timeframe
Presentation at Eastern Community Forum	Generate awareness of the project in the community and gather feedback to inform the LEP Review.	19 February 2019
Letter to Moorebank residents	Provide opportunities for community feedback on the unique issues for the Moorebank community.	19 February 2019
Moorebank Community Survey	Provide opportunities for community feedback on the unique issues and concerns for the Moorebank community.	February – March 2019
Moorebank Pop Up event	Provide opportunities for community feedback on the unique issues and concerns for the Moorebank community.	7 March 2019
Council Meeting	Elected Council to consider community feedback.	27 March 2019

LEP Review – Engagement Action Plan (Updated September 2019)

Action	Purpose	Timeframe
Update at Eastern Community Forum	Report back on the outcomes of the community engagement and outline next steps.	16 April 2019

Stage 2 – Exhibition of Local Strategic Planning Statement

Objectives

- 1. Raise awareness in the community about the public exhibition of the draft LSPS and provide opportunities to provide feedback.
- 2. Engage with Council's culturally diverse community and seek feedback on the draft LSPS.
- 3. Engage with key interest groups, Government and Non-Government organisations.
- 4. Inform the business community and development industry and collect feedback on the draft LSPS.

Action	Purpose	Timeframe
Councillor Workshop	Brief Council on the draft LSPS and consultation process.	7 June 2019
Council Meeting	Council to consider and adopt draft LSPS before public exhibition.	26 June 2019
Display of draft LSPS and applicable technical studies (in Council libraries and Council's customer service centre).	Raise awareness in the community about the public exhibition of the draft LSPS and provide opportunities to provide feedback. Engage with Council's culturally diverse community	During the exhibition period (July – August 2019)
	and seek feedback on the draft LSPS.	
Draft LSPS on Council's website	Raise awareness in the community about the public exhibition of the draft LSPS and provide opportunities to provide feedback.	28 June 2019
Draft LSPS and FAQs available on Council's Liverpool Listens page with	Raise awareness in the community about the public exhibition of the draft LSPS	During the exhibition period (July – August 2019)

LEP Review – Engagement Action Plan (Updated September 2019)

Action	Purpose	Timeframe
online survey/feedback option.	and provide opportunities to provide feedback.	
Draft LSPS promoted / explained on social media and in local newspapers.	Raise awareness in the community about the public exhibition of the draft LSPS and provide opportunities to provide feedback.	During the exhibition period (July – August 2019)
Consultation with Warwick Farm residents, including community meeting.	Engage with the Warwick Farm community on the LSPS and the future of the Warwick Farm equine precinct.	First two weeks of exhibition
Distribute flyer or letter	Raise awareness in the community about the public exhibition of the draft LSPS and provide opportunities to provide feedback.	First two weeks of exhibition period (July 2019)
FAQ (On Council's website, sent to call centre etc.).	Raise awareness in the community about the public exhibition of the draft LSPS and provide opportunities to provide feedback.	During the exhibition period (July – August 2019)
Pop ups at various shopping centres / malls across the LGA. Activity:	Raise awareness in the community about the public exhibition of the draft LSPS and provide opportunities to provide feedback.	During the exhibition period (July – August 2019)
 Ideas Wall (sticky notes) Map your ideas (local aerial map) 	Engage with Council's culturally diverse community and seek feedback on the draft LSPS.	
Community Drop in sessions at local libraries	Provide an in-depth overview of the draft LSPS and invite feedback.	During the exhibition period (July – August 2019).
Targeted stakeholder letter (offering option for face to face briefing).	Raise awareness in the community about the public exhibition of the draft LSPS and provide opportunities to provide feedback. Engage with Council's culturally diverse community	During the first week of the exhibition period (July 2019)
	and seek feedback on the draft LSPS.	

LEP Review – Engagement Action Plan (Updated September 2019)

Action	Purpose	Timeframe
Online Ideas board using Liverpool Listens.	Provide an interactive space for the community to discuss issues and ideas.	During the exhibition period (July – August 2019)
Online Interactive Mapping Tool	Provide an opportunity for the community to identify their big ideas for the Liverpool LGA.	April – August 2019
Industry information session / workshop (Business community and development industry).	Inform the business community and development industry and collect feedback on the draft LSPS	July 2019 (TBC)
Council Meeting	Council consideration of all feedback and revised LSPS.	TBA (Following the Exhibition period).

Stage 3 – Exhibition of LEP Review Planning Proposal

Objectives

- 1. Inform land owners and residents who are directly affected by any changes and gather feedback and invite submissions.
- 2. Inform the wider community and gather feedback and invite submissions.

Action	Purpose	Timeframe
Council meeting	Council to consider draft Planning Proposal before gateway determination and public exhibition.	25 September 2019
Formal Exhibition / invite formal submissions.	Inform the wider community and gather feedback.	During exhibition period (Feb/March 2020)
(Information on Council's website, newspaper advertisements, information displayed in libraries etc.)	Comply with legislative / Gateway Determination requirements.	
Distribute flyer or letter	Inform the wider community and gather feedback.	During exhibition period (Feb/March 2020)

LEP Review – Engagement Action Plan (Updated September 2019)

Action	Purpose	Timeframe
Write to land owners and residents who are directly affected by any changes proposed and gather feedback.	Inform landowners and residents and invite feedback.	During exhibition period (Feb/March 2020)
Letter to key stakeholders	Inform key interest groups, Government and non- government organisations.	During exhibition period (Feb/March 2020)
Draft Planning Proposal promoted / explained on social media and in local newspapers.	Raise awareness in the community about the public exhibition of the planning proposal.	During exhibition period (Feb/March 2020)
Fact Sheet / Q&A on Council's website.	To provide a clear source of general information regarding the project.	During exhibition period (Feb/March 2020)
Pop Up / information session for any areas directly impacted by proposed changes.	Inform landowners and residents who are directly affected by the Planning Proposal and invite feedback.	During exhibition period (Feb/March 2020)
Presentation / Q&A at Community Forums (where scheduled).	Inform the community and gather feedback.	During exhibition period (Feb/March 2020)
Council meeting to consider submissions.	Council to consider feedback and submissions.	TBA (Post Exhibition)

Attachment 3:

Summary of changes made to the exhibited draft LSPS

Maps	Structure Plan	Identified Metropolitan Rural Area;
		 Removed reference to investigate potential koala protection corridor and replaced with Action 14.4;
		 Amended strategic centre/town centre references;
		 Amended reference to industrial land and amended
		mapping to correct anomaly;
		Amended Moorebank Intermodal Terminal
		reference;
		 Added – "8. Urban Development Investigation Area." at Moorebank river sites."
		Removed "Protect and link Green Corridors"
		mapping reference to Badgerys Creek and replaced with the following text - "2. Collaborate with the Commonwealth Government and Western Sydney Planning Partnership to protect green corridor around Badgerys Creek"; and
		 Added "Protect and link Green Corridors" mapping reference to Thompsons Creek
		 Amended airport identification and added generalised linkages from FAST Corridor to airport and Aerotropolis
		 Amended rail routes to distinguish between
		committed projects and investigations
		Added disclaimer as to status of transport projects,
		and which projects are Council-led
	Structure Plan Inset Map	 Clarified Industrial land north of Liverpool City Centre and Warwick Farm industrial precinct as follows: "Investigate flexible employment lands to support CBD and Innovation Precinct" Identified Liverpool Innovation Precinct Identified Orange Grove as Bulky Goods Retail
	Transport map	Freight routes added
		 Amended airport identification and adding generalised linkages from FAST Corridor to airport and Aerotropolis
		 Added Liverpool and Aerotropolis cluster icons
		Amended rail routes to distinguish between
		committed projects and investigations
		Removed "3 – Bankstown to Liverpool metro
		extension' as it is already labelled in legend
	New maps	Our Jobs.
		Our Home.
		Our Environment.
Amendment	CONNECTIVITY	Introduction updated with information on the
to Planning	Our connections	importance of transit-oriented development and social connectivity.
Priorities		

Summary of changes made to the exhibited draft LSPS

Planning Priority 1. Active and public transport reflecting Liverpool's strategic significance	 Amendments to Rationale: Text added stating that Council will work with Transport for NSW to support and implement travel behaviour change programs and encourage the use of sustainable transport choices. Reference added stating support for emerging forms of micro-mobility in the LGA, including e-bikes and e-scooters. Reference added around advocacy for improved bus services Add Council will: Investigate measures required to support micro-mobility. Investigate setting mode shift targets. Amend Action 1.2: to read: "Develop a Transport and Mobility Plan and review Local Environmental Plan (LEP) to ensure alignment (short term)."
Planning Priority 2. A rapid smart transit link between Liverpool and Western Sydney International Airport/Aerotropolis	 Amendment to Planning Priority: Added 'Aerotropolis' Amendments to Rationale: Reference added stating that the FAST Corridor will be a catalyst for increased public transport growth in the LGA and wider region. Changed proposed maximum time from City to airport via FAST from 20 minutes to 30 minutes. Add Action 2.4 – "Investigate extension of FAST corridor to Holsworthy station with consideration of appropriate station locations, including Moore Point (medium to long term)." Add Action 2.5 – "Deliver the FAST Corridor (long term)"
Planning Priority 3. Accessible and connected suburbs	 Amendments to Rationale: Added information on ensuring through-site links are provided on larger blocks to improve connectivity and permeability. Delete Action 3.3: Liaise with Fairfield and Canterbury Bankstown councils to implement active transport routes around Chipping Norton Lakes, including bridge and road connections (medium term). This Action has been included in an expanded Action 3.1.
Planning Priority 4. Liverpool is a leader in innovation and collaboration	 Amendments to Rationale: Removed reference to Community Engagement Strategy and replaced with Community Participation Plan.

	 Add Council will: Support innovative approaches to the operation of business, educational and institutional establishments to improve the performance of the transport network.
LIVEABILITY Our Home	 Introduction updated to refer to Council's plan to create vibrant multipurpose community hubs in new and existing suburbs.
Planning Priority 6. High-quality, plentiful and accessible community facilities, open space and infrastructure aligned with growth	 Amendments to Rationale: Text added stating that Council is also committed to improving its open space network and reference added that while is sufficient open space to meet our growing needs there are some areas where open space access needs to be improved, including in the City Centre and New Release areas. Reference added that the Western Sydney Parklands, a key open space and recreational asset for the region and that Council will improve active transport connections to the Parklands and, in collaboration with the Western Sydney Parklands Trust Add Council will: Ensure place-based integrated services by co-locating social services within neighbourhoods. Prioritise a collaborative approach towards community and social infrastructure planning. Strengthen connections to Western Sydney Parklands. Engage communities who use the Georges River on relevant projects. Collaborate with neighbouring councils to identify outdoor sports and recreation facilities that have a regional focus Add reference in Action 6.1 to FAST Corridor in regards to contributions planning. Add Action 6.2: "Investigate DCP changes to encourage green open space in high-rise development (short term)." Add Action 6.3: "Collaborate with the NSW Department of Education to identify opportunities for
	 sharing local school infrastructure with the wider community (short term)." Add Action 6.4: "Develop community and recreation hub at Phillips Park, Lurnea (short term)".

Planning Priority 7.	Amendments to Rationale:
Housing choice for	 Reference to the development of a Local
different needs, with	Housing Strategy added.
density	 Information on recent housing completions
focused in the City	numbers added
Centre and centres	 Clarification to the reference to our Local
well serviced	Housing Study the that there's enough
by public transport	zoned land to provide for 89,652 (adjusted
	from 90,528)
	 Reference to seniors housing added and to
	'missing middle' style developments
	assisting in providing more affordable
	dwellings
	 "as a priority" added to text that Council
	supports an increase in affordable rental housing for the community.
	 Text added that Council acknowledges the
	economic and social benefits created
	through the provision of affordable housing,
	including supporting job growth,
	encouraging greater financial prosperity for
	low income households, increasing social
	cohesion through mixed tenure
	developments, and reducing social isolation.
	 Text added that increasing the provision of
	affordable rental housing will mean that
	Liverpool's key workers will be able to better
	support themselves, their families and the local economy.
	 Text added that Council will develop an
	Affordable Housing Contributions Scheme,
	identifying new areas for higher density
	housing in which contributions for affordable
	housing can be levied.
	 Text added that Council will also continue to
	deliver affordable housing through
	mechanisms such as voluntary planning
	agreements, and the provision of Council-
	owned land for affordable housing
	developments.
	Add Council will:
	 Work with DPIE to deliver housing in growth
	areas with supporting infrastructure.
	Amend Action 7.1 to refer to implementation of
	Local Housing Strategy and add DCP as
	mechanism for implementation
	Amend Action 7.2. to include "in line with Greater
	Sydney Commission's requirement for 5-10%
	affordable housing"
	 Amend Action 7.3 to reference to Green Valley and
	change time frame to medium term.
	Change Action 7.6 to 7.8 and amend to read:
	"Monitor, review and update the Local Housing
	Strategy to ensure sufficient and appropriate
	housing is delivered to meet community needs
	(ongoing)."

Summary of changes made to the exhibited draft LSPS

	 Add new Action 7.6: "Partner with State Government to investigate planning controls to address land fragmentation challenges in growth areas (short term)."
Planning Priority 8. Community-focused low-scale suburbs where our unique local character and heritage are respected	 Add Council will: Support heritage asset revitalisation and adaptive reuse where appropriate. Add Action 8.2: "Review R4 zoned land around local centres to address interface issues (short to medium term)."
Planning Priority 9. Safe, healthy and inclusive places shaping the wellbeing of the Liverpool community	 Amendments to Rationale: Reference added that Council is also committed to creating inclusive and harmonious environments and that Liverpool is one NSW's most culturally diverse cities with around 40% of people born overseas.
	 Add Council will: Consider child-friendly planning strategies and aging in place principles in LEP and DCP reviews. Ensure community and social support services are located near areas of need.
	 Amend action: Change Action 9.1 to remove reference to climate resilience study, and instead amend DCP to better respond to urban heat.
PRODUCTIVITY Our Jobs	 Introduction updated to better reflect Liverpool's status as an education city.
Planning Priority 10. - A world-class health, education, research and innovation precinct	 Amendments to Rationale: Reference added that Liverpool also has potential to improve its standing as an education destination.
	 Add Council will: Collaborate with tertiary institutions to encourage appropriate student housing.
Planning Priority 11. An attractive environment for local jobs, business, tourism and investment	 Amendments to Rationale: Text added that Liverpool City Centre is an attractive destination for knowledge intensive industries and has a large capacity for commercial office floor space. Reference added regarding retailing and that centres act as important focal points for the local community. Text added that Council will prioritise the future expansion of retail within local or town centres rather than stand-alone centres.

Summary of changes made to the exhibited draft LSPS

	•	 Add Council will: Investigate updates to procurement policy to preference local workers. Establish a hierarchy of centres and determine anticipated retail supply and demand to guide future planning. Investigate planning controls to allow retail centres in Liverpool to keep up to date with technology and retail trends such as online shopping and electric trucks. Investigate a review of trading hours to establish late night trading to support the city centre as a dining destination. Amend Action 11.2 to read: "Investigate amendments to LEP to rezone Georges River precinct north of Newbridge Road as a mixed-use zone to support the Liverpool CBD and Innovation Precinct, with an extensive open space system and cross-river linkages (short to medium term)." Delete Action 11.3 – "Pursue LEP changes necessary to support tourism and visitor accommodation." Delete Action 11.6 –"Work with TfNSW to bring forward extension of Sydney Metro City and Southwest and investigate a preferred alignment." Delete Action 11.8 – "Advocate a fast rail service to the Liverpool City Centre from Sydney CBD, and enhanced integration with future rail links." Delete Action 11.9 – "Review and update LEP and DCP to give effect to City Centre Public Domain Master Plan."
Planning Priority 12. Industrial and employment lands meet Liverpool's future needs	•	 Amendments to Rationale: Text added that Council is committed to safeguarding existing industrial and urban services land from competing pressures, aside from land marked for investigation on the Inset map to support the CBD and Innovation Precinct Include reference to strengthening of established industrial precincts, guided by the new Industrial and Employment Lands Strategy Reference added regarding the importance of managing freight movement through the LGA and that Council is committed to collaborating

		with State Government and private industry to
		manage the freight task.
		5
	•	Add Council will:
		 Collaborate with TfNSW to address the
		growing freight task and support actions the State Government and industry need to take
		for the efficient, safe and sustainable
		movement of freight, in line with the NSW
		Freight and Ports Plan 2018-2023.
		 Manage the interfaces of industrial, trade and
		intermodal facilities to reduce adverse
		impacts.
		 Collaborate with TfNSW, DPIE and private industry to support the urban consolation of
		freight.
		inoight.
	•	Delete Action 12.2 – "Review LEP and DCP for
		employment lands to address a future transition to
		new industries in appropriate locations." Delete Action 12.3 – "Review industrial land zones
	•	under LEP to enable innovative employment uses to
		support Liverpool Innovation Precinct."
	•	Add new Action 12.2: "Review the LEP and DCP to
		ensure statutory planning controls protect key freight routes and employment lands from sensitive land
		uses (short to medium term)."
 Diana in Diana in An		,
Planning Priority 13.	•	Amend Council will to include reference to
A viable 24-hour Western Sydney		"Collaboration through the Planning Partnership"
International Airport		
growing to reach its		
potential.		
 SUSTAINABILITY		
 Our environment		
Planning Priority 14.	•	Amendments to Rationale:
Bushland and waterways are		 Reference added regarding South Creek as a key structural element of the Western
celebrated,		Parkland City.
connected,		• Text added that Council will work with State
protected and		Government through the Western Sydney
enhanced		Planning Principle to ensure a landscape- led approach to development in the
		Aerotropolis is undertaken.
		• Text added that Council will work with the
		State Government to implement the
		Cumberland Plain Conservation Plan, when finalised.
		 Further reference added regarding Water
		Sensitive Urban Design.
	•	Add Council will:
	1	 Collaborate with Western Sydney Planning
		 Collaborate with Western Sydney Planning Partnership to ensure a landscape-led

	Planning Priority 15. A green, sustainable, resilient and water- sensitive city	 approach to development is taken within the Aerotropolis. Collaborate with DPIE to implement the Cumberland Plain Conservation Plan. Manage flood risk by limiting development in the 1 in 100 year flood level and collaborating with key stakeholders to implement the Hawkesbury-Nepean Valley Flood Risk Management Strategy for the western edge of the LGA. Amend Action 14.6 to: "14.4 - Collaborate with Department of Defence and neighbouring councils' to investigate a koala habitat protection corridor (short term)." Delete Action 14.2 - "Review LEP to ensure protection of biodiversity around waterways." Delete Action 14.5 - "Advocate protection corridor around Badgerys Creek." Amendments to Rationale Text added to convey that areas in the LGA face significant flood and bushfire risk. Text added that Council will also work to investigate opportunities for low-carbon, high-efficiency precincts, particularly within the Liverpool Collaboration Area and Leppington Town Centre precinct. Add Council will Continue to provide education around sustainability and waste issues to the community. Encourage transport demand initiatives that help to reduce greenhouse gas emissions. Support the take-up of electric vehicles and
		 Add Action 15.3: - "Review LEP and DCP to ensure Water Sensitive Urban Design is adequately addressed (short term)."
	Planning Priority 16 Rural lands are protected and enhanced	 Delete Action 16.2 – "Review LEP and DCP to protect against development that detracts from Liverpool's scenic values, in line with findings of the Scenic Lands Study."
Amendments to other sections of LSPS	About the Plan	Updated to reference consideration of SEPPs and Ministerial Directions under Section 9.1 of the EP&A Act
	Implementation timeframes	 Timeframes have been amended to better align with the four-year timeframes of the CSP: Medium term is now 2021/22-2024/25

What We've Heard	 Long term is now 2025/26-2028/29 A new 'Visionary' timeframe has been added for actions from 2029/2030 onwards. Section updated to include outcome of consultation during the LSPS exhibition period
Key Challenges and Opportunities	 Additional information added in 'Social Connection' to indicate proportion of LGA living with a disability; noting Council acknowledges the role of planning in determining health and wellbeing outcomes; and that it will work with partners to create social connection. Map of Liverpool in the context of the Western City District has been added
Vision	Vision has been amended to remove reference to Liverpool as Sydney's third CBD
Implementation, Monitoring and Reporting	Added information on GSC's Pulse indicators as a potential measure of performance

LIVERPOOL CITY COUNCIL

LIVERPOOL CONTRIBUTIONS PLAN 2019 -AUSTRAL AND LEPPINGTON NORTH

Adopted: xxxx

Content Manager xxxx.2019

Liverpool Contributions Plan 2019





Contents

Page Number

1	Sum	mary of Plan	6		
	1.1	Preamble	6		
	1.2	Summary of contribution rates and local infrastructure costs	6		
		1.2.1 Monetary Contribution Rates	7		
		1.2.2 Land contribution rates	8		
		1.2.3 Example contribution calculations	8		
	1.3	Overview and structure of Plan	9		
2	Adm	inistration and operation of the Plan	11		
	2.1	Definitions used in this Plan	11		
	2.2	Name of Plan	12		
	2.3	Land to which Plan applies	12		
	2.4	Purposes of Plan	14		
	2.5	Adoption of Plan	14		
	2.6	Relationship to other plans	14		
	2.7	Types of development to be levied	14		
	2.8	Authority to require contributions	15		
	2.0	2.8.1 Monetary contributions	15		
		2.8.2 Land contributions	15		
		2.8.3 Cap on monetary contributions for residential development	16		
		2.8.4 Obligations of accredited certifiers	16		
		2.8.5 Variation to contributions authorised by this Plan and contributions for unanticipated development	16		
	2.9	Payment of contributions	17		
		2.9.1 Timing of payment	17		
		2.9.2 Obligations of accredited certifiers	17		
		2.9.3 Deferred payments2.9.4 Formula for bank guarantee amounts	17 18		
		2.9.5 Methods of settling contribution requirements	18		
		2.9.6 Goods and Services Tax	19		
	2.10	Contributions demand credits for existing development	19		
	2.11	Adjustment to contribution rates and contribution amounts	20		
		2.11.1 Overview	20		
		2.11.2 Adjustment methods	20		
		2.11.3 Works Schedule items other than land	21		
		2.11.4 Land	21		
		2.11.5 Calculation of Land Value Index	22 23		
	2.12	Review of Plan and contribution rates			
	2.13	Pooling of funds	24		
3	Dem	and for public amenities and public services	25		
	3.1	Summary of this Part	25		
	3.2	Development and infrastructure planning context	25		
		3.2.1 Growth Areas Structure Planning	25		

4

5

Liverpool Contributions Plan 2019 - Austral and Leppington North Precincts

	3.2.2	Precinct Planning	27			
	3.2.3	Infrastructure Delivery Plan	28			
3.3		d development outcomes	28			
	3.3.1	Existing development	28			
	3.3.2	Net Developable Area	29			
	3.3.3	Overview of expected development	29			
	3.3.4	Demographic characteristics	32			
	3.3.5	Dwelling occupancy rates	32			
	3.3.6	Anticipated resident population	33			
	3.3.7	Anticipated non-residential floor space	33			
3.4	Infrastru	cture demand arising from the expected development	34			
Stra	tegy pla	ns	35			
4.1	Infrastru	cture costs and delivery generally	35			
	4.1.1	Apportionment of the infrastructure costs to expected development	35			
	4.1.2	Delivery of the infrastructure	35			
	4.1.3	Infrastructure staging and priority	36			
4.2	Open sp	ace and recreation facilities	37			
	4.2.1	Relationship between the expected types of development and the demand for additional public facilities	37			
	4.2.2	How are the contributions calculated?	44			
4.3	Community and cultural facilities					
	4.3.1	What is the relationship between the expected types of development and the demand for additional				
		public facilities?	46			
	4.3.2	How are the contributions calculated?	49			
4.4	Water c	/cle management facilities	51			
	4.4.1	What is the relationship between the expected types of development and the demand for additional	54			
	4.4.2	public facilities?	51			
	4.4.2	How are the contributions calculated?	58			
4.5		rt management facilities	59			
	4.5.1	What is the relationship between the expected types of development and the demand for additional	50			
	450	public facilities?	59			
	4.5.2	How are the contributions calculated?	65			
4.6		nagement and administration	67			
	4.6.1	What is the relationship between the expected types of development and the demand for additional public facilities?	67			
	4.6.2	Calculation of contributions	67			
Wor	ks Sche	dules and Map	68			
5.1	Open sr	ace and recreation facilities	69			
5.2	Community and cultural facilities					
5.3	Water cycle management facilities					
5.4	Transport management facilities					

Tables

Table 2.1	Assumed land values for various classifications	23
Table 3.1	Estimated dwelling and populations	27
Table 3.2	Studies supporting infrastructure planning and costing	27
Table 3.3	Expected Net Developable Area	30
Table 3.4	Dwelling occupancy rates assumed in this Plan	33
Table 3.5	Calculation of anticipated resident population	33
Table 3.6	Anticipated non-residential development potential	33
Table 4.1	Proposed provision of district and local open space	41
Table 4.2	Proposed provision of district and local open space	41
Table 4.3	Recreation facilities requirements	42
Table 4.4	Assumed residential development occupancy rates	45
Table 4.5	Comparison of community facility provision standards	47
Table 4.6	Assumed residential development occupancy rates	49
Table 4.7	Assumed residential development occupancy rates	66

Figures

Figure 2.1	Land to which this Plan applies	13
Figure 3.1	South West Growth Area early release precincts	26
Figure 3.2	South West Growth Area Structure Plan	26
Figure 3.3	Expected land use in the Precincts	31
Figure 4.1	Concept Stormwater Treatment Train	52
Figure 4.2	Drainage catchments with 1% AEP basins	54
Figure 4.3	Drainage catchments with 50% AEP basins	55
Figure 4.4	Drainage systems without basins	56
Figure 4.5	Creek culverts	57
Figure 4.6	Proposed road hierarchy and intersection treatments - Austral and Leppington North Precincts	60
Figure 4.7	Proposed walkways and cycleways	62
Figure 4.8	Planned major road infrastructure - Austral and Leppington North Precincts	64

Appendices

Appendix A Demand Credits Analysis for Precincts Appendix B Background Information

1 Summary of Plan

1.1 Preamble

The Austral and Leppington North Precincts are urban release areas in Sydney's South West Growth Area. Although the Austral Precinct is solely within the Liverpool LGA, the Leppington North Precinct straddles the Liverpool and Camden LGAs.

A range of new and augmented infrastructure needs to be planned, programmed, funded and delivered in order to support this planned development.

The infrastructure will be delivered or coordinated by a number of parties including State Government public authorities, Stateowned corporations, councils, developers and private providers.

Councils typically fund the provision of local infrastructure through a combination of general revenue (from rates and other charges), development contributions under the Environmental Planning and Assessment Act 1979, and grants from the State or Commonwealth government. Much of the capital cost of local infrastructure in new urban areas is funded by development ('section 7.11') contributions as there is often a clear relationship between the need for new or upgraded infrastructure and population growth attributable to the new development.

This Plan addresses the provision in the Precincts of those public amenities and public services - or local infrastructure - to be delivered by or on behalf of Liverpool City Council. The provision of local infrastructure in the Plan is estimated to cost approximately \$877m and includes:

- open space and recreation facilities, such as sports fields, sports courts, playgrounds, walking trails and bike paths;
- community and cultural facilities, such as an aquatic and recreation centre and multi-purpose community centres;
- water cycle management facilities, such as detention basins and stormwater channels; and
- traffic and transport management facilities, such as upgrades to existing roads, new roads and intersections.

This Plan amends the original version of the contributions plan that was adopted by Council in November 2014. The most recent updates to the Plan account for changes to State Government policy and legislation and other necessary adjustments which ensure the proposed infrastructure provision is efficient and appropriate for the needs of the development and that the contributions are cost reflective.

1.2 Summary of contribution rates and local infrastructure costs

The tables on the following pages show the contribution rates for essential infrastructure applicable to development (which is the subject of this Plan) and the total value of works required to cater for the needs of the new development, including non-essential infrastructure. All costs in this Plan are expressed in June quarter 2019 dollars. Contributions for non-essential infrastructure do not apply under this Plan.

Contributions as land areas are only shown below to indicate the shares of land represented by the monetary contributions, and are not additional to monetary contributions.

Example contribution rate calculations are also shown for residential and non-residential development scenarios.

1.2.1 **Monetary Contribution Rates**

ESSENTIAL INFRASTRUCTURE		RESIDENTI	AL DEVELOPMENT*			NON RESIDENTIAL DEVELOPMENT**
ltem	Item Cost apportioned to Austral and Leppington North Development	\$ per additional person	\$ per residential lot for a dwelling house	\$ per attached dwelling, semi- attached dwellings and multi-dwelling housing	\$ per dwelling in all other residential accommodation	\$ per hectare of equivalent NDA
Open Space						
Land	\$276,127,956	\$5,557	\$18,895	\$14,449	\$14,449	
Works	\$131,920,139	\$2,655	\$9,027	\$6,903	\$6,903	
Subtotal	\$408,048,095	\$8,213	\$27,923	\$21,353	\$21,353	
Community Facilities						
Land	\$6,424,768	\$129	\$440	\$336	\$336	
Subtotal	\$6,424,768	\$129	\$440	\$336	\$336	
Roads						
Land	\$23,388,185	\$442	\$1,503	\$1,149	\$1,149	\$20,416
Works	\$80,983,682	\$1,530	\$5,203	\$3,979	\$3,979	\$70,692
Subtotal	\$104,371,867	\$1,972	\$6,705	\$5,128	\$5,128	\$91,107
Drainage						
Land	\$125,622,453					\$109,657
Works	\$226,315,751					\$197,554
Subtotal	\$351,938,204					\$307,211
Plan Administration						
Allowance	\$6,588,294					\$5,751
Subtotal	\$6,588,294					\$5,751
TOTAL	\$877,371,228	\$10,314	\$35,068	\$26,816	\$26,816	\$404,070

*Residential development also pays drainage and plan administration contributions (calculated on an NDA basis). ** NDA rates for roads apply to non-residential development only.

NON ESSENTIAL		RESIDENTIA	L DEVELOPMEN	г	
Item	Item Cost apportioned to Austral and Leppington North Development	\$ per additional person	\$ per residential lot for a dwelling house	\$ per attached dwelling, semi- attached dwellings and multi-dwelling housing	\$ per dwelling in all other residential accommodation
Community Facilities					
Local Facilities Works	\$20,360,684	\$410	\$1,393	\$1,065	\$1,065
Regional Facility Works	\$36,396,838	\$733	\$2,491	\$1,905	\$1,905
TOTAL	\$56,757,521	\$1,142	\$3,884	\$2,970	\$2,970

1.2.2 Land contribution rates

ESSENTIAL INFRASTRUCTURE		RESIDENTIAL	. DEVELOPMENT*			ALL DEVELOPMENT ^{***}
Item	Item Total Area apportioned to Austral and Leppington North Development (m2)	m² per additional person	m ² per dwelling house	m ² per attached dwelling, semi- attached dwellings and multi-dwelling housing	m ² per dwelling in all other residential accommodation	m ² per hectare of equivalent NDA
Open Space						
Land	1,068,519	21.51	73.12	55.91	55.91	
Community Facilities						
Land	14,341	0.29	0.98	0.75	0.75	
Roads						
Land	57,480	1.09	3.69	2.82	2.82	50.18
Drainage						
Land	719,601					628.15
TOTAL	1,859,941	22.88	77.79	59.49	59.49	678.32

1.2.3 Example contribution calculations

The residential contribution (for essential infrastructure) equals the sum of:

- The open space contribution per dwelling,
- The community facilities contribution per dwelling,
- The transport contribution per dwelling,
- The stormwater infrastructure contribution per hectare of NDA, and
- The plan preparation and administration contribution per hectare of NDA.

Contributions for open space, community facilities and transport infrastructure are levied based on the number of people expected to reside in the new dwelling, while contributions for stormwater infrastructure and plan administration are levied by the area (NDA) of the development.

This approach best aligns the contribution payable by a development to its estimated share of the demand for the different kinds of infrastructure in the Plan.

Below is an example of how to calculate the contribution payable by development.

Consider a scenario where a developer has 0.2 hectares (NDA) and applies to develop 5 low density dwelling houses on this land.

The total contribution under this Plan =

 $($27,923 \times 5) + ($440 \times 5) + ($6,705 \times 5) + ($307,211 \times 0.2) + ($5,751 \times 0.2) = $237,930$

This equals a contribution of \$47,586 per dwelling, on average, for this development.

Up until 1 July 2020, development is unlikely to be levied the full contribution amount. Section 2.8 explains how the cap on monetary contributions impacts the contribution payable by development in a given period.

661

The non-residential contribution equals the sum of:

- The transport contribution per NDA,
- The stormwater infrastructure contribution per NDA, and
- The plan preparation and administration contribution per NDA.

Below is an example of how to calculate the contribution payable by development.

Consider a scenario where a developer applies to develop a 0.5 hectare (NDA) site for commercial offices.

The total contribution under this Plan =

 $(\$91,107 \times 0.5) + (\$307,211 \times 0.5) + (\$5,751 \times 0.5) = (\$404,070 \times 0.5) = \$202,035$

There is no cap on contributions for non-residential development.

1.3 Overview and structure of Plan

Section 7.11 of the *Environmental Planning and Assessment Act* 1979 (EP&A Act) allows a consent authority responsible for determining a development application to grant consent to the proposed development subject to a condition requiring the payment of a monetary contribution, or the dedication of land free of cost, or a combination of them, towards the provision of public amenities and public services to meet the development.

Where the consent authority is a council or an accredited certifier, such a contribution may be imposed on a development only if it is of a kind allowed by and determined in accordance with a contributions plan, such as this Plan.

This Plan has been prepared to authorise the imposition of development contributions on development expected to occur in the Austral Precinct and that part of the Leppington North Precinct that is situated in the Liverpool LGA.

This Plan has been prepared:

- in accordance with the EP&A Act and Environmental Planning and Assessment Regulation 2000 (EP&A Regulation); and
- having regard to the latest Practice Notes issued by the NSW Department of Planning, Industry and Environment.

There are minimum requirements for development contributions plans set out in the EP&A Regulation. Each requirement, and reference to the clause or Part of this document that deals with that requirement, are listed below:

The purpose of the plan	Clause 2.4
The land to which the plan applies	Clause 2.3
The relationship or nexus between the expected development in the area and the community infrastructure that is required to meet the demands of that development	Part 3
The formulas to be used for determining the reasonable contributions required from expected development for different types of community infrastructure;	Clauses 4.2.2, 4.3.2, 4.4.2, 4.5.2, 4.6.2
The contribution rates for the anticipated types of development in the area;	Clause 1.2
The council's policy concerning the timing of the payment of monetary development contributions, and the imposition of development conditions that allow deferred or periodic payment,	Clause 2.9

Maps showing the specific public amenities and services proposed to council, supported by a works schedule that contains an estimate of (whether by reference to dates or thresholds)	
If the plan authorises monetary development contributions or section different purposes to be pooled and applied progressively for those p for the expenditure of the contributions or levies, particularised by re schedule.	purposes, the priorities

2 Administration and operation of the Plan

2.1 Definitions used in this Plan

Except where indicated in this clause, the definitions of terms used in this Plan are the definitions included in the EP&A Act, EP&A Regulation and the State Environmental Planning Policy (Sydney Region Growth Centres) 2006, are adopted by this Plan.

In this clause, 'existing' means at the date on which this Plan came into effect.

In this Plan, the following words and phrases have the following meanings:

Bank Guarantee means an irrevocable and unconditional undertaking without any expiry or end date in favour of the Council to pay an amount or amounts of money to the Council on demand issued by an Australian bank, non-bank financial institution, or insurance company subject to prudential supervision by the Australian Prudential Regulatory Authority and has a credit rating of 'A' or above (as assessed by Standard and Poors) or 'A2' or above (as assessed by Moody's Investors Service) or 'A' or above (as assessed by FitchRatings).

Council means Liverpool City Council.

CPI means the Consumer Price Index (All Groups - Sydney) published by the Australian Bureau of Statistics.

EP&A Act means the Environmental Planning and Assessment Act 1979.

EP&A Regulation means the Environmental Planning and Assessment Regulation 2000.

ILP means the Austral and Leppington North Precincts Indicative Layout Plan.

LGA means local government area.

Precincts means the area of land shown in Figure 2.1 of this Plan.

Net Developable Area means the area of land to which a development application relates and includes the area of any land that the development consent authorises, or requires, to be used as a road, or reserved or dedicated as a public road but excludes:

- (a) existing roads to be used as part of the proposed road network;
- (b) existing educational establishments (as defined in the Standard Instrument);
- (c) any part of the land that is below the level of a 1:100 ARI flood event, if that part of the land is unsuitable for development by virtue of it being at or below that level;
- (d) any land that the development consent authorises, or requires, to be reserved, dedicated or otherwise set aside as, or for the purpose of, any of the following:
 - (i) a government school (within the meaning of the Education Act 1990);
 - (ii) a tertiary institution, including a university or TAFE establishment, that provides formal education and is constituted by or under an Act.
 - (iii) an emergency services facility;
 - (iv) a health services facility owned and operated by a public authority;
 - (v) a golf course;
 - (vi) a passenger transport facility;

Page 11

- (vii) a public reserve or a drainage reserve (within the meaning of the Local Government Act 1993);
- (viii) a public transport corridor (other than a road corridor);
- (ix) a public utility undertaking;
- (x) roads or other public amenities or public services, in connection with which development contributions have been imposed under section 7.11 or section 7.12 of the Act or may be imposed in accordance with a contributions plan approved under section 7.18 of the EP&A Act;
- (xi) roads or other infrastructure in connection with which Special Infrastructure Contributions have been, or may be, imposed in accordance with section 7.24 of the EP&A Act.

Planning Agreement means a Voluntary Planning Agreement referred to in section 7.4 of the EP&A Act.

Residential Accommodation has the same meaning as in the State Environmental Planning Policy (Sydney Region Growth Centres) 2006.

Social Infrastructure Assessment means the report titled, Austral and Leppington North Precincts - Demographic and Social Infrastructure Assessment, prepared by Elton Consulting, July 2011.

Special Infrastructure Contribution means a contribution referred to in section 7.24 of the EP&A Act.

State Environmental Planning Policy (Sydney Region Growth Centres) 2006 means the State Environmental Planning Policy amended from time to time.

Transport Assessment means the Austral and Leppington North (ALN) Precincts Transport Assessment prepared by AECOM, July 2011.

Works In Kind means the undertaking of a work or provision of a facility by an applicant which is already nominated in the works schedule of a contributions plan as a means of either fully or partly satisfying a condition of consent requiring development contributions to be made.

Works Schedule means the schedule of the specific public amenities and public services for which contributions may be required as set out in Part 5 of this Plan.

2.2 Name of Plan

This Plan is called Liverpool Contributions Plan 2019 - Austral and Leppington North Precincts (the Plan).

2.3 Land to which Plan applies

This Plan applies to the Austral and Leppington North Precincts within the Liverpool LGA (i.e., the Precincts), as illustrated in Figure 2.1 over page.





Figure 2.1 Land to which this Plan applies

2.4 Purposes of Plan

The purposes of the Plan are to:

- Provide an administrative framework under which specific public amenities and services strategies to serve the Precincts may be implemented and coordinated.
- Ensure that adequate public amenities and services are provided for as part of any new development in the Precincts.
- To authorise the Council or accredited certifiers to impose conditions under section 7.11 of the EP&A Act when granting consent to development on land to which this Plan applies.
- Provide a comprehensive strategy for the assessment, collection, expenditure accounting and review of development contributions relating to the Precincts on an equitable basis.
- Ensure that the existing community is not burdened by the provision of public amenities and services required as a
 result of future development in the Precincts.
- Enable the Council to be both publicly and financially accountable in its assessment and administration of the Plan.

2.5 Adoption of Plan

This Plan was adopted by Council on x and came into effect on x. Previous versions of the plan were by Council on 26 May 2015 and 26 November 2014.

This Plan applies to development applications determined after the date on which the Plan came into effect.

2.6 Relationship to other plans

This Plan repeals Liverpool Contributions Plan 2014 - Austral and Leppington North Precincts.

The land to which this Plan applies is not otherwise subject to any contributions plans made under Subdivision 3 of Division 7.1 of Part 7 of the EP&A Act.

This Plan does not limit or otherwise affect any requirements for the payment of Special Infrastructure Contributions pursuant to Subdivision 4 of Division 7.1 of Part 7 of the EP&A Act.

This Plan has been prepared in conjunction with the *Camden Growth Areas Contributions Plan* as it applies to the Leppington North Precinct (Camden). The Precincts, which comprise land situated in both the Camden and Liverpool LGAs, have been released concurrently and their combined infrastructure needs have been established under an Infrastructure Delivery Plan for the Austral and Leppington North Precincts. This Plan addresses development contributions in respect to development expected to take place in the Liverpool LGA component of the Precincts.

2.7 Types of development to be levied

Except as provided for by this clause, this Plan applies to:

- Residential Accommodation development, insofar as the Plan authorises the imposition of a requirement for a
 development contribution for the types of public amenities and public services described in clauses 4.2 to 4.6 of this
 Plan; and
- All other development, insofar as the Plan authorises the imposition of a requirement for a development contribution for the types of public amenities and public services described in clauses 4.4 to 4.6 of this Plan.

Page 14

This Plan does not apply to development:

- for the sole purpose of affordable housing;
- for the sole purpose of the adaptive reuse of an item of environmental heritage;
- for the purposes of public infrastructure provided by or on behalf of State Government or the Council;
- for the purposes of public amenities or public services under this Plan or another contributions plan prepared under section 7.13 of the EP&A Act;
- for works to be carried out by Sydney Water, Endeavour Energy or equivalent water, sewer or energy provider; or
- that in the opinion of Council does not increase the demand for the categories of public amenities or public services addressed by this Plan.

2.8 Authority to require contributions

2.8.1 Monetary contributions

This Plan authorises the Council, when granting consent to an application to carry out development to which this Plan applies, to impose a condition under section 7.11 of the EP&A Act requiring the payment of a monetary contribution to the Council towards:

- the provision of public amenities and public services as specified in the Works Schedule to meet the demands of the development; and / or
- the recoupment of the cost of public amenities and public services previously provided in advance of development within the area.

This Plan requires the Council or an accredited certifier, when determining an application for a complying development certificate relating to development to which this Plan applies, to impose a condition under section 7.11 of the EP&A Act requiring the payment of a monetary contribution towards:

- the provision of public amenities and public services as specified in the Works Schedule to meet the demands of the development; and / or
- the recoupment of the cost of public amenities and public services previously provided in advance of development within the area.

2.8.2 Land contributions

This Plan authorises the Council, by imposition of a condition of development consent, to require in connection with any development on land to which this Plan applies (and in addition to any monetary contribution that may be sought) the dedication free of cost to the Council of any part of the development site that is land that is to be acquired under this Plan.

The extent of land that may be required in the consent shall not exceed the amount of land the value of which does not exceed the monetary contribution otherwise authorised by this Plan.

The monetary development contribution otherwise authorised by this Plan shall be reduced by an amount corresponding to the value of the land required to be dedicated.

Where the value of the land exceeds the monetary development contribution otherwise authorised, the developer may offer to enter into a Planning Agreement dealing with an appropriate settle-up in exchange for the dedication of the remainder.

Further information on land contributions is included in clauses 2.9.5 and 2.11 of this Plan.

Page 15

2.8.3 Cap on monetary contributions for residential development

On 28 July 2017, the Minister for Planning issued the Environmental Planning and Assessment (Local Infrastructure Contributions) Amendment Direction 2017 that requires councils to submit contributions plans to IPART for assessment if they wish to levy contributions above the prevailing capped amount.

