Narellan Town Shopping Centre

Peer review of Economic Impact Assessment Documentation

SGS Economics & Planning

Final Report

NSW DP&I
May 2013

Independent insight.

Independent insight.

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CONTENTS

EXECUTIVE SUMMARY

Scope of work

The Department of Planning and Infrastructure is seeking independent advice on the economic impact of the planning proposal, based on a review of the retail analysis and economic impact assessment undertaken by DeepEnd Services (DES) and the subsequent peer reviews undertaken by Hill PDA. The review is to have particular regard to:

- The conclusions on impacts to existing and planned centres within the South West of Sydney, including Oran Park, Leppington and Campbelltown;
- Submissions received from Liverpool and Campbelltown Councils; and
- Submissions received from BBC Consulting Planners and Urbis (acting on behalf of the Macarthur Square Shopping Centre and the Campbelltown Mall Shopping Centre.

The department is not seeking an overall recommendation on the merits of proceeding with the rezoning or its compliance with other strategic frameworks. The review is to provide independent assessment of the retail analysis and economic impact modelling undertaken by Hill PDA and DES, in particular the elements of this modelling that has been criticised by submissions. The review's conclusions will assist the department in understanding the reliability of these impact assessments. These economic impact assessments will be one, albeit an important one, factor in the overall strategic planning decision.

Findings

A summary of the main points emerging is given below for each principal economic impact assessment/ peer review.

Deep End Services

1. The DES-defined primary and secondary catchments areas appear reasonable but it is difficult to critically assess whether these catchment areas are reasonable or not without knowing the percentage capture of retail expenditure within each area (i.e. how thin is the secondary catchment?). Ultimately, the defined catchment area appears to be the result of judgement rather than an assessment based on empirical evidence. Shopper surveys would provide such an evidence base. Alternatively, retail simulation modelling could define catchment areas for Narellan and other centres in the region.
2. While the use of ABS Census data and the summary presented in the DES report is sound, it is not clear how this demographic information is used given that all household expenditure data is sourced from MDS Marketinfo.
3. Since the time of writing, more data has become available on existing population and population forecasts for the defined trade area. The NSW Bureau of Transport Statistics (BTS) has produced travel-zone-level (TZ) population forecasts for these areas. While there are a few boundary issues when comparing against the DES trade area , the BTS figures broadly line up with the DES figures
4. SGS supports the use of 06/07 MDS MarketInfo data as source for household expenditure data. The use of Deloitte Access Economics data to bring the Marketinfo numbers up to date also appears sound.
5. The steps that DES followed to obtain the floorspace estimates appear to be sound.

6. We note that the DES impact analysis examines the impacts of stage 5 and stage 6 independently. We would suggest that the cumulative impact of stage 5 and stage 6 should also be assessed.
7. Since stage 5 is proposed to include two additional full line DDS, the expanded NTSC would be classified as a regional shopping centre, according to the shopping centre definitions in the Urbis Retail Averages. The typical RTD for a full-line supermarket and mini major within a regional shopping centre is around $10,900 per sqm and $6,945 per sqm respectively. These are higher than the DES numbers in table 14. In addition, the NTSC after the stage 5 expansion has potential to trade at around $6,260 per sqm (an average RTD for a regional shopping centre), which is about 6% higher than the $5,884 estimated by DES.
8. As with the previous comment, the average trading level of $5,876 per sqm appears to be on the low side, compared to the average RTD for a regional shopping centre. If the centre is currently underperforming we would suggest that an expansion is unlikely.
9. It is important to note that obtaining an accurate estimate for the turnover of the NTSC after the stage 5 or 6 expansion is critical to the impact assessment. It may be appropriate to apply sensitivity testing to the turnover estimate given the degree of uncertainty involved in projecting sales levels over a long time period (as recognised by DES).
10. We agree with the input assumptions for the redistribution of expenditure within the defined retail system (retail impact analysis) but it is not clear how these elements have been taken into account. As it stands, it appears that the impact assessment is largely based on professional judgment.
11. We broadly agree with the way that DES have expressed impacts – i.e. as the change in turnover in the first year of operation compared to the turnover that would have been achieved should the development not have proceeded. However, it would appear that 2016 rather than 2017 should be used as the first full year of operation. Using 2017 will have the result of lessening the impacts on competing centres.
12. We agree with the mitigating factors as described. Of the list in the DES report we would suggest that the resulting trading performance expressed in terms of the retail turnover density (RTD) is the most important consideration.
13. The floorspace per job estimates used to generate on site employment numbers are low (so will result in high job numbers) but are still within a reasonable range
14. The development is unlikely to introduce many new jobs to the system – rather, the effect is more akin to a redistribution of employment within the system. While we agree that from a project perspective the proposed development will result in employment generation, the fact that expenditure is being drawn from other retailers may result in job losses elsewhere in the retail system. Though it is not possible to model the reaction of individual businesses to the turnover loss, it is likely that the net employment effect in the system as a whole will be small if not zero.
15. Notwithstanding the comments above, the proposal may have merit in terms of providing more retail floorspace and hence boosting local employment opportunities if the other centres in the system do not have the capacity to meet the forecast growth in retail spending.
16. While we acknowledge that there is no accepted standard definition for significant impact, we would suggest that a one off trading impact of -10% in the first full year of operation is a reasonable threshold for significance. However, this should be viewed in tandem with the trading performance of the affected centre – i.e. the resultant RTD compared with published benchmarks with the proposed retail floorspace included in the system.
17. In our view the list of positive and negative effects included as part of the net community benefit test is not comprehensive. The effects are not quantified and the difference between effects from the proposal's perspective and net effects within the system is not clearly articulated. As it stands, the DES net community benefit test does not cover the elements nor does it follow the method we would expect (e.g. an analysis of net rent effects in the system).