Without a review of the plan by IPART, the maximum contribution amount applying to residential development in the Precincts is \$30,000 per dwelling/lot. Once IPART reviews the plan and the Minister or its delegate publishes the Government's advice about the IPART recommendations, the contribution rates applying to residential development are the lower of the applicable contribution amount in Section 1.2 (for essential infrastructure only) or \$45,000 per dwelling/lot from 1 July 2019 to 30 June 2020.

From 1 July 2020, the contribution amounts in Section 1.2 will apply to residential development, assuming these rates are in accordance with the IPART- review and the Government's subsequent advice on the plan.

Applicants should inquire with the Council as to the current rates that apply to residential development.

2.8.4 Obligations of accredited certifiers

In relation to an application made to an accredited certifier for a complying development certificate:

- the accredited certifier must, if a complying development certificate is issued, impose a condition requiring a
 development contribution, if such a contribution is authorised by this Plan; and
- any such contribution may only be a monetary contribution required under this Plan; and
- the amount of the monetary contribution that the accredited certifier must so impose is the amount determined in accordance with this Plan in respect of the development.

It is the responsibility of the principal certifying authority to accurately calculate and apply the local infrastructure contribution conditions to complying development certificates. Deferred payments of contributions required by a condition of a complying development certificate will not be accepted.

2.8.5 Variation to contributions authorised by this Plan and contributions for unanticipated development

Council retains the right to reduce the development contribution otherwise calculated in accordance with the provisions of this Plan.

A developer's request for variation to a contribution calculated in accordance with this Plan must be supported by written justification included with the development application. Such request will be considered as part of the assessment of the application.

There may be circumstances when development is proposed that was not anticipated when this Plan was made and that is not specifically identified to be levied under this Plan, but which would if carried out, result in the provision of, or increase the demand for, the public amenities and services included in this Plan. In these circumstances, Council will calculate a reasonable contribution proportionate to the demand for amenities and services generated by the unanticipated development, and impose that contribution on the consent for that development.

This clause does not apply to accredited certifiers other than the Council. Accredited certifiers other than the Council must not:

- vary, waive or modify a development contribution calculated in accordance with this Plan, or
- impose any contribution other than a monetary contribution specifically authorised by this Plan.

2.9 Payment of contributions

2.9.1 Timing of payment

Council requires contributions to be satisfied in full, as follows:

Development applications involving subdivision only

Monetary contributions are required to be paid prior to the release of the subdivision certificate whether by Council or an accredited certifier (in the case of strata subdivision). Any dedication of land to Council, in lieu of a monetary contribution, shall be shown on the plan of subdivision.

Development applications involving building work only

Monetary contributions are required to be paid to Council prior to the issuing of the construction certificate, whether by Council or an accredited certifier. Dedication of land to Council, in lieu of monetary contribution, shall be shown on a plan of subdivision, to be registered prior to the issue of an occupation certificate.

Development applications involving subdivision and building work (for example, dual occupancy and integrated housing)

Monetary contributions are required to be paid to Council prior to the release of the construction certificate or subdivision certificate, whichever occurs first, whether by Council or an accredited certifier. Any dedication of land to Council, in lieu of monetary contribution, shall be shown on a plan of subdivision, to be registered prior to issue of an occupation certificate.

Development applications where no building works are proposed

Monetary contributions are required to be paid to Council prior to occupation / commencement of the development. Any dedication of land to Council, in lieu of monetary contribution, shall be shown on a plan of subdivision to be registered prior to issue of an occupation certificate.

2.9.2 Obligations of accredited certifiers

It is the responsibility of an accredited certifier issuing a construction certificate to certify that the contributions have been paid to Council prior to the issue of the certificate. The accredited certifier must ensure that the applicant provides a receipt (or receipts) confirming that contributions have been fully paid and copies of such receipts must be included with copies of the certified plans provided to the Council in accordance with clause 142(2) of the EP&A Regulation. Failure to follow this procedure may render such a certificate invalid and expose the certifier to legal action.

The only exceptions to the requirement are where Works In Kind, material public benefit, dedication of land and/or deferred payment arrangement has been agreed by the Council. In such cases the Council will issue a letter confirming that an alternative payment method has been agreed with the applicant.

2.9.3 Deferred payments

Council will allow payment of contributions to be deferred in the following cases only:

- where the applicant has the intention and ability to dedicate land or provide a material public benefit in part or to full
 satisfaction of a condition imposed by development consent, and that offer of land or material public benefit is
 acceptable to the Council; or
- in other circumstances, to be outlined in writing by the applicant and determined formally by Council on the merits of the case.

In the circumstances where deferred payments are accepted, the debtor must lodge with Council an unconditional bank guarantee for the amount to be deferred. Bank guarantees will be accepted on the following conditions:

- The guarantee must carry specific wording outlining the purpose for which those contributions were due, for example, "drainage contributions for Stage 3".
- The guarantee will be for the contribution amount plus the estimated amount of compound interest foregone by Council
 for the anticipated period of deferral (Refer to formula in clause 2.9.4 below).

Council may call up the guarantee at any time without reference to the applicant, however, the guarantee will generally be called up only when cash payment has not been received, and land is not dedicated or material public benefit not provided by the end of the period of deferral.

The period of deferral must be for a limited time only as agreed where land is to be dedicated or a material public benefit is to be provided. The period of deferral may be extended subject to providing a further bank guarantee for the extended period in accordance with the above terms.

Council will discharge the bank guarantee when payment is made in full by cash payment, land transfer or by completion of Works In Kind.

2.9.4 Formula for bank guarantee amounts

The following formula to be applied to all bank guarantees for contributions is:

```
Guarantee Amount = P + P (Cl x Y)
```

Where

- P = Contribution due;
- CI = Compound interest rate comprised of Council's estimate over the period plus 3 percent allowance for fluctuations); and
- Y = Period of deferral (years).

2.9.5 Methods of settling contribution requirements

Contributions may be made by one or a combination of the methods described below.

Monetary contribution

A monetary contribution is the most common method of settling contribution requirements. However, Council may consider the transfer of land to Council or providing Works In Kind, but only where the offered land and or works are included in this Plan's Works Schedule (Part 5 of this Plan).

Transfer of land

An applicant may transfer land to Council in part or in full satisfaction of a contribution requirement. The land may be for open space, community facilities, drainage or roads and must be land, which is included in this Plan's Works Schedule (Part 5 of this Plan). The value of the land will be determined by an independent valuer appointed by Council.

Where land which is the subject of a development application contains land identified for acquisition under this Plan, Council may as a condition of consent require that land to be dedicated free of charge to Council. Monetary contributions will be adjusted accordingly to reflect the value of the land to be dedicated in lieu of payment of cash.

Works In Kind

Applicants are encouraged to provide Works In Kind in part or full satisfaction of a contribution. The works must be included in this Plan's Works Schedule (Part 5 of this Plan). The value of contingency for individual works will be paid where it can be proven to Council's satisfaction that unforeseen circumstances have given rise to additional costs.

Prior to proceeding with the works, applicants will be required to provide details of the works to be undertaken (including a development application), financial guarantees, bank guarantees and administration.

Applicants may provide land or works included in Part 5 of this Plan in excess of that required for the development. The value of the works will be determined in accordance with Council's Works in Kind Procedure, available from Council's administration office.

2.9.6 Goods and Services Tax

No Goods and Services Tax (GST) is applicable to the payment of contributions made under section 7.11 of the EP&A Act. This exemption applies to both cash contributions and land or works in lieu of contributions.

2.10 Contributions demand credits for existing development

Monetary contributions determined under this Plan will be calculated according to the estimated net increase in demand for the particular public amenities and public services that are included in this Plan and that a particular development is projected to generate.

The Plan addresses the provision of:

- roads, transport, and drainage facilities (being 'economic infrastructure'); and
- open space, recreation, community and cultural facilities (being 'social infrastructure'),

that have been designed to meet the needs of the urban development of the Precincts.

The planned economic infrastructure is to facilitate the conversion of the area from semi-rural development context to an urban development context. It is the wholesale re-development of the land for urban purposes (particularly through land subdivisions) that necessitates the provision of the economic infrastructure. The economic infrastructure currently available does not meet the needs of the planned urban development and whole new road and drainage networks have to be designed and built to meet those needs. No credit will therefore be given in the calculation of contributions for the demand for economic infrastructure attributable to development that existed at the time this Plan was prepared.

The planned social infrastructure is also to facilitate that same conversion, however there are people already living in the area that demand and use social infrastructure. It is also likely that current populations will, to some extent, demand the recreation and community facilities that will be provided under this Plan.

Consistent with the above, in calculating contributions under this Plan a credit will be given in the calculation of contributions only for the demand for social infrastructure attributable to development that existed at the time this Plan was prepared. That is, a contribution for social infrastructure will only be due to any net increase in population relating to the proposed development.

To determine the net increase in demand for social infrastructure requires that an assessment be made of:

- in the case of the first urban development of the land the existing residential population on the site when the first version of the plan came in to effect in 2014, or
- in the case of any subsequent urban development on the land the assumed residential population on the site at the date of lodgement of the application,

whichever is relevant.

The information included in Appendix A of this Plan will be used to calculate the estimated net increase in residential population in the case of the first urban development of the land.

A precise population attributable to each existing residential development is not available. Instead, this Plan assesses existing population on the basis of average dwelling occupancy figures for the Austral and Leppington North Precincts.

672

The assumed household occupancy rate for the purpose of determining net increase in demand for social infrastructure and the calculation of open space and recreation, and community and cultural facilities contributions under this Plan is 3.1 persons per dwelling.¹

2.11 Adjustment to contribution rates and contribution amounts

2.11.1 Overview

The purpose of this clause is to ensure that the monetary contribution rates imposed at the time of development consent reflect the current costs of provision of the facilities included in this Plan.

To convert the cost of facilities included in the Plan to a current cost, the monetary contribution rates shown in Part 1 of this Plan are to be adjusted in accordance with the provisions set out below:

- at the time of imposing a condition on a development consent requiring payment of the monetary contribution; and again
- at the time that the monetary contribution is to be paid pursuant to the condition imposed on that same development consent.

The adjusted contribution rates will also be published quarterly on the Council's website www.liverpool.nsw.gov.au.

This process is distinct and separate from clause 2.12, which deals with future reviews of this Plan. Future reviews will not affect any consent granted in accordance with this Plan and such reviews are required to be publicly exhibited.

2.11.2 Adjustment methods

The Consumer Price Index (CPI) is the most commonly used index for adjusting contribution rates, and for simplicity, is applied to contribution rates levied on development under this Plan. However, it is not the most suitable index for escalating capital works costs nor contributions relating to land that is yet to be acquired.

Capital works costs in the schedule of works are escalated to the base date of this Plan by ABS producer price indexes (PPIs):

- PPI Building Construction NSW (cat no. 30) for community facilities
- PPI Non-Residential Building Construction NSW (cat no. 3020) for open space facilities; and
- PPI Road and Bridge Construction NSW (cat no. 3101) for roads and stormwater facilities.

Land prices do not correlate with movements in the prices of goods and services, especially in urban release areas. As a result, Council will prepare and regularly publish a customised Land Value Index (LVI), generally consistent with in the contributions management arrangements it applies to other land release areas within the Liverpool LGA.

In accordance with the provisions of clause 32(3) of the EP&A Regulation, Council, without the necessity of preparing a new or amending contributions plan, will adjust the monetary development contribution rates set out in this Plan to reflect quarterly changes to both:

- the CPI (for all Works Schedule items identified in this Plan apart from the items comprising land yet to be acquired); and
- the customised LVI (for Works Schedule items identified in this Plan involving land yet to be acquired).

¹ Austral and Leppington North Precincts – Demographic and Social Infrastructure Assessment, prepared by Elton Consulting, page 14 identifies rates of 3.2 and 3.0 persons per dwelling in Austral and Leppington suburbs in 2006. A rate of 3.1 is assumed to be an average occupancy rate across both suburbs.

2.11.3 Works Schedule items other than land

The monetary contributions rates for Works Schedule items as set out in Part 5 of this Plan will be adjusted to reflect quarterly variations in the Consumer Price Index (All Groups - Sydney) from the date that the Plan came into effect.

The adjustments shall be made at the time of granting development consent so as to determine the appropriate contribution to be included on any relevant consent. A further adjustment will be made at the time of payment to reflect any further changes between the date of consent and payment of contribution.

Contribution at time of development consent

C₂ = C₁ x CPl₂ CPl₁

Contribution at time of payment



Where:

C ₁	=	Contribution of rate for works as shown in this Plan
C ₂	=	Contribution rate for works as included or to be included in the conditions imposed on the development consent
C ₃	=	Contribution rate for works at the time that the contribution is to be paid
CPI₁	=	Consumer Price Index (All Groups - Sydney) result at the time that the Plan was prepared - i.e. June quarter 2019
CPI₂	=	Consumer Price Index (All Groups - Sydney) result for the quarter immediately prior to the date of granting the relevant development consent
CPI₃	=	Consumer Price Index (All Groups - Sydney) result for the quarter immediately prior to the date that the contribution is to be paid

2.11.4 Land

The monetary contributions rates for Works Schedule items that relate to land as set out in Part 5 of this Plan will be adjusted in accordance to reflect quarterly variations in the Land Value Index (published on the Liverpool City Council website) from the date that the Plan came into effect.

The adjustments shall be made at the time of granting development consent so as to determine the appropriate contribution to be included on any relevant consent. A further adjustment will be made at the time of payment to reflect any further changes between the date of consent and payment of contribution.

Contribution at time of development consent

$$C_2 = \frac{C_1 \times LVI_2}{LVI_1}$$

Page 21

Contribution at time of payment

C3 =	=	C ₂ x LVI ₃
C ₁	=	Land component of contributions as shown in this Plan
C ₂	=	Land component of contributions subject of the conditions imposed on the development consent
C ₃	=	Land component of contributions at the time that the contribution is to be paid
LVI ₁	=	Land Value Index at the time that the Plan was prepared - i.e. June quarter 2019 = 100 $$
LVI ₂	=	Land Value Index at the time of granting the relevant development consent
LVI₃	=	The latest Land Value Index at time that the contribution is to be paid

2.11.5 Calculation of Land Value Index

Where:

The Land Value Index is a measure to reflect the changes in land values during the life of the Plan from the date of the adoption of the Plan.

The land costs included in the Works Schedule in Part 5 of this Plan are based on estimates provided in the report prepared by CivicMJD (1 July 2019). This provided an update to the valuations by CivicMJD in its report dated 2018.

The values are shown in Table 2.1.

Table 2.1 Assumed land values for various classifications

Land classification	Base assumed land cost (per sqm)	Land cost (per sqm) including average acquisition contingencies of 12%
Riparian corridors (constrained land and land below the 20-year Annual Recurrence Interval (ARI) event)	\$35	\$39.20
Residential land between the 20-year and 100-year ARI events	\$135	\$151.20
Low density residential prime land (R2) above the 100-year ARI event	\$340	\$380.80
Medium density residential prime land (R3) above the 100-year ARI event	\$430	\$481.60
Commercial/ Neighbourhood Business (B1) prime land within the town centre and above the 100 -year ARI event	\$400	\$448.00
Commercial/ Business Development prime land (B5) within the town centre and above the 100-year ARI event	\$450	\$504.00
Employment lands/ Industrial	\$370	\$414.40

Notes:

Refer to section 5.0 of the original MJ Davis Valuations report (undated) for Leppington and Leppington North but may include Special Land Value at date of acquisition, Severance, Solatium and Disturbance as required to be paid pursuant to the Land Acquisition (Just Terms Compensation) Act 1991.

The derivation of the Land Value Index, its quarterly updates and accompanying contributions rates for Austral Leppington North, are published on Council's website.

2.12 Review of Plan and contribution rates

Council will review this Plan on a regular basis.

The review process will canvass, as a minimum, the following issues (where data is available):

- development activity in terms of latest information on net additional dwellings and populations;
- likely total development activity to be experienced during the remainder of the Precincts development;
- progress in the delivery of public amenities and services identified in Part 5 of this Plan;
- modification of facility concepts, changes in anticipated facility costs, facility timing and land values;
- annual contributions received and expenditure information; and
- any other factors likely to affect the delivery of works identified in this Plan.

Pursuant to clause 32(3) of the EP&A Regulation, Council may make only minor adjustments or amendments to the Plan without prior public exhibition and adoption by Council. Minor adjustments could include minor typographical corrections and amendments to rates resulting from changes in the indexes adopted by this Plan.

Amendments beyond those authorised under clause 32 of the EP&A Regulation require the preparation of a new draft plan which in turn must meet the requirements of the EP&A Act and EP&A Regulation (including public exhibition of the draft plan for a period of at least 28 days). The nature of the proposed amendments and reasons for same would be clearly outlined as part of the exhibition.

Amendments requiring public exhibition would include adjustments to contribution rates taking account of more recent information and, where relevant, the following:

- actual costs of completed works;
- reviewed costs of yet to be completed works and land acquisition;
- adjustment in projected project management and contingency costs associated with works; and
- plan management and administration costs.

Plan reviews of the type described above will not affect any development contributions obligation required under any consent that is granted under this Plan.

2.13 Pooling of funds

Council's ability to forward fund services and amenities identified in this Plan is very limited. Consequently their provision is largely contingent upon the availability of contributions funds.

To provide a strategy for the orderly delivery of the public services and amenities, this Plan authorises monetary contributions paid for different purposes in accordance with the conditions of various development consents authorised by this Plan and any other contributions plan approved by the Council to be pooled and applied progressively for those purposes.

The priorities for the expenditure of pooled monetary contributions under this Plan are the priorities for works as set out in the Works Schedule in Part 5.

In any case of the Council deciding whether to pool and progressively apply contributions funds, the Council will have to first be satisfied that such action will not unreasonably prejudice the carrying into effect, within a reasonable time, of the purposes for which the money was originally paid.

3 Demand for public amenities and public services

3.1 Summary of this Part

The Austral and Leppington North Precincts are part of the South West Growth Area, as planned by the State Government.

The Austral Precinct and a portion of the Leppington North Precinct are in the Liverpool LGA and so Liverpool City Council will serve as a consent authority for much of the development. Council will also be the manager of most of the new public infrastructure that will be required to be delivered in its jurisdiction.

Planning for housing and other development requires the parallel planning for public infrastructure to support the development and the incoming population.

The incoming population is directly related to the expected number and type of residential dwellings and extent of non-residential development floor space in an area.

The extent of public amenities and services required for the future development of an area is usually based on standards or benchmarks rates (e.g. per capita provision).

The application of the provision standards to the estimate of expected development enables a list of infrastructure requirements to meet that development to be compiled.

This connection between expected development, infrastructure standards, and the resultant infrastructure list directly informs the contribution requirements in this Plan.

A range of infrastructure studies have been prepared to inform the infrastructure list (or Works Schedule). Part 4 of this Plan provides more detail on the servicing requirements expressed in these studies.

3.2 Development and infrastructure planning context

3.2.1 Growth Areas Structure Planning

The land affected by this Plan is within the Austral and Leppington North Precincts in Sydney's South West Growth Area.

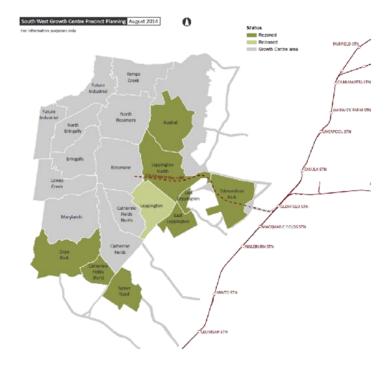
To facilitate planning and orderly development of the South West Growth Area, this area has been divided into seventeen precincts. The locations of the early release precincts, including Austral and Leppington North Precincts, are shown in Figure 3.1 over page.

The Austral and Leppington North Precincts were released for precinct planning purposes by the Minister for Planning in October 2009. The Austral Precinct is wholly located in the Liverpool LGA, while the Leppington North Precinct is located partly in the Liverpool LGA and partly in the Camden LGA. This contributions plan relates to the Austral Precinct and that part of the Leppington North Precincts that is within the Liverpool LGA.

A structure plan has been prepared for the Growth Area (formerly referred to as the Growth Centre), a copy of which is included as Figure 3.2 over page. Apart from local neighbourhood centres, the structure plan proposes ten (10) new town or village centres. The largest of these is the planned Major Town Centre at Leppington that will be located in the Leppington North Precinct in the adjoining Camden LGA, immediately adjacent to the southern boundary of the land affected by this Plan. The Western Sydney Parkland forms the northern and eastern boundaries of the Precincts.

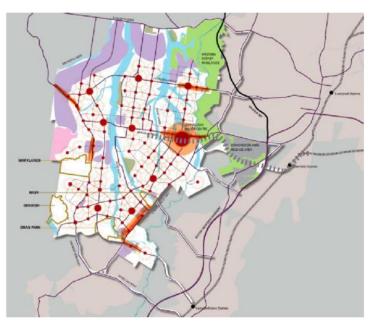
The Leppington Major Centre will be a major service provider for properties in the Precincts and some of the regional facilities of the centre will be located within the land affected by this Plan. Other infrastructure investment is underway to support the future Leppington Major Centre, including a new rail line from Glenfield via Edmondson Park.





Source: Department of Planning and Environment, 2014 (now Department of Planning, Industry and Environment).

Figure 3.1 South West Growth Area early release precincts



Source: South West Growth Centres Structure Plan Edition 3, prepared by Department of Planning and Environment (now Department of Planning, Industry and Environment).

Figure 3.2 South West Growth Area Structure Plan

Table 3.1 provides a context for the area the subject of this Plan in terms of the planned dwellings and population illustrating that the majority of housing and population in the Austral and Leppington North Precincts will be located in the Liverpool LGA.

Table 3.1 Estimated dwelling and populations

District	Area (ha)	Projected dwellings	Projected population
South West Growth Area (17 Precincts)	17,000	110,000	300,000
Austral and Leppington North Precincts		16,133*	49,686*

Sources: Growth Centres Commission (Structure Plan Explanatory Note); Department of Planning and Infrastructure (now Department of Planning, Industry and Environment)

*Gross estimated dwellings and population included in this Plan

3.2.2 Precinct Planning

A package of information on anticipated development and required infrastructure has been prepared for the Austral and Leppington North Precincts, including:

- Indicative Layout Plan (ILP) to guide planning and assessment of the precincts.
- An amendment to State Environmental Planning Policy (Sydney Growth Centres) 2006 to facilitate the formal rezoning
 of the land to enable urban development.
- Development Control Plan.
- Contributions plans prepared by Camden Council and Liverpool City Council (this Plan).
- Infrastructure Delivery Plan (IDP).

Key information sources that have underpinned infrastructure planning and costing in this Plan are listed included in Table 3.2.

Table 3.2 Studies supporting infrastructure planning and costing

Public amenity or service	Studies informing infrastructure need and cost
Land acquisition for public amenities or services	MJ Davis Valuations Pty Ltd, Austral and Leppington North Precincts, 2014
	CivicMJD, Valuation Report - Various Residential and Industrial Release Areas (in Liverpool LGA), June 2018
	CivicMJD, Land Valuations for the Austral Precinct, July 2019
Stormwater drainage works	Cardno (NSW/ACT) Pty Ltd, Austral & Leppington North Precincts Water Cycle Management WSUD Report, prepared for NSW Department of Planning and Infrastructure, April 2011, plus Responses to Exhibition Submissions, December 2012
	SMEC, Austral and Leppington North Design of Water Management Infrastructure Detailed Concept Design Report and its associated input studies, prepared for Liverpool City Council, March 2019
Roads and transport works	AECOM Australia Pty Ltd, Austral and Leppington North (ALN) Precincts Transport Assessment, prepared for NSW Department of Planning and Infrastructure, July 2012
Open space and recreation, community and cultural facilities works	Elton Consulting, Austral and Leppington North Precincts - Demographic and Social Infrastructure Assessment, August 2011, plus Addendum, July 2012

More detail on the Precincts' infrastructure requirements is included in the Parts 4 and 5 of this Plan.

680

3.2.3 Infrastructure Delivery Plan

The Infrastructure Delivery Plan (IDP) provides an overview of the urban infrastructure requirements for the Austral and Leppington North Precincts, and how those requirements will be met.

The IDP provides, amongst other things, a basis for ongoing discussion between planning and infrastructure agencies to guide, inform and improve the delivery of infrastructure. It also serves the purpose of acquainting owners and developers of land in the Precincts with how and when infrastructure is likely to be provided.

Coordination in infrastructure delivery will be critical to the timely roll-out of urban development of the Precincts. Coordination is even more critical in an environment where the land is comprised of relatively small parcels held by a large number of land owners. This is the case in in the Precincts.

The IDP provides the following directions for the delivery of local infrastructure to the land to which this Plan applies:

- Identifies the need to prepare contributions plans for local infrastructure. This Plan addresses this requirement.
- Requires staging plans for local infrastructure to accord with the indicative priority development areas identified in the IDP. The staging outcomes in this Plan reflect the IDP.
- Identifies that total local infrastructure costs are likely to be higher than the likely contribution receipts, given the
 contributions caps that are in place. The funding of higher order recreation and community facilities is particularly
 uncertain. Council, in partnership with the State Government, will therefore need to explore other sources of funding or
 other delivery options.
- Provides that councils have prepared, or are required to prepare, Community Strategic Plans as the key documents guiding councils' activities in the coming decades. This is now the mandated way for councils in NSW to undertake and report their resource planning and the delivery of services and facilities to their communities. Supporting the implementation of the strategic plans will be the resourcing strategies (including long-term financial plans, workforce management plans and asset management plans), delivery plans and operational plans. Councils' Community Strategic Plans must be prepared with due consideration of the various strategies and policies that impact on the local area from both the State (including the Metropolitan Strategy and the State Plan) and Federal Government levels.
- Provides that the effective management of development growth will require a significant ongoing commitment from State Government, particularly in the delivery of infrastructure and services. State Government's role will span a range of agencies and joint commitment and action through the Metropolitan and Sub-regional Strategy will be required to ensure consistent, timely and quality delivery of infrastructure and services to this part of the South West Growth Area.
- Provides that funding constraints mean that there should be an even greater emphasis placed on partnering with developers to provide the necessary local infrastructure (through, for example, Planning Agreements and Works in Kind agreements).

3.3 Expected development outcomes

3.3.1 Existing development

Existing development in the area is characterised by mainly rural and rural residential land uses.

When the land was rezoned for urban development, the majority of land in the Precincts was used for either small scale agricultural purposes such as market gardens or rural residences. Rural residencies are often used as a place of business. This may include ownership of trucks, horses or running construction businesses.

At the time of rezoning, some of the land in the Precincts was developed for purposes that might be characterised as urban uses - for example, private schools and retirement living establishments.

681

3.3.2 Net Developable Area

The capacity for development of land is restricted by a number of factors, including:

- natural constraints such as riparian and flood prone lands;
- man-made constraints such as existing infrastructure, easements and other legal restrictions, and existing
 infrastructure such as gas and transmission lines.

In addition to the constraints, there are future constraints. For example, certain land is needed to be set aside or reserved for public purposes such as roads, government buildings, education and health facilities, and so on.

Taking these matters into consideration allows a calculation of the amount of 'economic' land that is available for development. The planned development of this 'Net Developable Area' (or NDA) is the development that will generate the demand for the urban infrastructure such as roads and drains that are required to sustain it. Net Developable Area is therefore one of the bases used to determine contributions under this Plan.

The Precincts together have an estimated total Net Developable Area of approximately 1,030 hectares.²

3.3.3 Overview of expected development

The Precinct Plan for both Austral and Leppington North Precincts has been prepared with reference to the Structure Plan and the indicative dwelling and town centre targets, and achieves the following outcomes:

- Leppington Major Centre and nearby employment land, with capacity for up to 13,000 jobs in retailing, light industrial, business park, human services and entertainment sectors.
- Approximately 17,350 dwellings and a population of approximately 54,300.
- A Town Centre in Austral with retail floor space in the order of 30,000 square metres.
- Three neighbourhood centres each with retail floor space in the order of 10,000 square metres.
- 4 primary schools and 2 high schools.
- 85 hectares of light industrial land for local jobs and local services.
- A new TAFE college and Regional Integrated Primary Health Care centre located in Leppington Major Centre.
- Regional level community and cultural facilities in Leppington Major Centre.

Expected development in the Precincts will be characterised by the following:

- A part of the Leppington Major Centre civic precinct and bulky goods retailing located immediately to the north of Bringelly Road.
- Four (4) neighbourhood retail shopping centres and up to eight (6) schools.
- A range of lower density residential areas, including medium density around the various retail centres, infill low density
 urban residential and lower density Environmental Living zones just beyond the creek corridors and rural transition
 along the western boundary.
- A light Industrial area to the north of Fifteenth Avenue.

² Total NDA is 1,131 hectares. 'Equivalent NDA' (that is, total NDA adjusted to reflect the lower residential development potential of Environment zoned lands and higher potential of some areas) is used to calculate contributions under this Plan. Equivalent NDA for the Precincts is approximately 1,146 hectares.

- Open space and drainage facilities along the Bonds Kemps and Scalabrini Creek corridors as well as adjacent to the Western Sydney Parklands and along other minor, unnamed creeks that pass through the Austral Precinct.
- Areas reserved for environmental conservation and environmental protection, principally along the Kemps Creek corridor and in the north of the Austral Precinct, as well as a corridor for the South West Rail Line.

The extent of development is reflected in the final Indicative Layout Plan adopted by the Department of Planning and Infrastructure (now Department of Planning, Industry and Environment).

Table 3.3 outlines the expected extent of development in the Liverpool LGA portion of the Austral and Leppington North Precinct based on the final Indicative Layout Plan. The Equivalent NDA makes allowance for higher and lesser densities.

The proposed arrangement of these component land uses is shown in Figure 3.3.

Table 3.3 Expected Net Developable Area

Land Use	NDA (ha)	Equivalent NDA assuming 15dw/ha
Environmental Living (4 dwellings/ha)	107.79	28.74
Environmental Living (10 dwellings/ha)	45.69	30.46
Very Low Density Residential (10 dw/ha)	9.23	6.15
Lower Density Residential (15 dw/ha)	703.00	703.00
Low Density Residential (20 dw/ha)	56.35	75.13
Medium Density Residential (25 dw/ha)	13.85	23.08
R3 Medium Density Residential (25 dw/ha)	125.38	208.97
Sub Total Residential	1,061	1,076
Neighbourhood Centre	9.90	9.90
Bulky Goods	24.14	24.14
Light Industrial	36.01	36.01
Sub Total Employment	70.05	70.05
TOTAL	1,131	1,146

Source: Department of Planning and Infrastructure (now Department of Planning, Industry and Environment).

NSW Planning & AUSTRAL & LEPPINGTON NORTH PRECINCTS 0

Liverpool Contributions Plan 2019 - Austral and Leppington North Precincts

Figure 3.3 Expected land use in the Precincts

684

3.3.4 Demographic characteristics

The likely demographic characteristics of a development area are important for understanding and planning for the future social infrastructure needs of that area.

The demographic characteristics of the existing rural population do not provide a robust indicator of the future demography of the Precincts.

The report Austral and Leppington North Precincts - Demographic and Social Infrastructure Assessment (the 'Social Infrastructure Assessment') prepared by Elton Consulting analyses the demographics and housing market conditions in the Camden, Liverpool and Campbelltown LGAs.

The Social Infrastructure Assessment makes the following conclusions about the anticipated demography of the future release area:

- There will initially be a comparable proportion of young couples and families with children to other release areas in the
 region, but a greater range of family types, reflecting the wider range of housing types and price markets to be
 provided.
- Proportions of empty nesters and older people will be initially similar to that usually experienced in new release areas, but, given the differing housing stock, will rapidly increase to approximate those in the wider district once services and public transport become well established.
- Over time, the population will become more diverse. Increasing proportions of young adults and older people will be
 attracted to the area once Leppington Major Centre is established. The proportion of the population who are young
 children and young adults will decline as the population ages and the proportion of older children with older parents
 grows. The proportion of the population aged 55+ years will also increase considerably as the area matures.
- Owner occupiers are likely to provide a stable group that will age in place through the life cycle stages, while tenant households will experience greater turnover, thereby maintaining a similar age profile as in the initial stages.
- Over time the population profile is likely to come to more closely approximate that of an established area with a variety
 of age and household characteristics, rather than a traditional new release area with particular age concentrations.
- Changing demographic, cultural and lifestyle patterns that will occur through the life of the development; and the
 relative uncertainty about the future composition of the population and its precise needs, gives rise to a need to plan for
 flexibility in social infrastructure facilities to enable them to respond and adapt as the particular requirements and
 lifestyle preferences of the population are ascertained.

3.3.5 Dwelling occupancy rates

The amount and mix of the types of expected residential development will inform estimate of the future population of an area. The need for social infrastructure is usually based on per capita benchmarks. As development contributions are levied on a development-by-development basis, in order for the contribution to be reasonable there needs to be an assumption of how many people are likely to live in the proposed development.

This Plan therefore assumes standard dwelling occupancy rates for the purpose of determining the estimated occupancy of development that is approved during the life of the Plan.

The occupancy rates used to calculate contributions under this Plan are those determined by the Social Infrastructure Assessment. They are shown in Table 3.4.

Table 3.4 Dwelling occupancy rates assumed in this Plan

Development type	Occupancy rate	
Subdivided lots	3.4 persons per lot	
Detached dwelling, detached dual occupancy (each dwelling)	3.4 persons per dwelling	
Semi-detached, town house, terrace, attached dual occupancy (each dwelling)	2.6 persons per dwelling	
Flat, unit, apartment, secondary dwellings	1.8 persons per dwelling	
Seniors living dwellings	1.5 persons per dwelling	

3.3.6 Anticipated resident population

The anticipated population in the Austral and Leppington North Precincts has been determined on the basis of the Net Developable Area for various types of residential development, the minimum density of dwellings in those areas (specified in the draft SEPP amendment), and the assumed average occupancy rates for those dwellings.

The anticipated population is shown in Table 3.5.

Table 3.5 Calculation of anticipated resident population

Dwelling type	Projected dwellings	Assumed dwelling occupancy rate	Population
Low density and environmental living (detached dwellings)	12.652	3.4	39.186
Medium density residential (semi-detached etc.)	3,481	2.6	13,159
Less assumed existing population (see Appendix A)			-2,659
Expected net additional population			49.686

3.3.7 Anticipated non-residential floor space

The predominant economic land use in the Precincts will be residential development. There will also be some non-residential development including neighbourhood retail centres, a light industrial area; and a bulky goods retailing area adjoining the neighbouring Leppington Major Centre in Camden LGA.

The anticipated extent of these non-residential developments is shown in Table 3.6.

Table 3.6 Anticipated non-residential development potential

Land use category	Net Developable Area (ha)	Projected gross floor area (m²)*
Neighbourhood Retail Centre	9.90	44,550
Bulky goods	24.14	108,630
Light Industrial	36.01	162,045
Total	70.05	315,225

* based on an assumed average floor space ratio of 0.45:1

Source: Department of Planning and Infrastructure (now Department of Planning, Industry and Environment)

3.4 Infrastructure demand arising from the expected development

Future development in the South West Growth Area will result in an additional population of up to 300,000 people.

Existing public amenities and services in the Precincts have been essentially designed to accommodate the existing predominantly rural living environment. A change in the development profile from rural to urban development is now planned. More particularly, the Precincts are planned to have a low density suburban character. The projected influx of an estimated 49,686 new residents demands a significant investment in new and augmented public amenities and services.

Research on infrastructure needs for the impending urban development has identified the following impacts on public services and public amenities:

- increased demand for active and passive recreation facilities, such as recreation centres, sports fields, sports courts, playgrounds, walking trails and bike paths;
- increased demand for spaces that will foster community life and the development of social capital in the Precincts, such as multi-purpose community centres and libraries;
- increased demand for facilities that will support safe and convenient travel between land uses both within the Precincts
 and to and from destinations outside of the area, such as upgrades to existing roads, new roads, intersections and
 public transport facilities; and
- increased demand for stormwater drainage facilities as a result of the extra stormwater runoff generated by impervious surfaces associated with urban (as distinct from rural) development, as well as water quality devices consistent with Water Sensitivity Urban Design (WSUD) principles.

A range of public facilities and public amenities have been identified as being required to address the impacts of the expected development, including:

- open space and recreation facilities;
- community and cultural facilities;
- water cycle management facilities; and
- traffic and transport management facilities.

More detail on the demand for public services and amenities, the relationship with the expected development, and the strategies for the delivery of required infrastructure is included in Part 4 of this Plan.

The costs, indicative timing, and proposed location of individual items for the public amenities and public services included in this Plan are shown in Part 5 of this Plan.

4 Strategy plans

4.1 Infrastructure costs and delivery generally

4.1.1 Apportionment of the infrastructure costs to expected development

The costs for public services and amenities were informed by the studies that support the infrastructure planning of the area (refer Table 3.2).

The development monetary contribution for each of the facilities identified in this Plan is determined by dividing the total cost of the facility by the contribution catchment (which is expressed in persons or NDA). This process ensures that fair apportionment of facility costs is calculated for development expected to occur under this Plan.

The contribution catchments for each infrastructure type are:

- in the case of open space and recreation facilities land and works, the expected additional resident population of the Precincts;
- in the case of community and cultural facilities land and works, the number of people (or future residents) the
 respective facility has been designed for;
- in the case of road and transport land and works, the expected additional resident population of the Precincts for residential development and the estimated equivalent Net Developable Area of the Precincts for non-residential development; and
- in the case of stormwater drainage land and works and plan administration, the estimated equivalent Net Developable Area of the Precincts for all development.

The infrastructure included in this Plan has generally been sized to reflect the demand generated by the expected development under this Plan. Some facilities, such as the proposed aquatic and indoor recreation centre, have been designed to serve a wider catchment and the contribution rate reflects that wider contribution catchment. Council will need to make arrangements to ensure that the cost attributable to the demand sources external to the Precincts is met (for example, by subsequent contributions plans, joint contributions plans, special rates, grants).

More details on this apportionment are discussed in the remainder of Part 4 of this Plan.

4.1.2 Delivery of the infrastructure

Council will require contributions from developers under this Plan toward provision of the public amenities and public services identified in this Plan. These contributions may be in the form of monetary contributions, dedications of land free of cost, or a combination of these.

Developers may choose to provide, subject to the agreement of the Council, one or more infrastructure items identified in this Plan as Works In Kind or provide another type of material public benefit as means of satisfying development contributions required under the Plan (refer clause 2.9.5 of this Plan). A Works In Kind Agreement must be in place prior to commencing the works in accordance with the Council's Works In Kind Agreements Policy.

Substantial research has been applied to the derivation of the Plan's Works Schedule and the planning for the location of all facilities has been completed but detailed design will be carried out in the development phase. The facilities will be developed in a manner that allows them to effectively serve the demand attributable to development envisaged under this Plan.

The facilities strategies included in Part 4 of this Plan are based on strategic information. It is likely that, as the planning process for the different development areas proceeds, modified and more cost effective solutions that still meet the strategy objectives will be developed.

Council will prepare design concepts for the facilities so that specification and costing of the facilities can be more accurately defined as implementation of this Plan proceeds. This may result in amendment of this Plan.

Where alternatives to the Works Schedule are proposed in conjunction with the development of areas and the alternatives are approved by the Council, the development contribution applicable to a development the subject of a development application may be reviewed, or the Works Schedule in this Plan updated, or both.

4.1.3 Infrastructure staging and priority

The overarching strategy that guides the staging and priority of infrastructure is the Infrastructure Delivery Plan. This will be developed and refined in accordance with the anticipated development program for the Austral and Leppington North Precincts. The provision of facilities included in this Plan will be programmed, as far as practicable, to align with these broader programs.

The initial development areas, as discussed in the Infrastructure Delivery Plan and clause 3.2.3, include:

- Land in and around the Leppington Major Centre.
- Land located north and south of Fifteenth Avenue on the eastern edge of the Austral Precinct.

The second of these areas is within the Liverpool LGA, while the Leppington Major Centre is just south of the border with Camden Council and so the land around this centre may include land in the Liverpool LGA.

Ideally, development will proceed outward from the railway station and retail core. The existing land ownership pattern and other influences (such as the demand for different land use types) however means that this order of development is unlikely to occur. The Infrastructure Delivery Plan strategies reflect this:

There should not be any assumption that services are 'reserved' for particular areas in the early stages. If owners and developers of land located outside the initial development areas consult and work cooperatively with infrastructure providers and owners of adjacent land, there is no reason why those lands could not also be developed.³

With these uncertainties, the facility staging and priorities details that are shown in Part 5 of this Plan are general in their scope, and will be subject to regular review.

³ Austral and Leppington North Precincts Infrastructure Delivery Plan, Draft Report for Exhibition, prepared by Newplan, August 2011, Section 4.2.

689

4.2 Open space and recreation facilities

4.2.1 Relationship between the expected types of development and the demand for additional public facilities

The requirements for local, district and regional scale open space and recreation facilities as a result of the expected development of the Precincts are documented in the report Austral and Leppington North Precincts – Demographic and Social Infrastructure Assessment, prepared by Elton Consulting in August 2011. This is supplemented by an Addendum, prepared by Elton Consulting in July 2012.

The information below comprises a summary of sections of that report that describe the demand for new and upgraded public amenities and services.

Existing provision

There are limited open space and recreation facilities accessible to the current residents of the Precincts. However the extent of provision is consistent with the area's small population and semi-rural character ⁴

There are three identified local public open space areas located within the Liverpool LGA part of the Austral and Leppington North Precincts. These are:

- Craik Park (includes children's playground, sports field and tennis courts);
- WV Scott Memorial Park (includes children's playground, sports fields, cricket practice nets, netball courts and bushland); and
- Starr Park (bushland).

In addition there is a significant area of district and regional parks and bushlands on the periphery of the Austral Precinct, including:

- Western Sydney Regional Parklands;
- Grimson Park (in West Hoxton); and
- Kemps Creek Nature Reserve (high conservation value bushland no public access).

The level of open space provision reflects the rural residential lifestyle of the area. That is, the demand for public open space (particular local and passive open space) is significantly reduced in locations where residents live on their own substantial parcel of land.

With the proposed development of the area to an urban environment and its associated influx of new residents, the area will require significantly more land for open space and recreation purposes.

Trends in facility provision

Current and emerging trends and factors that have been considered in the planning and specification of Austral and Leppington North Precincts recreation infrastructure included the following:

- Significant and ongoing popularity of informal recreation activities (e.g. walking), and activities requiring fixed commitments are declining in favour of informal and more flexible activities.
- Facilities that are flexible in their service provision.

⁴ Social Infrastructure Assessment, page 16

- Growing awareness and interest in health and fitness as part of a balanced lifestyle rather than an emphasis solely on leisure.
- Increasing demand for outdoor recreation.
- Growing awareness of the importance of incidental exercise within employment and residential areas, increasing the demand for walking and cycling paths.
- An increasing emphasis on quality as well as quantity.
- An increasing demand for access for young people and improved accessibility more generally.
- An increased demand for natural areas and adventure-based activities.
- The increased duration of playing seasons requiring consideration of alternative playing surfaces.

Planning principles for open space and recreation

Principles for the provision of sustainable open space and recreation infrastructure that have guided the selection of infrastructure items included in this Plan include the following:

- Open space should be largely publicly provided.
- Meet a diverse range of open space and recreation needs and opportunities.
- Avoid exerting pressure on open space and recreation facilities in surrounding areas.
- Quality of open space is more important than quantity.
- A physically and visually connected network; and represent a non-vehicular system that connects major activities and open spaces by walking and cycling.
- Comprise a local, district and regional hierarchy of spaces.
- Reflect and complement the natural, ecological, waterway and visual features of the area; and incorporate natural
 areas and riparian corridors into the open space system where possible.
- Integrate a network of open space with stormwater management and water-sensitive urban design 5

Recreation demand assessment based on forecast demographics

The size and characteristics of the population in the Precincts is discussed in Part 3 of this Plan.