HillPDA

1. While we agree with HillPDA that the trade area as described appears reasonable, it is ultimately a matter of judgment. Empirical evidence could be gathered from shopper surveys to support the trade area. Shopper surveys would provide such an evidence base. Alternatively, retail simulation modelling could define catchment areas for Narellan and other centres in the region
2. We agree with the use of Marketinfo for household expenditure data.
3. While we agree that retail expenditure is likely to continue to grow in the future, we would suggest that the rate of growth is likely to be lower than it has been since 1986 given the challenges faced by the retail industry (e.g. the fact that online retail growth is double that of conventional retail). A slowing rate of growth can be seen in ABS catalogue 8501.0 - Retail Trade, Australia, Mar 2013
4. We disagree with the HillPDA assertion that the DES population (and therefore expenditure) estimates are too high. Recently published BTS population forecasts for the trade area appear to broadly line up with the DES numbers.
5. As previously noted, when assessing total spending, the HillPDA assumption regarding future retail expenditure growth appear to be optimistic in that the growth trends observed since 1986 is expected to continue into the future.
6. We agree with HillPDA that the DES floorspace estimates for centres in the defined trade area are reasonable.
7. We disagree with the suggestion that DES have understated the floorspace at Spring Farm. DES figures appear to line up with the proposed Spring Farm Masterplan (as published on Camden Council's website)
8. For current sales data HillPDA uses 'Shopping Centre News'. We agree that this is a good source for turnover estimates. Using this data, we agree with HillPDA that the current turnover estimated for Narellan presented by DES appear to be on the low side.
9. We agree with the HillPDA position that it is appropriate to test the economic impacts a year after opening, once the development has reached a settled pattern of trading and therefore the first phase should be tested at 2016 rather than 2017 given that the EIA states that the first phase will be completed by the end of 2015.
10. The HillPDA figures for current RTD appear to be a little low. We would suggest using around $10,900 per sqm for a supermarket and around $6900 per sqm for mini majors. The closest Dan Murphy's store is in the Campbelltown Centre. A mini-major like Dan Murphy's could be trading as high as $13,000 per sqm.
11. Gravity modelling is appropriate to determine the likely retail impacts. SGS retail gravity modelling assumes that redirected turnover is a function of the competing offer of centres in the retail landscape where expenditure capture is determined by travel time (rather than distance used in the HillPDA model), the size of the centre, and its attractiveness as a retail destination determined by any attracting factors other than its size (such as opening hours, number of on-site car spaces etc.)
12. While we acknowledge that there is no accepted standard definition for significant impact, we would suggest that a one off trading impact of -10% in the first full year of operation is a reasonable threshold for significance. However, this should be viewed in tandem with the trading performance of the affected centre – i.e. the resultant RTD compared with published benchmarks with the proposed retail floorspace included in the system.
13. The fact that several centres (Oran Park, Harrington Plaza, Camden Town Centre, Mount Annan and Spring Farm) experience a turnover impact greater than 10% is a cause for concern. In particular, three centres (Camden, Mount Annan and Macarthur Square) are expected to experience negative growth in their trading levels between 2011 and 2016 following expansion of Narellan. While the latter two centres are currently trading above the benchmark, Camden is performing well below sub-regional indoor centres. Hence, the -5.9% shift (from 2011-16) in retail trade estimated by

HillPDA is a legitimate concern for the viability of Camden centre. This should be carefully considered by DP&I in this assessment of the planning proposal.