Implications for recreation demand as a result of the expected mix of residents is discussed in detail in Table 9.1 of the Social Infrastructure Assessment.

In summary:

- Future developments will initially contain a predominance of families with children, adolescents and young people, and only over time will there be a balance of more middle aged and older people.
- The major target groups for recreation planning in new release areas are children aged 0-14 years, and adults aged 25-40 years.

⁵ Social Infrastructure Assessment, Section 3.1

- Local open space is important in encouraging informal interaction and creating opportunities for new and existing
 residents to come together, as well as for encouraging extended family activity, for walking and cycling as well as
 family gatherings.
- The level of local open space will in part be informed by prevailing council standards of provision.

In relation to the last point, the following plans and strategies provide guidance:

- Liverpool City-Wide Recreation Strategy 2020 (2003); and
- Liverpool City Council Provision Rates Indicative Draft 21 September 2010.

The following is a summary of Liverpool City Council's standards relating to open space:

- The provision of open space in new release areas is based on a standard of 2.83 hectares per 1,000 people;
- Local parks (minimum 2,000 square metres) to be provided within a five-minute walk of most dwellings;
- 1 key suburb park (district park) with a minimum size of 3 hectares per 5,000 10,000 people;
- 1 double playing field of minimum 4 hectares per 10,000 people (local sporting field);
- 1 district sporting field per 60,000 people approximately;
- District sporting fields to be minimum 6 hectares and, where possible, co-located with other commercial, community
 and recreation space in larger neighbourhood activity hubs;
- Split between active and passive open space to reflect quality considerations, rather than a firm 50:50 split; and
- High use recreation facilities and quality open public spaces should be provided away from electricity transmission lines, wherever practicable ⁶.

The above considerations have informed the open space and recreation requirements for the future development of the Precincts.

Local and district open space requirements

The total area of local and district open space land required was calculated in the Social Infrastructure Assessment on the basis of meeting the combined needs of the Austral and Leppington North Precincts' developments.

The planning of open space areas was undertaken as part of the Precinct planning phase in an iterative manner. Earlier versions of the ILP identified more extensive passive open space areas aligning with the numerous drainage lines traversing the Austral and Leppington North Precincts. The size of the open space areas was reduced in acknowledgment of the very high cost of acquiring the substantial areas required for meeting open space demands.

The benchmark figure in the report proposed a rate of 2.9 hectares per 1,000 population. For a forecast population of 52,345 people in the Precincts (including the existing population), application of this benchmark would result in a requirement of approximately 151.8 hectares of district and local open space.

This Plan proposes to provide marginally less than the total Austral and Leppington North Precincts benchmark rate for open space (2.9 hectares per 1,000 residents). Table 4.1 shows that some of the land has been obtained free of cost so that the incoming population (49,686 residents) is required to provide only 104.84 hectares, or 2.11 hectares per 1,000 residents. The incoming population benefits from open space areas greater than the benchmark rate, while paying for less than the benchmark rate. The proposed inclusion of 104.84 hectares of land in this Plan for open space purposes is considered reasonable on these grounds.

⁶ Social Infrastructure Assessment, p76

The extent of open space is based on the final Indicative Layout Plan prepared by the NSW Department of Planning and Infrastructure (now NSW Department of Planning, Industry and Environment).

For the Precincts, Table 4.1 sets out the how the required amount of open space land was achieved.

Table 4.1 Proposed provision of district and local open space

Open space	Area (ha)
Land to be acquired	104.84
Land dedicated from the NSW Government (Office of Strategic Lands)	5.67
Land currently owned or managed by Liverpool City Council	13.50
Total open space to be provided in Precincts	124.01
Total population in Precincts (persons)	49,686
Open space provision rate (ha/1,000 persons)	2.5

Source: Department of Planning and Infrastructure (now Department of Planning, Industry and Environment).

Table 4.2 provides a breakdown of this open space according to type.

Table 4.2 Proposed provision of district and local open space

Open space type	Acquisition land area (ha)	Dedication land area (ha)	Total open space (ha)
Local passive open space	36.16		36.16
Local sporting fields (active recreation)	26.52	9.70 (Craik Park)	36.22
		5.67 (NSW Govt. dedication)	
District passive open space	33.09	3.80 (Council land)	42.56
District sporting fields (active recreation)	9.07		9.07
Total open space	104.84	19.17	124.01

Source: Department of Planning and Infrastructure (now Department of Planning, Industry and Environment).

The data in Table 4.1 show a weighting toward the provision of passive rather than active open space. The high percentage of passive open space arises in part because of the extensive creek networks that traverse the Precincts.

The above land also does not include:

- Regional active open space available in Western Sydney Parklands;
- Riparian and other conservation land such as bushland;
- Open space under transmission lines; and
- Playing fields within school sites.

The costs associated with open space land and works will be apportioned solely to new residential development. No contributions for Precincts open space facilities will be required of non-residential development as the need for the facilities has been based on the anticipated residential development only.

Recreation facilities requirements

The facilities described in Table 4.3 (on the following pages) have been determined in the Social Infrastructure Assessment as being required to meet the needs of expected development in the Austral and Leppington North Precincts, and in some cases the wider Growth Area catchment.

Some of the facilities are located in the Camden LGA portion of the Leppington North Precinct and are therefore not included in the Works Schedules that comprise Part 5 of this Plan. The full list of Austral and Leppington North Precincts' requirements is shown for completeness.

Table 4.3 Recreation facilities requirements

Facility	Size	Description	Provision	Provision in the Precincts
Local passive parks	s to 0.5ha spaces and opportunities and cater to 500m walki older children and young people as well distance of	Within 400- 500m walking distance of 90% of dwellings	Many dispersed throughout the Precinct mainly focused along the riparian corridors but	
		Grassed area for ball games, seats, shelter. May contain practice wall, fitness equipment, other elements.		generally well distributed around the area
District (key suburb) parks	Min. 3ha	'Something for everyone', family parks. Includes a combination of outdoor courts (basketball, netball), skate park, BMX track, shared pathways, children's play equipment, outdoor fitness equipment, performance space, specialised recreation facilities, water feature, picnic / barbecue facilities, unleashed dog exercise area.	6-7 parks	7 concentrations of district passive recreation facilities sized between 3 and 16 hectares
Children's playgrounds (0- 4years)	Min. 0.3ha for standalone playgrounds	Co-located with parks, sportsgrounds, courts, schools, community facilities, conservation areas. Regional, district, local hierarchy in terms of play equipment and range of experiences.	11 playgrounds	18 playgrounds or playspaces to be provided on local and district passive parks
		Each play area should offer a different experience. Include road safety bike track at regional playground. Include children's bike paths in district and regional playgrounds.		
		Can be co-located with playspaces for 5 to 12-year olds – within sight distance for carers but physically separated. Fencing if adjacent to water, road, steep slope. Seating, shade, water provided.		
Play spaces (5 to 12-year olds)	Min. 0.3ha for standalone playgrounds. Where co- located the space may be reduced.	Allows for more independent play, skill development and cognitive development. However, they still require adult supervision. More challenging equipment These may include bouldering features, climbing areas, 'learn to' cycleways through to cycle obstacle course, skate facility, BMX/mountain bike jumps and tracks. These areas could be co-located with children's playgrounds, school or community facilities for supervision and convenience of use by carers.	13 play spaces	See above

Facility	Size	Description	Provision	Provision in the Precincts
	Min. 4ha	1 double field per 5,000 people.	8 double playing fields or 20 single fields.	6 additional local sportsgrounds to complement an existing sportsground at Craik Park
	(ideally 5ha)	To accommodate demand for local sport and recreation training and competition. Rather than a series of single fields facilities are grouped to provide economies of scale for infrastructure.		
		To be located close to schools. Inclusions :		
		 2 multi-purpose rectangular fields or 1- 2 full-sized cricket/AFL ovals (plus practice nets) 		
		 2 tennis / netball courts – 2 half-court basketball courts, or 2 multi-purpose courts – Lights for training – Amenities with change rooms, canteen, meeting room – 		
		Parking co-located with a playground, school, community facility, play space.		
District sportsground	Min. 6ha up to 10ha	The local sports park identified above may be expanded to incorporate one of the proposed district grounds dependent on location and access.	1 complex of four playing fields	1 complex of four playing fields on a new 9.1ha park located between
		Requirements – To be located near public transport routes, no further than 2 km from all dwellings – To be co-located, where possible, with other commercial, community and recreation space in neighbourhood activity hub – Provide for district standard adult competitions and training or junior regional or state school championships. – Amenity buildings, parking, storage core inclusions – Located on land without flooding or transmission line constraints.		Ninth and Tenth Avenues
		Given the timeframe before the population threshold warrants a district standard facility. The final mix of courts and fields will require community consultation and council input based on most recent open space planning principles and research.		
		Inclusions: – 4 multi-purpose rectangular fields, parking and landscaped buffer – No flooding or transmission line restrictions – Higher quality fields than local – Maybe combined with playground, netball training courts or multi-purpose tennis/basketball/netball courts. Add practice nets if cricket wickets – May include lawn bowling club or similar.		

Source: Social Infrastructure Assessment, pages 79-84.

696

Regional open space and recreation facilities requirements

The Leppington railway station will be located just outside the southern boundary of the Precincts in the surrounding Major Centre. Leppington Major Centre is the only major centre to be developed in the entire South West Growth Area, and will include some of the land at the southern edge of the Precincts. This centre is being designed to serve a user catchment of around 300,000 residents.

Associated with this centre and located within the Liverpool LGA, the Regional Indoor Sports and Aquatic Centre is proposed to service the population of the Precincts and beyond. Details of this facility are included in clause 4.3 Community and Cultural Facilities.

Other regional open space demands are expected to be met by the Western Sydney Parklands, which adjoin the Austral and Leppington North Precincts to the east. It is expected that the embellishment of the Parklands will be carried out in the manner of other regional parks in the Sydney region (e.g. Centennial Park in the Sydney City LGA).

The Growth Area catchment, equivalent in scale to Canberra, will require substantial recreation facilities to meet the regional demand. Apart from the Aquatic Centre, the planning for regional facilities also includes a regional stadium. The Western Sydney Parklands Trust has prepared an options paper in relation to the stadium and envisages that it will be located in the Western Sydney Parklands.⁷

This Plan does not require contributions toward a stadium or any embellishments in the Western Sydney Parklands.

4.2.2 How are the contributions calculated?

Contributions will be collected only from residential development toward open space and recreation facilities identified under this Plan.

Monetary contributions are calculated on a per person or per resident basis, then factored up to a per lot or per dwelling amount.

The monetary contribution per person in a development containing residential dwellings or lots (whether or not that development also comprises non-residential floor space) is calculated as follows:

Contribution per resident (\$) =
$$\sum \frac{(\$INF)}{P}$$

Where:

- \$INF = the estimated \$ cost or if the facility is existing, the indexed, completed cost of providing each of the open space and recreation facilities (refer Part 5 Works Schedule).
- P = the estimated resident population (in persons) that will demand each facility that is, the expected net additional population of the Precincts (refer Table 3.5)

The monetary contribution for different residential development types is determined by multiplying the contribution per person by the estimated increase in population as a result of the development and using the assumed occupancy rates included in clause 3.3.5 of this Plan.

For convenience, these rates are reproduced in Table 4.4.

⁷ The Western Sydney Parklands Trust Plan of Management identifies a proposal for a regional sporting hub in the southern end of the Western Sydney Parklands, in the vicinity of the Austral and Leppington North Precincts, subject to funding.

Table 4.4 Assumed residential development occupancy rates

Development type	Occupancy rate
Subdivided lots	3.4 persons per lot
Detached dwelling, detached dual occupancy (each dwelling)	3.4 persons per dwelling
Semi-detached, town house, terrace, attached dual occupancy (each dwelling)	2.6 persons per dwelling
Flat, unit, apartment, secondary dwellings	1.8 persons per dwelling
Seniors living dwellings	1.5 persons per dwelling

698

4.3 Community and cultural facilities

4.3.1 What is the relationship between the expected types of development and the demand for additional public facilities?

The requirements for community and cultural facilities as a result of the expected development of the Precincts are documented in the Social Infrastructure Assessment.

The following is summary of the information and approach used to arrive at the community and cultural facilities requirements of the Precinct.

Existing provision

There are very limited community and cultural facilities accessible to the current residents of the Precincts. They include two (2) schools and three (3) child care centres, three (3) places of worship and two (2) seniors living developments.

Other facilities are located further afield, including in the Camden LGA and surrounding suburbs of Liverpool LGA. District level facilities are located in the newer suburbs further east around Horningsea Park and further south in Camden LGA, and have been designed to meet the needs of incremental urban growth in those locations, rather than any growth envisaged in the Austral and Leppington North Precincts.

The limited extent of provision is consistent with the area's small population and semi-rural character 8.

Principles for sustainable community infrastructure

Principles for the provision of sustainable community facilities infrastructure described in the Social Infrastructure Assessment and that have guided the selection of infrastructure items included in this Plan include the following:

- Facilities should be provided in an efficient, timely and co-ordinated way to support the pattern of development; ensuring that services are available to residents as early as possible and they are not disadvantaged through delays in delivery.
- Efficient use of limited resources by designing facilities to be multipurpose, co-located with other facilities and able to
 accommodate shared and multiple use arrangements.
- Cluster related facilities and services to promote civic identity, safety and focal points for the community.
- Ensure that facilities, services and open space are accessible by public transport and located to maximise access for
 pedestrians and cyclists.
- Ensure flexibility in the design and use of facilities, so they can respond and adapt as needs change. Avoid
 arrangements for single uses or specific target groups that may quickly become outdated.
- Promote equitable access for all sections of the population, through the distribution, design and management (including cost) of facilities.
- Provide environmentally and economically sustainable buildings.
- Ensure viable levels of resourcing of facilities and services, both capital and recurrent funding.
- Promote innovation and creativity between agencies in services delivery and integration
- Develop sustainable ownership, governance, management and maintenance arrangements for facilities.

⁸ Social Infrastructure Assessment, page 18

Community facilities demand assessment based on forecast demographics

The anticipated size and characteristics of the resident population in the Precincts is discussed in Part 3 of this Plan.

Various standards of provision for local and district community facilities have been adopted by the Department of Planning and Infrastructure (now Department of Planning, Industry and Environment), Camden Council and Liverpool City Council. The standards have been used as a basis for determining facility needs in the Austral and Leppington North Precincts as a whole.

A summary of these standards is included in Table 4.5.

Table 4.5 Comparison of community facility provision standards

Facility type	Former Department of Planning & Infrastructure & Growth Centres Commission standard	Camden Council standard	Liverpool City Council standard
Libraries - Branch - District	1 branch facility for each 33,000 persons 1 district facility for each 40,000 persons	39 square metres per 1,000 persons + 20% circulation space	42 square metres per 1,000 persons
Multi-purpose community centre in smaller activity centre	1 centre for each 6,000 persons Each centre with a size of	42 square metres per 1,000 persons 2.5 x floor area for land	Indicative 1 centre for each 10,000 people, with an average size of 600 square metres for each centre
	2,000-2,500 square metres	component	To be located in activity centres with shops, schools etc. Facilities are to provide flexible multipurpose spaces and spaces for outreach services.
			Smaller 600m ² facilities contribute to the overall level of provision of 60- 85m ² per 1,000 people
Multipurpose community centres in larger activity centre	1 centre for each 20,000 persons 1 community service centre for each 60,000 persons	22 square metres per 1,000 persons 2.5 x floor area for land component	Indicative 1 centre for each 60,000 persons, with a built area of about 1,500 square metres
			To be located in larger activity centres and commercial and transport hubs to provide flexible multipurpose spaces and provide a base for organisations and the delivery of services
			Larger 1,500m ² facilities contribute to the overall level of provision of 60- 85m ² per 1,000 people
Youth Centre	1 centre for each 20,000 persons	89 square metres per 1,000 persons + outdoor space	No longer provided by Council as a stand-alone purpose-built facility. The size and layout of multipurpose community facilities now provide appropriate and designated spaces for delivering youth services, programs and activities.
			Outdoor spaces, like half-court basketball courts and skate parks, are now provided as standard for informal activities and programs for young people.

Sources: Social Infrastructure Assessment Table 8.1

Community and cultural facility requirements

This Plan proposes to provide primarily for a residential population in a suburban setting. Regional level facilities are proposed to be provided in the Leppington Major Centre in Camden LGA. The community and cultural facilities proposed in the Precincts have either a local or district service catchment. This Plan nevertheless proposes that development contribute towards regional facilities that are located in Liverpool LGA, by providing its reasonable share towards the Regional Aquatic Centre including associated public art.

One of the four (4) proposed multi-purpose community centres has been scaled-up to service a district scale population of approximately 40,000 residents, which approximates the catchment of the Precincts. The other three (3) centres will provide for a neighbourhood catchment of approximately 10,000 residents each. The cost of these four facilities are shared equally across the entire Precincts incoming residential population.

Proposed community and cultural facility provision

Regional infrastructure required on the northern fringe of the Leppington Major Centre and provided in the Precincts, and serving a surrounding population of around 120,000, includes the Regional Indoor Sports and Aquatic Centre. This centre is to be located on a 5 hectare site, including a 3 hectare facility and outdoor elements and 2 hectares for parking and landscaping. Building components include the following:

- Aquatic facilities include an indoor 50 metre x 10 lane Olympic pool, training pool, 25 metre leisure pool, heated teaching pool; children's play pool / wave pool / whirl pool / water slides, diving pool.
- Indoor Sports to include 4 indoor sports courts each large enough for netball
- Fitness centre incorporating weights, aerobics/Dance/Yoga/Pilates activity room with wooden floor, spin cycle room,
- Wellness / health services physiotherapy, nutrition etc.
- Spa, sauna, steam room
- Retractable seating for 1,500 this would increase to 3,500 in stage 2.
- General amenity, kiosk and café, equipment sales, change, lockers, toilets, crèche facilities for users
- Outdoor elements may include water play park, BMX, skate, sports oval and netball, tennis, basketball courts. May be
 integrated with a youth recreation facility.

Local and district level infrastructure includes the following:

- A multi-purpose community centre in Austral of 1,500 square metres floor area, including a variety of flexible multipurpose spaces suited to a range of community activities and programs. Also, the building is proposed to include office and service delivery areas for human services and spaces suitable for young people and older people.
- Three (3) multi-purpose community centres in other neighbourhood centres in the Precincts, each with an approximate building area of 750 square metres.

This Plan includes provision for the land and works associated with these facilities, but acknowledges that with respect to the Regional Sports and Aquatic Centre, the demand is spread over a large catchment (120,000 residents). This Plan therefore authorises contributions that are commensurate with the Precincts' level of demand for the regional facilities, i.e.:

49,686 persons / 120,000 persons = 41.4%,

Or an apportionment factor of 0.42.

Council will seek funding from other sources to meet the balance of the cost of the facility, including development contributions from future developments in other South West Growth Area Precincts situated within the Liverpool LGA.

Location and staging matters

Facilities should generally be co-located with or adjacent to open space in activity centres. There are multiple ways to arrange the spaces and further planning should concentrate on combination and co-location options.

A number of sites have been identified in the ILP for these purposes but there is a significant amount of planning and acquisition of land required even before preliminary designs can be prepared.

The design of facilities will depend upon a variety of factors, including the availability of funds, the aspirations of the responsible council, and evolving best practice. Detailed needs and feasibility assessments need to be undertaken as the population of the area grows.

Existing higher order facilities in the surrounding region (including those in both the Liverpool and Camden LGAs) offer some opportunity to meet interim needs either in their current form or through expansion (for example, the Casula Powerhouse).

The general principle will be that the local and district community facilities will not be built until the surrounding population that each services has reached a threshold of 5,000 residents for the local centres and 30,000 for the larger district centre. Should the demand for two facilities require the facility to be constructed within a similar time-frame, Council must necessarily prioritise these so to manage the delivery as efficiently as possible within the constraints of funding and resources.

4.3.2 How are the contributions calculated?

Contributions will be collected from residential development toward community and cultural facilities identified under this Plan.

Monetary contributions are calculated on a per person or per resident basis, then factored up to a per lot or per dwelling amount.

The monetary contribution per person in a development containing residential dwellings or lots (whether or not that development also comprises non-residential floor space) is calculated as follows:

Contribution per resident (\$) =
$$\Sigma$$
 (\$INF)

Where:

- \$INF = the estimated \$ cost or if the facility is existing, the indexed, completed cost of providing each of the community and cultural facilities (refer Part 5 Works Schedule)⁹
- P = the estimated resident population (in persons) that will demand each facility that is, the expected net additional population of the Precincts (refer Table 3.5)

The monetary contribution for different residential development types is determined by multiplying the contribution per person by the estimated increase in population as a result of the development and using the assumed occupancy rates included in clause 3.3.5 of this Plan.

For convenience, these rates are reproduced in Table 4.6.

Table 4.6 Assumed residential development occupancy rates

Development type	Occupancy rate
Subdivided lots	3.4 persons per lot
Detached dwelling, detached dual occupancy (each dwelling)	3.4 persons per dwelling
Semi-detached, town house, terrace, attached dual occupancy (each dwelling)	2.6 persons per dwelling

⁹ In the case of the regional facility, the cost is the cost fairly apportioned to the Precincts' expected population - that is, 41% of the total cost (see section on 'Community and cultural facility requirements' above).

Development type	Occupancy rate
Flat, unit, apartment, secondary dwellings	1.8 persons per dwelling
Seniors living dwellings	1.5 persons per dwelling

703

4.4 Water cycle management facilities

4.4.1 What is the relationship between the expected types of development and the demand for additional public facilities?

Stormwater runoff in the Austral and Leppington North Precincts was proposed in precinct planning to be managed through a comprehensive Water Sensitive Urban Design (WSUD) approach.

Informed by a range of studies, the report Austral and Leppington North Precincts Water Cycle Management WSUD Report (the WSUD Strategy) prepared by Cardno Pty Ltd established the preliminary framework for the management of stormwater quantity and quality related to the expected urban development of the Precincts. This report was informed by a range of studies including:

- Cardno (2011), Biodiversity Conservation Assessment, Draft Final Report, prepared for the Department of Planning, January.
- Cardno (2011), Riparian Corridor and Flooding Assessment, Draft Final Report, prepared for the Department of Planning, February.
- GeoEnviro Consulting (2010), Geotechnical, Salinity and Acid Sulfate Soil Investigation, prepared for the Department
 of Planning, December.
- JBS Environmental (2010), Preliminary Environmental Site Assessment, Final report, prepared for the Department of Planning, December.
- Growth Centres Commission (2006), Growth Centres Development Code, November.

The main water management infrastructure was proposed to manage flooding within the project area and to minimise downstream impacts includes detention basins, trunk drainage pipes, overland flow paths/constructed channel systems, and culvert crossings. A series of bioretention systems and gross pollutant traps (GPTs) were also proposed to manage stormwater quality within the project area.

The WSUD Strategy acknowledged that development of an area:

- generates demand for water supply;
- requires management of wastewater as well as stormwater; and
- increases the area of impermeable surfaces and so exacerbates potential flooding issues, impacts on the quality of stormwater and potentially affects riparian corridors.

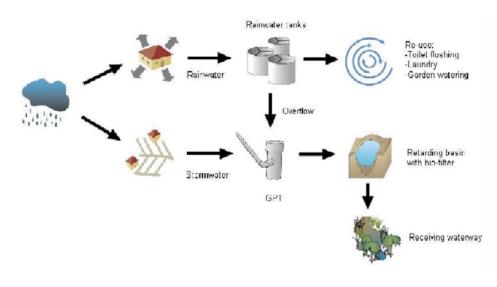
These water related issues are locality based and caused directly and solely by the development activity and so should be ameliorated by that same development activity.

To minimise the potential cost of the stormwater management scheme, the WSUD Strategy investigated the following:

- harvesting of rainwater for toilet, laundry and garden use in residential lots; and
- treatment measures to improve stormwater quality, promote infiltration and attenuate run-off to emulate a more natural rainfall/ runoff regime.

Figure 4.1 (over page) is a schematic describing the approach recommended with the WSUD strategy.

The schematic illustrates that 'rainwater' works will be required in conjunction with development consents for individual dwellings, while other ('stormwater') works relate to the broader catchment and so will be funded through development contributions obtained under this Plan.



Source: Austral and Leppington North Precincts Water Cycle Management WSUD Report, page 17

Figure 4.1 Concept Stormwater Treatment Train

Refinements to the water cycle management strategy

SMEC Australia Pty Ltd (SMEC) was engaged by Council in 2018/19 to refine the water cycle management strategy and undertake investigation and detailed concept design of proposed flood mitigation, water quality control structures and other stormwater infrastructure within the Precincts. This resulted in certain changes to the originally proposed stormwater facilities as explained below.¹⁰

The concept design of the proposed stormwater management infrastructure was carried out by SMEC in two distinct phases.

The first phase involved a data review, preliminary ecological and environmental assessment, hydrologic and hydraulic modelling and the optimisation of the detention basin layout.

The second phase involved the preliminary concept design and the final detailed concept design of the water management facilities, as well as flood mapping, dam break assessment, additional topographic survey, investigation of utility conflicts, geotechnical assessment and the preparation of a more detailed Review of Environmental Factors (REF).

The basin optimisation and the concept design were carried out in accordance with the Australian Rainfall and Runoff (ARR2016) procedures. The basin optimisation study resulted in a reduced number of detention basins from the earlier WSUD Strategy, and some basins only being designed to control the 50% AEP flows. Another two basins were subsequently removed based on the results of further modelling during the concept design.

As a result of SMEC's findings, the Plan includes:

- eight detention basins designed to control the 50% and 1% AEP flows, and
- eleven basins designed to control only the 50% AEP flow.

¹⁰ SMEC Australia (2019), Detailed Concept Design Report - Austral and Leppington North Design of Water Management Infrastructure, prepared for Liverpool City Council, March (SMEC Concept Design Report).

The remaining flood mitigation infrastructure such as trunk drainage pipes, channels, and culverts are designed to convey flows up to the 1% AEP event.

Adopting a systems-based approach to infrastructure design

SMEC adopted a systems-based or integrated approach for the design of the water management infrastructure. There are 62 drainage systems and these were grouped into three categories as follows:

- Drainage systems with 1% AEP basins
- Drainage systems with 50% AEP basins
- Drainage systems without basins.

A typical drainage system with a basin includes trunk drainage pipes and channels, a detention basin and water quality controls such as GPT/sedimentation pond, biofilters and raingardens. The need for culverts along the major creeks and creek enhancement works have also been identified (see the sections below).

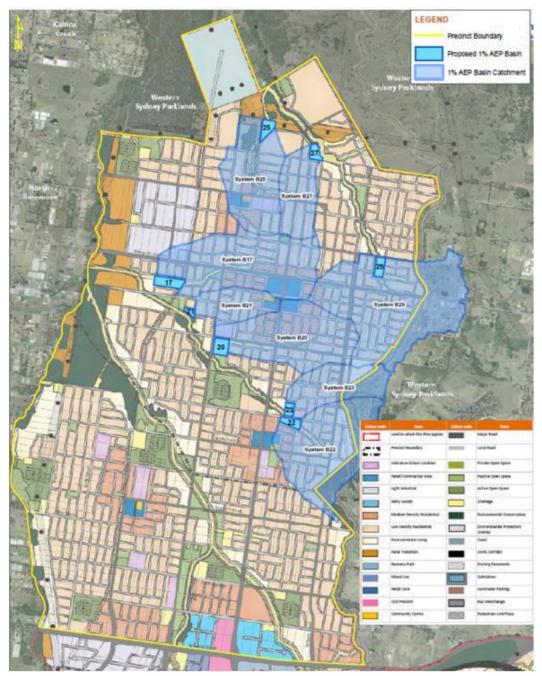
Only eight of the non-basin drainage systems include trunk infrastructure works (either pipe or channel). Streetscape raingardens will be implemented throughout these drainage systems to manage stormwater quality but these will be implemented through development controls rather than via this Plan. The drainage systems and locations of proposed trunk infrastructure that comprises stormwater channels and basins are shown in Figures 4.2, 4.3 and 4.4 on the following pages.

Supplementary streetscape raingardens

The earlier WSUD Strategy recommended an end-of-pipe approach to managing stormwater quality, by either co-locating bioretention and detention basins or providing stand-alone end-of-pipe biofilters. Although a treatment train approach was advocated, most of the water quality improvement was to be achieved by the end-of-pipe bioretention basins. However, it is not possible to operate a biofilter in some basins due to hydraulic constraints.

Additionally, due to the limited footprint area, the majority of the co-located biofilters were undersized relative to their catchments. Therefore, supplementary streetscape controls (i.e. raingardens) are proposed to meet the water quality treatment targets and replace the stand-alone end-of-pipe biofilters.

For drainage systems with biofilters co-located within detention basins, the required supplementary streetscape raingarden area is defined as a percentage of the total catchment. For drainage systems without co-located biofilters, a minimum raingarden area is defined as a percentage of the development area, based on land use.

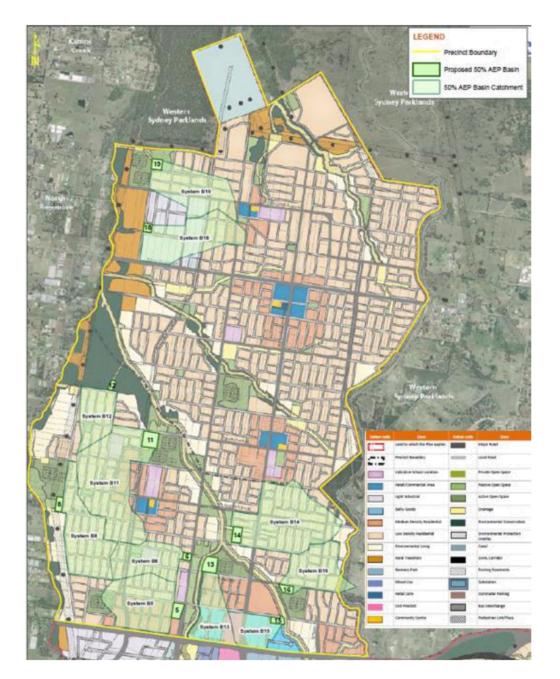


Liverpool Contributions Plan 2019 - Austral and Leppington North Precincts

Source: SMEC Concept Design Report, page 58.

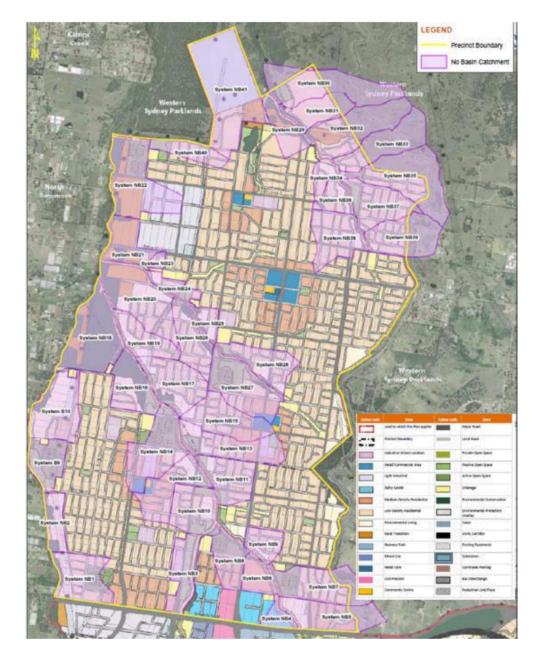
Figure 4.2 Drainage catchments with 1% AEP basins





Source: SMEC Concept Design Report, page 98.

Figure 4.3 Drainage catchments with 50% AEP basins



Source: SMEC Concept Design Report, page 151.

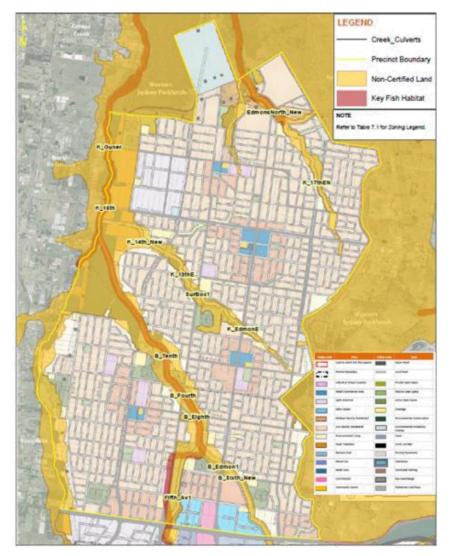
Figure 4.4 Drainage systems without basins

Creek enhancement works

In addition to the design of the drainage and water quality infrastructure, creek enhancement works (i.e. filling of flood fringe areas up to the post development 1% AEP flood level), were proposed to maximise development potential. SMEC's modeling results indicated that the 1% AEP flood levels were increased in some locations because of the filling, but the increases were not significant. Therefore, for future development the post development 1% AEP flood levels (with filling) should be adopted as the flood planning level.

Creek culverts

This Plan also includes 12 creek culverts based on SMEC's recommendations to remove 14 existing culverts, redesign nine existing culverts and add three new culverts compared with the earlier WSUD Strategy. The 12 creek culvert locations are shown in Figure 4.5.



Source: SMEC Concept Design Report, page 179.

Figure 4.5 Creek culverts

SMEC Australia provided Council with updated cost estimates for each of the stormwater infrastructure facilities¹¹ and Council has adopted these estimates with some revisions, mainly to reflect a lower allowance for contaminated soil disposal but also to ensure that culverts are not double counted with the road costings. A contingency is still retained in the cost estimates to account for the major risks in delivering the infrastructure which were identified by SMEC. These risks include the possible variations to the finished design surface levels, conflicts with other utility infrastructure, the need to dispose of contaminated soil offsite and soft soil conditions ¹².

More detail on all of the drainage systems and infrastructure items and their costs (for which contributions are collected under this Plan) are included in the maps and schedules included in Part 5. Council will encourage the provision of water cycle management facilities as Works In Kind in conjunction with the civil works undertaken as part of land subdivision.

A range of 'non-trunk' reticulation works not addressed by this Plan will also be required to be undertaken directly by the developer as conditions of consent under section 4.17(1)(f) of the EP&A Act. The facilities may include lot-scale on-site detention (OSD) basins, rainwater tanks, construction of kerb, gutter and piping in local roads, installation of drainage pits and grates, and pipe connections to the trunk drainage network.

4.4.2 How are the contributions calculated?

Contributions are determined on a Net Developable Area basis.

The monetary contribution per hectare is calculated as follows:

Contribution per hectare of equivalent net developable land (\$) = Σ

Where:

- \$INF = the estimated cost, or if the facility has been completed, the indexed actual cost, of providing each of the water cycle management infrastructure items in the area to which this Plan applies (refer Part 5 – Works Schedule)
- NDA = the total area of equivalent net developable land (in hectares) that will generate demand for facilities refer to Table 3.3 of this Plan

To determine the total contribution that would apply to a proposed development, multiply the contribution rate by the amount of net developable land (in hectares) on the site the subject of the proposed development.

¹¹ SMEC Concept Design Report, pp 210-211.

¹² SMEC Concept Design Report, pp x-xi.

711

4.5 Transport management facilities

4.5.1 What is the relationship between the expected types of development and the demand for additional public facilities?

Occupants of expected development in the Precincts will utilise a transport network comprising:

- facilities for private vehicles, including roads and intersections;
- facilities for public transport, including rail and bus facilities focused on the planned Leppington railway station; and
- facilities for walking and cycling.

The existing transport network, including the network for pedestrians and cyclists, has been planned to serve existing and approved developments (that is, predominantly rural residential developments) in the area, and not the future development envisaged for the area.

The ILP for the Austral and Leppington North Precincts and the Austral and Leppington North (ALN) Precincts Transport Assessment prepared by AECOM (the 'Transport Assessment') together identify a range of transport infrastructure works that will be required to mitigate the impacts and otherwise accommodate the expected development.

Details of:

- the assumptions of expected land use and development;
- the methodology used to determine the need for transport facilities attributable to the expected development in the Austral and Leppington North Precincts; and
- the scope and specification of those facilities,

are contained in the Transport Assessment.

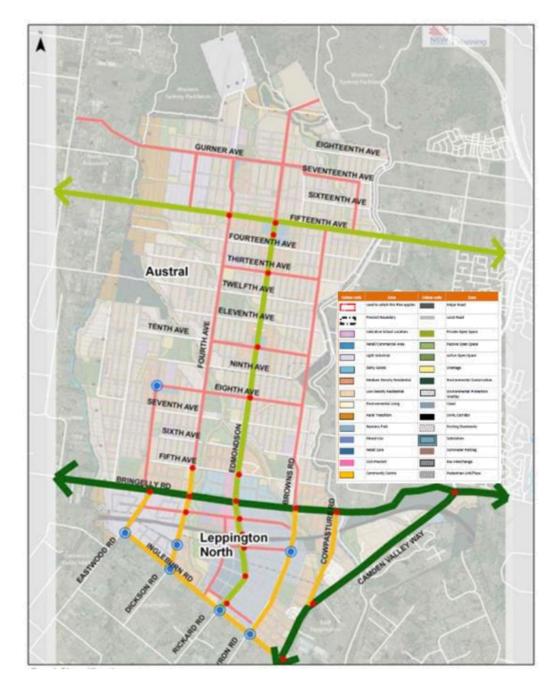
The following is a summary of the approach utilised in the Transport Assessment for planning for the transport needs in the Precincts.

Proposed road and intersection hierarchy

The proposed road network complements a broader hierarchy envisaged for the South West Growth Area.

The proposed hierarchy comprises 'principal arterial', 'transit boulevard', 'sub arterial' and 'collector' roads. These will connect to a network of existing and new roads in adjoining Growth Area Precincts. Following finalisation of the ILP a road safety assessment of the proposed street network was undertaken by Council. As a result additional roundabouts were found necessary and are included in the contributions plan.

The proposed road hierarchy and intersection treatments for the future development of the Austral and Leppington North Precincts are shown in Figure 4.6.



Source: Transport Assessment, Figure 13

Figure 4.6 Proposed road hierarchy and intersection treatments - Austral and Leppington North Precincts

Proposed walking and cycling facilities

Providing viable alternatives to the private car for journeys with destinations both within and outside the development area is viewed as essential to encouraging sustainable development. A comprehensive bicycle network is proposed for both the Austral and Leppington North Precincts, which will link the centres, schools, transport nodes and various residential neighbourhoods with key strategic routes and onward destinations.

The proposed network will include a mixture of dedicated bicycle facilities that will take the form of.

- Off-Road (Shared Path);
- On-Road (Cycle Lane); and
- On-Road (Signed Route).

All proposed roads throughout the Austral and Leppington North Precincts will have dedicated pedestrian footpaths. Footpaths will be provided in conjunction with the adjacent road project with an increased width of footway allowed for – i.e. 1.2 to 2.5m.

Leppington North Precinct will be a focus for walking and cycling trips because of the location of the Leppington Major Centre but there is proposed to be a similar level of provision in the Austral Precinct. In addition, an off-road cycleway is proposed to be provided along the edge of the Western Sydney Parklands. This facility to be funded from sources apart from development contributions.

Figure 4.7 over page shows the proposed walking and cycle network for Leppington North Precinct.

Public transport facilities

The Austral and Leppington North Precincts are proposed to benefit from good public transport accessibility through the South West Rail Line and a comprehensive proposed bus network and bus servicing strategy linking key centres, transport nodes, schools, employment opportunities and residential areas.

The only public transport work addressed by this Plan is the proposed provision of bus shelters to serve bus routes throughout the Precincts. All other public transport works, apart from the roads and intersections that will cater for buses and other general traffic and bus shelters, are not addressed by this Plan and will be delivered using funding and delivery mechanisms apart from development contributions.

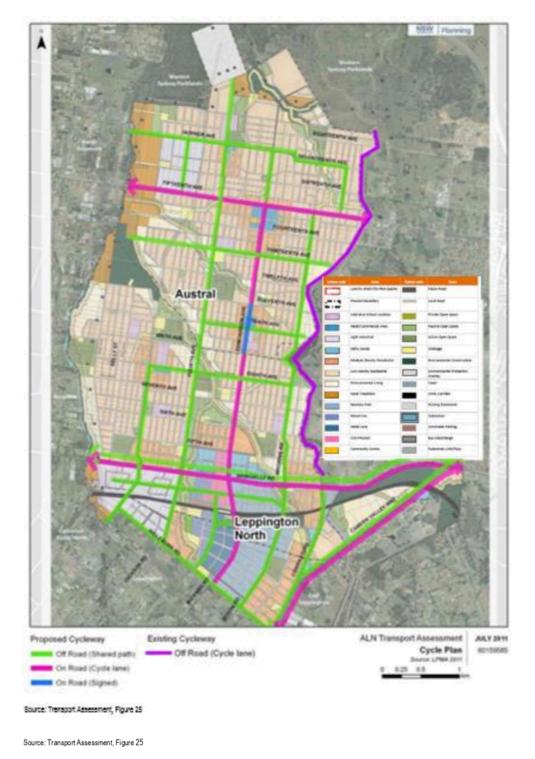


Figure 4.7 Proposed walkways and cycleways

715

Funding and delivery dependent on road hierarchy

Some of the required transport works are to meet a regional demand that extends beyond the Precincts boundary to the remainder of the South West Growth Area.

The State Government has identified a number of works in the Precincts that are intended to be provided through the State budget or through Special Infrastructure Contributions under the EP&A Act (refer to *Environmental Planning and Assessment* (*Special Infrastructure Contribution - Western Sydney Growth Areas*) Determination 2011). The works include arterial road and public transport links as well as rail and bus passenger transport facilities (such as interchanges and bus shelters on roads to be funded via Special Infrastructure Contributions).

Figure 4.8 over page shows the major road infrastructure planned to be provided across both the Austral and Leppington North Precincts, including delineation of those roads that are intended to be funded via Special Infrastructure Contributions.

Special Infrastructure Contributions will be imposed via conditions of consent on developments in the Precinct. More details on the applicability of Special Infrastructure Contributions can be found by accessing the Department of Planning, Industry and Environment's website.

Planned higher order roads for the Precinct not covered by State Government funding are to be provided by councils. They are usually funded through land or monetary development contributions but are often constructed as Works In Kind by the developer (that is, works carried out instead of, or as payment towards, a development contribution). Such roads can be constructed by the developer through a Works In Kind agreement at the time of subdivision and dedicated to the local council as public roads once constructed.

Collector roads may be delivered by a combination of development contributions and direct provision by developers as a condition of development consent. Usually, where private development lots front onto a collector road then that road is usually provided by the developer as part of the subdivision works. On existing streets, half frontages to open space and drainage will be funded by contributions.

New local roads are also usually provided by developers as, in most cases, they have private lots fronting onto them and are needed for the development to function safely. In this Plan there are a number of works defined as 'new road half-width' and 'upgrade road half-width'. These works relate to circumstances where the 'half-road' does not adjoin private land and is therefore not able to be provided by that development. Roads in front of public parks fall into this category.

Roads that do not or will not have development fronting them - such as bridges and crossings of open space - are often funded through development contributions. In some cases, development will front a road that is half on the adjoining property and in turn fronts open space. In this situation it would be difficult to construct the road without contributions.

For public schools only two frontages are expected to be funded by the school. In some cases frontages to a school site on an existing street will be funded by contributions.

The selection of some facilities for inclusion in this Plan has also been based on the land ownership arrangement given that there may be difficulty in developers providing key transport links through parts of the Precincts where the ownership is fragmented. The integrated use of the different implementation mechanisms cited above will result in the transport infrastructure that is required as a consequence of the expected development in the Precincts being provided.

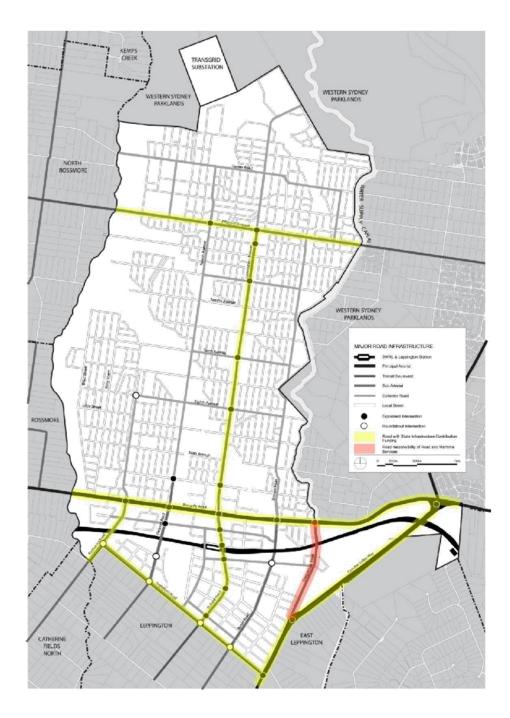




Figure 4.8 Planned major road infrastructure - Austral and Leppington North Precincts

717

Infrastructure works identified in this Plan

Works the subject of a development contribution condition that are addressed under this Plan include the following and a detailed list is included in the Works Schedules in Part 5 of this Plan:

- Approximately 13 kilometres of new roads or road upgrades for full or half road widths as required;
- 12 pedestrian crossings (plus road sections over creek culverts and crossings otherwise in drainage costs)
- Fifty (50) pedestrian refuge crossings or thresholds;
- 10 intersections (9 new round abouts and one new signalized intersection); and
- Forty-two (42) bus shelters.

4.5.2 How are the contributions calculated?

The determination of reasonable contribution rates for transport facilities in development contributions plans is often based on the number of vehicle trips generated by development. Apportionment to the different classes of development (that is, residential, commercial, employment, etc.) of the costs of facilities that are determined on a per trip basis is then derived by calculating the degree to which the traffic generated by each land use class will use the different road links and intersections included in the contributions plan.

However, at the time of preparing this Plan, there has been limited knowledge of likely trip origins and destinations by different development classes available to inform this method of apportionment.

This Plan instead determines contributions for traffic and transport facilities by first splitting the costs between residential and nonresidential development based on the relative net developable areas of each class of development. It then levies residential development its share of the costs on a per person basis and non-residential development its share of costs on a net developable land basis.

The per resident approach for residential development is considered to best reflect the demand for traffic and transport facilities by the additional population. The net developable land area approach for determining contributions for non-residential development is considered reasonable because the land use mix and employment numbers attributable to the different non-residential land uses expected in the Precinct have been assessed only at a strategic network level at the time of preparing this Plan.

Formula for Residential Development

Contributions will be collected from residential development toward road and transport facilities identified under this Plan.

Monetary contributions are calculated on a per person or per resident basis, then factored up to a per lot or per dwelling amount.

The monetary contribution per person in a development containing residential dwellings or lots (whether or not that development also comprises non-residential floor space) is calculated as follows:

Contribution per resident (\$) =
$$\sum \frac{($INF)}{P}$$

Where:

- \$INF = apportioned share to residential development (93.89%) of the estimated \$ cost or if the facility is existing, the indexed, completed cost of providing each of the road and transport facilities (refer Part 5 Works Schedule).
- P = the estimated resident population (in persons) that will demand each facility that is, the expected net additional population of the Precincts (refer Table 3.5)

The monetary contribution for different residential development types is determined by multiplying the contribution per person by the estimated increase in population as a result of the development and using the assumed occupancy rates included in clause 3.3.5 of this Plan.

For convenience, these rates are reproduced in Table 4.7.

Table 4.7 Assumed residential development occupancy rates

Development type	Occupancy rate
Subdivided lots	3.4 persons per lot
Detached dwelling, detached dual occupancy (each dwelling)	3.4 persons per dwelling
Semi-detached, town house, terrace, attached dual occupancy (each dwelling)	2.6 persons per dwelling
Flat, unit, apartment, secondary dwellings	1.8 persons per dwelling
Seniors living dwellings	1.5 persons per dwelling

Formula for Non-Residential Development

Contributions for non-residential development are determined on a Net Developable Area basis.

The monetary contribution per hectare is calculated as follows:

			(\$INF)
Contribution per ha of equivalent net developable land (\$)	=	Σ	
			NDA

Where:

- \$INF = the apportioned share to non-residential development (6.11%) of the estimated cost, or if the facility has been completed, the indexed actual cost, of providing each of the transport management infrastructure items in the area to which this Plan applies (refer Part 5 – Works Schedule).
- NDA = the total area of equivalent net developable land (in hectares) that will generate demand for each facility by nonresidential development – refer to Table 3.3 of this Plan.

To determine the total contribution that would apply to a proposed non-residential development, multiply the contribution rate by the amount of equivalent net developable land (in hectares) on the site the subject of the proposed development.

4.6 Plan management and administration

4.6.1 What is the relationship between the expected types of development and the demand for additional public facilities?

Councils incur significant costs in the preparation and administration of contributions plans.

Council staff are deployed to:

- prepare and review contributions plans;
- account for contributions receipts and expenditure; and
- co-ordinate the implementation of contributions plans and works, including involvement in negotiating Works in Kind and material public benefit agreements.

Consultant studies are also commissioned by Council from time to time in order to determine the value of land to be acquired, the design and cost of works, as well as to review the development and demand assumptions of the contributions plan. Council is also required to engage the services of legal professionals from time to time to assist it in the administration of this Plan.

As these costs arise directly as a result of the development in the Plan area, it is reasonable that the costs associated with preparing and administering this Plan be recouped through contributions from development.

Costs associated with the ongoing administration and management of the Plan will be levied on all applications that are required to pay a development contribution.

Costs included in this Plan for these purposes are determined are based on the recommended rate by IPART, being 1.5% of the cost of works.

4.6.2 Calculation of contributions

Contributions will be collected from development toward Plan preparation and administration activities.

The monetary contribution per hectare of net developable land is calculated as follows:

			(\$INF)
Contribution per ha of equivalent net developable land (\$)	=	Σ	
			NDA

Where:

- \$Admin = 1.5% of capital works costs in accordance with IPART's benchmark (refer Part 5 Works Schedule)
- NDA = the total area of equivalent net developable land (in hectares) of the area to which this Plan applies as shown in Table 3.3 of this Plan.

To determine the total contribution that would apply to a proposed development, multiply the contribution rate by the amount of equivalent net developable land (in hectares) on the site the subject of the proposed development.

5 Works Schedules and Map

Works Schedules

The schedules contained in this section are extracted from the following MS Excel spread sheet:

Liverpool S7.11 Schedules October 2018.xls.XLSX

The spread sheet also contains details on the components of each facility, as well as the assumptions informing the calculation of costs included in this Part. Refer to the source spread sheet file for more information on works and land items included in this Plan.

Infrastructure Map

The infrastructure referred to in the contributions plan is shown on the Austral Leppington North Infrastructure Map, which is a separate document. This map can be viewed at a large scale and shows all the infrastructure items on the one map in relation to property boundaries and the proposed local streets under the ILP.

5.1 Open space and recreation facilities

Land

ltem	Facility	Area (ha)	Cost
	Future Land Acquisition		
LALP	Local passive open space facilities	37.5339	\$90,959,820
LALS	Local sporting field facilities	26.8682	\$67,252,192
LADP	District passive open space facilities	33.3807	\$64,170,334
LADS	District sporting field facilities	9.0691	\$24,160,473
	Subtotal	106.8519	\$246,542,818
	Land Acquisition Contingency		\$29,585,138
	TOTAL ESSENTIAL OPEN SPACE INFRASTRUCTURE LAND ACQUISITION COSTS	106.8519	\$276,127,956

Staging / Priority of infrastructure - when surrounding development proceeds.

LALP - Local Passive Open Space

ltem	Area (ha)	Acquisition Cost
LP2	1.6146	\$5,489,640
LP4	0.0972	\$330,480
LP5	1.8031	\$1,837,161
LP6	0.5036	\$1,712,192
LP7	0.8372	\$3,599,802
LP8	2.3162	\$2,540,522
LP10	1.3320	\$1,159,200
LP11	1.4399	\$1,813,920
LP12	1.2173	\$1,170,955
LP13	0.9572	\$906,720
LP16	0.6532	\$2,061,670
LP17	0.6713	\$2,282,420
LP22	1.2139	\$5,159,075
LP25	0.9098	\$1,228,230
LP26	0.1708	\$230,580
LP27	0.4352	\$1,479,680
LP28	0.6337	\$611,095
LP29	1.3538	\$2,834,090
LP30	0.4333	\$505,310
LP31	0.5520	\$615,275
LP32	2.1575	\$2,892,974
LP33	0.5072	\$771,215
LP34	0.3354	\$819,505
LP35	0.8813	\$3,014,508
LP39	0.5964	\$2,027,661
LP40	0.5879	\$2,528,130
LP44	0.5196	\$1,469,018
LP45	2.1657	\$6,994,960
LP46	0.2426	\$219,320
LP49	0.5679	\$1,028,307
LP50	0.4252	\$231,943

ltem	Area (ha)	Acquisition Cost
LP51	0.3487	\$759,626
LP52	0.1733	\$371,757
LP53	0.3139	\$1,349,879
LP55	0.5859	\$2,519,468
LP56	0.3316	\$1,226,828
LP57	0.1351	\$51,021
LP58	0.1913	\$650,252
LP59	0.2575	\$875,593
LP60	0.3275	\$1,113,526
LP61	0.2725	\$926,376
LP62	2.4292	\$9,514,289
LP63	0.0325	\$110,649
LP64	2.3271	\$7,912,121
LP65	0.2558	\$869,688
LP66	1.4202	\$3,143,190

LADP - District Passive Open Space

ltem	Area (ha)	Acquisition Cost
DP2	3.6531	\$3,506,140
DP3	3.9971	\$8,890,655
DP4	2.2378	\$3,131,900
DP5	2.2284	\$2,999,285
DP6	6.1467	\$15,923,995
DP7	0.3658	\$215,230
DP8	0.5594	\$1,901,960
DP9	0.3295	\$1,120,300
DP10	10.4438	\$17,684,205
DP11	2.6598	\$7,004,191
DP12	0.7593	\$1,792,473

LALS - Local Sporting Fields

ltem	Area (ha)	Acquisition Cost
LS1	5.7696	\$20,914,746
LS4	6.1658	\$15,878,348
LS8	2.6640	\$4,338,932
LS9	12.2688	\$26,120,166

LADS - District Sporting Fields

ltem	Area (ha)	Acquisition Cost
DS1	9.0691	\$24,160,473

Works

ltem	Area (ha)	Cost	Project On Costs	Demolition Allowance	Total Cost
	e Open Space embellis		4054 600	ACO 0.70	A4 700 100
LP2	1.6146	\$1,296,788	\$354,023	\$58,378	\$1,709,190
LP4	0.0972	\$94,828	\$25,888	\$0	\$120,717
LP5	1.8031	\$1,441,900	\$393,639	\$29,189	\$1,864,728
LP6	0.5036	\$389,601	\$106,361	\$0	\$495,962
LP7	0.8372	\$631,562	\$172,416	In DC15	\$803,978
LP8	2.3162	\$1,793,970	\$489,754	\$0	\$2,283,724
LP10	1.3320	\$977,747	\$266,925	\$58,378	\$1,303,050
LP11	1.4399	\$1,056,553	\$288,439	\$0	\$1,344,992
LP12	1.2173	\$999,184	\$272,777	\$0	\$1,271,961
LP13	0.9572	\$710,941	\$194,087	\$0	\$905,028
LP16	0.6532	\$497,083	\$135,704	\$0	\$632,786
LP17	0.6713	\$511,253	\$139,572	\$0	\$650,825
LP22	1.2139	\$1,006,140	\$274,676	\$87,568	\$1,368,384
LP25	0.9098	\$684,249	\$186,800	\$29,189	\$900,238
LP26	0.1708	\$123,890	\$33,822	\$0	\$157,712
LP27	0.4352	\$339,997	\$92,819	\$58,378	\$491,195
LP28	0.6337	\$479,105	\$130,796	\$58,378	\$668,279
LP29	1.3538	\$1,100,737	\$300,501	\$58,378	\$1,459,617
LP29 LP30			\$91,484	-	
	0.4333	\$335,105		In DC25	\$426,588
LP31	0.5520	\$420,675	\$114,844	In DC25	\$535,520
LP32	2.1575	\$1,683,075	\$459,480	\$29,189	\$2,171,744
LP33	0.5072	\$364,933	\$99,627		\$464,560
LP34	0.3354	\$240,322	\$65,608	\$0	\$305,930
LP35	0.8813	\$763,538	\$208,446	\$0	\$971,984
LP39	0.5964	\$456,903	\$124,734	\$0	\$581,637
LP40	0.5879	\$450,785	\$123,064	\$29,189	\$603,039
LP44	0.5196	\$401,200	\$109,528	\$0	\$510,728
LP45	2.1657	\$1,594,180	\$435,211	\$0	\$2,029,391
LP46	0.2426	\$173,836	\$47,457	\$0	\$221,293
LP49	0.5679	\$431,054	\$117,678	\$29,189	\$577,921
LP50	0.4252	\$301,567	\$82,328	\$0	\$383,894
LP51	0.3487	\$274,826	\$75,027	\$29,189	\$379,042
LP52	0.1733	\$124,303	\$33,935	\$0	\$158,238
LP53	0.3139	\$252,030	\$68,804	\$0	\$320,835
LP55	0.5859	\$550,636	\$150,324	\$0	\$700,960
LP56	0.3316	\$264,833	\$72,299	\$0	\$337,132
LP57	0.1351	\$95,272	\$26,009	\$0	\$121,282
LP58	0.1913	\$163,048	\$44,512	\$0	\$207,560
LP59	0.2575	\$211,122	\$57,636	\$0	\$268,758
LP60	0.3275	\$261,882	\$71,494	\$0	\$333,376
LP61	0.2725	\$221,956	\$60,594	\$0	\$282,550
LP62	2.4292	\$1,786,333	\$487,669	\$0	\$2,274,002
LP63	0.0325	\$47,930	\$13,085	\$0	\$61,015
LP64	2.3271	\$1,712,285	\$467,454	\$0	\$2,179,739
LP65	0.2558	\$209,862	\$57,292	\$0	\$267,155

ltem	Area (ha)	Cost	Project On Costs	Demolition Allowance	Total Cost
LP66	1.4202	\$1,050,090	\$286,675	\$0	\$1,336,764
Subtotal	37.5339	\$28,979,113	\$7,911,298	\$554,595	\$37,445,005
District Passiv	e Open Space embel	ishment			
DP2	3.6531	\$3,014,217	\$822,881	\$116,757	\$3,953,856
DP3	3.9971	\$2,861,116	\$781,085	\$87,568	\$3,729,768
DP4	2.2378	\$1,540,013	\$420,424	\$87,568	\$2,048,005
DP5	2.2284	\$1,975,897	\$539,420	\$116,757	\$2,632,074
DP6	6.1467	\$4,660,309	\$1,272,264	\$116,757	\$6,049,330
DP7	0.3658	\$258,037	\$70,444	\$0	\$328,481
DP8	3.7543	\$3,007,335	\$821,003	\$0	\$3,828,338
DP9	0.3295	\$931,706	\$254,356	\$58,378	\$1,244,440
DP10	10.4438	\$7,417,007	\$2,024,843	\$58,378	\$9,500,228
DP11	6.4326	\$4,772,867	\$1,302,993	\$0	\$6,075,860
DP12	0.7593	\$517,160	\$141,185	\$58,378	\$716,723
Subtotal	40.3484	\$30,955,664	\$8,450,896	\$700,541	\$40,107,101
Local Sporting	Fields embellishmen	t	A1 110 007	\$116.757	\$6,708,551
LS1	5.7696	\$5,178,157	\$1,413,637	\$110,757	40,700,001
	5.7696 6.1658	\$5,178,157 \$5,435,016	\$1,413,637 \$1,483,759	\$175,135	\$7,093,910
LS4					
LS4 LS5	6.1658	\$5,435,016	\$1,483,759	\$175,135	\$7,093,910
LS4 LS5 LS8	6.1658 0.0000	\$5,435,016 \$5,419,289	\$1,483,759 \$1,479,466	\$175,135 \$0	\$7,093,910 \$6,898,755
LS1 LS4 LS5 LS8 LS9 Subtotal	6.1658 0.0000 2.6640	\$5,435,016 \$5,419,289 \$3,471,283	\$1,483,759 \$1,479,466 \$947,660	\$175,135 \$0 \$116,757	\$7,093,910 \$6,898,755 \$4,535,700
LS4 LS5 LS8 LS9 Subtotal	6.1658 0.0000 2.6640 12.2688	\$5,435,016 \$5,419,289 \$3,471,283 \$9,991,042 \$29,494,788	\$1,483,759 \$1,479,466 \$947,660 \$2,727,555	\$175,135 \$0 \$116,757 \$116,757	\$7,093,910 \$6,898,755 \$4,535,700 \$12,835,354
LS4 LS5 LS8 LS9 Subtotal District Sportir	6.1658 0.0000 2.6640 12.2688 26.8682	\$5,435,016 \$5,419,289 \$3,471,283 \$9,991,042 \$29,494,788	\$1,483,759 \$1,479,466 \$947,660 \$2,727,555	\$175,135 \$0 \$116,757 \$116,757	\$7,093,910 \$6,898,755 \$4,535,700 \$12,835,354
LS4 LS5 LS8 LS9 Subtotal	6.1658 0.0000 2.6640 12.2688 26.8682 ng Fields embellishme	\$5,435,016 \$5,419,289 \$3,471,283 \$9,991,042 \$29,494,788 nt	\$1,483,759 \$1,479,466 \$947,660 \$2,727,555 \$8,052,077	\$175,135 \$0 \$116,757 \$116,757 \$525,405	\$7,093,910 \$6,898,755 \$4,535,700 \$12,835,354 \$38,072,270
LS4 LS5 LS8 LS9 Subtotal District Sportir DS1	6.1658 0.0000 2.6640 12.2688 26.8682 ng Fields embellishme 9.0691 9.0691	\$5,435,016 \$5,419,289 \$3,471,283 \$9,991,042 \$29,494,788 nt \$7,170,487	\$1,483,759 \$1,479,466 \$947,660 \$2,727,555 \$8,052,077 \$1,957,543	\$175,135 \$0 \$116,757 \$116,757 \$525,405 \$262,703	\$7,093,910 \$6,898,755 \$4,535,700 \$12,835,354 \$38,072,270 \$9,390,733
LS4 LS5 LS8 LS9 Subtotal District Sportir DS1 Subtotal	6.1658 0.0000 2.6640 12.2688 26.8682 ng Fields embellishme 9.0691 9.0691	\$5,435,016 \$5,419,289 \$3,471,283 \$9,991,042 \$29,494,788 nt \$7,170,487 \$7,170,487	\$1,483,759 \$1,479,466 \$947,660 \$2,727,555 \$8,052,077 \$1,957,543 \$1,957,543	\$175,135 \$0 \$116,757 \$116,757 \$525,405 \$262,703 \$262,703	\$7,093,910 \$6,898,755 \$4,535,700 \$12,835,354 \$38,072,270 \$9,390,733 \$9,390,733

Staging / Priority of infrastructure - as and when surrounding development proceeds.

Project On Costs excludes construction and contingency

5.2 Community and cultural facilities

	Land		
ltem	Facility	Area (ha)	Cost
	Future Land Acquisition		
LACF	Land for Local Community Facilities	1.4341	\$5,736,400
	Subtotal	1.4341	\$5,736,400
	Land Acquisition Contingency		\$688,368
TOTAL	ESSENTIAL COMMUNITY FACILITY INFRASTRUCTURE LAND ACQUISITION COSTS	1.4341	\$6,424,768

LACF - Local Community Facilities

ltem	Total Area	Acquisition Cost
CF2	0.3412	\$1,364,800
CF3	0.2867	\$1,146,800
CF4	0.5339	\$2,135,600
CF5	0.2723	\$1,089,200

Works

ltem	Facility	Area (ha)	Cost to Plan	Project On Costs	Demolition Allowance	Total Cost to Plan	Priority / Staging
	Regional Community Facility						
LS1	Aquatic and Indoor Recreation Centre construction	5.2141	\$26,292,267	\$7,177,789	\$25,241	\$33,495,297	1
	Subtotal	5.2141	\$26,292,267	\$7,177,789	\$25,241	\$33,495,297	
	Local Community Facilities						
CF2	Local Community Facility construction						
CF3	Local Community Facility construction	0.3412	\$3,003,443	\$819,940	\$30,480	\$3,853,864	2
CF4	Local Community Facility construction	0.2867	\$2,938,779	\$802,287	\$30,480	\$3,771,546	2
CF5	Local Community Facility construction	0.5339	\$5,784,381	\$1,579,136	\$30,480	\$7,393,997	3
	Subtotal	0.2723	\$2,921,694	\$797,622	\$0	\$3,719,316	2
	Public Art	1.4341	\$14,648,297	\$3,998,985	\$91,440	\$18,738,722	
PA1	Regional Community Facility						
PA2	Local Community Facilities						
	Subtotal		\$788,768	\$215,334	\$0	\$1,004,102	4
	Total Construction Costs		\$439,449	\$119,970	\$0	\$559,418	5
	Construction Contingency		\$1,228,217	\$335,303	\$0	\$1,563,520	
TOTAL	NON ESSENTIAL COMMUNITY FA	ACILITY CONST	RUCTION COSTS			\$56,757,521	

Note Cost of Regional Community Facility LS5 has been adjusted to reflect residential catchment within the Precincts that will contribute to facility (41.4%) as facility will serve population of 120,000 people.

Project On Costs excludes construction and contingency

Priority / Staging

- 1 As residential catchments in adjoining Precincts establish, facility to serve 120,000 population.
- 2 As population in catchment area reaches 10,000.
- 3 At completion of residential development within the Precincts, facility to serve population of 40,000.
- 4 To be delivered with Aquatic and Indoor Recreation Centre.
- 5 To be delivered with Local Community Facilities.

5.3 Water cycle management facilities

Land

ltem	Facility	Area (ha)	Cost
	Future Land Acquisition		
LAC	Land for Trunk Drainage Channels	47.8209	\$39,846,554
LAB	Land for Trunk Drainage Basins	24.1392	\$72,316,350
	Subtotal	71.9601	\$112,162,904
	Land Acquisition Contingency		\$13,459,549
TOTAL E	ESSENTIAL DRAINAGE INFRASTRUCTURE LAND ACQUISITION COSTS	71.9601	\$125,622,453

ltem	Total Area	Acquisition Cost
Chn B19	0.9455	\$1,172,670
Chn B18	0.2824	\$360,716
Chn B17.4	1.8932	\$1,899,114
DC6	0.4735	\$165,725
DC7A	1.8283	\$639,921
DC9	1.8287	\$640,031
Chn B8	0.2857	\$274,247
Chn B11	0.2343	\$244,993
DC18	1.1021	\$385,739
DC19A	1.1322	\$396,262
DC20	3.1912	\$1,116,922
Chn B6	0.2135	\$342,107
Chn B14.2	0.2563	\$263,137
DC23	0.4119	\$144,152
DC24	2.2938	\$802,823
DC25	0.8323	\$291,307
CHN B17.2-3	1.1949	\$1,194,539
CHN B17.1-2	1.6094	\$5,474,399
Chn B25	1.4446	\$505.617
DC32	3.1592	\$1,105,713
DC33	4.6023	\$2,366,435
Chn NB33	0.5620	\$277,240
DC38	0.5157	\$1,030,597
DC40	1.0908	\$381,786
DC41	1.2289	\$438,662
Chn B29C	0.6988	\$1,959,037
Chn 29b.2	0.4357	\$851,653
Chn 29b.1	0.4715	\$428,940
Chn B20.1-3	1.2827	\$4,151,994
DC53	1.0245	\$358,581
Chn B20.5	0.0481	\$46,522
DC54	0.8779	\$309,310
DC55	0.5351	\$201,164
Chn B22	1.3585	\$2,752,544
Chn B14.1	0.5553	\$1,066,704
DC61	0.6753	\$236,355
Chn B16	0.1352	\$142,624
DC63	3.0978	\$1,084,226
Chn NB5	0.8075	\$2,626,424
DC65	0.4990	\$174,645
DC66	1.2761	\$740,367
DC67	1.4295	\$800,614

LAB - Trunk Drainage Basins

ltem	Total Area	Acquisition Cost
B5	1.4259	\$5,810,491
B6	0.5423	\$1,843,831
B8	0.8821	\$2,999,021
B11	2.2508	\$6,647,005
B13	1.8546	\$7,192,729
B14	1.3321	\$3,948,705
B15	0.8328	\$2,678,705
B16	0.9374	\$3,187,086
B17	2.2928	\$7,795,465
B18	0.6628	\$2,253,564
B19	1.0110	\$2,209,242
B20	2.0244	\$5,744,656
B21	0.5808	\$1,345,350
B22	1.3260	\$4,526,908
B23	0.9568	\$2,088,794
B25	1.6643	\$3,964,541
B27	1.2901	\$3,710,420
B29	1.4567	\$2,693,080
B32	0.8157	\$1,676,756

Staging / Priority of infrastructure - As land affected by acquisition is developed or as required to service development.

Works

System	Detention Basin	Trunk Drainage Works	Water Quality Works	Construction Cost	Project On Costs	Contingency	Total Cost
Drainage Syst	ems with 1% A	EP Basins					
Drainage System B17	Basin 17	Chn B17.1, Chn B17.2, Chn B17.3 and Chn B17.4 (open channel)	Bioretention B17, GPT B17	\$24,249,473	\$4,325,779	\$4,589,051	\$33,164,303
Drainage System B20	Basin 20	Chn B20.1, Chn B20.2 and Chn B20.3 (open channels), B20 pipe (Pipe B20.1, Pipe B20.2, Pipe B20.3, Pipe B20.4, Pipe B20.5, Pipe B20.6 and Pipe B20.7	Bioretention B20, GPT B20	\$10,455,627	\$1,843,942	\$1,837,320	\$14,136,889
Drainage System B21	Basin 21	Pipe B21.1, Pipe B21.2 and Pipe B21.3	GPT B21	\$2,056,463	\$363,972	\$370,020	\$2,790,455
Drainage System B22	Basin 22	Chn B22 (open channel)	GPT B22	\$8,682,075	\$1,543,912	\$1,610,674	\$11,836,661
Drainage System B23	Basin 23	Pipe B23.1, Pipe B23.2 and Pipe B23.3	GPT B23	\$3,327,278	\$588,295	\$594,689	\$4,510,262
Drainage System B25	Basin 25	Pipe B25.1, Pipe B25.2 and Pipe B25.3, Chn 25 (open channel)	Bioretention B25, GPT B25	\$10,605,354	\$1,881,145	\$1,935,610	\$14,422,109
Drainage System B27	Basin 27	Pipe B27.1, Pipe B27.2 and Pipe B27.3	Bioretention B27, GPT B27	\$5,011,651	\$881,149	\$862,674	\$6,755,474
Drainage System B29	Basin 29	Chn B29b.1, Chn B29b.2, Chn B29c (open channels), Pipe B29a.1, Pipe B29a.2, Pipe B29a.3, Pipe B29a.4, Pipe B29a.5 and Pipe B29a.6, Pipe	GPT B29a, GPT B29b and GPT B29c, Sedimentation pond B29, Bioretention – B29	\$11,660,864	\$2,063,328	\$2,094,659	\$15,818,851

B29b.1, Pipe B29b.2,
Pipe B29b.3 and Pipe
D206 /

		B29b.4					
	Subtotal			\$76,048,785	\$13,491,522	\$13,894,697	\$103,435,004
Drainage Sys	tems with 50%	6 AEP Basins					
Drainage System B5	Basin 5	Pipe B5.1, Pipe B5.2, Pipe B5.3 and Pipe B5.4	GPT B5	\$6,825,964	\$1,203,293	\$1,195,989	\$9,225,246
Drainage System B6	Basin 6	Pipe B6.1, Pipe B6.2, Pipe B6.3, Pipe B6.4 and Pipe B6.5, Chn B6	Bioretention B6, GPT B6	\$4,223,729	\$741,805	\$721,637	\$5,687,171
Drainage System B8	Basin 8	Pipe B8.1, Pipe B8.2, Pipe B8.3, Pipe B8.4 and Pipe B8.5, Chn B8	Bioretention B8, GPT B8	\$5,152,081	\$909,282	\$909,799	\$6,971,162
Drainage System B11	Basin 11	Pipe B11.1, Pipe B11.2, Pipe B11.3, Pipe B11.4, Pipe B11.5, Pipe B11.6, Pipe B11.7, B11.8, B11.9, and Pipe B11.10, Chn B11	Bioretention B11, GPT B11	\$11,799,998	\$2,067,475	\$1,983,171	\$15,850,644
Drainage System B12	Basin 12	Chn B12	Bioretention B12, GPT B12	\$2,775,251	\$491,964	\$504,506	\$3,771,721
Drainage System B13	Basin 13	Pipe B13.1, Pipe B13.2 and Pipe B13.3	Bioretention B13, GPT B13	\$6,998,847	\$1,241,591	\$1,278,428	\$9,518,866
Drainage System B14	Basin 14	Pipe B14.1, Pipe B14.2, Pipe B14.3, Pipe B14.4, Pipe B14.5, Pipe B14.6, Pipe B14.7, Pipe B14.8, Pipe B14.9, Pipe B14.10, and Pipe B14.11, Chn B14.1 and Chn B14.2	Bioretention B14, GPT B14	\$10,175,940	\$1,783,786	\$1,715,964	\$13,675,690
Drainage System B15	Basin 15		Bioretention B15, GPT B15	\$2,381,657	\$421,319	\$427,136	\$3,230,112
Drainage System B16	Basin 16	Pipe B16.1, Pipe B16.2, Pipe B16.3 and Pipe B16.4, CHN B16	Bioretention B16, GPT B16	\$5,111,927	\$898,043	\$875,027	\$6,884,997
Drainage System B18	Basin 18	Pipe B18.1, Pipe B18.2, Pipe B18.3, Pipe B18.4, Pipe B18.5, Pipe18.6 and Pipe 18.7	Bioretention B18, GPT B18	\$5,413,165	\$929,536	\$783,744	\$7,126,445
Drainage System B19	Basin 19	Pipe B19.1, Pipe B19.2, Pipe B19.3, Pipe B19.4, Pipe B19.5, Pipe B19.6, Pipe B19.7 and Pipe B19.8, Chn B19	Bioretention B19, GPT B19	\$7,957,090	\$1,395,696	\$1,347,549	\$10,700,335
B32*	Basin 32	DC65, DC66		\$4,317,035	\$647,555	\$733,896	\$5,698,486
Sub Total				\$73,132,684	\$12,731,345	\$12,476,846	\$98,340,875
Drainage Syst Drainage	ems without B	Basins		\$3,626,257	\$605,337	\$409,326	\$4,640,920
System NB5 Drainage System NB13				\$1,093,709	\$186,506	\$149,663	\$1,429,878
Drainage System NB14				\$776,125	\$132,480	\$107,075	\$1,015,680

Drainage System NB15	\$1,416,193	\$241,760	\$195,537	\$1,853,490
Drainage System NB33	\$1,010,720	\$170,759	\$127,675	\$1,309,154
Drainage System NB35	\$1,682,890	\$286,276	\$225,618	\$2,194,784
Drainage System NB37	\$1,005,778	\$171,567	\$138,000	\$1,315,345
Drainage System NB38	\$444,754	\$76,108	\$62,632	\$583,494
Sub Total	\$11,056,426	\$1,870,793	\$1,415,526	\$14,342,745
Creek Culverts (stormwater works only) B_Eighth	\$1,103,487	\$188.300	\$151.845	\$1,443.632
-	• • • • • • • • • • • • • • • • • • • •			
B_Fourth	\$1,232,952	\$210,898	\$173,036	\$1,616,886
B_Tenth	\$1,345,777	\$229,820	\$186,357	\$1,761,954
EdmonsNort h_New	\$1,020,077	\$175,622	\$150,735	\$1,346,434
Fifth_Av1	\$1,484,838	\$253,710	\$206,565	\$1,945,113
K_13thE	\$240,250	\$41,045	\$33,383	\$314,678
K_17thEN	\$760,626	\$129,832	\$104,919	\$995,377
Surbox1	\$590,547	\$100,833	\$81,673	\$773,053
Sub Total	\$7,778,554	\$1,330,060	\$1,088,513	\$10,197,127
TOTAL ESSENTIAL STORMWATER INFRASTRUCTURE	\$168,016,449	\$29,423,720	\$28,875,582	\$226,315,751

"Basin 32 (B32) was outside the scope area of the SMEC study

Staging / Priority of infrastructure - when surrounding development proceeds.

Project On Costs excludes construction and contingency

5.4 Transport management facilities

Land

Item	Facility	Area (ha)	Cost
	Future Land Acquisition		
LACR	Land for new Collector Roads	4.3614	\$15,983,248
LALR	Land for new Local Roads	1.7768	\$4,899,060
	Subtotal	6.1382	\$20,882,308
	Land Acquisition Contingency		\$2,505,877
TOTAL	ESSENTIAL ROAD INFRASTRUCTURE LAND ACQUISITION COSTS	6.1382	\$23,388,185

LACR - Collector Roads

ltem	Total Area	Acquisition Cost
CR1	0.4470	\$1,519,800
CR14	0.5150	\$2,060,000
CR15	0.3010	\$1,023,400
CR16	0.3270	\$1,111,800
CR17	1.2800	\$5,504,000
CR18	0.4733	\$1,399,990
CR1A	0.4610	\$1,567,400
CR21	0.0748	\$252,680
CR22	0.4032	\$1,275,238
CR35	0.0791	\$268,940

LALR - Local Roads

ltem	Total Area	Acquisition Cost
LR28	0.0254	\$109,220
LR33	0.1824	\$620,160
LR39A	0.0628	\$213,520
LR39B	0.0480	\$163,200
LR39C	0.0680	\$231,200
LR39D	0.0899	\$305,660
LR48	0.1254	\$280,810
LR59A	0.0886	\$301,240
LR59B	0.0522	\$119,770
LR61	0.0459	\$195,075
LR64	0.1440	\$489,600
LR67	0.2641	\$594,540
LR68	0.0238	\$80,920
LR69A	0.0716	\$243,440
LR70	0.0650	\$260,000
LR72	0.0402	\$172,860
LR73	0.1150	\$391,000
LR74	0.0219	\$74,460
LR76	0.0808	\$52,385
LR28	0.0254	\$109,220
LR33	0.1824	\$620,160
LR39A	0.0628	\$213,520
LR39B	0.0480	\$163,200

ltem	Facility	Length (m)	Cost	Project On Costs	Demolition Allowance	Total Cost	Staging / Priority
	Local Roads						
_R3	Upgrade road half width	160	\$316,032	\$78,376	\$0	\$394,408	*1
LR5	Upgrade road half width	140	\$276,528	\$68,579	\$0	\$345,107	*1
LR6	Upgrade road half width	225	\$444,420	\$110,216	\$0	\$554,637	*1
LR11	Upgrade road half width	90	\$177,768	\$44,087	\$0	\$221,855	*1
LR13	Upgrade road half width	455	\$898,717	\$222,882	\$0	\$1,121,599	*1
LR13A	Upgrade road half width	240	\$474,048	\$117,564	\$0	\$591,612	*1
LR16	Upgrade road half width	105	\$207,396	\$51,434	\$0	\$258,830	*1
_R18	Upgrade road half width	120	\$237,024	\$58,782	\$0	\$295,806	*1
LR22	Upgrade road half width	235	\$464,172	\$115,115	\$0	\$579,287	*1
_R24	Upgrade road half width	80	\$158,016	\$39,188	\$0	\$197,204	*1
_R26	Upgrade road half width	280	\$553,056	\$137,158	\$0	\$690,215	*1
LR27	Upgrade road full width	150	\$457,793	\$113,533	\$0	\$571,325	*1
R28	Upgrade road half width	85	\$167,892	\$41,637	\$0	\$209,529	*1
LR33	New road full width	90	\$259,025	\$64,238	\$0	\$323,264	*1
_R35	Upgrade road half width	510	\$1,007,353	\$249,824	\$0	\$1,257,176	*1
_R36	Upgrade road full width	330	\$1,007,144	\$249,772	\$0	\$1,256,916	*1
_R37	Upgrade road half width	325	\$641,941	\$159,201	\$0	\$801,142	*1
R39	Upgrade road half width	80	\$158,016	\$39,188	\$0	\$197,204	*1
LR39A	New road half width	80	\$128,106	\$31,770	\$0	\$159,877	*1
LR39B	New road half width	60	\$96,080	\$23,828	\$0	\$119,908	*1
LR39C	New road half width	85	\$136,113	\$33,756	\$0	\$169,869	*1
LR39D	New road half width	115	\$184,153	\$45,670	\$0	\$229,823	*1
LR46	Upgrade road half width	65	\$128,388	\$31,840	\$0	\$160,228	*1
LR46B	Upgrade road half width	50	\$98,760	\$24,493	\$0	\$123,253	*1
LR46C	Upgrade road half width	55	\$108,636	\$26,942	\$0	\$135,578	*1
LR48	Upgrade road half width	144	\$284,429	\$70,538	\$0	\$354,967	*1
LR57	Upgrade road full width	320	\$976,625	\$242,203	\$0	\$1,218,828	*1
LR59A	New road half width	60	\$96,080	\$23,828	In DC47	\$119,908	*1
LR59B	New road half width	35	\$56,047	\$13,900	\$27,823	\$97,769	*1
LR61	New road half width	100	\$160,133	\$39,713	\$0	\$199,846	*1
_R64	New road full width	90	\$259,025	\$64,238	\$0	\$323,264	*1
LR67	New road half width	300	\$480,399	\$119,139	In LS7 and LP42	\$599,538	*1
_R69	Upgrade road half width	90	\$177,768	\$44,087	\$0	\$221,855	*1
_R69A	New road full width	90	\$259,025	\$64,238	\$0	\$323,264	*1
LR70	New road half width	65	\$104,086	\$25,813	\$0	\$129,900	*1
LR72	New road half width	100	\$160,133	\$39,713	\$0	\$199,846	*1
LR73	New road half width	100	\$160,133	\$39,713	\$27,823	\$227,669	*1
_R74	New road half width	30	\$48,040	\$11,914	\$0	\$59,954	*1
LR75	New road half width	160	\$256,213	\$63,541	\$27,823	\$347,577	*1
	Subtotal	5,894	\$12,264,716	\$3,041,650	\$83,469	\$15,389,835	
	Collector Roads			4070 5	••	A. 676	
CR1	Upgrade road half width	475	\$1,100,667	\$272,965	\$0	\$1,373,632	*1
CR1A	New road full width	225	\$763,637	\$189,382	\$55,646	\$1,008,665	*1

Works

ltem	Facility	Length (m)	Cost	Project On Costs	Demolition Allowance	Total Cost	Staging / Priority
CR7A	Upgrade road full width	105	\$398,359	\$98,793	\$0	\$497,153	*1
CR8	Upgrade road half width	240	\$556,126	\$137,919	\$0	\$694,046	*1
CR9	Upgrade road full width	70	\$265,573	\$65,862	\$0	\$331,435	*1
CR10	Upgrade road half width	85	\$196,961	\$48,846	\$0	\$245,808	*1
CR11	Upgrade road full width	345	\$1,308,895	\$324,606	\$0	\$1,633,501	*1
CR12	Upgrade road half width	130	\$301,235	\$74,706	\$0	\$375,941	*1
CR14	New road half width	495	\$944,729	\$234,293	\$111,292	\$1,290,313	*1
CR15	New road full width	155	\$526,061	\$130,463	\$27,823	\$684,347	*1
CR16	New road half width	340	\$648,904	\$160,928	\$111,292	\$921,125	*1
CR17	New road full width	320	\$1,086,062	\$269,343	\$55,646	\$1,411,051	*1
CR18	New road half width	420	\$801,588	\$198,794	\$27,823	\$1,028,205	*1
CR19	Upgrade road full width	80	\$303,512	\$75,271	\$0	\$378,783	*1
CR19A	Upgrade road half width	80	\$185,375	\$45,973	\$0	\$231,349	*1
CR21	New road half width	70	\$133,598	\$33,132	\$0	\$166,730	*1
CR21A	Upgrade road half width	70	\$162,204	\$40,226	\$0	\$202,430	*1
CR22	New road half width	325	\$620,276	\$153,829	\$222,584	\$996,689	*1
CR22	Upgrade road half width	115	\$266,477	\$66,086	\$0	\$332,564	*1
	Upgrade road full width	215	\$815,688	\$202,291	\$0	\$1.017.979	*1
CR25	Upgrade road full width	150	\$569,085	\$141,133	\$0	\$710.218	*1
CR26 CR27	Upgrade road full width	155	\$588.054	\$145,837	\$0	\$733,892	*1
	Upgrade road full width	140	\$531,146	\$131,724	\$0	\$662,870	*1
CR27A	Upgrade road half width	150	\$347,579	\$86,200	\$0	\$433,779	*1
CR28	Upgrade road half width	400	\$926,877	\$229,866	\$0	\$1,156,743	*1
CR29	Upgrade road full width	160	\$607.024	\$150,542	\$0	\$757,566	*1
CR29A	Upgrade road half width	95		\$54,593	\$0	\$274,726	*1
CR30		90	\$220,133		\$0		*1
CR31	Upgrade road half width New road half width	90 70	\$208,547	\$51,720	•	\$260,267	*1
CR35			\$133,598	\$33,132	\$0	\$166,730	
CR38	Upgrade road half width	80	\$185,375	\$45,973	\$0	\$231,349	*1
CR39	Upgrade road half width	60	\$139,032	\$34,480	\$0	\$173,511	*1
CR40	Upgrade road half width	30	\$69,516	\$17,240	\$0	\$86,756	*1
CR42	Upgrade road full width	285	\$1,081,261	\$268,153	\$0	\$1,349,414	*1
CR43	Upgrade road half width	50	\$115,860	\$28,733	\$0	\$144,593	*1
CR44	Upgrade road half width	50	\$115,860	\$28,733	\$0	\$144,593	*1
CR45	Upgrade road half width	240	\$556,126	\$137,919	\$0	\$694,046	*1
D1	Design of Collector Road upgrade of Fourth Avenue	ltem	\$1,365,804	\$0	\$0	\$1,365,804	*7
D2	Design of Collector Road of Browns Road Extension	ltem	\$514,182	\$0	\$0	\$514,182	*8
	Centre line design of existing roads	34350	\$687,000	\$0	\$0	\$687,000	*9
	Subtotal		\$20,614,465	\$4,475,775	\$612,106	\$25,702,346	
	Padastrian/Dridge Oreasing -						
PB1	Pedestrian/Bridge Crossings Pedestrian crossing of DC20	ltem	\$106,922	\$26,517	\$0	\$133,438	*4
PB2	Pedestrian crossing of DC19A	ltem	\$106,922	\$26,517	\$0	\$133,438	*5
PB4	Pedestrian crossing of DC14	ltem	\$106,922	\$26,517	\$0	\$133,438	*3

ltem	Facility	Length (m)	Cost	Project On Costs	Demolition Allowance	Total Cost	Staging / Priority
PB6	Pedestrian crossing of DC26	ltem	\$106,922	\$26,517	\$0	\$133,438	*3
PB7	Pedestrian crossing of DC33	ltem	\$106,922	\$26,517	\$0	\$133,438	*3
PB8	Pedestrian crossing of DC30	ltem	\$106,922	\$26,517	\$0	\$133,438	*3
PB10	Pedestrian crossing of DC63	ltem	\$106,922	\$26,517	\$0	\$133,438	*1
PB11	Pedestrian crossing of DC61 at Sixth Ave	ltem	\$106,922	\$26,517	\$0	\$133,438	*1
PB13	Pedstrian crossing - Creek Twelfth Avenue	ltem	\$106,922	\$26,517	\$0	\$133,438	*1
PB14	Pedestrian crossing - Creek Fourteenth Avenue	ltem	\$106,922	\$26,517	\$0	\$133,438	*1
PB15	Pedestrian crossing - Bonds Creek Ninth Avenue	ltem	\$106,922	\$26,517	\$0	\$133,438	*2
BR12	Crossing upgrade - Kemps Creek Gurner Road (upgrade crossing to 100 ARI)	120	\$3,825,664	\$948,765	\$17,115	\$4,791,543	*6
	Subtotal		\$5,108,722	\$1,266,963		\$6,392,799	
	Road segments over culverts						
Clv B29.b.2	Channel Crossing Type 2	50	\$854,251	\$211,854	\$0	\$1,066,105	*3
Chn NB5	Channel Crossing Type 1	25	\$427,126	\$105,927	\$0	\$533,053	*3
Clv B20.2	Channel Crossing Type 2	30	\$512,551	\$127,113	\$0	\$639,663	*3
Clv B20.3	Channel Crossing Type 2	30	\$512,551	\$127,113	\$0	\$639,663	*3
Clv B17.3	Channel Crossing Type 2	30	\$512,551	\$127,113	\$0	\$639,663	*3
Clv B17.1	Channel Crossing Type 2	30	\$512,551	\$127,113	\$0	\$639,663	*3
Fifth_Av1	Scalabrini Creek Fifth Avenue (replace collector road pavement)	60	\$1,320,206	\$327,411	\$0	\$1,647,618	*2
B_Eighth	Bonds Creek Eighth Avenue (upgrade crossing to 100 ARI) (Collector Street)	110	\$2,420,378	\$600,254	\$0	\$3,020,632	*1
BR4	Bonds Creek Tenth Avenue (replace local road pavement)	80	\$244,156	\$60,551	\$0	\$304,707	*1
B_Fourth	Bonds Creek Fourth Avenue (upgrade crossing to 100 ARI) (Collector Street)	175	\$3,850,602	\$954,949	\$0	\$4,805,551	*2
Surbox1	Unnamed Creek Fourth Avenue (upgrade crossing to 100 ARI) (Collector Street)	100	\$2,200,344	\$545,685	\$0	\$2,746,029	*2
BR8	Unnamed Creek Thirteenth Avenue (upgrade crossing to 100 ARI)	95	\$289,935	\$71,904	\$0	\$361,839	*1
K_17thE N	Unnamed Creek Seventeenth Avenue (replace collector road pavement)	105	\$2,310,361	\$572,970	\$0	\$2,883,331	*1
K_11thE	Unnamed Creek Eleventh Avenue (replace local road pavement)	110	\$1,879,353	\$466,079	\$0	\$2,345,432	*1

ltem	Facility	Length (m)	Cost	Project On Costs	Demolition Allowance	Total Cost	Staging / Priority
Edmons North_Ne W	Unnamed Creek extension of Edmondson Avenue (new crossing)	35	\$597,976	\$148,298	\$0	\$746,274	*3
	Subtotal		\$22,096,631	\$5,479,964		\$27,576,596	
IN2	Intersections Roundabout Eighth	ltem	\$172,224	\$42,712	\$0	\$214,936	*1
IINZ	Avenue/Western N-S Collector	llem	\$172,224	\$4Z,71Z	20	\$214,930	
IN3	Traffic Signals Fourth Avenue / Fifth Avenue	ltem	\$833,800	\$206,782	\$0	\$1,040,582	*1
IN4	Roundabout Fourth Avenue / Eighth Avenue	ltem	\$172,224	\$42,712	\$0	\$214,936	*1
IN5	Roundabout Gurners Ave / Fourth Ave	ltem	\$172,224	\$42,712	\$0	\$214,936	*1
IN6	Roundabout Gurners Ave / Extension of Edmondson Ave	ltem	\$172,224	\$42,712	\$0	\$214,936	*1
IN7	Roundabout Sixteenth Ave / North South Collector Street	ltem	\$172,224	\$42,712	\$0	\$214,936	*1
IN8	Roundabout Fourth Ave / Thirteenth Ave	Item	\$172,224	\$42,712	\$0	\$214,936	*1
IN9	Roundabout Thirteenth Ave / North South Collector Street	ltem	\$172,224	\$42,712	\$0	\$214,936	*1
IN10	Roundabout Fourth Ave / Eleventh Ave	ltem	\$172,224	\$42,712	\$0	\$214,936	*1
IN11	Roundabout Fourth Ave / Tenth Ave	Item	\$172,224	\$42,712	\$0	\$214,936	*1
	Subtotal		\$18,444,892	\$4,574,333		\$23,019,225	
	Pedestrian Crossings						
PC1	Allowance for 50 Pedestrian Crossing/Refuge Works locations TBD	50	\$1,363,867	\$338,239	\$0	\$1,702,106	*2
	Subtotal		\$1,363,867	\$338,239	\$0	\$1,702,106	
	Public Transport Facilities						
PT1	Public Transport Facilities Allowance for 42 bus shelters locations TBD	42	\$973,805	\$241,504	\$0	\$1,215,309	*1
	Subtotal	42	\$973,805	\$241,504	\$0	\$1,215,309	
	oustoldi						
	Total Construction Costs		\$61,395,001	\$14,529,651	\$695,575	\$76,637,342	
	Construction Contingency					\$4,346,340	

Note cost of BR12 has been apportioned 50% to the Austral and Leppington North Precincts and 50% to the Rossmore Precinct. Priority / Staging

*1 When surrounding development proceeds.