14. However, we would need to our own retail simulation modelling with adjusted population and expenditure figures, and adjusted RTD figures to confirm this.
15. We agree that is useful to also examine the changing nature of trading performance over time, however, we maintain that that most significant considerations in terms of retail impact are the change in turnover in the first full year of operation and the resultant RTD at that time.
16. While the impacts on traders in Narellan is not strictly a planning consideration in so far as they are all part of the same centre, there are implications for other centres, if the resultant trading performance of Narellan has been underestimated. HillPDA suggest that DES has underestimated impacts on Narellan. As a result, they suggest that assumed trading performance is higher than it should otherwise be and this has the effect of overestimating the impacts on other centres. Consistent with this argument, Urbis Retail Averages indicate that on average a sub-regional shopping centre (the current classification of the NTSC) has a higher RTD than a regional shopping (the classification of the NTSC after expansion), while the RTD for specialties in a regional shopping would be higher. However, these benchmark RTD figures suggest that the differences are small.
17. Both point in time impacts and current centre performance are relevant considerations for when interpreting results from economic impact assessment. In addition to the qualitative discussions above, it would be useful to compare the resultant RTDs of the other centres after the proposed expansion in Narellan with the benchmark RTDs for comparable centres in 2021. The latter measure should take into account the real growth in benchmark RTD over time. Based on the 0.6% per annum real growth in RTD (that HillPDA use to forecast turnovers), benchmark RTDs are expected to grow by over 6% from 2011-21. In comparison to this growth rate, Macarthur Square would also fall short
18. We agree that the proposed expansion in Narellan may result in a negative impact on the trading performance of the existing centre as a whole. However, certain type of retailers, such as supermarkets, may also benefit from the higher volume of patrons attracted by the new additions of the DDS and DS, particularly given that the proposed increase in supermarket floorspace is relatively marginal compared to the size of the proposed expansion. Overall, we suggest the net negative impact on Narellan centre is likely to be small and would not therefore have the effect of resulting in significantly lower impacts on competing centres compared with the DES analysis.
19. We agree with HillPDA that the DES net community benefit test falls short of the mark. However, as with the DES study, in our view the list of positive and negative effects included as part of the net community benefit test is not comprehensive. The effects are not quantified and the difference between effects from the proposal's perspective and net effects within the system is not clearly articulated. As it stands, the DES net community benefit test does not cover the elements nor does it follow the method we would expect (e.g. an analysis of net rent effects in the system).

Location IQ

1. We agree that a larger level of floorspace at Narellan would have a great impact on other centres (assuming viability and all other things being equal). However, as noted in Camden Councils letter to the Department, the calculations identified in the submissions are the potential maximum and not the actual floor space proposed. The draft DCP, Planning Proposal, and relevant studies, assessments, etc. are based on a proposed NTC expansion that would ultimately achieve a GLAR of approximately 88,000 sqm.
2. We disagree with the Location IQ assertion that DES has overestimated the future population. As previously noted, recent BTS population forecasts for the trade area appear to broadly line up with the DES numbers.
3. It should be noted that Forecast i.d. would have produced a set of population forecasts that are different (probably lower in this case) to the DP&I's 2010 Interim Population Forecasts that are used in the BTS Forecasts as LGA control totals.

4. We agree that an impact greater than 10% is normally considered significant. However, EIA needs to consider the resultant RTDs as well, as discussed earlier.
5. We agree that the assertion by Location IQ that the expansion at Narellan will come at the expense of future growth at other centres, such as Campbelltown – Macarthur. HillPDA finds that the turnover impact on Macarthur Square would be 11.3% after the stage 6 expansion. This is above the 10% threshold level and should be considered significant, particularly given that centre is currently trading slightly below the median of the RTDs of comparable centres.
6. An oversupply of department store and DDS floorspace is a legitimate concern, particularly if this will result in a delay in the proposed planned floorspace in growth areas, such as Leppington and Oran Park. However, this argument lacks a proper demand assessment and impact assessment for DS and DDS floorspace.
7. HillPDA's EIA suggests that the proposed expansion in 2021 would have a 10.5% impact on the turnover of the Leppington Major Centre, which is just above the 10% threshold level. SGS can not comment on the impact on the DS commodity group, given that the expansion at Narellan does not propose an additional department store.
8. We broadly agree with Location IQ that it would not be expected or reasonable for the Narellan trade area to reclaim all of the escape expenditure or retain the majority of spending. While we may expect some escape expenditure to be reclaimed it is natural to have a level of escape expenditure to higher order centres and similarly we agree that it does not justify the need for the proposed development at Narellan.