*2 As adjoining road upgrades are carried out.

*3 When the drainage channel is constructed.

*4 When Open Space DP4 is constructed

*5 When Open Space LP13 is constructed.

*6 As and when surrounding development proceeds and after Rossmore Precinct rezoned.

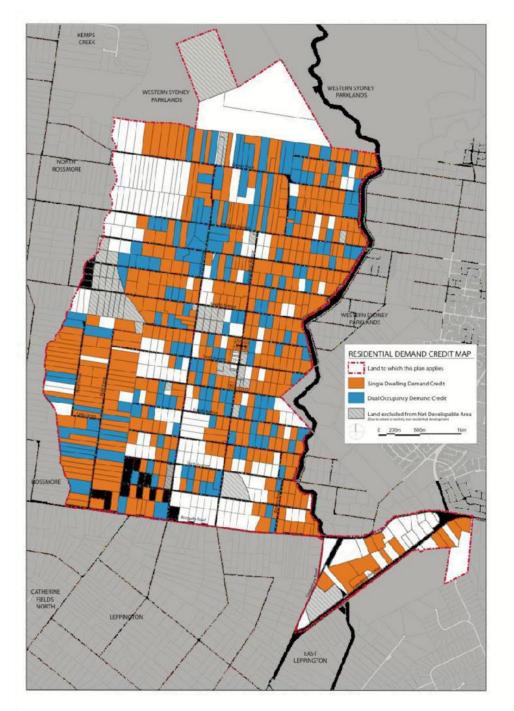
*7 Prior to construction of Fourth Avenue upgrade works.

*8 Prior to construction of Browns Road Extension works.

*9 Prior to development taking place

Appendix A

Demand Credit Analysis for Precincts



Allowances for existing development in the calculation of open space and recreation, and community and cultural facilities contributions

Demand credits

Land Use	Single Dwelling Demand Credits	Dual Occupancy Demand Credits	Population Demand Credit
Environmental Living (4 Dwellings/ha)	33	14	207.4
Environmental Living (6 Dwellings/ha)	20	6	108.8
Low Density Residential	300	133	1,924.4
Medium Density Residential	89	26	479.4
Total	442	179	2,720

Assumed occupancy

Single dwelling	3.4
Dual occupancy	6.8
Special use	1.5

Land Use Coding

Environmental Living (4 dwellings / ha)	EL
Environmental Living (6 dwellings / ha)	LL
Low density residential	LD
Medium density residential	MD

Lots with Single Dwelling Demand Credit

Lot No.	DP	Land Type
19	3403	LD
18	3403	LD
17	3403	LD
16	3403	LD
15	3403	LD
1	233174	LD
2	233174	LD
12	3403	LD
111	1010191	LD
14	831988	LD
1	519215	LD
22	791237	LD
21	791237	LD
A	416820	LD
2	201865	LD
144	2475	LD
143	2475	LD
142	2475	LD
140	2475	LD
139	2475	LD
138	2475	LD
160	2475	LD
2	512264	LD
1	512264	LD
156	2475	LD
154	2475	LD
153	2475	LD
152	2475	LD
151	2475	EL
218	2475	LD
A	373652	LD
В	373652	LD
215	2475	LD
229	2475	LD
228	2475	LD
2	615379	LD

226 2475 LD 224 2475 LD 223 2475 LD 21 2475 LD 223 2475 LD 2 34883 LD 1 331146 LD 288 2475 EL 1 619379 LD 8 417374 LD 303 2475 LD 303 2475 LD 303 2475 LD 301 2475 LD 302 2475 LD 298 2475 LD 296 2475 LD 358 2475 LD 357 2475 LD 356 2475 LD 357 2475 LD 352 2475 LD 363 2475 MD 363 2475 MD 364 2475 MD </th <th>Lot No.</th> <th>DP</th> <th>Land Type</th>	Lot No.	DP	Land Type																																																																																																																																								
224 2475 LD 223 2475 LD 21 2475 LD 2 34883 LD 1 33146 LD 289 2475 LD 288 2475 LD 303 2475 LD 303 2475 LD 303 2475 LD 301 2475 LD 302 2475 LD 300 2475 LD 298 2475 LD 298 2475 LD 296 2475 LD 295 2475 LD 368 2475 LD 357 2475 LD 356 2475 LD 356 2475 LD 350 2475 LD 368 2475 LD 369 2475 MD 366 2475 MD <td></td> <td>2475</td> <td></td>		2475																																																																																																																																									
223 2475 LD 291 2475 LD 2 34883 LD 1 331146 LD 289 2475 EL 1 619379 LD 88 2475 EL 1 619379 LD 303 2475 LD 300 2475 LD 301 2475 LD 302 2475 LD 300 2475 LD 298 2475 LD 298 2475 LD 296 2475 LD 358 2475 LD 356 2475 LD 356 2475 LD 356 2475 LD 356 2475 LD 360 2475 LD 363 2475 MD 363 2475 MD 366 2475 MD </td <td>225</td> <td>2475</td> <td>LD</td>	225	2475	LD																																																																																																																																								
291 2475 LD 2 34883 LD 1 331146 LD 289 2475 LD 288 2475 EL 1 619379 LD B 417374 LD 303 2475 LD 300 2475 LD 300 2475 LD 298 2475 LD 298 2475 LD 296 2475 LD 295 2475 LD 358 2475 LD 357 2475 LD 356 2475 LD 356 2475 LD 350 2475 LD 350 2475 LD 366 2475 MD 366 2475 MD 366 2475 MD 368 2475 MD 368 2475 MD <		2475	LD																																																																																																																																								
2 34883 LD 1 331146 LD 289 2475 LD 288 2475 EL 1 619379 LD B 417374 LD 303 2475 LD 302 2475 LD 300 2475 LD 298 2475 LD 298 2475 LD 298 2475 LD 296 2475 LD 358 2475 LD 357 2475 LD 356 2475 LD 356 2475 LD 356 2475 LD 350 2475 LD 350 2475 LD 360 2475 MD 363 2475 MD 366 2475 MD 368 2475 MD 368 2475 MD <	223	2475	LD																																																																																																																																								
1 331146 LD 289 2475 LD 288 2475 EL 1 619379 LD 8 417374 LD 303 2475 LD 301 2475 LD 301 2475 LD 300 2475 LD 298 2475 LD 296 2475 LD 296 2475 LD 296 2475 LD 358 2475 LD 358 2475 LD 357 2475 LD 358 2475 LD 354 2475 LD 355 2475 LD 356 2475 LD 357 2475 LD 360 1000185 MD 363 2475 MD 366 2475 MD 368 2475 MD 369 2475 MD 368 2475	291	2475	LD																																																																																																																																								
289 2475 LD 288 2475 EL 1 619379 LD B 417374 LD 303 2475 LD 300 2475 LD 300 2475 LD 298 2475 LD 298 2475 LD 296 2475 LD 295 2475 LD 358 2475 LD 356 2475 LD 356 2475 LD 356 2475 LD 356 2475 LD 350 2475 LD 351 2475 LD 352 2475 LD 360 1000185 MD 363 2475 MD 364 2475 MD 365 2475 MD 366 2475 MD 368 2475 MD	2	34883	LD																																																																																																																																								
288 2475 EL 1 619379 LD B 417374 LD 303 2475 LD 302 2475 LD 300 2475 LD 298 2475 LD 298 2475 LD 298 2475 LD 296 2475 LD 8 369323 LD 358 2475 LD 356 2475 LD 350 2475 LD 348 2475 LD 366 2475 MD 368 2475 MD 368 2475 MD 368 2475 MD 370 2475 MD 368 2475 MD	1	331146	LD																																																																																																																																								
1 619379 LD B 417374 LD 303 2475 LD 301 2475 LD 301 2475 LD 300 2475 LD 298 2475 LD 296 2475 LD 295 2475 LD 358 2475 LD 357 2475 LD 356 2475 LD 357 2475 LD 356 2475 LD 352 2475 LD 3530 2475 LD 3600 100185 MD 363 2475 MD 366 2475 MD 368 2475 MD 368 2475 MD 369 2475 MD 368 2475 MD 369 2475 MD 369 2475 MD	289	2475	LD																																																																																																																																								
B 417374 LD 303 2475 LD 302 2475 LD 300 2475 LD 300 2475 LD 298 2475 LD 298 2475 LD 295 2475 LD 358 2475 LD 358 2475 LD 356 2475 LD 356 2475 LD 356 2475 LD 356 2475 LD 350 2475 LD 344 2475 LD 349 2475 LD 348 2475 MD 365 2475 MD 366 2475 MD 368 2475 MD 368 2475 MD 368 2475 MD 368 2475 MD 369 2475 MD	288	2475	EL																																																																																																																																								
B 417374 LD 303 2475 LD 302 2475 LD 300 2475 LD 300 2475 LD 298 2475 LD 298 2475 LD 295 2475 LD 295 2475 LD 358 2475 LD 356 2475 LD 356 2475 LD 356 2475 LD 356 2475 LD 350 2475 LD 350 2475 LD 349 2475 LD 366 2475 MD 366 2475 MD 366 2475 MD 368 2475 MD 368 2475 MD 368 2475 MD 368 2475 MD 369 2475 MD	1	619379	LD																																																																																																																																								
303 2475 LD 301 2475 LD 300 2475 LD 298 2475 LD 298 2475 LD 296 2475 LD 295 2475 LD 295 2475 LD 358 2475 LD 356 2475 LD 356 2475 LD 356 2475 LD 356 2475 LD 350 2475 LD 348 2475 LD 348 2475 MD 365 2475 MD 366 2475 MD 368 2475 MD 368 2475 MD 368 2475 MD 368 2475 MD 370 2475 MD 36 3403 <t< td=""><td>В</td><td>417374</td><td></td></t<>	В	417374																																																																																																																																									
302 2475 LD 301 2475 LD 298 2475 LD 296 2475 LD 296 2475 LD 295 2475 LD 358 2475 LD 357 2475 LD 356 2475 LD 356 2475 LD 352 2475 LD 352 2475 LD 352 2475 LD 352 2475 LD 3530 2475 LD 3600 1000185 MD 363 2475 MD 366 2475 MD 368 2475 MD 368 2475 MD 369 2475 MD 366 3403 MD 36 3403 MD 2 619739	303	2475																																																																																																																																									
301 2475 LD 300 2475 LD 298 2475 LD 296 2475 LD 295 2475 LD 358 2475 LD 356 2475 LD 352 2475 LD 350 2475 LD 360 1000185 MD 363 2475 MD 365 2475 MD 366 2475 MD 368 2475 MD 368 2475 MD 370 2475 MD 370 2475 MD 363 3403 MD 36 3403 MD 36 3403 MD 36 3403 MD																																																																																																																																											
300 2475 LD 298 2475 LD 295 2475 LD 285 2475 LD 388 2475 LD 357 2475 LD 356 2475 LD 354 2475 LD 352 2475 LD 350 2475 LD 349 2475 LD 348 2475 LD 3600 1000185 MD 366 2475 MD 366 2475 MD 368 2475 MD 368 2475 MD 368 2475 MD 369 2475 MD 369 2475 MD 369 2475 MD 360 100185 LD 413204 LD LD 414227 LD <																																																																																																																																											
298 2475 LD 296 2475 LD 295 2475 LD 358 2475 LD 357 2475 LD 356 2475 LD 356 2475 LD 354 2475 LD 352 2475 LD 350 2475 LD 351 2475 LD 352 2475 LD 3600 1000185 MD 363 2475 MD 363 2475 MD 363 2475 MD 368 2475 MD 368 2475 MD 368 2475 MD 370 2475 MD 386 2475 MD 386 2475 MD 370 2475 MD 370 2475 MD 370 2475 MD																																																																																																																																											
296 2475 LD 285 2475 LD B 369323 LD 358 2475 LD 357 2475 LD 356 2475 LD 356 2475 LD 352 2475 LD 350 2475 LD 351 2475 LD 352 2475 LD 360 2475 LD 361 2475 MD 362 2475 MD 363 2475 MD 365 2475 MD 368 2475 MD 366 3403 MD 8 413204 LD 1 10379 LD 2 631289 LD																																																																																																																																											
295 2475 LD B 369323 LD 358 2475 LD 357 2475 LD 356 2475 LD 352 2475 LD 350 2475 LD 350 2475 LD 349 2475 LD 3600 1000185 MD 363 2475 MD 368 2475 MD 368 2475 MD 368 2475 MD 368 2475 MD 369 2475 MD 368 2475 MD 369 2475 MD 368 2475 MD 36 413204 LD 1 103748 MD <td></td> <td></td> <td></td>																																																																																																																																											
B 369323 LD 358 2475 LD 357 2475 LD 356 2475 LD 354 2475 LD 350 2475 LD 354 2475 LD 350 2475 LD 349 2475 LD 363 2475 MD 363 2475 MD 363 2475 MD 363 2475 MD 365 2475 MD 368 2475 MD 368 2475 MD 368 2475 MD 368 2475 MD B 413204 LD A 413204 LD A 413204 LD 1 103748 MD 36 3403 MD 2 631289 LD 1 631289 LD <																																																																																																																																											
358 2475 LD 357 2475 LD 356 2475 LD 354 2475 LD 352 2475 LD 350 2475 LD 349 2475 LD 348 2475 LD 3600 1000185 MD 363 2475 MD 365 2475 MD 366 2475 MD 368 2475 MD 368 2475 MD 369 2475 MD 370 2475 MD 8 413204 LD A 413204 LD B 411087 LD 2 395169 LD 1 619739 LD 2 631289 LD 2 631289 LD 3601 1000185 LD 320 778465 LD 380																																																																																																																																											
357 2475 LD 356 2475 LD 354 2475 LD 350 2475 LD 349 2475 LD 344 2475 LD 348 2475 LD 3600 1000185 MD 363 2475 MD 3665 2475 MD 368 2475 MD 368 2475 MD 369 2475 MD 370 2475 MD 36 3403 MD 36 3403 MD 36 3403 MD 2 619739 LD 2 619739 LD 2 619739 LD 320 778465 LD 320																																																																																																																																											
356 2475 LD 354 2475 LD 350 2475 LD 349 2475 LD 348 2475 LD 3600 1000185 MD 363 2475 MD 3665 2475 MD 368 2475 MD 368 2475 MD 368 2475 MD 370 2475 LD 11 1103748 MD 36 3403 MD 2 619739 LD 2 619739 LD 2 631289 LD 1 622608																																																																																																																																											
354 2475 LD 352 2475 LD 350 2475 LD 349 2475 LD 348 2475 LD 3600 1000185 MD 363 2475 MD 365 2475 MD 368 2475 MD 368 2475 MD 369 2475 MD 369 2475 MD 370 2475 MD B 413204 LD B 413204 LD B 414227 LD 11 1103748 MD 36 3403 MD B 411087 LD 2 619739 LD 2 619739 LD 2 631289 LD 1 631289 LD 3601 1000185 LD 320 778465 L																																																																																																																																											
352 2475 LD 350 2475 LD 349 2475 LD 348 2475 LD 3600 1000185 MD 363 2475 MD 365 2475 MD 368 2475 MD 368 2475 MD 369 2475 MD 369 2475 MD 370 2475 MD B 413204 LD A 413204 LD B 414227 LD 11 1103748 MD 36 3403 MD B 411087 LD 2 395169 LD 1 619739 LD 2 631289 LD 1 631289 LD 320 778465 LD 320 778465 LD 320 778465 LD 2 574738 LD 2 574736 LD 380 2475 LD 380 2475 LD 431 2475 LD 431 2475 LD 424 2475 LD 424 2475 LD 424 2475 LD 423 2475 LD 422 2475 LD																																																																																																																																											
350 2475 LD 349 2475 LD 348 2475 LD 3600 1000185 MD 363 2475 MD 365 2475 MD 368 2475 MD 369 2475 MD 369 2475 MD 370 2475 MD B 413204 LD A 413204 LD B 414227 LD 11 1103748 MD 366 3403 MD B 411087 LD 2 395169 LD 1 619739 LD 2 631289 LD 3601 1000185 LD 320 778465 LD 321 778465 LD 322 574738 LD 323 2475 LD 380 2475 LD <td></td> <td></td> <td></td>																																																																																																																																											
349 2475 LD 348 2475 LD 3600 1000185 MD 363 2475 MD 365 2475 MD 368 2475 MD 368 2475 MD 369 2475 MD 370 2475 MD B 413204 LD A 413204 LD B 414227 LD 11 1103748 MD 36 3403 MD B 411087 LD 2 395169 LD 1 619739 LD 2 631289 LD 1 631289 LD 3801 1000185 LD 320 778465 LD 379 2475 LD 380 2475 LD 380 2475 LD 380 2475 L																																																																																																																																											
348 2475 LD 3600 1000185 MD 363 2475 MD 365 2475 MD 368 2475 MD 368 2475 MD 368 2475 MD 369 2475 MD B 413204 LD A 413204 LD B 414227 LD 11 1103748 MD 36 3403 MD B 411087 LD 2 395169 LD 1 619739 LD 2 631289 LD 1 631289 LD 3601 1000185 LD 320 778465 LD 321 778465 LD 320 778465 LD 330 2 574738 LD 2 574738 LD 339407																																																																																																																																											
3600 1000185 MD 363 2475 MD 365 2475 MD 368 2475 MD 369 2475 MD 370 2475 MD B 413204 LD A 413204 LD B 414227 LD 11 1103748 MD 36 3403 MD B 411087 LD 2 395169 LD 1 619739 LD 2 619739 LD 2 631289 LD 1 632608 LD 3601 1000185 LD 320 778465 LD 321 778465 LD 322 574738 LD 3390 2475 LD 380 2475 LD 380 2475 LD 380 2475																																																																																																																																											
363 2475 MD 365 2475 MD 368 2475 MD 369 2475 MD 370 2475 MD B 413204 LD A 413204 LD B 414227 LD 11 1103748 MD 36 3403 MD B 411087 LD 2 395169 LD 1 619739 LD 2 631289 LD 1 631289 LD 3601 1000185 LD 320 778465 LD 321 778465 LD 3220 778465 LD 379 2475 LD 380 2475																																																																																																																																											
365 2475 MD 368 2475 MD 369 2475 MD 370 2475 MD B 413204 LD A 413204 LD B 414227 LD 11 1103748 MD 366 3403 MD B 411087 LD 2 395169 LD 1 619739 LD 2 631289 LD 2 631289 LD 321 778465 LD 320 778465 LD 321 778465 LD 320 778465 LD 320 778465 LD 379 2475 LD 380 2475 LD 431 2475 LD 380 2475 LD 426 2475 LD 426 2475																																																																																																																																											
368 2475 MD 369 2475 MD 370 2475 MD B 413204 LD A 413204 LD B 414227 LD 11 1103748 MD 366 3403 MD B 411087 LD 2 395169 LD 1 619739 LD 2 631289 LD 2 631289 LD 320 778465 LD 321 778465 LD 320 778465 LD 320 778465 LD 320 778465 LD 380 2475 LD 380 2475 LD 431 2475 LD 424 2475 LD 426 2475 LD 426 2475 LD <tr tb<="" tr=""> 424 2475<!--</td--><td></td><td></td><td></td></tr> <tr><td>369 2475 MD 370 2475 MD B 413204 LD A 413204 LD B 414227 LD 11 1103748 MD 36 3403 MD B 411087 LD 2 395169 LD 1 619739 LD 2 631289 LD 2 631289 LD 3601 100185 LD 320 778465 LD 320 778465 LD 1 562807 MD 1 574738 LD 2 574738 LD 380 2475 LD 380 2475 LD 431 2475 LD 426 2475 LD 426 2475 LD 426 2475 LD 424 2475 LD<!--</td--><td></td><td></td><td></td></td></tr> <tr><td>370 2475 MD B 413204 LD A 413204 LD B 414227 LD 11 1103748 MD 36 3403 MD B 411087 LD 2 395169 LD 1 619739 LD 2 631289 LD 2 631289 LD 1 631289 LD 3601 1000185 LD 321 778465 LD 320 778465 LD 1 562807 MD 1 574738 LD 2 574738 LD 380 2475 LD 431 2475 LD 426 2475 LD 426 2475 LD 426 2475</td><td></td><td></td><td></td></tr> <tr><td>B 413204 LD A 413204 LD B 414227 LD 11 1103748 MD 36 3403 MD B 411087 LD 2 395169 LD 1 619739 LD 2 631289 LD 1 631289 LD 1 631289 LD 3601 1000185 LD 321 778465 LD 320 778465 LD 1 562807 MD 1 574738 LD 2 574738 LD 380 2475 LD 380 2475 LD 431 2475 LD 426 2475 LD 426 2475 LD 426 2475 LD 424 2475 LD 424 2475 LD<</td><td>369</td><td>2475</td><td>MD</td></tr> <tr><td>A 413204 LD B 414227 LD 11 1103748 MD 36 3403 MD B 411087 LD 2 395169 LD 1 619739 LD 2 631289 LD 1 631289 LD 3601 1000185 LD 321 778465 LD 320 778465 LD 1 562807 MD 1 574738 LD 2 574738 LD 380 2475 LD 431 2475 LD 431 2475 LD 431 2475 LD 431 2475 LD 424 2475 LD 426 2475 LD 423 2475 LD 424 2475 LD 424 2475 LD<</td><td>370</td><td>2475</td><td>MD</td></tr> <tr><td>B 414227 LD 11 1103748 MD 36 3403 MD B 411087 LD 2 395169 LD 1 619739 LD 2 619739 LD 2 631289 LD 1 631289 LD 431 622608 LD 3601 1000185 LD 321 778465 LD 320 778465 LD 1 562807 MD 1 574738 LD 2 574738 LD 379 2475 LD 380 2475 LD 431 2475 LD 426 2475 LD 426 2475 LD 426 2475 LD 424 2475 LD 423 2475 LD 424 2475 L</td><td>В</td><td>413204</td><td>LD</td></tr> <tr><td>11 1103748 MD 36 3403 MD B 411087 LD 2 395169 LD 1 619739 LD 2 619739 LD 2 631289 LD 1 631289 LD 431 6222608 LD 3601 1000185 LD 320 778465 LD 1 562807 MD 1 562807 MD 1 562807 MD 1 574738 LD 2 574738 LD 380 2475 LD 8 339407 LD 426 2475 LD 426 2475 LD 424 2475 LD 423 2475 LD 424 2475 LD 423 2475 LD 424 2475 LD 422 2475 LD</td><td>Α</td><td>413204</td><td></td></tr> <tr><td>36 3403 MD B 411087 LD 2 395169 LD 1 619739 LD 2 619739 LD 2 619739 LD 2 631289 LD 1 631289 LD 431 6222608 LD 3601 1000185 LD 321 778465 LD 320 778465 LD 1 562807 MD 1 574738 LD 2 574738 LD 379 2475 LD 380 2475 LD 431 2475 LD A339407 LD A 426 2475 LD 426 2475 LD 424 2475 LD 424 2475 LD 424 2475 LD 422 2475 LD</td><td>В</td><td>414227</td><td>LD</td></tr> <tr><td>B 411087 LD 2 395169 LD 1 619739 LD 2 619739 LD 2 631289 LD 1 631289 LD 431 6222608 LD 3601 1000185 LD 321 778465 LD 320 778465 LD 1 562807 MD 1 562807 MD 1 574738 LD 379 2475 LD 380 2475 LD 431 2475 LD 431 2475 LD 431 2475 LD 426 2475 LD 426 2475 LD 425 2475 LD 424 2475 LD 422 2475 LD</td><td>11</td><td>1103748</td><td>MD</td></tr> <tr><td>2 395169 LD 1 619739 LD 2 631289 LD 1 631289 LD 431 6222608 LD 3601 1000185 LD 320 778465 LD 320 778465 LD 1 562807 MD 1 574738 LD 2 574738 LD 380 2475 LD 380 2475 LD 431 2475 LD 431 2475 LD 424 2475 LD 424 2475 LD 425 2475 LD 424 2475 LD 424 2475 LD 424 2475 LD 424 2475 LD 422 2475 LD</td><td>36</td><td>3403</td><td>MD</td></tr> <tr><td>1 619739 LD 2 619739 LD 2 631289 LD 1 631289 LD 431 6222608 LD 3601 100185 LD 320 778465 LD 320 778465 LD 1 562807 MD 1 574738 LD 2 574738 LD 379 2475 LD 380 2475 LD 431 2475 LD 431 2475 LD 426 2475 LD 426 2475 LD 425 2475 LD 424 2475 LD 423 2475 LD 424 2475 LD 422 2475 MD</td><td>В</td><td>411087</td><td>LD</td></tr> <tr><td>2 619739 LD 2 631289 LD 1 631289 LD 431 6222608 LD 3601 1000185 LD 321 778465 LD 320 778465 LD 1 562807 MD 1 562807 MD 1 574738 LD 2 574738 LD 379 2475 LD 431 2475 LD 431 2475 LD 431 2475 LD 426 2475 LD 426 2475 LD 426 2475 LD 424 2475 LD 423 2475 LD 423 2475 LD 422 2475 MD</td><td>2</td><td>395169</td><td>LD</td></tr> <tr><td>2 631289 LD 1 631289 LD 431 6222608 LD 3601 1000185 LD 321 778465 LD 320 778465 LD 1 562807 MD 1 574738 LD 2 574738 LD 379 2475 LD 431 2475 LD 431 2475 LD 431 2475 LD 432 2475 LD 424 2475 LD 426 2475 LD 425 2475 LD 424 2475 LD 424 2475 LD 423 2475 LD 422 2475 LD</td><td>1</td><td>619739</td><td>LD</td></tr> <tr><td>1 631289 LD 431 6222608 LD 3601 1000185 LD 321 778465 LD 320 778465 LD 1 562807 MD 1 574738 LD 2 574738 LD 379 2475 LD 431 2475 LD 431 2475 LD 431 2475 LD 426 2475 LD 426 2475 LD 424 2475 LD 423 2475 LD 423 2475 LD</td><td>2</td><td>619739</td><td>LD</td></tr> <tr><td>1 631289 LD 431 6222608 LD 3601 1000185 LD 321 778465 LD 320 778465 LD 1 562807 MD 1 574738 LD 2 574738 LD 379 2475 LD 431 2475 LD 431 2475 LD 431 2475 LD 426 2475 LD 426 2475 LD 424 2475 LD 423 2475 LD 423 2475 LD</td><td>2</td><td>631289</td><td></td></tr> <tr><td>431 6222608 LD 3601 1000185 LD 321 778465 LD 320 778465 LD 1 562807 MD 1 574738 LD 2 574738 LD 379 2475 LD 431 2475 LD 80 2475 LD 431 2475 LD 426 2475 LD 426 2475 LD 424 2475 LD 423 2475 LD 423 2475 LD 422 2475 MD</td><td></td><td></td><td></td></tr> <tr><td>3601 1000185 LD 321 778465 LD 320 778465 LD 1 562807 MD 1 574738 LD 2 574738 LD 379 2475 LD 380 2475 LD 431 2475 LD A 339407 LD A 339407 LD 426 2475 LD 425 2475 LD 426 2475 LD 423 2475 LD 424 2475 LD 422 2475 MD</td><td>431</td><td>6222608</td><td></td></tr> <tr><td>321 778465 LD 320 778465 LD 1 562807 MD 1 574738 LD 2 574738 LD 379 2475 LD 380 2475 LD 431 2475 LD A 339407 LD 426 2475 LD 425 2475 LD 426 2475 LD 425 2475 LD 424 2475 LD 423 2475 LD 422 2475 MD</td><td></td><td></td><td></td></tr> <tr><td>320 778465 LD 1 562807 MD 1 574738 LD 2 574738 LD 379 2475 LD 380 2475 LD 431 2475 LD B 339407 LD 426 2475 LD 425 2475 LD 424 2475 LD 425 2475 LD 426 2475 LD 422 2475 LD</td><td></td><td></td><td></td></tr> <tr><td>1 562807 MD 1 574738 LD 2 574738 LD 379 2475 LD 380 2475 LD 431 2475 LD B 339407 LD 426 2475 LD 425 2475 LD 424 2475 LD 425 2475 LD 426 2475 LD 422 2475 LD 423 2475 LD 422 2475 MD</td><td></td><td></td><td></td></tr> <tr><td>1 574738 LD 2 574738 LD 379 2475 LD 380 2475 LD 431 2475 LD B 339407 LD A 339407 LD 426 2475 LD 425 2475 LD 424 2475 LD 425 2475 LD 424 2475 LD 422 2475 LD</td><td></td><td></td><td></td></tr> <tr><td>2 574738 LD 379 2475 LD 380 2475 LD 431 2475 LD B 339407 LD A 339407 LD 426 2475 LD 425 2475 LD 424 2475 LD 422 2475 LD</td><td></td><td></td><td></td></tr> <tr><td>379 2475 LD 380 2475 LD 431 2475 LD B 339407 LD A 339407 LD 426 2475 LD 425 2475 LD 424 2475 LD 422 2475 MD</td><td></td><td></td><td></td></tr> <tr><td>380 2475 LD 431 2475 LD B 339407 LD A 339407 LD 426 2475 LD 425 2475 LD 424 2475 LD 423 2475 LD 422 2475 MD</td><td></td><td></td><td></td></tr> <tr><td>431 2475 LD B 339407 LD A 339407 LD 426 2475 LD 425 2475 LD 424 2475 LD 423 2475 LD 422 2475 MD</td><td></td><td></td><td></td></tr> <tr><td>B 339407 LD A 339407 LD 426 2475 LD 425 2475 LD 424 2475 LD 423 2475 LD 422 2475 MD</td><td></td><td></td><td></td></tr> <tr><td>A 339407 LD 426 2475 LD 425 2475 LD 424 2475 LD 423 2475 LD 422 2475 MD</td><td></td><td></td><td></td></tr> <tr><td>426 2475 LD 425 2475 LD 424 2475 LD 423 2475 LD 422 2475 MD</td><td></td><td></td><td></td></tr> <tr><td>425 2475 LD 424 2475 LD 423 2475 LD 422 2475 MD</td><td></td><td></td><td></td></tr> <tr><td>424 2475 LD 423 2475 LD 422 2475 MD</td><td></td><td></td><td></td></tr> <tr><td>423 2475 LD 422 2475 MD</td><td></td><td></td><td></td></tr> <tr><td>422 2475 MD</td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td></tr> <tr><td>421 24/5 MD</td><td></td><td></td><td></td></tr> <tr><td></td><td>421</td><td>24/5</td><td>MU</td></tr>				369 2475 MD 370 2475 MD B 413204 LD A 413204 LD B 414227 LD 11 1103748 MD 36 3403 MD B 411087 LD 2 395169 LD 1 619739 LD 2 631289 LD 2 631289 LD 3601 100185 LD 320 778465 LD 320 778465 LD 1 562807 MD 1 574738 LD 2 574738 LD 380 2475 LD 380 2475 LD 431 2475 LD 426 2475 LD 426 2475 LD 426 2475 LD 424 2475 LD </td <td></td> <td></td> <td></td>				370 2475 MD B 413204 LD A 413204 LD B 414227 LD 11 1103748 MD 36 3403 MD B 411087 LD 2 395169 LD 1 619739 LD 2 631289 LD 2 631289 LD 1 631289 LD 3601 1000185 LD 321 778465 LD 320 778465 LD 1 562807 MD 1 574738 LD 2 574738 LD 380 2475 LD 431 2475 LD 426 2475 LD 426 2475 LD 426 2475				B 413204 LD A 413204 LD B 414227 LD 11 1103748 MD 36 3403 MD B 411087 LD 2 395169 LD 1 619739 LD 2 631289 LD 1 631289 LD 1 631289 LD 3601 1000185 LD 321 778465 LD 320 778465 LD 1 562807 MD 1 574738 LD 2 574738 LD 380 2475 LD 380 2475 LD 431 2475 LD 426 2475 LD 426 2475 LD 426 2475 LD 424 2475 LD 424 2475 LD<	369	2475	MD	A 413204 LD B 414227 LD 11 1103748 MD 36 3403 MD B 411087 LD 2 395169 LD 1 619739 LD 2 631289 LD 1 631289 LD 3601 1000185 LD 321 778465 LD 320 778465 LD 1 562807 MD 1 574738 LD 2 574738 LD 380 2475 LD 431 2475 LD 431 2475 LD 431 2475 LD 431 2475 LD 424 2475 LD 426 2475 LD 423 2475 LD 424 2475 LD 424 2475 LD<	370	2475	MD	B 414227 LD 11 1103748 MD 36 3403 MD B 411087 LD 2 395169 LD 1 619739 LD 2 619739 LD 2 631289 LD 1 631289 LD 431 622608 LD 3601 1000185 LD 321 778465 LD 320 778465 LD 1 562807 MD 1 574738 LD 2 574738 LD 379 2475 LD 380 2475 LD 431 2475 LD 426 2475 LD 426 2475 LD 426 2475 LD 424 2475 LD 423 2475 LD 424 2475 L	В	413204	LD	11 1103748 MD 36 3403 MD B 411087 LD 2 395169 LD 1 619739 LD 2 619739 LD 2 631289 LD 1 631289 LD 431 6222608 LD 3601 1000185 LD 320 778465 LD 1 562807 MD 1 562807 MD 1 562807 MD 1 574738 LD 2 574738 LD 380 2475 LD 8 339407 LD 426 2475 LD 426 2475 LD 424 2475 LD 423 2475 LD 424 2475 LD 423 2475 LD 424 2475 LD 422 2475 LD	Α	413204		36 3403 MD B 411087 LD 2 395169 LD 1 619739 LD 2 619739 LD 2 619739 LD 2 631289 LD 1 631289 LD 431 6222608 LD 3601 1000185 LD 321 778465 LD 320 778465 LD 1 562807 MD 1 574738 LD 2 574738 LD 379 2475 LD 380 2475 LD 431 2475 LD A339407 LD A 426 2475 LD 426 2475 LD 424 2475 LD 424 2475 LD 424 2475 LD 422 2475 LD	В	414227	LD	B 411087 LD 2 395169 LD 1 619739 LD 2 619739 LD 2 631289 LD 1 631289 LD 431 6222608 LD 3601 1000185 LD 321 778465 LD 320 778465 LD 1 562807 MD 1 562807 MD 1 574738 LD 379 2475 LD 380 2475 LD 431 2475 LD 431 2475 LD 431 2475 LD 426 2475 LD 426 2475 LD 425 2475 LD 424 2475 LD 422 2475 LD	11	1103748	MD	2 395169 LD 1 619739 LD 2 631289 LD 1 631289 LD 431 6222608 LD 3601 1000185 LD 320 778465 LD 320 778465 LD 1 562807 MD 1 574738 LD 2 574738 LD 380 2475 LD 380 2475 LD 431 2475 LD 431 2475 LD 424 2475 LD 424 2475 LD 425 2475 LD 424 2475 LD 424 2475 LD 424 2475 LD 424 2475 LD 422 2475 LD	36	3403	MD	1 619739 LD 2 619739 LD 2 631289 LD 1 631289 LD 431 6222608 LD 3601 100185 LD 320 778465 LD 320 778465 LD 1 562807 MD 1 574738 LD 2 574738 LD 379 2475 LD 380 2475 LD 431 2475 LD 431 2475 LD 426 2475 LD 426 2475 LD 425 2475 LD 424 2475 LD 423 2475 LD 424 2475 LD 422 2475 MD	В	411087	LD	2 619739 LD 2 631289 LD 1 631289 LD 431 6222608 LD 3601 1000185 LD 321 778465 LD 320 778465 LD 1 562807 MD 1 562807 MD 1 574738 LD 2 574738 LD 379 2475 LD 431 2475 LD 431 2475 LD 431 2475 LD 426 2475 LD 426 2475 LD 426 2475 LD 424 2475 LD 423 2475 LD 423 2475 LD 422 2475 MD	2	395169	LD	2 631289 LD 1 631289 LD 431 6222608 LD 3601 1000185 LD 321 778465 LD 320 778465 LD 1 562807 MD 1 574738 LD 2 574738 LD 379 2475 LD 431 2475 LD 431 2475 LD 431 2475 LD 432 2475 LD 424 2475 LD 426 2475 LD 425 2475 LD 424 2475 LD 424 2475 LD 423 2475 LD 422 2475 LD	1	619739	LD	1 631289 LD 431 6222608 LD 3601 1000185 LD 321 778465 LD 320 778465 LD 1 562807 MD 1 574738 LD 2 574738 LD 379 2475 LD 431 2475 LD 431 2475 LD 431 2475 LD 426 2475 LD 426 2475 LD 424 2475 LD 423 2475 LD 423 2475 LD	2	619739	LD	1 631289 LD 431 6222608 LD 3601 1000185 LD 321 778465 LD 320 778465 LD 1 562807 MD 1 574738 LD 2 574738 LD 379 2475 LD 431 2475 LD 431 2475 LD 431 2475 LD 426 2475 LD 426 2475 LD 424 2475 LD 423 2475 LD 423 2475 LD	2	631289		431 6222608 LD 3601 1000185 LD 321 778465 LD 320 778465 LD 1 562807 MD 1 574738 LD 2 574738 LD 379 2475 LD 431 2475 LD 80 2475 LD 431 2475 LD 426 2475 LD 426 2475 LD 424 2475 LD 423 2475 LD 423 2475 LD 422 2475 MD				3601 1000185 LD 321 778465 LD 320 778465 LD 1 562807 MD 1 574738 LD 2 574738 LD 379 2475 LD 380 2475 LD 431 2475 LD A 339407 LD A 339407 LD 426 2475 LD 425 2475 LD 426 2475 LD 423 2475 LD 424 2475 LD 422 2475 MD	431	6222608		321 778465 LD 320 778465 LD 1 562807 MD 1 574738 LD 2 574738 LD 379 2475 LD 380 2475 LD 431 2475 LD A 339407 LD 426 2475 LD 425 2475 LD 426 2475 LD 425 2475 LD 424 2475 LD 423 2475 LD 422 2475 MD				320 778465 LD 1 562807 MD 1 574738 LD 2 574738 LD 379 2475 LD 380 2475 LD 431 2475 LD B 339407 LD 426 2475 LD 425 2475 LD 424 2475 LD 425 2475 LD 426 2475 LD 422 2475 LD				1 562807 MD 1 574738 LD 2 574738 LD 379 2475 LD 380 2475 LD 431 2475 LD B 339407 LD 426 2475 LD 425 2475 LD 424 2475 LD 425 2475 LD 426 2475 LD 422 2475 LD 423 2475 LD 422 2475 MD				1 574738 LD 2 574738 LD 379 2475 LD 380 2475 LD 431 2475 LD B 339407 LD A 339407 LD 426 2475 LD 425 2475 LD 424 2475 LD 425 2475 LD 424 2475 LD 422 2475 LD				2 574738 LD 379 2475 LD 380 2475 LD 431 2475 LD B 339407 LD A 339407 LD 426 2475 LD 425 2475 LD 424 2475 LD 422 2475 LD				379 2475 LD 380 2475 LD 431 2475 LD B 339407 LD A 339407 LD 426 2475 LD 425 2475 LD 424 2475 LD 422 2475 MD				380 2475 LD 431 2475 LD B 339407 LD A 339407 LD 426 2475 LD 425 2475 LD 424 2475 LD 423 2475 LD 422 2475 MD				431 2475 LD B 339407 LD A 339407 LD 426 2475 LD 425 2475 LD 424 2475 LD 423 2475 LD 422 2475 MD				B 339407 LD A 339407 LD 426 2475 LD 425 2475 LD 424 2475 LD 423 2475 LD 422 2475 MD				A 339407 LD 426 2475 LD 425 2475 LD 424 2475 LD 423 2475 LD 422 2475 MD				426 2475 LD 425 2475 LD 424 2475 LD 423 2475 LD 422 2475 MD				425 2475 LD 424 2475 LD 423 2475 LD 422 2475 MD				424 2475 LD 423 2475 LD 422 2475 MD				423 2475 LD 422 2475 MD				422 2475 MD								421 24/5 MD					421	24/5	MU
369 2475 MD 370 2475 MD B 413204 LD A 413204 LD B 414227 LD 11 1103748 MD 36 3403 MD B 411087 LD 2 395169 LD 1 619739 LD 2 631289 LD 2 631289 LD 3601 100185 LD 320 778465 LD 320 778465 LD 1 562807 MD 1 574738 LD 2 574738 LD 380 2475 LD 380 2475 LD 431 2475 LD 426 2475 LD 426 2475 LD 426 2475 LD 424 2475 LD </td <td></td> <td></td> <td></td>																																																																																																																																											
370 2475 MD B 413204 LD A 413204 LD B 414227 LD 11 1103748 MD 36 3403 MD B 411087 LD 2 395169 LD 1 619739 LD 2 631289 LD 2 631289 LD 1 631289 LD 3601 1000185 LD 321 778465 LD 320 778465 LD 1 562807 MD 1 574738 LD 2 574738 LD 380 2475 LD 431 2475 LD 426 2475 LD 426 2475 LD 426 2475																																																																																																																																											
B 413204 LD A 413204 LD B 414227 LD 11 1103748 MD 36 3403 MD B 411087 LD 2 395169 LD 1 619739 LD 2 631289 LD 1 631289 LD 1 631289 LD 3601 1000185 LD 321 778465 LD 320 778465 LD 1 562807 MD 1 574738 LD 2 574738 LD 380 2475 LD 380 2475 LD 431 2475 LD 426 2475 LD 426 2475 LD 426 2475 LD 424 2475 LD 424 2475 LD<	369	2475	MD																																																																																																																																								
A 413204 LD B 414227 LD 11 1103748 MD 36 3403 MD B 411087 LD 2 395169 LD 1 619739 LD 2 631289 LD 1 631289 LD 3601 1000185 LD 321 778465 LD 320 778465 LD 1 562807 MD 1 574738 LD 2 574738 LD 380 2475 LD 431 2475 LD 431 2475 LD 431 2475 LD 431 2475 LD 424 2475 LD 426 2475 LD 423 2475 LD 424 2475 LD 424 2475 LD<	370	2475	MD																																																																																																																																								
B 414227 LD 11 1103748 MD 36 3403 MD B 411087 LD 2 395169 LD 1 619739 LD 2 619739 LD 2 631289 LD 1 631289 LD 431 622608 LD 3601 1000185 LD 321 778465 LD 320 778465 LD 1 562807 MD 1 574738 LD 2 574738 LD 379 2475 LD 380 2475 LD 431 2475 LD 426 2475 LD 426 2475 LD 426 2475 LD 424 2475 LD 423 2475 LD 424 2475 L	В	413204	LD																																																																																																																																								
11 1103748 MD 36 3403 MD B 411087 LD 2 395169 LD 1 619739 LD 2 619739 LD 2 631289 LD 1 631289 LD 431 6222608 LD 3601 1000185 LD 320 778465 LD 1 562807 MD 1 562807 MD 1 562807 MD 1 574738 LD 2 574738 LD 380 2475 LD 8 339407 LD 426 2475 LD 426 2475 LD 424 2475 LD 423 2475 LD 424 2475 LD 423 2475 LD 424 2475 LD 422 2475 LD	Α	413204																																																																																																																																									
36 3403 MD B 411087 LD 2 395169 LD 1 619739 LD 2 619739 LD 2 619739 LD 2 631289 LD 1 631289 LD 431 6222608 LD 3601 1000185 LD 321 778465 LD 320 778465 LD 1 562807 MD 1 574738 LD 2 574738 LD 379 2475 LD 380 2475 LD 431 2475 LD A339407 LD A 426 2475 LD 426 2475 LD 424 2475 LD 424 2475 LD 424 2475 LD 422 2475 LD	В	414227	LD																																																																																																																																								
B 411087 LD 2 395169 LD 1 619739 LD 2 619739 LD 2 631289 LD 1 631289 LD 431 6222608 LD 3601 1000185 LD 321 778465 LD 320 778465 LD 1 562807 MD 1 562807 MD 1 574738 LD 379 2475 LD 380 2475 LD 431 2475 LD 431 2475 LD 431 2475 LD 426 2475 LD 426 2475 LD 425 2475 LD 424 2475 LD 422 2475 LD	11	1103748	MD																																																																																																																																								
2 395169 LD 1 619739 LD 2 631289 LD 1 631289 LD 431 6222608 LD 3601 1000185 LD 320 778465 LD 320 778465 LD 1 562807 MD 1 574738 LD 2 574738 LD 380 2475 LD 380 2475 LD 431 2475 LD 431 2475 LD 424 2475 LD 424 2475 LD 425 2475 LD 424 2475 LD 424 2475 LD 424 2475 LD 424 2475 LD 422 2475 LD	36	3403	MD																																																																																																																																								
1 619739 LD 2 619739 LD 2 631289 LD 1 631289 LD 431 6222608 LD 3601 100185 LD 320 778465 LD 320 778465 LD 1 562807 MD 1 574738 LD 2 574738 LD 379 2475 LD 380 2475 LD 431 2475 LD 431 2475 LD 426 2475 LD 426 2475 LD 425 2475 LD 424 2475 LD 423 2475 LD 424 2475 LD 422 2475 MD	В	411087	LD																																																																																																																																								
2 619739 LD 2 631289 LD 1 631289 LD 431 6222608 LD 3601 1000185 LD 321 778465 LD 320 778465 LD 1 562807 MD 1 562807 MD 1 574738 LD 2 574738 LD 379 2475 LD 431 2475 LD 431 2475 LD 431 2475 LD 426 2475 LD 426 2475 LD 426 2475 LD 424 2475 LD 423 2475 LD 423 2475 LD 422 2475 MD	2	395169	LD																																																																																																																																								
2 631289 LD 1 631289 LD 431 6222608 LD 3601 1000185 LD 321 778465 LD 320 778465 LD 1 562807 MD 1 574738 LD 2 574738 LD 379 2475 LD 431 2475 LD 431 2475 LD 431 2475 LD 432 2475 LD 424 2475 LD 426 2475 LD 425 2475 LD 424 2475 LD 424 2475 LD 423 2475 LD 422 2475 LD	1	619739	LD																																																																																																																																								
1 631289 LD 431 6222608 LD 3601 1000185 LD 321 778465 LD 320 778465 LD 1 562807 MD 1 574738 LD 2 574738 LD 379 2475 LD 431 2475 LD 431 2475 LD 431 2475 LD 426 2475 LD 426 2475 LD 424 2475 LD 423 2475 LD 423 2475 LD	2	619739	LD																																																																																																																																								
1 631289 LD 431 6222608 LD 3601 1000185 LD 321 778465 LD 320 778465 LD 1 562807 MD 1 574738 LD 2 574738 LD 379 2475 LD 431 2475 LD 431 2475 LD 431 2475 LD 426 2475 LD 426 2475 LD 424 2475 LD 423 2475 LD 423 2475 LD	2	631289																																																																																																																																									
431 6222608 LD 3601 1000185 LD 321 778465 LD 320 778465 LD 1 562807 MD 1 574738 LD 2 574738 LD 379 2475 LD 431 2475 LD 80 2475 LD 431 2475 LD 426 2475 LD 426 2475 LD 424 2475 LD 423 2475 LD 423 2475 LD 422 2475 MD																																																																																																																																											
3601 1000185 LD 321 778465 LD 320 778465 LD 1 562807 MD 1 574738 LD 2 574738 LD 379 2475 LD 380 2475 LD 431 2475 LD A 339407 LD A 339407 LD 426 2475 LD 425 2475 LD 426 2475 LD 423 2475 LD 424 2475 LD 422 2475 MD	431	6222608																																																																																																																																									
321 778465 LD 320 778465 LD 1 562807 MD 1 574738 LD 2 574738 LD 379 2475 LD 380 2475 LD 431 2475 LD A 339407 LD 426 2475 LD 425 2475 LD 426 2475 LD 425 2475 LD 424 2475 LD 423 2475 LD 422 2475 MD																																																																																																																																											
320 778465 LD 1 562807 MD 1 574738 LD 2 574738 LD 379 2475 LD 380 2475 LD 431 2475 LD B 339407 LD 426 2475 LD 425 2475 LD 424 2475 LD 425 2475 LD 426 2475 LD 422 2475 LD																																																																																																																																											
1 562807 MD 1 574738 LD 2 574738 LD 379 2475 LD 380 2475 LD 431 2475 LD B 339407 LD 426 2475 LD 425 2475 LD 424 2475 LD 425 2475 LD 426 2475 LD 422 2475 LD 423 2475 LD 422 2475 MD																																																																																																																																											
1 574738 LD 2 574738 LD 379 2475 LD 380 2475 LD 431 2475 LD B 339407 LD A 339407 LD 426 2475 LD 425 2475 LD 424 2475 LD 425 2475 LD 424 2475 LD 422 2475 LD																																																																																																																																											
2 574738 LD 379 2475 LD 380 2475 LD 431 2475 LD B 339407 LD A 339407 LD 426 2475 LD 425 2475 LD 424 2475 LD 422 2475 LD																																																																																																																																											
379 2475 LD 380 2475 LD 431 2475 LD B 339407 LD A 339407 LD 426 2475 LD 425 2475 LD 424 2475 LD 422 2475 MD																																																																																																																																											
380 2475 LD 431 2475 LD B 339407 LD A 339407 LD 426 2475 LD 425 2475 LD 424 2475 LD 423 2475 LD 422 2475 MD																																																																																																																																											
431 2475 LD B 339407 LD A 339407 LD 426 2475 LD 425 2475 LD 424 2475 LD 423 2475 LD 422 2475 MD																																																																																																																																											
B 339407 LD A 339407 LD 426 2475 LD 425 2475 LD 424 2475 LD 423 2475 LD 422 2475 MD																																																																																																																																											
A 339407 LD 426 2475 LD 425 2475 LD 424 2475 LD 423 2475 LD 422 2475 MD																																																																																																																																											
426 2475 LD 425 2475 LD 424 2475 LD 423 2475 LD 422 2475 MD																																																																																																																																											
425 2475 LD 424 2475 LD 423 2475 LD 422 2475 MD																																																																																																																																											
424 2475 LD 423 2475 LD 422 2475 MD																																																																																																																																											
423 2475 LD 422 2475 MD																																																																																																																																											
422 2475 MD																																																																																																																																											
421 24/5 MD																																																																																																																																											
	421	24/5	MU																																																																																																																																								

Lot No.	DP	Land Type
490	2475	MD
488	2475	LD
487	2475	LD
486	2475	LD
485	2475	LD
484	2475	LD
483	2475	LD
482	2475	LD
480	2475	LD
479	2475	LD
478	2475	LD
416	2475	MD
415	2475	MD
D	406540	MD
3	510228	LD
5	510228	LD
4	30409	LD
6	30409	EL
5	30409	EL
15	30409	EL
16	30409	EL
17	30409	EL
647	2475	EL
21	30409	EL
22	30409	LD
532	2475	LD
10	874699	LD
1	938137	LD
2	938137	LD
3	938137	LD
		LD
4	938137	
5	938137	MD
6	938137	MD
640	2475	LD
A	414563	MD
B	414563	MD
С	414563	LD
547	2475	LD
548	2475	LD
549	2475	LD
550	2475	LD
551	2475	LD
552	2475	LD
626	2475	LD
628	2475	LD
631	2475	LD
632	2475	LD
634	2475	LD
636	2475	MD
637	2475	MD
100	1022124	LD
2	201514	LD
3	201514	LD
671	2475	LD
672	2475	LD
673	2475	LD
674	2475	LD
676	2475	EL
721	2475	EL
722	2475	LD
700	2475	LD
726 4	201514	LD

Lot No.	DP	Land Type
101	1022124	LD
2	503020	LD
3	503020	LD
4	503020	LD
A	386133	LD
714	2475	LD
715	2475	LD
716	2475	LD
717 718	2475	LD
	2475 2475	LD
684 685	2475	LD
		LD
686	2475	LD
688	2475	LD
689	2475	LD
690	2475	LD
691	2475	LD
11	1044691	
2	548700	LL
12	1044691	LL
706	2475	LD
709	2475	LD
710	2475	LD
712	2475	LD
713	2475	LD
769	2475	LD
768	2475	LD
767	2475	LD
766	2475	LD
763	2475	LD
762	2475	LD
787	2475	LD
784	2475	LD
783	2475	LD
782	2475	LD
780	2475	LD
2	555992	LD
752	2475	LD
2	570646	LD
1	570646	LD
A	370483	LD
11	776297	LD
12	776297	EL
799	2475	LD
101	591853	LD
102	591853	LD
A	363000	LD
802	2475	EL
803	2475	EL
804	2475	LD
85	2475	LD
806	2475	LD
807	2475	LD
808	2475	LD
847	2475	LD
810	2475	LD
812	2475	LD
814	2475	MD
1	238636	MD
2	238636	MD
3	238636	MD
4	238636	MD

Lot No.	DP	Land Type
5	238636	MD
6	238636	MD
7	560787	MD
8	560787	MD
9	560787	MD
B	40482	MD
A	40482	MD
841	2475	LD
842	2475	LD
819	2475	LD
820	2475	LD
822 823	2475	LD
	2475	LD
824	2475	
827	2475	
828	2475	
829	2475	LD
830	2475	LD
831	2475	LD
832	2475	LD
833	2475	LD
834	2475	MD
872	2475	LD
871	2475	LD
870	2475	LD
869	2475	LD
867	2475	MD
874	2475	LD
875	2475	LD
876	2475	LD
877	2475	LD
878	2475	MD
213	813479	MD
212	813479	MD
211	813479	MD
20	708107	MD
31	632173	MD
32	632173	MD
101	790560	MD
100	790560	MD
1	31151	MD
2	31151	MD
3	31151	MD
4	31151	MD
5	31151	MD
6	538235	MD
71	627424	MD
72	627424	MD
882	2475	MD
883	2475	LD
885	2475	LD
887	2475	LD
861	2475	LD
860	2475	LD
855	2475	LD
85	740973	EL
86	740973	EL
87	740973	EL
88	740973	EL
89	740973	EL
141	707894	LD
142	707894	LD

Lot No.	DP	Land Type
131	732036	LD
132	732036	LD
101	712544	LD
101	854174	LD
82	740973	LD
81	740893	LD
7	2756	LD
61	596624	LD
1	802655	LD
2	802655	LD
42	791236	LD
41	791236	LD
D	411796	LD
С	411796	LD
В	411796	LD
A	411796	LD
В	391036	LD
19	2756	LD
18	2756	LD
A	385901	LD
16	2756	LD
15	2756	LD
11		MD
	519909	
12	519909	MD
131	879822	MD
132	879822	MD
1	598602	MD
111	591857	MD
В	378927	MD
2	567541	MD
3	538092	MD
2	538092	MD
941	2475	MD
11	571579	MD
10	571579	MD
899	2475	EL
1900	614637	EL
1901	614637	EL
933	2475	EL
903	2475	EL
906	2475	LD
927	2475	LD
928	2475	LD
909	2475	LD
911	2475	LD
919	2475	LD
920	2475	LD
920		LD
923 42	2475	LD
	623270	
20	565535	LD
2	557622	LD
5	563539	LD
4	563539	LD
1	211782	LD
2	211782	LD
В	405649	LD
1	795818	LD
A	386802	LD
В	386802	LD
4	615872	LD
3	615872	LD
51	610394	LD
	640004	LD
52 A	610394 417196	LD

Lot No.	DP	Land Type
В	417196	LD
3	2756	MD
11	1007049	MD
В	408221	MD
1	581050	MD
2	581050	MD
D	408221	MD
1130	2475	MD
1128	2475	MD
1126	2475	MD
1119	2475	LD
1060	2475	LD
1059	2475	LD
1057	2475	LD
1049	2475	LD
1050	2475	LD
999	2475	LD
998	2475	LD
996	2475	LD
993	2475	LD
988	2475	LD
989	2475	LD
952	2475	LD
953	2475	LD
5	236726	LD
6	236726	LD
1004	2475	EL
1005	2475	EL
1006	2475	EL
1065	2475	MD
1066	2475	MD
1067	2475	MD
1114	2475	MD
1116	2475	MD
14	533382	EL
4	126820	EL
1145	2475	EL
1144	2475	EL
1102	2475	LD
1103	2475	LD
2	201643	LD
1013	2475	LD
1012	2475	LD
1011	2475	LD
1010	2475	LD
1007	2475	LD
1040	2475	EL
971	2475	LD
972	2475	LD
976	2475	LD
977	2475	LD
954	2475	LD
955	2475	LD
956 958	2475	LD
	2475	LD
959 961	2475 2475	LD LD
963	2475	LD
968	2475	LL
908 970	2475	
101	789832	LL
102	789832	LL
1017	2475	LL
1031	2475	LL
1078	2475	LD
.010	2	20

Lot No.	DP	Land Type
1079	2475	LD
1101	2475	LD
1100	2475	LD
1099	2475	LD
1098	2475	LD
1148	2475	MD
1163	2475	MD
1161	2475	MD
1160	2475	MD
1	126822	MD
10	1124205	MD
A	355182	MD
1159	2475	MD
11	1124205	MD
С	337828	LD
2	501499	LL
1	501499	LL
14	19406	LL
2	513043	LL
С	389531	LL
D	389531	LL
2 2 3	531654	LL
2	205472	LD
3	205472	LD
5	205472	LD
6	205472	LD
1037	2475	LD
20	730327	LD
41	623270	EL
362	2475	

Lots with Dual Occupancy Demand Credit

Lot No.	DP	Land Type
3	233174	LD
112	1010191	LD
2	606317	LD
100	634734	LD
100	634734	LD
2	519215	LD
4	3403	LD
В	416820	LD
1	3403	LD
1	201865	LD
3	201865	LD
141	2475	LD
157	2475	LD
155	2475	LD
150	2475	LD
221	2475	LD
220	2475	LD
219	2475	LD
217	2475	LD
212	2475	LD
231	2475	LD
230	2475	LD
1	34883	LD
C	417374	LD
294	2475	LD
A	369323	LD
359	2475	LD
353	2475	LD
364	2475	MD
366	2475	MD
367	2475	MD
372	2475	LD
4	1117859	LD
4 12	1103748	MD
2	749642	LD
2	395169	LD
3	395169	LD
3 2	562807	MD
3 377	574738	LD
377 378	2475	LD
	2475	LD
433	2475	LD
432	2475	LD
429	2475	LD
428	2475	LD
427	2475	LD
489	2475	MD
481	2475	LD
479	2475	LD
5	1117859	MD
В	389089	MD
С	406540	LD
495	2475	MD
6	1117859	LD
2	510228	LD
1	510228	LD
4	510228	LD
405	2475	LD
404	2475	LD
403	2475	LD
14	30409	EL

Lot No.	DP	Land Type
118	575004	LD
119	575004	LD
20	30409	LD
23	30409	LD
24	30409	LD
655	2475	LD
25	30409	EL
2	204217	LD
535	2475	LD
638	2475	MD
641	2475	LD
545	2475	LD
546 629	2475	LD LD
633		LD
635	2475	MD
13	776298	EL
723	2475	LD
724	2475	LD
687	2475	LD
711	2475	LD
765	2475	LD
765	2475	
781	2475	LD
761	2475	EL
760	2475	EL
790	2475	LD
32	878676	LD
10	776297	LD
798	2475	LD
103	591853	LD
846	2475	EL
845	2475	EL
844	2475	LD
811	2475	LD
840	2475	LD
839	2475	LD
817	2475	MD
821	2475	LD
825	2475	LL
835	2475	MD
873	2475	LL
859	2475	LD
858	2475	LD
886	2475	LD
884	2475	LD
856	2475	EL
83	740973	EL
84	740973	EL
9	2756	LD
121	738282	LD
122	738282	LD
102	712544	LD
A	391036	LD
112	591857	MD
A	378927	MD
940	2475	MD
942	2475	MD
102	621868	MD
898	2475	EL
936	2475	LD
935	2475	LD

Lot No.	DP	Land Type
934	2475	EL
904	2475	LD
905	2475	LD
907	2475	LD
908	2475	LD
926	2475	LD
929	2475	LD
930	2475	LD
912	2475	LD
913	2475	LD
914	2475	LD
921	2475	LD
922	2475	LD
922 924	2475	LD
924 43	623270	LD
43 21	565535	LD
1	557622	LD
A	388784	LD
B	388784	LD
2	2756	LD
2	596773	LD
1	596773	LD
6	2756	LD
4	408221	MD
1	581189	MD
1123	2475	LD
1120	2475	LD
1058	2475	LD
1048	2475	LD
997	2475	LD
986	2475	LD
951	2475	LD
1063	2475	MD
1064	2475	MD
1115	2475	MD
1113	2475	MD
A	416093	MD
В	416093	MD
1164	2475	EL
1146	2475	EL
1077	2475	LD
1008	2475	LD
1009	2475	LD
978	2475	LD
975	2475	LD
974	2475	LD
974 973	2475	LD
1	126820	
969	2475	LL
964	2475	LL
960	2475	LD
957	2475	LD
3	519215	LD
725	2475	LD
786	2475	LD
764	2475	LD

Lots with No Demand Credit

Lot No.	DP	Land Type
1	606317	LD
91	1050385	LD
15	831988	LD
158	2475	LD
214	2475	LD
213	2475	LD
222	650859	LD
297	2475	LD
299	2475	LD
355	2475	LD
37	3403	LD
1	749642	LD
1	204217	LD
627	2475	MD
630	2475	MD
639	2475	MD
707	2475	LD
708	2475	LD
809	2475	LD
813	2475	LD
843	2475	LD
818	2475	MD
857	2475	EL
868	2475	LD
111	875377	LD
112	875377	LD
9	2756	LD
9 62	596624	LD
102	854174	LD
C	385901	LD
2	598602	MD
2 910	2475	LD
915	2475	LD
917	2475	LD
918	2475	LD
12	1007049	MD
1125	2475	MD
1127	2475	MD
1129	2475	MD
1122	2475	LD
1056	2475	LD
1055	2475	LD
994	2475	LD
995	2475	LD
987	2475	LD
946	2475	LD
945	2475	LD
944	2475	LD
943	2475	LD
1	236726	EL
962	2475	LL
1014	2475	LD
1035	2475	LD

Liverpool Contributions Plan 2019 - Austral and Leppington North Precincts

Appendix B

Background Information

Appendix B

Liverpool Contributions Plan 2019 - Austral and Leppington North Precincts

Background Information

AECOM Australia Pty Ltd (2011), Austral and Leppington North (ALN) Precincts Transport Assessment, prepared for NSW Department of Planning and Infrastructure, July

Cardno (NSW/ACT) Pty Ltd (2011), Austral & Leppington North Precincts Water Cycle Management WSUD Report, prepared for NSW Department of Planning and Infrastructure, April

CivicMJD (2018), Valuation Report - Various Residential and Industrial Release Areas (in Liverpool LGA), June

CivicMJD (2019), Land Valuations for the Austral Precinct, 1 July

Department of Planning and Infrastructure (2011), Precinct Planning Package

Elton Consulting (2011), Austral and Leppington North Precincts - Demographic and Social Infrastructure Assessment, July

Environmental Planning and Assessment (Special Infrastructure Contribution - Western Sydney Growth Areas) Determination 2011

MJ Davis Valuations Pty Ltd (2011), Section 94 Contributions and Infrastructure Delivery Plan - Austral and Leppington North Precincts

Newplan (2011), Austral and Leppington North Precincts Infrastructure Delivery Plan, Draft Report for Exhibition, prepared by Newplan, August

NSW Department of Planning and Environment (2019), Local Infrastructure Contributions Practice Note - January 2019

NSW Department of Infrastructure, Planning and Natural Resources (2005), Development Contributions Practice Notes – July 2005

SMEC Australia (2019), Detailed Concept Design Report - Austral and Leppington North Design of Water Management Infrastructure, prepared for Liverpool City Council, March



DEVELOPMENT ENGINEERING BONDS STANDARD

Adopted: (Current date)

HPE Content Number - 300934.2019



DEVELOPMENT ENGINEERING BONDS STANDARD DIRECTORATE: City Economy & Growth

BUSINESS UNIT: Development Assessment

1. PURPOSE/ OBJECTIVES

The objective of the Development Engineering Bonds Policy is to address development related issues that may arise during development projects. The policy will also define what bonds will be payable by the developer and for what period they will be held by Council. The policy aims to establish clear and streamlined administration processes of engineering bonds.

2. SCOPE

Environmental Planning and Assessment Act 1979

3. DEFINITIONS

Performance Bond – To provide security on works undertaken within the public domain. The performance bond will ensure that works are constructed to an appropriate standard and in a timely fashion. In the event the contractor fails to satisfactorily complete the works, this will enable Council to utilise the performance bond to address public safety, complete the necessary works and restore public infrastructure.

Maintenance Bond – To provide security for repairs or emergency actions arising during the maintenance period (defects liability period – minimum 12 months) of a completed development.

Asphaltic Concrete (AC) / Final Seal Bond - To provide security on the final layer of AC that will be installed, following the maintenance period (minimum 12 months) and rectification of any defects. The bond may also be used where the final seal can be incorporated in an adjoining sealing programme undertaken by either Council or the developer.

Outstanding Works Bond – To allow the early release of a subdivision or occupation certificate prior to completion of all public and/or private infrastructure works. The bond is to ensure that the works are completed as required by the development consent in a timeframe determined by Council (maximum 12 - 24 months).

Damages Bond – To ensure any damage to public infrastructure resulting from a development or associated works is rectified to Council's satisfaction prior to the issue of a subdivision certificate. The bond is used to ensure protection of Council's infrastructure during the construction process such as footpath, kerb and gutter, or road pavement.

		Summary		
Bond Type	Amount of Bond	Minimum Amount incl. GST	Minimum Duration Held	Maximum Duration Held
Performance	110-150% of the cost	\$10,000	Completion of works	Completion of works
Maintenance	5% of construction cost	\$10,000	12 Months	48 Months
AC/Final Seal	150% of cost	\$10,000	12 Months	24 Months
Outstanding Works	200% of cost	\$20,000	Completion of works	12 –24 Months
Damages	200% of cost	\$20,000	Completion of works	12 Months

Note:

- Maximum Duration Held may vary subject to Land Development Engineer's (LDE) assessment
- 2) More than one bond type from the above table may be applicable.

STANDARD STATEMENT

The standard explains what is to be done, by whom and when. Set it out as shown below.

Responsible staff position	Step number	Action
Development Engineering	All Steps	As per Procedure

- 4.1 The Development Engineering Bonds Policy has been created to mitigate risk, ensure compliance and provide security to Council and stakeholders. The policy will also provide a clear understanding of processes and procedures involved in the administration of engineering bonds.
- 4.2 Council's Land Development Engineers are responsible for the implementation of the Development Engineering Bonds Policy and must adhere to the policy procedures and ensure that they use administration resources available to them.
- 4.3 Standard internal forms pertaining to the policy have been updated and created to deliver effective communication with internal and external stakeholders. The Manager Development Engineering is responsible for monitoring the policy to ensure that it is reviewed and updated accordingly and that staff are adhering to the policy. Should a disagreement arise in regard to the policy, it is the responsibility of the staff member to advise the Manager Development Engineering.
- 4.4 In addition an assessment table has been devised as a reference point for Council staff to easily calculate the bond amount relative to the value of works.
- 4.5 Development Engineering Bonds Procedures, as Annexure A of this policy, will outline the processes and procedures relating to the various types of bonds available.

4.6 The Chief Executive Officer is delegated by Council to approve changes in the procedures attached to this policy.

AUTHORISED BY

Chief Executive Officer

EFFECTIVE FROM

This date is the date the standard was approved by the CEO.

REVIEW DATE

The standard must be reviewed every two years or more frequently depending on its category or if legislative or policy changes occur.

VERSIONS

The current and previous version of the procedure should be set out in the following table.

Version	Amended by	Changes made	Date	TRIM Number
2	Development Assessment	Transferred to Standard	22 November 2019	300934.2019
1	N/A	Adopted by Council	14 March 2016	316692.2015

THIS STANDARD HAS BEEN DEVELOPED IN CONSULTATION WITH

City Corporate – Governance, Legal and Procurement

REFERENCES

In this section please list all documents used to develop this standard or that are related to this standard (other policies, guidelines etc. of Council and other relevant agencies, but not legislation or regulations).

ATTACHMENTS

Development Engineering Bonds Procedures

ATTACHMENT - DEVELOPMENT ENGINEERING BONDS PROCEDURES

The implementation of Development Engineering Bonds Procedures will mitigate risk factors, provide security for Council along with a streamlined internal administration procedure when processing engineering bonds.

1. PERFORMANCE BOND

The purpose of the Performance Bond is to ensure public infrastructure works undertaken within the public domain are constructed to an appropriate standard and in a timely fashion, depending on the circumstances. In the event the contractor fails to satisfactorily complete the works, the bond enables Council to complete the necessary works, make the job safe and restore the public infrastructure.

1.1 Payable

The bond is payable prior to issue of any construction certificate for the development.

1.2 Bond assessment amount

The bond is based on the cost of civil infrastructure construction works. The minimum bond amount is \$10,000. The table below outlines the bond assessment loading factor relative to the value of works.

Value of Works (incl. GST)	Bond Amount
Up to \$100,000	150%
\$101,000 to \$200,000	125%
More than \$200,000	110%

1.3 Form of the Bond

The bond shall be in the form of cash, bank cheque or bank guarantee. If the bond is a bank guarantee it must be unconditional and include the Development Application number and relevant conditions of consent, along with a brief description of the works to be bonded and have no expiry date.

Personal cheques are not accepted as a form of payment.

1.4 Assessment

The construction cost shall be determined by an estimate made by Council's Land Development Engineer (LDE) based on IPART schedule of rates or submission of written quote(s) from a qualified, licensed and insured contractor independent from the applicant as set out below. Council may also accept a written estimate from a registered quantity surveyor and/ or contractor.

ATTACHMENT - DEVELOPMENT ENGINEERING BONDS PROCEDURES

The implementation of Development Engineering Bonds Procedures will mitigate risk factors, provide security for Council along with a streamlined internal administration procedure when processing engineering bonds.

1. PERFORMANCE BOND

The purpose of the Performance Bond is to ensure public infrastructure works undertaken within the public domain are constructed to an appropriate standard and in a timely fashion, depending on the circumstances. In the event the contractor fails to satisfactorily complete the works, the bond enables Council to complete the necessary works, make the job safe and restore the public infrastructure.

1.1 Payable

The bond is payable prior to issue of any construction certificate for the development.

1.2 Bond assessment amount

The bond is based on the cost of civil infrastructure construction works. The minimum bond amount is \$10,000. The table below outlines the bond assessment loading factor relative to the value of works.

Value of Works (incl. GST)	Bond Amount
Up to \$100,000	150%
\$101,000 to \$200,000	125%
More than \$200,000	110%

1.3 Form of the Bond

The bond shall be in the form of cash, bank cheque or bank guarantee. If the bond is a bank guarantee it must be unconditional and include the Development Application number and relevant conditions of consent, along with a brief description of the works to be bonded and have no expiry date.

Personal cheques are not accepted as a form of payment.

1.4 Assessment

The construction cost shall be determined by an estimate made by Council's Land Development Engineer (LDE) based on IPART schedule of rates or submission of written quote(s) from a qualified, licensed and insured contractor independent from the applicant as set out below. Council may also accept a written estimate from a registered quantity surveyor and/ or contractor.

Value of Works (incl. GST)	No. Quotes/ Tenders
Up to \$50,000	1 written quote
\$50,001 to \$150,000	3 written quotes
More than \$150,001	3 written tenders

1.5 Documentation

A "Bond Assessment" form shall be completed by the assessing officer and attached to the Development Application file. The applicant shall be advised in writing of the assessed bond amount and when it is payable. This will be communicated formally to the applicant in writing (letter/ email).

1.6 Duration

The bond shall be held until the works are satisfactorily completed and Council's LDE has undertaken a final inspection.

1.7 Fees

A lodgement and refund fee shall be applicable in accordance with Council's adopted Fees and Charges.

1.8 Call up

The bond may be 'called up' in the event that the contractor/ developer fails to complete the works satisfactorily or by agreement with Council.

1.9 Release of Bonds

The bond shall be released to the developer following the payment of any necessary fees and satisfactory completion of the works.

2. MAINTENANCE BONDS

2.1 Purpose

To ensure defects are rectified and necessary maintenance is undertaken. The defects may be rectified at the end of the defects liability period of usually 12 months.

Where a defect results in a safety issue or affects the proper functioning or operation of a facility the defect shall be rectified immediately.

2.2 Payable

The bond is payable prior to issue of a Subdivision, Occupation or Compliance Certificate for the designated works.

2.3 Amount

The maintenance bond is based on 5% of the civil infrastructure construction cost.

The minimum bond amount is \$10,000 and a guide has been created to assist Council staff in quoting the bond amount.

2.4 Form of the Bond

The bond shall be in the form of cash, bank cheque or bank guarantee. If the bond is a bank guarantee it must be unconditional and include the Development Application number and relevant conditions of consent along with a brief description of the works to be bonded and have no expiry date.

Personal cheques are not accepted as a form of payment.

2.5 Assessment

The construction cost shall be determined by an estimate made by Council's LDE based on Council's schedule of rates or submission of copies of invoices from the contractor who undertook the works.

2.6 Duration

The bond is usually held for a minimum of 12 months. Council may require the period to be extended in some circumstances. For example, where a public road or other infrastructure is constructed, but not dedicated or not open to normal traffic during the 12 month period following completion.

The extended period will normally be pro-rata for the period of "non-use". Where significant rectification works have been required, the maintenance period may also be extended.

Some water quality/ quantity structures or landscaping works may also require extended maintenance periods. This will be determined on a case by case basis in conjunction with Council's Director Infrastructure and Environment.

2.7 Documentation

A "Bond Assessment" form shall be completed by the assessing officer and attached to the Development Application file. The applicant shall be advised in writing of the assessed bond amount and when it is payable. This will be communicated formally to the applicant in writing (letter/ email).

2.8 Fees

A lodgement and refund fee shall be applicable in accordance with Council's adopted Fees and Charges.

2.9 Call up

The bond may be 'called up' in the event that the contractor/developer fails to complete the works satisfactorily or by agreement with Council.

2.10 Release of Bonds

The bond shall be released following payment of any necessary fees and inspection of the works indicates that they are satisfactorily completed.

ASPHALTIC CONCRETE (AC) BOND/ FINAL SEAL

3.1 Purpose

To ensure that the final layer of AC is installed following the maintenance period (usually 12 months) and rectification of any defects. The bond may also be used where the final seal can be incorporated in an adjoining sealing program undertaken by either Council or the developer.

3.2 Payable

The bond is payable prior to issue of a Subdivision, Occupation or Compliance Certificate for the designated works.

3.3 Amount

The AC bond is based on 150% of the AC cost. The minimum bond amount is \$10,000.

3.4 Form of the Bond

The bond shall be in the form of cash, bank cheque or bank guarantee. If the bond is a bank guarantee it must be unconditional and include the Development Application number and relevant conditions of consent along with a brief description of the works to be bonded and have no expiry date.

Personal cheques are not accepted as a form of payment.

3.5 Assessment

The construction cost shall be determined by an estimate made by Council's LDE based on Council's schedule of rates or submission of copies of invoices from the contractor who undertook the works.

3.6 Duration

The bond is usually held for a minimum of 12 months or until rectification works are completed whichever is the greater.

In the case of urban development the bond will be held until the majority (more than 70%) of dwellings are completed.

Council may require the period to be extended longer than 12 months in some circumstances, for example, where a public road or other infrastructure is constructed but not dedicated or not open to normal traffic or usage during the 12 month period following completion.

The extended period will normally be pro-rata for the period of "non-use". Where significant rectification works have been required the maintenance period may also be extended.

The bond period may be extended where the final seal can be incorporated in an adjoining sealing program undertaken by either Council or the developer. This will be determined by Council's Director Infrastructure and Environment.

3.7 Documentation

A "Bond Assessment" form shall be completed by the assessing officer and attached to the Development Application file. The applicant shall be advised in writing of the assessed bond amount and when it is payable. This will be communicated formally to the applicant in writing (letter/ email).

3.8 Fees

A lodgement and refund fee shall be applicable in accordance with Council's adopted Fees and Charges.

3.9 Call up

The bond may be called up in the event that the contractor/ developer fails to undertake the sealing works or by agreement with Council.

3.10 Release of Bonds

The bond shall be released following a written request for the release of the bond and following payment of any necessary fees and satisfactory inspection of the works.

OUTSTANDING WORKS BOND

4.1 Purpose

To allow the early release of a subdivision or occupation certificate prior to completion of all public and/or private infrastructure works. The bond is to ensure that the works are completed as required by the Development Consent within a four month time frame.

The works would normally be of a minor nature and not involve significant infrastructure. This may include landscaping works, private access roads to rural lots, footpaths and so on.

The deferral of the construction shall not expose Council to a public liability risk, adversely affect the built or natural environment or the safe operation of the development.

The acceptance of an "Outstanding Works Bond" is solely at the discretion of Council's Manager Development Engineering (MDE).

4.2 Payable

The bond is payable prior to issue of a Subdivision, Occupation or Compliance Certificate for the designated works.

4.3 Amount

The bond is based on 200% of the construction cost of the works. Minimum bond amount is \$20,000.

4.4 Form of the Bond

The bond shall be in the form of cash, bank cheque or bank guarantee. If the bond is a bank guarantee it must be unconditional and include the Development Application number and relevant conditions of consent along with a brief description of the works to be bonded and have no expiry date.

Personal cheques are not accepted as a form of payment.

4.5 Assessment

The construction cost shall be determined by an estimate made by Council's LDE based on IPART schedule of rates or submission of written quote(s) from a suitably qualified, licensed and insured contractor independent from the applicant. Council may also accept a written estimate from a registered quantity surveyor.

Value of Works (incl. GST)	No. Quotes/ Tenders
Up to \$50,000	1 written quote
\$50,001 to \$150,000	3 written quotes
More than \$150,001	3 written tenders

4.6 Documentation

A "Bond Assessment" form shall be completed by the assessing officer and attached to the Development Application file. The applicant shall be advised in writing of the assessed bond amount and when it is payable. This will be communicated formally to the applicant in writing (letter/ email).

4.7 Duration

The bond shall be held until the works are satisfactorily completed and Council's LDE has undertaken a final inspection.

4.8 Fees

A lodgement and refund fee shall be applicable in accordance with Council's adopted Fees and Charges.

4.9 Call up

The bond may be called up in the event that the contractor/ developer fails to complete the works satisfactorily or by agreement with Council.

4.10 Release of Bonds

The bond shall be released following a written request for the release of the bond and following payment of any necessary fees and satisfactory inspection of the works.

5. DAMAGES BOND

5.1 Purpose

To ensure any damage to public infrastructure resulting from a development or associated works is rectified to Council's satisfaction prior to issue of a subdivision or occupation certificate. The bond is used to ensure protection of Council's infrastructure during the construction process such as footpath, kerb and gutter, or road pavement.

5.2 Payable

The bond is payable prior to issue of a construction certificate for the development.

5.3 Amount

The bond is based on 200% of the estimated cost of potential rectification works. A dilapidation report of the identified infrastructure is to be submitted prior to determination of the bond amount. The report should identify all infrastructure in the vicinity of the works and a written assessment of the condition of the infrastructure and include photos and any testing results undertaken to determine the condition of the infrastructure, for example, "benkleman beam" tests for road pavement.

Minimum bond amount is \$20,000.

5.4 Form of the Bond

The bond shall be in the form of cash, bank cheque or bank guarantee. If the bond is a bank guarantee it must be unconditional and include the Development Application number. and relevant conditions of consent along with a brief description of the works to be bonded and have no expiry date.

Personal cheques are not accepted as a form of payment.

5.5 Assessment

The construction cost shall be determined by an estimate made by Council's LDE based on Council's schedule of rates.

5.6 Documentation

A "Bond Assessment" form shall be completed by the assessing officer and attached to the DA file. The applicant shall be advised in writing of the assessed bond amount and when it is payable. This will be communicated formally to the applicant in writing (letter/ email).

5.7 Duration

The bond shall be held until the associated development construction works are completed and any necessary rectification works satisfactorily completed and Council's LDE has undertaken a final inspection.

5.8 Fees

A lodgement and refund fee shall be applicable in accordance with Council's adopted Fees and Charges.

5.9 Call up

The bond may be called up in the event that the contractor/ developer fails to complete the rectification works satisfactorily or by agreement with Council.

5.10 Release of Bonds

The bond shall be released following a written request for the release of the bond and following payment of any necessary fees and satisfactory inspection of the works.

MANAGEMENT OF BONDS

6.1 Cash Bonds

Cash bonds are to be receipted at Council's Customer Service Centre to the "RC Bond" Account and should include the Development Application Number and brief description of the bond purpose. A copy of the receipt is to be attached to the file and noted on the Bond Assessment form.

6.2 Bank Guarantees

Bank guarantees are legal documents; the original Bank Guarantee(s) are to be registered and held by the Records Team. A copy of the bond is placed on the file and noted on the Bond Assessment Form.

6.3 Release of Bonds

A request for the release of a bond must be received in writing from the applicant. The works must be inspected by Council and be deemed satisfactory and meet the bond requirements prior to the release.

An internal Bond Release Form is to be completed and attached to the file. Bond releases are to be recommended by the LDE and authorised by the MDE.

Cash bonds are refunded by cheque. A cheque requisition form is completed and forwarded to Council's Financial Services unit.

Bank guarantees are released to the bank or institution that issued the document with a covering letter from Council. A memo is to be sent to Records advising that the bond is no longer required and is to be released.

Copies of all documentation pertaining to the bond release are to be saved in TRIM.

6.4 Call up of Bonds

Prior to calling up the bond, advice should be sought from Council's Legal Services team.

6.5 Non-compliance

In the event that the developer/ contractor fails to comply with the requirements of the bond, the bond shall be used to undertake the necessary works.

The developer/ contractor shall be advised in the first instance verbally, followed by written confirmation with a direction for works to be completed within a specified time frame, normally 28 days.

If the developer/ contractor fails to comply, Council will commence action to call up the bond to complete the works. A notice will be issued to the developer/ contractor advising that Council intends to use the bond to complete the works.

6.6 By agreement

In some cases, Council and the developer/ contractor may agree to the use of the bond by Council for the purposes of completing the works. For example the AC Bond may be used in conjunction with Council's sealing programme when the works are adjacent to other programmed works.

6.7 Post call up

All costs associated with the calling up of the bond and the undertaking of the works are to be deducted from the bond including any administration, supervision and legal costs.

The balance of any unused portion of the bond is to be released to the developer/ contractor. If outstanding costs remain, the developer/ contractor may be pursued as a sundry debtor. Refer S238 and S247 of the *Roads Act* 1993.

LIVERPOOL CITY COUNCIL

HOARDINGS STANDARD

Adopted: (Current date)

HPE Content Number: 300877.2019



HOARDINGS STANDARD

DIRECTORATE: City Economy & Growth

BUSINESS UNIT: Community Standards

1. PURPOSE/ OBJECTIVES

The objectives of this policy are:

- a) To provide a clear and consistent process by which Council may consider the approval and erection of hoardings on footpaths located within road reserves;
- b) To provide well designed, safe and quality hoardings across the Liverpool Local Government Area and adhere to all current work, health and safety requirements, to ensure pedestrian access and safety at all times;
- c) To ensure the visual quality of hoarding imagery through the implementation of consistent Council and proponent branding in appropriate locations

2. SCOPE

Environmental Planning and Assessment Act 1979 Local Government Act 1993 Roads Act 1993 Work Health and Safety Act 2011

3. DEFINITIONS

Nil

STANDARD STATEMENT

The standard explains what is to be done, by whom and when. Set it out as shown below.

Responsible staff position	Step number	Action
Community Standards	All	As per Standard

4.1 Application of Standard

- 4.1.1 This Standard applies to the erection of hoardings within the Liverpool Local Government Area.
- 4.1.2 Hoardings should protect the public from the hazards of construction, excavation or demolition works. All building sites within the Liverpool Local Government Area must be secured to prevent unauthorised entry and to

767

provide safe access in accordance with current work, health and safety requirements.

- 4.1.3 The policy sets out requirements for the installation of hoarding imagery to provide consistent and attractive marketing and advertising.
- 4.1.4 Approvals for hoardings (which are temporary structures) will be made by Council in accordance with section 68 of the *Local Government Act* 1993 (an activity under category E(2) of the table to that section) and section 115 of the *Roads Act* 1993. Any permit for a hoarding issued by Council will be subject to conditions with which an applicant must comply.
- 4.1.5 Where it is proposed that a temporary structure is erected on a classified road, the concurrence of the NSW Roads and Maritime Services (RMS) must also be obtained (s138(2) of the *Roads Act* 1993). A list of classified roads is available on the RMS website.
- 4.1.6 Where a temporary structure is proposed to be placed on or above a classified road, Council must refer the application to RMS for their concurrence. It is therefore important that applicants allow sufficient time in their work program to obtain the required concurrences and approvals.
- 4.1.7 This policy does not apply to site fencing which are located wholly within private properties (This type of fencing may be of open cyclone mesh form with dust preventative measures and a minimum of 2100 mm in height.

PART 5: HOARDINGS

5.1. General: type of hoardings

The hoarding is to be designed in accordance with the design and specifications adopted by Council and known as Type A and Type B hoardings. The following outlines the requirements:

5.1.1 Type A hoarding

Type A hoardings include fences, traffic barriers and jersey curbs and has the following requirements:

- a) The hoarding must be a minimum height of 2100 mm;
- b) The hoarding must be constructed of solid timber panels, a minimum of 17 mm thick, securely fixed with no protruding bolts and nails, the panelling fixed flush and evenly;
- c) The width of the footpath or nature strip is to be a minimum of 1500 mm to allow for pedestrian access;
- d) The quality and standard of the pedestrian access provided must be of the same level prior to the construction of the hoarding;
- e) The hoarding must not obstruct the view of traffic lights or signage.

5.1.2 Type B hoarding

Type B Hoardings can either be stand alone or incorporate site shed/offices. A Type B Hoarding must be erected where it is proposed to construct, demolish, carry out façade remedial works or maintenance to a building adjoining a public way, which:

- a) Is 7500 mm or greater in height and less than 3500 mm from the street alignment; or
- b) Has a vertical height above footpath level of less than 4000 mm; or
- c) The least horizontal distance between footpath and the nearest part of the structure is greater than half the height of the structure.

The following requirements apply:

- a) Have a minimum clear distance of 250 mm from the edge of the kerb to any part of the hoarding structure. If this distance is greater than 400 mm, pedestrian access between the structure and the kerb is to be blocked off at each end;
- b) Have a minimum overhead clearance of 2200mm to any bracing, beams or any other part of the structure;
- c) The street side should be open for at least two-thirds of its height for the full length of the structure to prevent a "tunnel effect";
- d) A clear span of 1500 mm is required for continual pedestrian access at all times;
- e) All materials must be solid in construction and provide a smooth finish to a minimum height of 2.1 metres to prevent injury to persons. All material must be securely fixed;

Attachment 1 to this policy depicts some diagrams of various types of hoarding to assist applicants.

5.1.3 Barrier fencing

Barrier fencing can be provided for a temporary period to secure open trenches, the construction of pathways, kerb and gutters, driveways, pipe laying and the like to protect the public from injury.

This type of fencing or barricading must be well constructed, lit and sign posted with appropriate warning and directional signs, as required.

All works requiring temporary fencing must be expedited to ensure timely completion and removal.

Demountable open panel fencing, that is,. ATF fencing, reinforcing mesh or similar structures and structures, not permanently fixed, shall not be permitted to form part of a hoarding structure situated on Council's road reserve.

5.1.4 Lighting

Hoarding lighting, connected to mains power supply, must be provided to ensure the pedestrian pathway or footpath is well lit for pedestrians. Lighting is to be equal to the level and distribution pattern of the existing street lighting in the area.

Where pedestrian hazards associated with the hoarding are present, significantly higher lighting levels will be required by Council.

All lighting associated with hoardings must not impact on surrounding traffic.

5.1.5 Office sheds

All site office and work sheds are to be located on private property, where possible. Where this is not possible, a Type B hoarding must be erected to facilitate this requirement.

Sheds placed above Type B Hoardings must be a minimum of 2.4 metres in height and are to be tied down to the deck by suitable structural fixings and certified by an engineer.

The office sheds and work are to incorporate a hoarding material to conceal the sheds from public view.

5.1.6 Use of cranes

A crane must not be used to convey material over a public way, unless a Type B Hoarding is in place and an appropriate approval has been obtained from Council.

The use of cranes, hoists, and concrete pumps shall not be placed on the public property unless prior approval has been obtained from Council.

5.1.7 Safety and access

Protective Footway Crossings

- a) If a vehicle crossing is required, the footpath must be protected and maintained and must not cause a tripping hazard or danger to the public. The vehicle crossing must be in place prior to the construction or demolition of a hoarding.
- b) Vehicles must not cross the footpath to gain access to the site, unless a temporary crossing is constructed to the satisfaction of Council.

Utility Services

- a) Hydrants, utility services and sewer manholes are not to obstruct the services and infrastructure to ensure ongoing access.
- b) If the structure is in close proximity to overhead electricity wires, electrical hazards are likely.. Applicants must consult the relevant electrical authority if the structure is within two metres of wiring. All electrical distribution boards required for site works are to be located within the site and not attached externally to the structure.
- c) Applicants must consult with the appropriate utility authority to ensure that here is no adverse impact on infrastructure from the proposed work.

Footpaths and Provision for People with Disabilities

- When required, pedestrian detours or alternative pathways must be designed to provide for disabled access. These routes must provide appropriate widths, levels, gradients, tactile indicators and colour schemes to assist people with disabilities.
- b) Pathways must be repaired immediately, if damaged to ensure pedestrian safety. Footpaths must be reinstated to their original condition to the satisfaction of Council, when a hoarding is removed.
- c) Any obstruction to the footpath from a proposed concrete pour, laying of cables, conduits, drainage pipes, service lines and the like requires Council's prior approval.

5.1.8 Maintenance of hoardings

Graffiti Prevention

- a) Graffiti must be removed or painted over on all hoarding structures within 48 hours of detection or Council notification. Hoardings must consist of appropriate coverings to assist in graffiti removal or measures to reduce the occurrence of graffiti.
- b) In the event of non-compliance with these requirements, Council reserves the right to remove or paint over the graffiti and invoice the developer for associated costs incurred by Council.

771

5.1.9 Protection of Council street trees

The design of a hoarding, including the type and location of posts, counter weights, crossings, and overhead decking must be designed to minimise impact on the street trees and vegetation.

Tree preservation measures may be required, if there is an impact on the street trees. No tree cutting, lopping or removal is permitted without the prior consent from Council.

5.1.9.1 Council assets

Council's infrastructure and assets must not be interfered with or damaged during the construction or operation of the hoarding. This includes the drainage system, kerb and gutters, footpaths and the like. Prior approval of Council is required for any modification to Council's infrastructure.

The use of the roadway for storage of materials, loading and unloading is not permitted at any time, unless prior Council approval is obtained.

Council's footpaths, roadways and ancillary infrastructure assets, such as litter bins, public seating and signage must be reinstated to their original condition when a hoarding is removed. An initial dilapidation report must be prepared and submitted to Council prior to the commencement of works and a second dilapidation within one week of the completion of work.

5.1.10 Traffic management plans

A traffic management plan (TMP) must be prepared by an accredited traffic engineer, if a hoarding is likely to affect pedestrian or traffic movements during the construction, operation or removal phase. The TMP must identify traffic and pedestrian issues, recommend appropriate means for dealing with such issues and must be submitted with the hoarding application for Council approval. Council's traffic engineers may provide relevant advice regarding the contents a TMP.

A TMP must refer to relevant Council, Police and/ or RMS requirements. Special conditions may apply, especially in high traffic areas of the City and in the vicinity of pedestrian malls, and transport interchanges.

The TMP should provide for traffic control in accordance with the Guide to Traffic Engineering Practice and AS 1742 Part 3 Manual of Traffic Control devices. Details should be included in a Traffic Management Plan as required.

A copy of the TMP must be available onsite at all times for the inspection of an authorised officer of Council, the NSW Police or the RMS.

5.1.11 Obstruction to traffic lights, RMS cameras and CCTV cameras

All hoardings must be constructed so that they will not obstruct the sight lines of motorists and pedestrians to traffic lights.

Visibility from driveways, pedestrian's crossings and intersections must not be obstructed.

The hoarding application site plan must set out the location of all traffic lights, RMS monitoring cameras, closed circuit television cameras and the like. The application must ensure there is no interference in the operation of these facilities. Referrals to the appropriate authority or Council or private organisations may be required to confirm there is no proposed interference.

PART 6: HOARDING IMAGERY

6.1 Advertising and artwork on hoardings

Overview

Council strongly encourages the provision of public art, graphics and images on hoardings. Good imagery is an opportunity for a developer to show how their development is contributing to the vibrancy and growth of Liverpool. Good graphics beautify a site and minimise the likelihood of graffiti or vandalism.

Council aims to work with developers to ensure that marketing and advertising opportunities on hoardings are high quality designs which combine the promotion of the new development with the potential economic growth and benefit to Liverpool.

Council will work with individual applicants to advise on brand style, supply artwork guidelines and examples, and give final approval to proceed with artwork designs.

Hoarding artwork must be limited to messages that relate to the adjacent development, the partners in the project and the planned benefit to the development of Liverpool City.

The planned benefit of the development to Liverpool City is to be aligned with Council's brand standards. (See Attachment 2.)

Graffiti or advertising not associated with the development of Liverpool City branding must be removed within 48 hours of a notice to the developer being provided by Council.

773

In the event of non-compliance with clause 4.1.3, Council reserves the right to remove or paint over the advertising and invoice the applicant for actual costs incurred by Council.

6.2 City Branding objectives

The objectives of the Liverpool City brand, the Great South West include:

- a) Using the Great South West brand to represent a cohesive marketing image for Liverpool;
- b) Ensuring a consistent message is provided by all of Liverpool's partners when promoting Liverpool.

City branding aims to promote:

- a) Increased regional awareness resulting in a positive impact on investment, jobs, residents, visitors and events;
- b) Increased investment in business, health and education, real estate and infrastructure;
- c) Growth in civic pride as the residents, workers, businesses, investors and institutions experience a stronger sense of purpose and direction.

Refer to Attachment 2 for specific marketing/ brandings standards and examples.

Council encourages applicants to include Liverpool City's Great South West brand on construction hoardings. It is recommended that applicants consult with Council's communications team when developing all construction signage.

If a proposed hoarding is likely to incorporate the City branding, Council may reimburse a developer for the cost of Council's proportion of the particular hoarding advertising. Council will not pay for advertising elements by a private developer. Council encourages consultation by developers with Council's communications team on hoarding imagery prior to the design of hoarding signage.

PART 7: GENERAL OPERATING PROCEDURES

7.1 General

Planning and Growth (Development Assessment) is responsible for processing applications for hoardings.

All hoardings must be designed, constructed and operated in accordance with this policy and the Hoarding Procedure attached to this policy. (See Attachment 3.)

All hoardings must comply with the conditions of the relevant hoarding permit. Breaches of this policy and the conditions of any hoarding permit approved by Council are dealt with in Part 6 of this policy.

Conditions contained in hoarding permits must be read in conjunction with any conditions of development consent pertaining to the development of the particular site. Specific conditions in a development consent relating to the protection of Council's assets, street trees, site management and construction layout may impact on the hoarding design must be complied with. Failure to adhere to any development conditions would constitute a breach of that consent.

A copy of all approvals must be available onsite at all times for inspection by Council and WorkCover personnel. The hoarding must be erected in accordance with this Policy and any conditions contained in the approval.

7.2 Modifications to a hoarding approval

Any modification to an approved hoarding design and permit requires the submission of a further application for Council approval, accompanied by a payment prescribed in Council's fees and charges.

A development application must be submitted to Council for any proposed change from one type of hoarding to another, stating the reasons for the proposed change and including the amended architectural and structural details.

7.3 Extending an approval

Council may determine to extend an approval under section 107 of the *Local Government Act* 1993 if it is satisfied that there is good cause for doing so. An approval will not be extended beyond five years.

An approval to extend a Permit must be obtained before it lapses. The application must:

- a) Provide reasons for an extension of approval;
- b) Set out the proposed extended period required for the hoarding; and

c) Set out any actual changes from the original approval.

A certificate from an appropriately qualified person may also be required to confirm that the temporary structure remains structurally sound.

A renewal hoarding permit application must include payment, as prescribed in Council's Fees and Charges.

Failure to renew an application can cause all building or demolition works to cease on site.

Council's standard conditions for a hoarding permit can be downloaded from Council's e-planning Portal.

When a hoarding permit approval has expired, Council will notify the applicant and may direct that the hoarding be removed. Council will undertake a site inspection within 48hours after the notification letter has been issued to ensure that the heading has been removed.

PART 8: BREACHES AND ENFORCEMENT OF THIS POLICY

- 8.1 Section 672 of the *Local Government Act* 1993 states that a non-compliance with an approval issued under this Act is a breach of the Act.
- 8.2 If Council becomes aware of non-compliance with the conditions relating to an approval of a hoarding permit, Council may:
 - a) Issue penalty infringement notices for failing to comply with the approval;
 - b) Issue a court attendance notice at Local Court. The Local Court can impose penalties for a corporation or for an individual;
 - c) Issue Orders requiring compliance with the conditions of approval;
 - d) In circumstances where Council has issued an order requiring compliance with the permit and the terms of the order have not been complied with, Council may commence legal action on land and environment court or local court to enforce the orders.

AUTHORISED BY

Chief Executive Officer

EFFECTIVE FROM

This date is the date the standard was approved by the CEO.

REVIEW DATE

The standard must be reviewed every two years or more frequently depending on its category or if legislative or policy changes occur.

VERSIONS

The current and previous version of the procedure should be set out in the following table.

Version	Amended by	Changes made	Date	TRIM Number
2	Community Standards	Refer to Standard template	22 Nov 2019	300877.2019
1	Adopted by Council	N/A	2016	084297.2016

THIS STANDARD HAS BEEN DEVELOPED IN CONSULTATION WITH

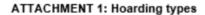
Chief Executive Officer (Strategic Communications and Research) Corporate Services (Governance and Legal Services)

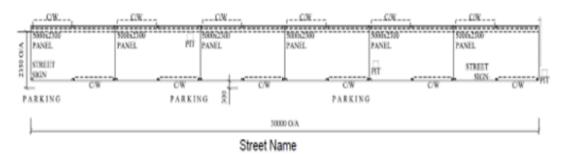
REFERENCES

AS 1742 Part 3 Manual of Traffic Control devices Guide to Traffic Engineering Practice

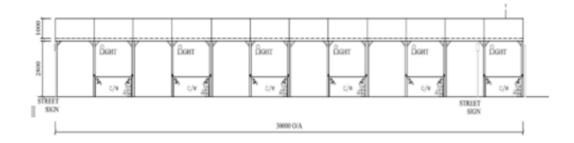
ATTACHMENTS

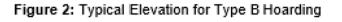
Attachment 1: Hoarding types Attachment 2: Standards for hoarding imagery Attachment 3: Hoardings Procedure











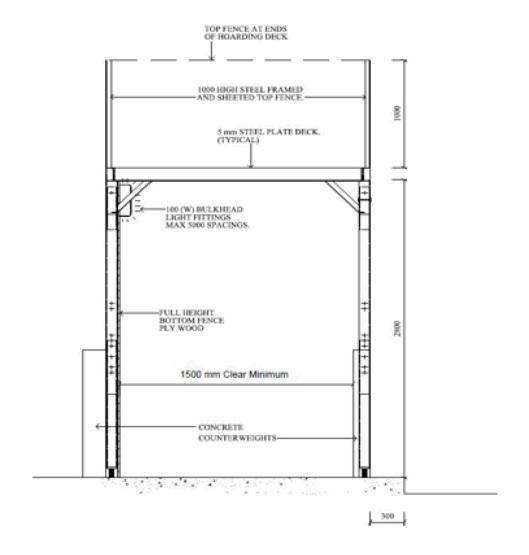


Figure 3: Typical Section for Type B Hoarding

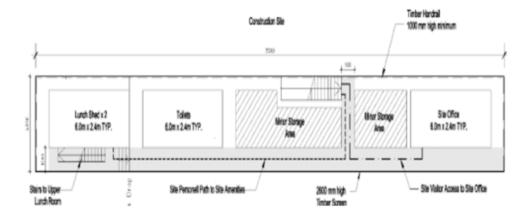


Figure 4: Typical Site Plan for Type B hoarding with Site Sheds

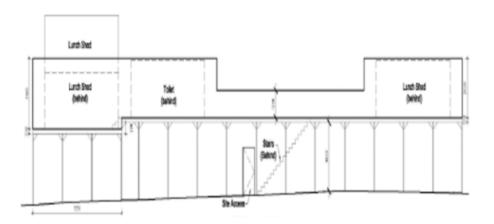


Figure 5: Typical Elevation for Type B Hoarding with Site Sheds

ATTACHMENT 2: Standards for hoarding imagery

Council seeks to work with developers to ensure that hoarding designs align with The Great South West brand and is appropriate for the location. Hoardings around building sites will help promote the redevelopment and reputation of Liverpool.

Text and images should include: how the final building will look (artists' impressions), partners (logos) in the development, and positively reflect The Great South West brand.

Council's Communications Team will work with individual applicants to provide advice on brand style, supply artwork guidelines and examples and give final approval for the designs.

Examples of artwork incorporating the Great South West brand are set out below:





For more information about The Great South West brand, go to <u>www.greatsouthw.com.au</u>, which contains Liverpool's Stakeholder Toolkit style guide to assist with brand design.



HOARDING PROCEDURE

Adopted: xxxx 2016

TRIM (Number)

l

Hoardings Standard

17 | Page



1. PURPOSE

This procedure relates to Council's Hoarding Policy, setting out specified requirements for applicants. These requirements should be read in association with the policy.

 SCOPE This procedure applies to the erection of hoardings on Council property within the Liverpool Local Government Area.

3. PROCEDURE

- 3.1 Council requirements for hoarding construction
- 3.2 Application submission requirements

The following documents must be submitted with an application for approval to construct a hoarding:

- a) Completed hoarding application indicating the type of hoarding, the length, the duration the hoarding will be erected for, site sheds, traffic barriers. A hoarding application form can be obtained from Council's website and is attached to this Procedure (Attachment A).
- b) Site and elevation plans for the proposed hoarding indicating the number of street fronts, hoarding locations, footpath widths (minimum of 1500mm required for pedestrians at all times), utility services, trees, traffic lights, swing of gate and lighting.
- c) Structural drawings and certification prepared by a practising structural engineer for all types of hoarding.
- d) Evidence of public liability insurance (not less than \$10,000,000), which indicates the property address and proof of cover for the time the hoarding is erected. Council must be indemnified for the period of construction and until the removal of the temporary structure. The indemnity is for any third party claims arising from injury to persons and, damage to property including consequential loss) in the course of works. Such indemnity must be for a minimum amount of \$10,000,000 (including the excess on the policy for any one accident or event).

A certificate of currency must be submitted with the application. It is the applicant's responsibility to ensure that insurance is current while the hoarding is erected on Councils property. The hoarding approval is considered void should the insurance lapse prior to a new current copy being provided to Council.

- e) Bond is to be paid in full. A bond is required to be paid for all hoardings located within the Liverpool Local Government Area based on the type of hoarding (i.e. A.B) and the number of street frontages which will be used. Refer to Council's Schedule of Fees and Charges.
- f) Traffic management plan where pedestrian or vehicle traffic is being modified due to the construction, operation or removal of the hoarding (if applicable). Refer to 3.10 of the Policy.

These requirements are subject to the site specific requirements (such as impacts on roads and on the public).

3.3 Further enquiries

Council recommends that applicants should contact Council's Building Compliance Team regarding Council's requirements prior to lodgement of an application.

3.4 Payment of fees

- 3.4.1 The fees payable for the issue of a permit to erect a hoarding on Council property are determined by Council in its 'Schedule of Fees and Charges'.
- 3.4.2 Application fees are payable at lodgement. Permit fees are payable on approval.
- 3.4.3 A bond is also payable in full on approval.







Clean Air for NSW

Peer Review Report

11 November 2019 Project No.: 0514651



The business of sustainability

Document details	The details entered below are automatically shown on the cover and the main page footer. PLEASE NOTE: This table must NOT be removed from this document.
Document title	Clean Air for NSW
Document subtitle	Peer Review Report
Project No.	0514651
Date	11 November 2019
Version	4.0
Author	Jordan Eastwood
Client Name	Cardno / Liverpool Council

				ERM approval	to issue	
Version	Revision	Author	Reviewed by	Name	Date	Comments
V1	00	Judith Cox Jordan Eastwood	Jane Barnett	Jane Barnett	03.07.2019	Draft V1
V2	01	Judith Cox	Jane Barnett	Jane Barnett	20.08.2019	Draft V2
V3	02	Jordan Eastwood	Jane Barnett	Jane Barnett	04.11.2019	Draft V3
V4	03	Jordan Eastwood	Jane Barnett	Jane Barnett	11.11.2019	Final

Signature Page

11 November 2019

Clean Air for NSW

Peer Review Report

fu buit

Jane Barnett Partner

ERM Australia Pacific Pty Ltd

© Copyright 2019 by ERM Worldwide Group Ltd and / or its affiliates ("ERM"). All rights reserved. No part of this work may be reproduced or transmitted in any form, or by any means, without the prior written permission of ERM.

www.erm.com Version: 4.0 Project No.: 0514651 Clean Air Peer Review Report Final.docx

	N AIR FOR Review Rep		CONTENTS
CON	ITENTS	S	
1.	INTR		1
	1.1 1.2	Background Scope of works	
2.		QUALITY STANDARDS	2
3.	REVI	IEW OF DEA REPORT	3
	3.1 3.2	Introduction PM ₁₀ and PM _{2.5} data 3.2.1 Monitoring data	3 3
	3.3	3.2.2 Particle characterisation data Ozone data	
4		ORICAL MONITORING DATA	
4.	4.1	PM ₁₀	
	4.1 4.2 4.3	PM0 PM2.5 O3	13
5.	PRO	POSED MOOREBANK INTERMODAL AND WESTERN SYDNEY AIRPORT	
	PRO	JECTS	25
	5.1	Moorebank Logistic Park Intermodal	
		5.1.1 Background 5.1.2 Predicted air quality impact	
	5.2	Western Sydney Airport	
		5.2.1 Background 5.2.2 Predicted air quality impact	
6.	SUMI	MARY	
7.	REFE	ERENCES	

List of Tables

Table 2-1: Air quality standards applicable for DEA review	2
Table 4-1: Air Quality Monitoring included in data analysis	6
Table 4-2: Annual average PM10 concentrations (µg/m3) (2010 - 2018)	8
Table 4-3: Maximum 24-hour average PM ₁₀ concentrations (µg/m ³) and number of days criteria	
exceeded (2010-2018)	9
Table 4-4: Annual average PM _{2.5} concentrations (µg/m ³) (2010 - 2018)	14
Table 4-5: Maximum 24-hour average PM _{2.5} concentrations (µg/m ³) and number of days criteria	
exceeded (2010-2018)	15
Table 4-6: Maximum 1-hour average O ₃ concentrations (µg/m ³) (2010 – 2018)	20
Table 4-7: Rolling 4-hour O ₃ monitoring data (µg/m ³) included in analysis (2010 – 2018)	22

List of Figures

Figure 3-1: NSW locations exceeding coarse (PM10) particle standard	.4
Figure 3-2: NSW locations exceeding the fine (PM2.5) particle standard	.4
Figure 3-3: Liverpool – average fine particle contribution by source (2000 to 2014)	. 5
Figure 4-1: Annual mean PM ₁₀ concentrations across Sydney monitoring locations (2010 - 2018)	10
Figure 4-2: Average of maximum 24-hour average PM ₁₀ concentrations across Sydney monitoring	
locations (2010 – 2018)	11
Figure 4-3: Monthly mean PM ₁₀ concentrations across Sydney monitoring locations (2014 – 2018)	12
Figure 4-4: Annual mean PM2.5 concentrations across Sydney monitoring locations (2010 - 2018) ?	16
Figure 4-5: Average of maximum 24-hour average PM _{2.5} concentrations across Sydney monitoring	
locations (2010 – 2018)	17
Figure 4-6: Monthly mean PM2.5 concentrations across Sydney monitoring locations (2014 - 2018).	18
Figure 4-7: Annual maximum 1-hour average O3 concentrations across Sydney monitoring locations	
(2010 – 2018)	23
Figure 4-8: Monthly mean O3 concentrations across Sydney monitoring locations (2014 – 2018)2	24

CONTENTS

INTRODUCTION

Executive Summary

ERM's review of OEH PM₁₀ and PM_{2.5} monitoring data for the period 2010 to 2018 supports the DEA analysis that the air quality measured at the Liverpool OEH station is amongst the highest of the data collected in the Sydney Basin. However, the elevated results from 2018 were noted by NSW EPA to be primarily due to the increase in the number of exceptional events, such as dust storms, bushfires and hazard reduction burning, and not solely as a result of pollution generated by transport or industry.

The maximum 24-hour average PM₁₀ and PM_{2.5} concentration and number of days the relevant criteria was exceeded, were higher at eight other western Sydney OEH station locations.

Ozone concentrations in Liverpool were lower in 2018 than 2017. However, as ozone is a secondary pollutant, its formation is driven by both meteorology and pollution upwind of Liverpool.

The air quality assessments for the proposed Moorebank Intermodal terminal and Western Sydney Airport have shown that neither is predicted to contribute significantly to coarse or fine particle concentrations in Liverpool.

Ozone concentrations are predicted to decrease in the Liverpool area when the airport is operational, due to the additional NOx emissions potentially suppressing its formation.

The Moorebank Intermodal terminal is expected to remove 3,000 heavy truck movements off Sydney's road network every day. In addition, the interstate terminal will have the capacity to move by rail an additional 500,000 containers to and from interstate and regional centres, removing the need for thousands of existing long haulage truck journeys. Whilst during the operational phase there were predicted to be increases in PM_{10} and $PM_{2.5}$ associated with the facility, these were considered minor when considered in the context of existing background conditions.

INTRODUCTION

1. INTRODUCTION

1.1 Background

ERM has been engaged by Cardno to provide advice to Liverpool City Council on a report published in February 2019 by Doctors for the Environment Australia (DEA) entitled *"Clean Air for New South Wales: 2018 Update"* (Doctors for the Environment Australia, 2019).

The DEA report discusses air pollution, air pollution trends, the effect of air quality on public health, and whether existing New South Wales (NSW) policies are providing the framework to improve this issue.

Liverpool City Council resolved at its 14 February 2019 meeting to engage "a suitability qualified consultant to peer review the air quality report by Dr Ben Altwood, whilst incorporating other data from local reports and Council's air quality monitoring data, and report these findings back to the Intermodal Committee and Council."

1.2 Scope of works

The following scope of work has been completed:

- Review the report produced by Doctors for the Environment Australia, titled "Clean Air for New South Wales: 2018 Update" (hereafter referred to as the DEA report)) (refer to Section 3 of this report).
- Review local historical monitoring data in the Sydney Metropolitan area (refer to Section 4 of this report).
- Review reports for the proposed Moorebank Intermodal terminal and Western Sydney Airport with respect to air quality (refer to Section 5 of this report).
- Determine comments on the DEA report in the context of existing information for the location and in the context of the proposed Moorebank Intermodal terminal and Western Sydney Airport (refer to Section 6 of this report).

AIR QUALITY STANDARDS

2. AIR QUALITY STANDARDS

To understand the basis of the review, and the trends in air pollution, Australian air quality standards must first be summarised.

Air quality standards are typically designed to protect human health, including those considered a sensitive population; this includes children, the elderly, and individuals suffering from respiratory disease. An air quality standard is typically a limit for a fixed averaging period (for example annual average or 24-hour average), which can be dictated as a value which should not be exceeded, or an allowance of a number of permitted exceedances.

The National Environment Protection (Ambient Air Quality) Measure (AAQ NEPM) established national standards for six criteria pollutants (NEPC, 1988), which include photochemical oxidants as ozone (O_3) and particulate matter with an aerodynamic diameter of less than 10 μ m (PM₁₀). These are the two pollutants referred to in the DEA report being reviewed.

Particulate matter standards were further amended in 2003 and 2016. The applicable AAQ NEPM standards are provided in Table 2-1. An aim to move to annual average and 24-hour PM_{2.5} standards of 7 µg/m³ and 20 µg/m³ by 2025 was also included in 2016, and these are listed in italics in Table 2-1.

The NSW Environment Protection Authority (NSW EPA) has adopted the current NEPM standards as impact assessment criteria for assessment of air pollutants from projects in NSW in a document entitled *"Approved Methods and Guidance for the Modelling and Assessment of Air Pollutants in NSW"* (NSW EPA, 2016).

Pollutant	Averaging Period	Criteria	Source
Particulate matter <10 µm	Annual	25 μg/m³	NEPC (2016)
(PM ₁₀ , coarse particles)		20 µg/m³ (goal by 2025)	NEPC (2016)
	24-hour	50 μg/m³	NEPC (2016)
Particulate matter <2.5 µm	Annual	8 µg/m³	NEPC (2016)
(PM _{2.5} , fine particles)		7 μg/m³ (goal by 2025)	NEPC (2016)
	24-hour	25 μg/m³	NEPC (2016)
Ozone (O ₃)	1-hour	100 ppb or 214 µg/m ³	NEPC (1998)
	4-hour	80 ppb or 171 µg/m ³	NEPC (1998)

Table 2-1: Air quality standards applicable for DEA review

REVIEW OF DEA REPORT

3. REVIEW OF DEA REPORT

3.1 Introduction

The DEA report arose following a community consultation process during 2016 that was led by the NSW Government, through the NSW Environmental Protection Authority (NSW EPA), to develop a clean air plan for NSW.

As part of the process, a document "*Clean Air for NSW Consultation Paper*ⁿ¹ (NSW Government, 2016) was released for public comment. Subsequently, a Clean Air Summit formed part of the stakeholder consultation and stakeholders were invited to complete an online survey to help further inform development of the Clean Air for NSW report. However, no formal policy has been developed since that time. The DEA report:

- presents the trends in air quality for coarse (PM₁₀) and fine particles (PM_{2.5}), and ozone (O₃) in NSW since the consultation paper was released
- discusses the source of fine particles in Sydney
- discusses a range of options that should be investigated by NSW Government to improve air quality

3.2 PM10 and PM2.5 data

3.2.1 Monitoring data

Monitoring data in the DEA report have been sourced from NSW Office Environment and Heritage (OEH) website²; the publicly available source of air quality data for NSW. It examines the trends between 2014 and 2018 of PM₁₀ and PM_{2.5} concentrations at what appears to be all monitoring locations across the NSW air quality monitoring jurisdiction.

From the data presented in Figure 1 and Figure 2 of the DEA report (replicated below as Figure 3-1 and Figure 3-2 for ease of reference) it appears that the number of monitoring stations with exceedances of the PM_{10} and $PM_{2.5}$ criteria has increased over the years.

It is not clear precisely what data are included in the DEA figures as the report notes that the number of monitoring locations has increased in recent years and that only "*monitors with historical data*" are included the figures, but there is no definition of what historical data it refers to.

The DEA report focuses much of its analysis on data collected in the Hunter Valley or Newcastle. The data collected in these locations are not considered representative of the air quality in Liverpool and the broader Sydney basin in general, and are therefore not considered further in this report.

As it is not clear what data the DEA report is presenting, ERM has completed a review of air quality data collected by OEH in the Sydney basin for the period 2010 to 2018. This analysis is presented in Section 4.1 (PM₁₀), Section 4.2 (PM_{2.5}) and Section 4.3 (O₃).

¹ Available from <u>https://www.epa.nsw.gov.au/your-environment/air/clean-air-nsw</u>

² Available from <u>https://www.environment.nsw.gov.au/AQMS/search.htm</u>

	793
INF 02	Peer review of Clean Air for New South Wales: 2018 Update (Doctors for the Environment Australia,
	2019)
Attachment 1	Peer review of Clean Air for New South Wales: 2018 update

```
CLEAN AIR FOR NSW
Peer Review Report
```

REVIEW OF DEA REPORT

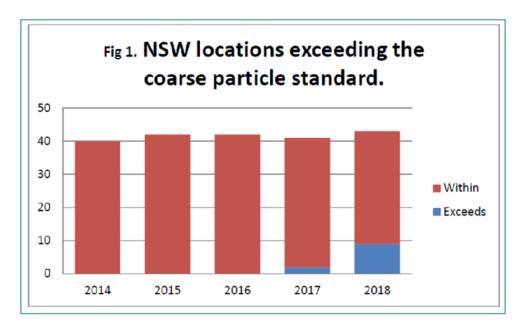
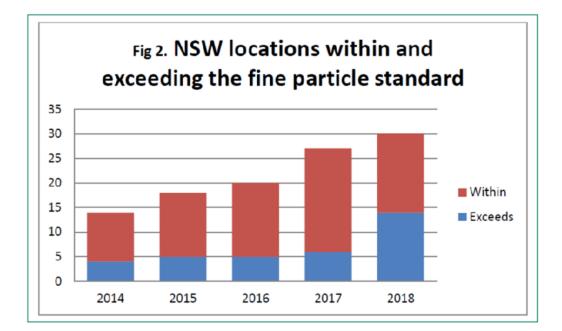


Figure 3-1: NSW locations exceeding coarse (PM₁₀) particle standard





REVIEW OF DEA REPORT

3.2.2 Particle characterisation data

Figure 3-3 of the DEA report presents an analysis of the sources of fine particles (PM_{2.5}) in Sydney for the period 2000 to 2014. It states that the data in this figure were sourced from the Sydney Particle Characterisation Study (ANSTO, 2016). However, the data presented on the DEA figure do not match those presented in the Sydney Particle Characterisation Study.

Figure 3-3 presents the data for Liverpool from the Sydney Particle Characterisation Study. It shows that smoke from biomass burning / diesel motor vehicles are the most common sources, with secondary sulfates and motor vehicles the next most common sources.

The study notes that the data from Liverpool shows a strong seasonal variation, with concentrations higher in winter months. For example, the contribution at Liverpool during the winter months from biomass burning was on average $5 \ \mu g/m^3$ higher that measured at Mascot. The study assumed this is due to wood smoke and biomass burning from domestic heating and is not associated with hazard reduction burns or bushfire events.

The meteorology of the Sydney Basin plays a significant role in the levels of pollution experienced in Liverpool. The Sydney Particle Characterisation Study notes that it is well known that pollution from the Sydney coast and the CBD is transported into the area with afternoon sea breezes, particularly in the summer.

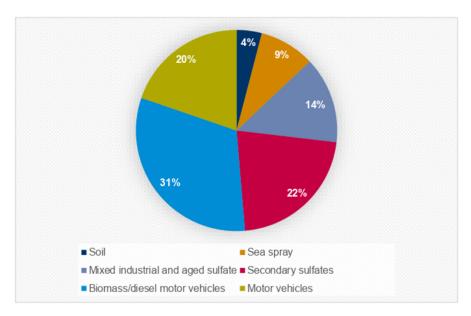


Figure 3-3: Liverpool - average fine particle contribution by source (2000 to 2014)

3.3 Ozone data

With respect to ozone (O₃), the DER report correctly identifies that ozone is not directly emitted from sources, but is a secondary pollutant formed in the atmosphere through photochemical reactions from primary emissions of precursor gases, including oxides of nitrogen (NO_x) and volatile organic compounds (VOCs).

HISTORICAL MONITORING DATA

4. HISTORICAL MONITORING DATA

Historical monitoring data have been sourced from the OEH website for PM₁₀, PM_{2.5} and O₃ from 2010 to 2018 to include sites listed within the DEA report as within the Sydney Basin, and those which may add to understanding the air quality trends within this area. The monitoring locations included are as shown in Table 4-1.

Air Quality Monitoring Station	Х	Y
Chullora	319315	6248145
Earlwood	327663	6245576
Lindfield ¹	328802	6260577
Liverpool	306573	6243485
Prospect	306901	6258703
Randwick	337588	6244021
Rozelle	330169	6251372
Macquarie Park ²	325695	6262277
Parramatta ²	314648	6258296
St Marys	293284	6258299
Richmond	291033	6278132
√ineyard¹	300281	6273857
Bringelly	293098	6244842
Campbelltown	296521	6228285
Camden	286766	6230833

Table 4-1: Air Quality Monitoring	included in data analysis
-----------------------------------	---------------------------

¹ No data available for PM₁₀.

² Data only available for 2018. Data excluded from contours shown in Figure 4-1, Figure 4-2, Figure 4-4 and Figure 4-5.

Trends were determined for the following pollutants and metrics:

- PM₁₀ annual mean
- PM10 maximum 24-hour mean
- PM_{2.5} annual mean
- PM_{2.5} maximum 24-hour mean
- O₃ 1 hour maximum
- O₃ 4 hour rolling mean

HISTORICAL MONITORING DATA

4.1 PM₁₀

Table 4-2 and Table 4-3 present the annual average and maximum 24-hour average PM_{10} concentrations at Sydney's OEH air quality monitoring stations for the period 2010 to 2018. Table 4-3 also includes the number of days within the year that there was an exceedance of the maximum 24-hour average criterion of 50 µg/m³.

Figure 4-1 presents the average of the annual mean PM₁₀ concentrations (from 2010-2018) for the OEH monitoring stations across Sydney. Stations that have one year or less of available data have not been included. Figure 4-1 also presents graphs of the annual average PM₁₀ concentrations at each station for the period 2010-2018. Figure 4-3 shows the monthly mean PM₁₀ concentrations for the period 2014 to 2018, highlighting the seasonal variation in PM₁₀ concentrations at each station. Typically, PM₁₀ concentrations are lower during the winter months, mainly due to the reduced contribution from bushfires and dust storms. However, in 2018, the monthly concentrations at Liverpool were elevated during this period due to large hazard reduction burns (discussed further below).

The data show that between 2010 and 2018, none of the OEH monitoring stations in the Sydney Basin stations recorded annual average PM_{10} concentrations above the standard of 25 µg/m³. However, between 2012 and 2018, Liverpool recorded the highest annual average PM_{10} concentrations of the stations analysed.

Between 2010 and 2018, the maximum annual average concentrations were measured in 2018 at all the stations. As noted in the NSW EPA Annual Air Quality Statement for 2018 (NSW EPA, 2019), this was "*mainly driven by the intense drought conditions*", and more frequent exceptional events³, including dust storms, bushfires and hazard reduction burning.

The maximum 24-hour average PM₁₀ concentrations are shown in Figure 4-2, with the average of the maximum 24-hour average PM₁₀ concentrations contour and a trend in data at each monitoring station. The number of days with a daily maximum exceeding the 24-hour standard of 50 μ g/m³ at each site is shown in Table 4-3. All monitoring stations have some exceedances of the standard.

Since the year 2016 there has been an upward trend in the number of exceedances. This is most evident at sites with the longest monitoring histories, such as Liverpool, Prospect and Bringelly in West Sydney. The NSW EPA Annual Air Quality Statement for 2018 makes the observation that the majority of hazardous particle days (92%) were due to smoke from large hazard reduction burns from April to August, and some forest fires. As noted, above, typically PM₁₀ concentrations are lower during the autumn/winter period. It is not unusual that the need for hazard reduction burns has increased, given the prolonged drought period.

³ Exceptional events are treated under Clause 18 of the National Environment Protection (Ambient Air Quality) Measure (AAQ NEPM) when reporting compliance against PM₁₀ and PM₂₅ for both the one-day average and one-year average standards. An exceptional event is defined as 'a fire or dust occurrence that adversely affects air quality at a particular location and causes an exceedance of one-day average standards in excess of normal historical fluctuations and background levels and is directly related to: bushfire; jurisdiction authorised hazard reduction burning; or continental scale windblown dust'.

JR FOR NSW	ew Report
CLEAN A	eer Revi

HISTORICAL MONITORING DATA

Air Quality Monitoring	Automatical antical						Year				
Station		2010	2011	2012	2013	2014	2015	2016	2017	2018	Average
Chullora	Annual Average	17.7	19.7	17.9	17.9	18.1	17.3	18.1	20.1	21.8	18.7
Earlwood	Annual Average	17.9	17.7	19.4	19.4	18.3	16.9	17.5	18.0	19.8	18.3
Lindfield	Annual Average	13.6	13.2	13.8	14.0	14.1	13.8	15.4	16.0	18.0	14.7
Liverpool	Annual Average	17.0	18.0	19.7	20.5	19.1	18.3	19.6	20.8	24.3	19.7
Prospect	Annual Average	15.4	15.7	17.2	18.8	17.6	17.4	19.0	19.0	21.9	18.0
Randwick	Annual Average	16.0	15.9	17.9	18.5	18.2	18.3	17.9	19.2	21.2	18.1
Rozelle	Annual Average	16.1	16.6	16.9	17.9	17.8	16.5	16.7	17.9		17.1
Macquarie Park	Annual Average		'		'			•	'	17.3	17.3*
Parramatta	Annual Average		,		'			•	,	21.6	21.6*
St Marys	Annual Average	15.1	14.7	14.4	16.0	16.7	15.1	16.0	16.2	19.3	16.0
Richmond	Annual Average	13.1	13.2	15.1	17.3	15.4	12.8	15.9	16.0	18.8	15.3
Vineyard	Annual Average	14.5	14.0	14.4	16.1	16.4	15.9	17.0	•		15.5
Bringelly	Annual Average	15.4	15.9	15.7	17.0	16.6	15.8	17.0	19.8	21.2	17.2
Campbelltown	Annual Average				15.8	16.9	15.6	16.1	15.7	17.9	16.3
Camden	Annual Average		,	,	15.4	15.6	13.8	14.4	14.7	17.5	15.2

Table 4-2: Annual average PM₁₀ concentrations (µg/m³) (2010 - 2018)

* Only one year of data available so not a long term average

Page 8

11 November 2019

Client: Cardno / Liverpool Council

Project No.: 0514651

www.erm.com Version: 4.0 Proj Clean Air Peer Review Report Final.docx

CLEAN AIR FOR NSW Peer Review Report	

HISTORICAL MONITORING DATA

Air Quality Monitoring						¥	Year				
Station	Averaging period	2010	2011	2012	2013	2014	2015	2016	2017	2018	Average
and lind	Maximum 24-hour average	42.1	65.2	41.6	55.0	40.0	46.2	63.5	63.0	90.7	29.2
Clunda	Number of days exceeded	0	9	0	-	0	0	-	4	7	
	Maximum 24-hour average	47.8	53.4	44.2	52.6	45.2	43.7	42.9	59.8	86.5	27.0
Earlwood	Number of days exceeded	0	-	0	2	0	0	0	-	5	
l indfiold	Maximum 24-hour average	48.2	35.7	34.5	38.8	38.3	37.5	68.9	46.3	89.7	24.6
	Number of days exceeded	0	0	0	0	0	0	-	0	4	
-	Maximum 24-hour average	41.1	46.3	42.5	52.8	40.8	40.5	68.7	74.0	101.5	29.3
LIVER DOOL	Number of days exceeded	0	0	0	-	0	0	ъ	2	13	
Dracesof	Maximum 24-hour average	40.1	41.5	38.7	50.4	44.3	48.0	110.1	61.1	113.3	31.2
Linspert	Number of days exceeded	0	0	0	+	0	0	4	٢	8	
Jointer	Maximum 24-hour average	42.7	40.1	43.7	45.3	46.1	41.9	44.1	56.0	95.5	25.6
RALIUWICK	Number of days exceeded	0	0	0	0	0	0	0	٢	5	
	Maximum 24-hour average	37.6	39.4	40.7	41.4	43.8	38.3	58.8	54.1	88.3	24.8
AUZEIIE	Number of days exceeded	0	0	0	0	0	0	-	1	2	
comorio Dork	Maximum 24-hour average				- More	tob				85.6	44.8
	Number of days exceeded				- ONI	אט עמומ				4	
Demonstra	Maximum 24-hour average				- More	deb				107.4	57.7
רמו ומו ומומ	Number of days exceeded				- ONI	NO Uala				8	
Ct Monie	Maximum 24-hour average	52.1	73.9	34.3	93.0	45.0	53.0	100.2	49.8	100.5	34.0
c Inial yo	Number of days exceeded	-	-	0	2	0	-	3	0	2	
Dichmond	Maximum 24-hour average	37.0	46.2	99.2	104.6	40.0	49.3	102.8	51.5	116.3	37.0
	Number of days exceeded	0	0	ъ	5	0	0	2	۲	8	
Vineverd	Maximum 24-hour average	39.7	32.7	34.3	67.8	41.9	59.0	105.4		No data	27.8
vilicyaru	Number of days exceeded	0	0	0	4	0	-	4		ומומ	
Dringelly	Maximum 24-hour average	41.1	86.0	40.1	97.2	42.6	57.0	61.6	83.7	92.9	34.7
ningeny	Number of days exceeded	0	2	0	3	0	-	3	9	8	
amphalitour	Maximum 24-hour average		Mo data		56.9	49.4	69.7	50.1	53.1	72.3	29.7
amprentown	Number of days exceeded		INO Uata		-	0	-	-	٢	з	
	Maximum 24-hour average		Alc data		97.5	41.4	62.4	43.6	48.4	68.1	30.9
	Number of days exceeded				2	0	-	0	0	9	

Project No.: 0514651 www.erm.com Version: 4.0 Proje Clean Air Peer Review Report Final.docx

Client: Cardno / Liverpool Council

Page 9

11 November 2019

798

HISTORICAL MONITORING DATA

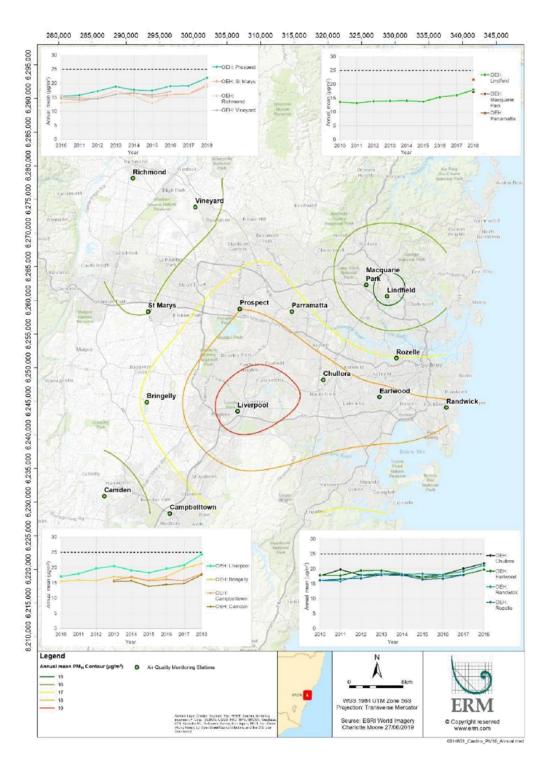


Figure 4-1: Annual mean PM₁₀ concentrations across Sydney monitoring locations (2010 – 2018)

www.erm.com Version: 4.0 Project No.: 0514651 Clean Air Peer Review Report Final.docx

HISTORICAL MONITORING DATA

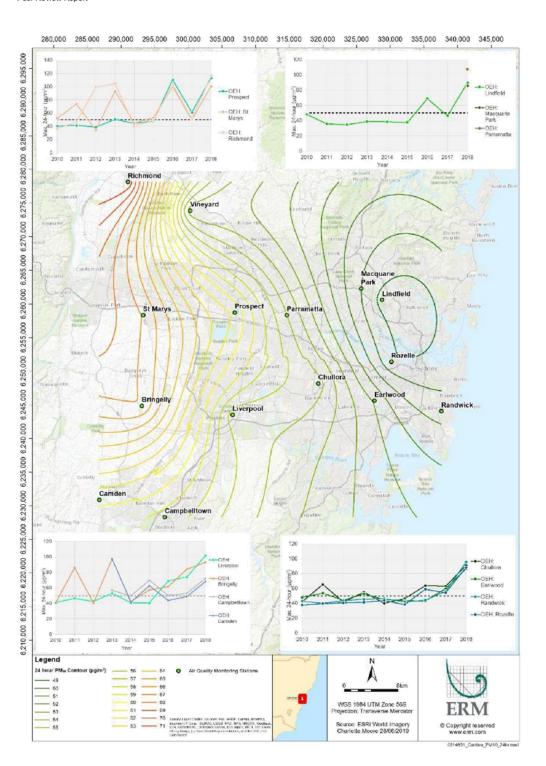
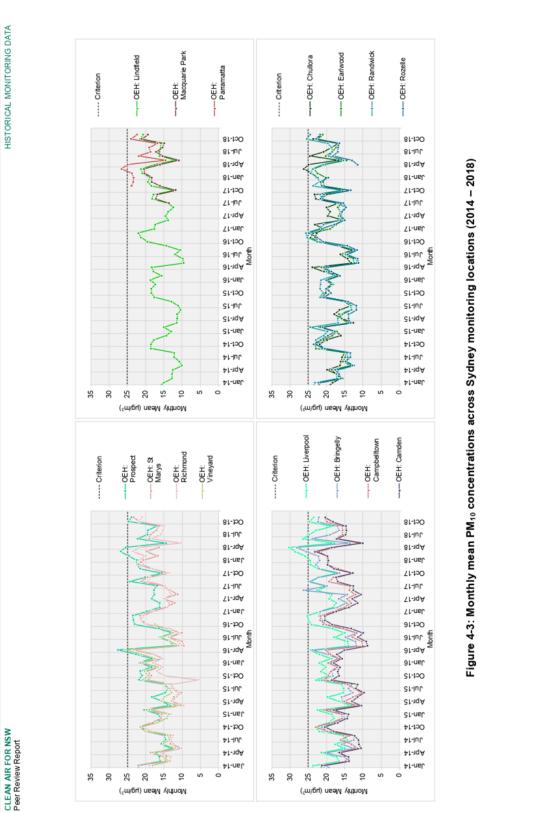


Figure 4-2: Average of maximum 24-hour average PM₁₀ concentrations across Sydney monitoring locations (2010 – 2018)

www.erm.com Version: 4.0 Project No.: 0514651 Clean Air Peer Review Report Final.docx

	801
INF 02	Peer review of Clean Air for New South Wales: 2018 Update (Doctors for the Environment Australia,
	2019)
Attachment 1	Peer review of Clean Air for New South Wales: 2018 update



Project No.: 0514651 www.erm.com Version: 4.0 Proj Clean Air Peer Review Report Final.docx

Page 12

11 November 2019

HISTORICAL MONITORING DATA

4.2 PM_{2.5}

Table 4-4 and Table 4-5 present the annual average and maximum 24-hour average $PM_{2.5}$ concentrations at Sydney's air quality monitoring stations. Table 4-5 also includes the number of days within the year that there was an exceedance of the maximum 24-hour average standard of 25 μ g/m³.

Figure 4-4 presents the average of the annual mean $PM_{2.5}$ concentrations (from 2010-2018) for the OEH monitoring stations across Sydney. Stations that have one year or less of available data have not been included. Figure 4-4 also presents graphs of the annual average $PM_{2.5}$ concentrations at each station for the period 2010 – 2018. Figure 4-6 shows the monthly mean $PM_{2.5}$ concentrations for the period 2014 to 2018, highlighting the seasonal variation in $PM_{2.5}$ concentrations at each station with higher concentrations typically occurring during the winter months, due to the contribution from domestic fires.

The data show that the stations at Liverpool and Prospect in West Sydney consistently have the highest annual mean PM_{2.5} concentrations across Sydney, with exceedances of annual mean concentrations above the standard of 8 μ g/m³. Chullora also experienced exceedances of the standard in recent years however due to lower concentrations historically, the average of the annual mean contour does not show this.

Between 2010 and 2018 there has been an upward trend in annual average concentrations of PM_{2.5} for all the stations that were operating. The maximum annual average concentrations were measured in 2018 at 8 out of the 13 stations covered in this report. As noted in the NSW EPA Annual Air Quality Statement for 2018, this increase was largely due to increased hazard reduction burns in 2018 around Sydney and the Illawarra, and an increase in particulates throughout the State due to intense drought conditions happening at the time.

The maximum 24-hour average PM_{2.5} concentrations are shown in Figure 4-5 with the average of the maximum 24-hour average PM_{2.5} concentrations contour and a trend in data at each monitoring station. The number of days with a daily maximum exceeding the 24-hour standard of 25 µg/m³ at each site are shown in Table 4-5. All monitoring stations have some exceedances of the standard. Since the year 2016, there has been an upwards trend of exceedances of the 24 hour standard. This trend is most evident at sites with the longest monitoring histories such as Chullora, Earlwood, Liverpool and Camden in West Sydney. In 2018, almost all of the monitoring sites experienced at least one exceedance of the standard, the maximum being the site at Liverpool with eight recorded exceedances. As noted in the NSW EPA Annual Air Quality Statement for 2018, these were all attributed to exceptional events related predominately due to an increase in hazard reduction burns during the coolers months and wildfires. The presence of wood smoke from domestic wood burners was also a likely contributing factor during the winter months. This is further substantiated in Figure 4-6 which shows exceedances of PM_{2.5} typically occurred between April and July of each year.

AIR FOR NSW	view Report
CLEAN A	eer Revi

HISTORICAL MONITORING DATA

Air Quality Monitoring	Autoration mariad						Year				
Station	Алегадний репол	2010	2011	2012	2013	2014	2015	2016	2017	2018	Average
Chullora	Annual Average	5.8	5.9	6.1	7.9	8.9	8.0	8.0	9.4	8.6	7.6
Earlwood	Annual Average	5.7	5.3	5.5	7.7	7.8	8.6	8.0	7.3	7.8	7.1
Liverpool	Annual Average	6.4	5.7	8.0	8.3	8.7	8.4	8.2	8.9	10.1	8.1
Prospect	Annual Average		No	No data		7.6	8.1	8.7	7.8	8.4	8.1
Randwick	Annual Average				No data	ta			7.0	7.6	7.3
Rozelle	Annual Average			No data			7.1	7.4	7.2	7.3	7.3
Macquarie Park	Annual Average					No data				6.9	6 .9
Parramatta	Annual Average					No data				9.2	9.2*
St Marys	Annual Average				No data	ta			7.0	7.8	7.4
Richmond	Annual Average	4.2	4.6	5.3	8.4	6.8	7.8	7.9	7.1	8.1	6.7
Bringelly	Annual Average				No data	ta			7.5	8.0	7.8
Campbelltown	Annual Average			2	No data			7.9	7.4	8.4	7.9
Camden	Annual Average		No data		6.5	6.3	6.2	6.5	6.8	7.3	6.6

Table 4-4: Annual average $PM_{2.5}$ concentrations ($\mu g/m^3$) (2010 - 2018)

* Only one year of data available so not a long term average

Page 14

11 November 2019

Client: Cardno / Liverpool Council

Project No.: 0514651

www.erm.com Version: 4.0 Proj Clean Air Peer Review Report Final.docx

JR FOR NSW	ew Report
CLEAN A	eer Revi

HISTORICAL MONITORING DATA

Air Quality Monitoring						ž	Year				
Station	Averaging period	2010	2011	2012	2013	2014	2015	2016	2017	2018	Average
chullons	Maximum 24-hour average	24.2	23.9	26.3	22.5	23.1	18.4	49.4	44.6	29.1	29.0
Criuiora	Number of days exceeded	0	0	-	0	0	0	5	8	°	
Lorbood	Maximum 24-hour average	22.5	23.6	20.7	32.7	22.7	23.9	33.3	50.9	28.5	28.7
Editwood	Number of days exceeded	0	0	0	-	0	0	5	2	-	
la como di	Maximum 24-hour average	21.8	28.9	23.6	27.0	24.3	23.9	No doto	56.4	45.4	31.4
Liverpool	Number of days exceeded	0	-	0	-	0	0	NO Uala	з	8	
1	Maximum 24-hour average					14.0	29.6		30.1	47.5	30.3
Flospect	Number of days exceeded		ON	NO Udia		0	-	NO Uala	з	4	
de interest	Maximum 24-hour average				Mo date				45.3	31.8	38.5
RAIIUWICK	Number of days exceeded				INU Udla				-	-	
-	Maximum 24-hour average						19.0		36.3	19.2	24.8
Kozelle	Number of days exceeded			No data			0	No data	2	0	
Moostorio Dorfe	Maximum 24-hour average				Mon	otob				51.8	51.8
	Number of days exceeded				DN	NU Udia				3	
Demonstra	Maximum 24-hour average					- toto				42.1	42.1
rallallalla	Number of days exceeded				DN	NO Udla				4	
Ct Monio	Maximum 24-hour average				Alo data				38.2	80.5	59.4
ol Ividiya	Number of days exceeded				INU Udia				3	3	
	Maximum 24-hour average	20.8	42.9	116.7	68.0	24.7	24.5	83.4	34.3	123.9	59.9
KICIIIIOIID	Number of days exceeded	0	2	2	14	0	0	9	с	4	
Dringelly	Maximum 24-hour average			Mo	to			21.6	52.5	55.6	43.2
DIIIIGelly	Number of days exceeded			DNI DNI	NO Udid				2	4	
Comphatter	Maximum 24-hour average			Alo doto			15.7	35.8	25.0	42.0	29.6
Callippelitown	Number of days exceeded			INO Udla				с	0	2	
Comdon	Maximum 24-hour average		No data		61.9	18.5	25.0	36.0	27.7	37.0	34.4
Calluci	Number of days exceeded		INO Udia		3	0	0	e	2	2	

INF 02 Attachment 1

www.erm.com Version: 4.0 Project No.: 0514651 Clean Air Peer Review Report Final.docx

Client: Cardno / Liverpool Council

Page 15

11 November 2019

HISTORICAL MONITORING DATA

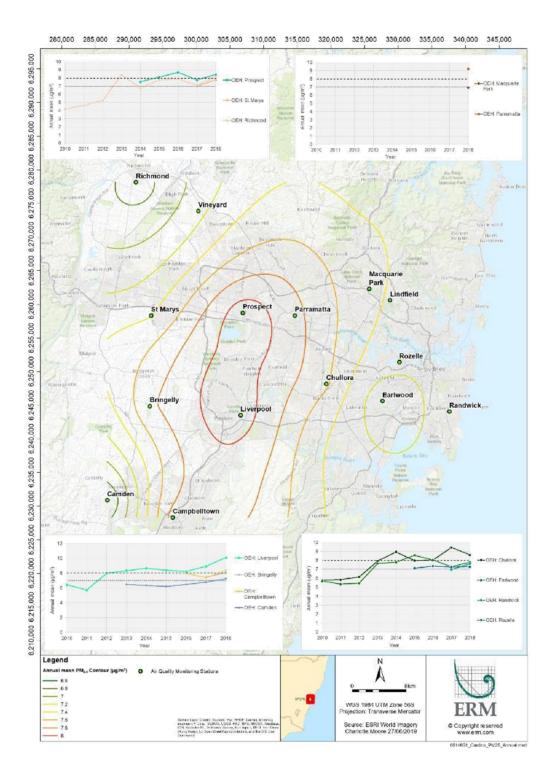


Figure 4-4: Annual mean PM_{2.5} concentrations across Sydney monitoring locations (2010 – 2018)

www.erm.com Version: 4.0 Project No.: 0514651 Clean Air Peer Review Report Final.docx

HISTORICAL MONITORING DATA

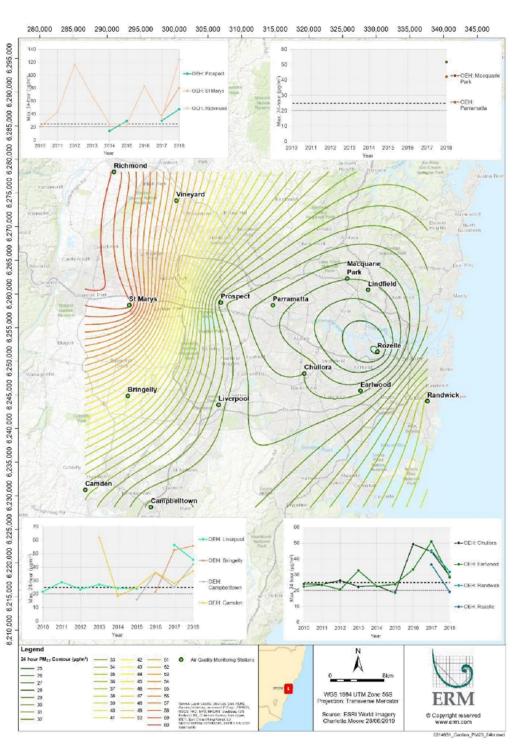
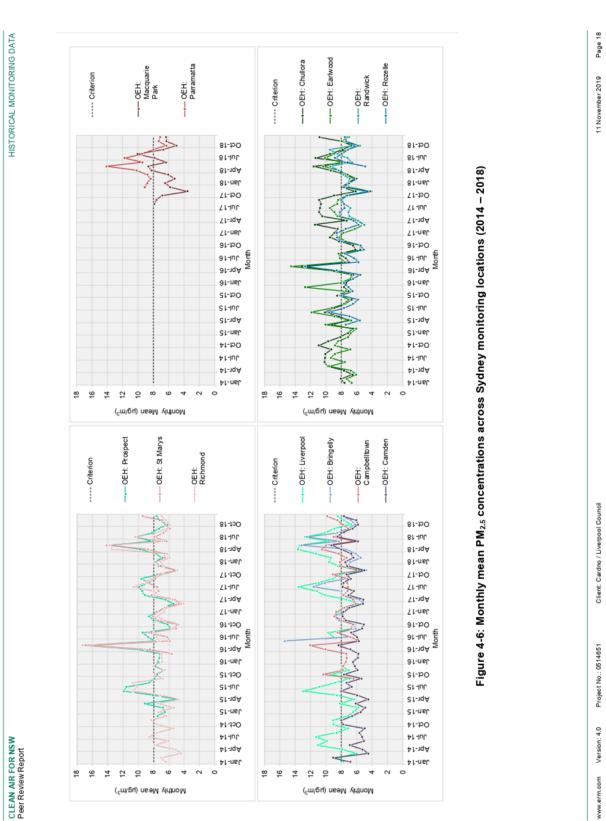


Figure 4-5: Average of maximum 24-hour average PM_{2.5} concentrations across Sydney monitoring locations (2010 – 2018)

	807
INF 02	Peer review of Clean Air for New South Wales: 2018 Update (Doctors for the Environment Australia,
	2019)
Attachment 1	Peer review of Clean Air for New South Wales: 2018 update



www.erm.com Version: 4.0 Proji Clean Air Peer Review Report Final docx

HISTORICAL MONITORING DATA

4.3 **O**₃

Table 4-6 and Table 4-7 present the maximum 1-hour concentrations and rolling 4-hour concentrations for O₃ respectively at Sydney's air quality monitoring stations. Table 4-6 also includes the number of times within the year that there was an exceedance of the maximum 1-hour average standard of 214 μ g/m³.

Figure 4-7 presents graphs of the maximum 1-hour average O₃ concentrations for the period 2010 – 2018. None of the monitoring stations show a consistent rising or falling trend for O₃. 2011 and 2017 were years of high annual mean O₃ concentrations whilst subsequent years of 2012 and 2018 brought a large decrease in annual mean concentrations. As with the monitored data for PM₁₀ and PM_{2.5}, the monitoring stations in West Sydney, notably Liverpool, Prospect, St Marys, Bringelly, Campbelltown, Camden and Parramatta have the highest concentrations of O₃. Ozone exceedances occurred on seven days in 2018, typically during days where meteorological conditions were conductive to ozone formation with a stable atmosphere and very warm temperatures (over 36°C).

Figure 4-8 shows the monthly-mean O_3 concentrations for the period 2014 – 2018, highlighting the seasonal variation at each station. O_3 concentrations follow a typical annual cycle increasing during the summer months and falling during the winter months.

-
S _
N D
ge de l
23
vie A
₹ a
Щ Ъ
104

HISTORICAL MONITORING DATA

_
18
- 2018)
5
0
5
ĩ
/brl)
~
ő
ati
ntr
S
⁵
ິດ
ě
rag
Ve
шa
ğ
÷
iximum 1-hour average O ₃ concentrations
Maximum
axi
Table 4-6:
le
ab
F

Air Quality Monitoring						Ye	Year				
Station	Averaging period	2010	2011	2012	2013	2014	2015	2016	2017	2018	Average
	Maximum 1-hour average	177.8	244.1	171.3	224.9	169.2	199.2	192.7	244.1	197.0	202.3
Cnullora	Number of times exceeded	0	٢	0	٢	0	0	0	5	0	-
	Maximum 1-hour average	182.0	212.0	175.6	216.3	147.8	199.2	197.0	233.4	154.2	190.8
Earlwood	Number of times exceeded	0	0	0	٢	0	0	0	2	0	0
	Maximum 1-hour average	175.6	184.2	156.3	173.5	182.0	205.6	220.6	227.0	162.8	187.5
Lindiela	Number of times exceeded	0	0	0	0	0	0	1	۲	0	0
	Maximum 1-hour average	194.9	220.6	169.2	250.6	220.6	186.3	203.5	289.1	237.7	219.2
LIVERPOOL	Number of times exceeded	0	٢	0	5	1	0	0	5	٢	1
	Maximum 1-hour average	222.7	269.8	171.3	237.7	220.6	182.0	222.7	263.4	224.9	223.9
Prospect	Number of times exceeded	3	5	0	2	2	0	1	2	1	2
doinibuo	Maximum 1-hour average	179.9	156.3	141.3	160.6	141.3	242.0	212.0	248.4	156.3	182.0
Kanuwick	Number of times exceeded	0	0	0	0	0	٢	0	4	0	1
	Maximum 1-hour average	156.3	199.2	147.8	156.3	143.5	212.0	190.6	244.1	167.0	179.7
Kozelle	Number of times exceeded	0	0	0	0	0	0	0	з	0	•
	Maximum 1-hour average					ł				186.2	186.2
масquare Рагк	Number of times exceeded				NO	No Data				0	0
-	Maximum 1-hour average					oto Dato				218.3	218.3
railallala	Number of times exceeded				101	Dala				٢	1
Ct Mone	Maximum 1-hour average	203.3	291.0	181.9	235.4	214.0	175.5	216.1	235.4	224.7	219.7
ol Ividi yo	Number of times exceeded	0	5	0	-	0	0	1	2	٢	٢
Richmond	Maximum 1-hour average	190.5	248.2	181.9	203.3	192.6	201.2	173.3	199.0	220.4	201.2

www.erm.com Version: 4.0 Project No.: 0514651 Clean Air Peer Review Report Final docx

Client: Cardno / Liverpool Council

Page 20

11 November 2019

02 chme	ent 1	2	2019	9)						lew South Wales: 2018 Update (Doctors for the Environment A lew South Wales: 2018 update	
	0	202.9	0	225.8	2	217.4	-	231.8	2		
	-			235.4	2	235.4	4	239.7	e		
	0	l	No Data	209.7 2	0	201.2 2	0	261.1 2	3		
			No								
	0			'	0	1	0	207.6	0		
	0	188.3	0	186.2	0	184.0	з	184.0	0		
	0	239.7	۲	265.4	4	265.4	0	263.2	4		
	0	224.7	2	231.1	3	201.2	0	235.4	1		
	0	171.2	0	188.3	0		I				
	-	201.2	0	267.5	5		No Data		No Data		
	0	192.6	0	222.6	2						
	es exceeded	our average	es exceeded								
	Number of times exceeded	Maximum 1-hour average	Number of times exceeded	Maximum 1-hour average	Number of times exceeded	Maximum 1-hour average	Number of times exceeded	Maximum 1-hour average	Number of times exceeded		
Peer Review Report			Vineyard		Bringelly		Campbelltown		Camden		
er Review		3	5		B		Cam	Ċ	Ű		

HISTORICAL MONITORING DATA

Air Quality Monitoring	A statement						Year				
Station		2010	2011	2012	2013	2014	2015	2016	2017	2018	Average
Chullora	Rolling 4-hour average	153.7	206.1	145.1	201.8	155.8	167.0	165.4	236.6	175.6	178.6
Earlwood	Rolling 4-hour average	157.9	187.9	145.6	176.1	139.2	174.5	177.2	187.4	139.2	165.0
Lindfield	Rolling 4-hour average	168.1	179.4	150.4	157.9	160.1	177.0	203.5	190.1	154.2	171.2
Liverpool	Rolling 4-hour average	174.5	202.9	152.6	236.6	187.4	164.4	184.2	249.5	199.2	194.6
Prospect	Rolling 4-hour average	207.2	242.5	156.9	223.3	208.3	149.4	166.0	227.0	194.9	197.3
Randwick	Rolling 4-hour average	166.0	147.8	133.8	144.6	131.7	181.5	193.8	217.9	147.8	162.8
Rozelle	Rolling 4-hour average	143.0	170.8	116.2	135.5	128.5	168.7	159.5	233.4	141.3	155.2
Macquarie Park	Rolling 4-hour average					No Data				171.2	171.2
Parramatta	Rolling 4-hour average					No Data				203.3	203.3
St Marys	Rolling 4-hour average		No I	No Data		181.9	151.9	173.3	205.4	201.2	182.8
Richmond	Rolling 4-hour average		No I	No Data		156.2	158.4	149.8	181.9	186.2	166.5
Vineyard	Rolling 4-hour average		No I	No Data		160.5	151.9		No Data		156.2
Bringelly	Rolling 4-hour average		No [No Data		241.8	166.9	No Data	190.5	196.9	199.0
Campbelltown	Rolling 4-hour average		No Data		175.5	237.5	169.1	No Data	194.7	209.7	197.3
Camden	Rolling 4-hour average		No Data		192.6	235.4	154.1	160.5	231.1	201.2	195.8

Table 4-7: Rolling 4-hour O_3 monitoring data ($\mu g/m^3$) included in analysis (2010 – 2018)

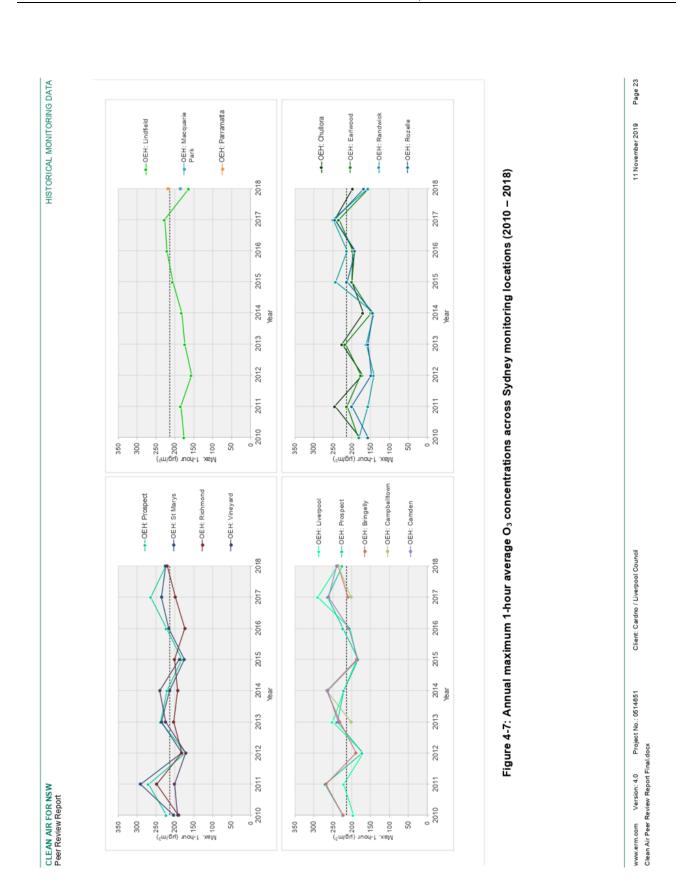
INF 02

Page 22

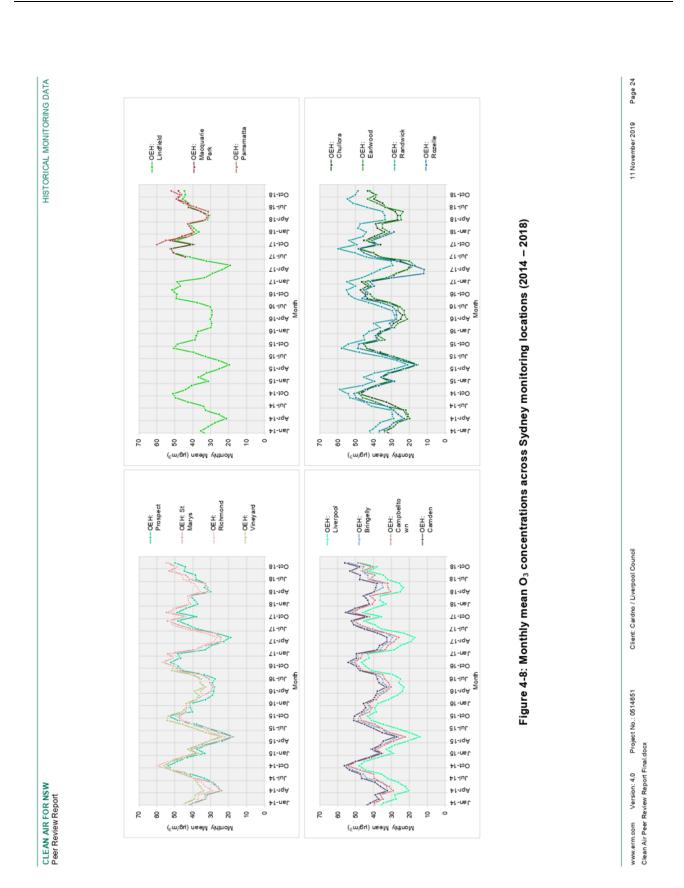
11 November 2019

Project No.: 0514651 www.erm.com Version: 4.0 Proj Clean Air Peer Review Report Final.docx

	812
INF 02	Peer review of Clean Air for New South Wales: 2018 Update (Doctors for the Environment Australia,
	2019)
Attachment 1	Peer review of Clean Air for New South Wales: 2018 update



	813
INF 02	Peer review of Clean Air for New South Wales: 2018 Update (Doctors for the Environment Australia,
	2019)
Attachment 1	Peer review of Clean Air for New South Wales: 2018 update



PROPOSED MOOREBANK INTERMODAL AND WESTERN SYDNEY AIRPORT PROJECTS

5. PROPOSED MOOREBANK INTERMODAL AND WESTERN SYDNEY AIRPORT PROJECTS

5.1 Moorebank Logistic Park Intermodal

5.1.1 Background

Moorebank Logistics Park⁴ (owned by Moorebank Intermodal Company) is an infrastructure development, currently under construction, which aims to transform the way containerised freight is moved through Port Botany and around NSW. Once built, the development will comprise:

- an import-export terminal;
- an interstate terminal;
- up to 850,000 m² of high specification warehousing;
- auxiliary services including retail and service offerings;
- a rail connection to the Southern Sydney Freight Line (SSFL), which will provide direct access to the facility; and
- substantial biodiversity offset areas protected from development, including vegetation on the east bank of the Georges River.

Once fully operational, the development will have the capacity to shuttle over 1 million shipping containers annually between Port Botany and Moorebank by rail instead of road. This is expected to remove 3,000 heavy truck movements off Sydney's road network every day. In addition, the interstate terminal will have the capacity to move by rail an additional 500,000 containers to and from interstate and regional centres, removing the need for thousands of existing long haulage truck journeys.

Moorebank Avenue splits the site, with Moorebank Precinct East (MPE) to the east, and Moorebank Precinct West (MPW) to the west.

5.1.2 Predicted air quality impact

Air quality assessments were prepared for both the MPE (Ramboll, 2016a) and MPW (Ramboll, 2016b). Both assessments included a cumulative assessment of air quality impacts with both MPE and MPW operating.

Key emissions of the construction phases of both project components are fugitive dust and particulate matter (total suspended particulates (TSP), PM₁₀ and PM_{2.5}). Construction phases of both the east and west components were assessed quantitatively.

Both assessments found that during the construction phase of the facility, predicted concentrations will comply with all relevant impact assessment criteria, despite resulting in short term increases of emissions. The utilised background dataset contained existing exceedances of the 24-hour average impact assessment criteria (three days for PM10 and two days for PM2.5). The results indicate that the construction for the Proposal would result in no additional days over the criteria. Predicted increases in fugitive dust and particulate matter were considered to be minor when compared against existing background concentrations. This is also the case when considering cumulative impacts.

Operational phase emissions are predicted to be particulate matter, nitrogen dioxide (NO₂), sulfur dioxide (SO₂) and volatile organic compounds (VOCs) associated with combustion emissions, predominantly from idling diesel locomotive freight trains and operation of site vehicles.

The operational phases of both east and west components were assessed quantitatively. Background concentrations utilised in the operation phase assessment were derived from an average of five years

⁴ <u>http://www.micl.com.au/</u>

www.erm.com Version: 4.0 Project No.: 0514651 Clien Clean Air Peer Review Report Final.docx

PROPOSED MOOREBANK INTERMODAL AND WESTERN SYDNEY AIRPORT PROJECTS

of data (2011 to 2015) from the Liverpool OEH monitoring station and annual averages were near to exceeding the standard for PM₁₀, and already exceeding for PM_{2.5}.

During the operational phase there were predicted to be increases in PM_{10} and $PM_{2.5}$ associated with the facility, but these were considered minor when added to the existing background conditions. For example, the maximum increase in PM_{10} concentrations were predicted to be 0.1 µg/m³ annual average and 0.2 µg/m³ for the 24-hour average. Annual average $PM_{2.5}$ concentrations already exceed the standard, therefore cumulative predictions are also above the standard at all receptors. However, the operational phase was predicted to in a minor increase in annual average $PM_{2.5}$ (<0.1 µg/m³ at all sensitive receptors).

5.2 Western Sydney Airport

5.2.1 Background

The Western Sydney Airport, currently under construction, will be the second major airport for the Greater Sydney Region. The airport is expected to be operational by 2026, servicing both domestic and international markets. The airport operation is proposed to be staged and will initially have a single 3.7 kilometre runway and facilities for up to 10 million annual passengers (Stage 1), with possible development of dual runway facilities and 82 million annual passengers (Stage 2).

The airport site covers approximately 1,780 hectares at Badgerys Creek, located in Western Sydney, approximately 50 km west of Sydney CBD, and approximately 15 - 20 km north-west of Liverpool.

Construction of the airport in terms of air quality emissions is primarily concerned with dust emissions during both the bulk earthworks and construction of aviation infrastructure.

Air emissions from the operation phase of Stage 1 of the development include NOx, PM10 and PM2.5, CO, SO2, air toxics and odour.

5.2.2 Predicted air quality impact

A local air quality assessment was undertaken for the Stage 1 and Stage 2 developments (Pacific Environment, 2016). The air quality assessment undertook a quantitative construction and operation phase assessment.

The construction impact assessment determined that the predicted dust impacts would be below air quality assessment criteria for all sensitive receptors assessed.

The operation phase dispersion modelling predicted that whilst the Stage 1 development would increase off-site concentrations, with highest predicted increase located at receptors located to the north and north-east of the site, there were no predicted exceedances of the air quality standards any of the off-site sensitive receptors assessed. There were also no predicted exceedances of the air quality standards at any on-site sensitive receptors assessed (with the exception of an exceedance of the 99th percentile 1-hour average criterion for formaldehyde).

Background emissions associated with the broader urban development of Western Sydney were noted to be significant contributor to the predicted off-site concentrations.

Predicted annual average PM_{2.5} concentrations exceeded the NEPM goal of 7 μ g/m³ for 2025, as the background contributions used in the assessment were already exceeding 7 μ g/m³ goal. The contribution from the airport to the annual average PM_{2.5} concentrations were predicted to range from 0.1 to 0.8 μ g/m³.

Long-term operational impacts (i.e. those that may result from the Stage 2 development in 2063) were assessed for NO_2 , PM_{10} and $PM_{2.5}$. However, as future projected emissions for sources other than the proposed airport were not available, this is considered to be a hypothetical scenario and the predicted concentrations are not considered dependable.

SUMMARY

In addition to the local air quality assessment, a regional air quality assessment was also competed (Ramboll, 2016c). This looked in detail at the formation of secondary pollutants such as ozone. The assessment predicted that daily maximum ozone concentrations would decrease near the airport due to suppression of the formation of ozone due to the increase in NOx emissions. Conversely, increases in ozone are predicted downwind of the airport (which is to the south and southwest for most days).

6. SUMMARY

As the Sydney Particle Characterisation Study notes "Liverpool is considered a significant western Sydney urban area with known pollution from the Sydney coast and the CBD being transported into the area during afternoon sea breeze events, especially in the summer months".

In summary:

- ERM's review of OEH PM₁₀ and PM_{2.5} monitoring data for the period 2010 to 2018 supports the DEA analysis that the air quality measured at the Liverpool OEH station is amongst the highest of the data collected in the Sydney Basin.
- Elevated short-term results from 2018 were due to the increase in the number of exceptional events, such as frequent exceptional events, such as dust storms, bushfires and hazard reduction burning. This is not unusual given the prolonged drought conditions currently being experienced in NSW.
- Based on the Sydney Particle Characterisation Study, smoke from biomass burning/diesel motor vehicles are the most common sources in the Sydney Basin, with secondary sulfates and motor vehicles the next most common sources. The study notes that the data from Liverpool shows a strong seasonal variation, with concentrations higher in winter months. The study assumed this is due to wood smoke and biomass burning from domestic heating and is not associated with bushfire events which are frequent in summer. Annual average concentrations of PM₁₀ and PM_{2.5} have increased at all monitoring sites during 2018 compared with 2017. NSW EPA notes this is primarily due to the increase in the number of exceptional events, such as dust storms, bushfires and hazard reduction burning. Again, these have increased with the prolonged drought conditions across NSW.
- All the measured exceedances of the 24-hour average PM₁₀ and PM_{2.5} standard at the Liverpool OEH monitoring station during 2018 were deemed by NSW EPA to be caused by exceptional events i.e. primarily due to hazard reduction burns, not solely as a result of pollution generated by transport or industry.
- The maximum 24-hour average PM₁₀ and PM_{2.5} concentration and number of days the relevant criteria exceeded was higher at eight other western Sydney OEH station locations.
- Ozone concentrations in Liverpool were lower in 2018 than 2017. However, as ozone is secondary pollutant, its formation is driven by both meteorology and pollution upwind of Liverpool.
- The air quality assessments for the proposed Moorebank Intermodal terminal and Westem Sydney Airport have shown that neither is predicted to contribute significantly to coarse or fine particle concentrations in Liverpool. Ozone concentrations are predicted to decrease in the Liverpool area when the airport is operational, due to the additional NO_x emissions potentially suppressing its formation. The Moorebank Intermodal terminal is expected to remove 3,000 heavy truck movements off Sydney's road network every day. In addition, the interstate terminal will have the capacity to move by rail an additional 500,000 containers to and from interstate and regional centres, removing the need for thousands of existing long haulage truck journeys. Whilst during the operational phase there were predicted to be increases in PM₁₀ and PM_{2.5} associated with the facility, these were considered minor when added to the existing background conditions.

REFERENCES

Both the proposed Moorebank Intermodal terminal and Western Sydney Airport will have requirements to monitor local air quality on an ongoing basis. This will enable any changes in local air quality to be monitored over time.

7. REFERENCES

ANSTO (2016). Sydney Particle Characterisation Study. PM_{2.5} Source Apportionment in the Sydney Region between 2000 and 2014.

Doctors for the Environment Australia (2019). Clean Air for New South Wales: 2018 Update.

NEPC (1998). Ambient Air – National Environment Protection Measures for Ambient Air Quality. National Environment Protection Council, Canberra.

NEPC (2016). Ambient Air – National Environment Protection Measures (Ambient Air Quality) Measure as amended. 25 February 2016. National Environment Protection Council.

NSW EPA (2016), "Approved Methods for the Modelling and Assessment of Air Pollutants in NSW", Published January 2017.

NSW EPA (2019). NSW EPA Annual Air Quality Statement for 2018.

NSW Government (2016). Consultation Paper Clean Air for NSW.

Pacific Environment (2016). Western Sydney Airport EIS – Local Air Quality and Greenhouse Gas Assessment. Prepared for Department of Infrastructure and Regional Development, Job number 9417F. 22 August 2016.

Ramboll (2016a). Moorebank Precinct East Stage 2 Proposal Air Quality Impact Assessment. December 2016.

Ramboll (2016b). Moorebank Precinct West Stage 2 Air Quality Impact Assessment. October 2016.

Ramboll (2016c). Western Sydney Airport EIS. Regional Air Quality Assessment. August 2016.

ERM has over 160 offices across the following countries and territories worldwide

Argentina	The Netherlands
Australia	New Zealand
Belgium	Norway
Brazil	Panama
Canada	Peru
Chile	Poland
China	Portugal
Colombia	Puerto Rico
France	Romania
Germany	Russia
Guyana	Singapore
Hong Kong	South Africa
India	South Korea
Indonesia	Spain
Ireland	Sweden
Italy	Switzerland
Japan	Taiwan
Kazakhstan	Tanzania
Kenya	Thailand
Malaysia	UK
Mexico	US
Mozambique	Vietnam
Myanmar	

ERM's Sydney Office

Level 15 309 Kent Street Sydney NSW 2000

www.erm.com