Urbis

1. While we agree with the Urbis observation that the future growth of Leppington will eat into the DES defined trade area to the north we do not agree that parts of the trade area reflect a somewhat 'artificial market' that would otherwise not be available to NTC if it was developed as intended. What is important, however, is that the change in market share for Narellan and competing centres is properly considered over time. For example, the resultant market share and RTD for Narellan in future with the proposed development at Narellan should not be such that it threatens its viability, role and function
2. We share the concern expressed by Urbis over the population forecasts and the apparent discrepancy between the DE#S figures and the Forecast i.d. numbers. However, recent BTS data appears to support the DES forecasts with population numbers for the defined area being broadly similar after accounting for boundary effects.
3. We agree with the Urbis position that the negative effects on Narellan that are suggested by HillPDA are probably overstated. The proposed development will result in an elevation of status for Narellan and while there will undoubtedly be some negative impact on individual retailers in Narellan, the net outcome for Narellan as a whole is unlikely to be near the 15%-20% stated by HillPDA.
4. The potential for a much higher level of floorspace to be developed at Narellan is significant. Obviously, all other things being equal, a higher floorspace level at Narellan would draw a higher level of expenditure away from other centres resulting in greater economic impacts.

Camden Council

1. While we may expect some escape expenditure to be reclaimed, it is natural to have a level of escape expenditure to higher order centres and, similarly, we suggest that it does not justify the need for the proposed development at Narellan.
2. While we acknowledge that there is no accepted standard definition for significant impact, we would suggest that a one off trading impact of -10% in the first full year of operation is a reasonable threshold for significance. However, this should be viewed in tandem with the trading performance of the affected centre – i.e. the resultant RTD compared with published benchmarks with the proposed retail floorspace included in the system

3. The fact that several centres (Oran Park, Harrington Plaza, Camden Town Centre, Mount Annan and Spring Farm) experience a turnover impact great than 10% is a cause for concern. In particular, three centres (Camden, Mount Annan and Macarthur Square) are expected to experience negative growth in their trading levels between 2011 and 2016 following expansion of Narellan. While the latter two centres are currently trading above the benchmark, Camden is performing well below sub-regional indoor centres. Hence, the -5.9% shift (from 2011-16) in retail trade estimated by HillPDA is a legitimate concern for the viability of Camden centre. This should be carefully considered by DP&I in this assessment of the planning proposal
4. Both point in time impacts and current centre performance are relevant. It would be useful for the economic impact analysis to compare the resultant RTDs of the other centres after the proposed expansion in Narellan with the benchmark RTDs for comparable centres in 2021. The latter measure should take into account the real growth in benchmark RTD over time. Based on the 0.6% per annum real growth in RTD (that HillPDA use to forecast turnovers), benchmark RTDs are expected to grow by over 6% from 2011-21. In comparison to this growth rate, Macarthur Square would also fall short.
5. While we acknowledge that the change in turnover from current levels to the first operational year of the expanded facility is a useful measure, we would argue that most significant measures are turnover impact in the first year of operation (with facility vs. without facility) combined with an assessment of trading performance (RTDs) at that time
6. We would also suggest that the HillPDA assumed retail expenditure growth figures are on the high side and that the rate of growth is likely to be lower than it has been since 1986 given the challenges faced by the retail industry (e.g. the fact that online retail growth is double that of conventional retail). A slowing rate of growth can be seen in ABS catalogue 8501.0 - Retail Trade, Australia, Mar 2013
7. We disagree with CCC's assertion that HillPDAs approach is 'conservative' as they have modelled a 'high impact scenario'. The 'high impact scenario' is based on an assumption that trading performance (RTD) at an expanded centre will not be significantly lower than the current centre. We would suggest that this is a sensible assumption rather than a conservative one.

SGS Conclusion

Trade area

The DES defined primary and secondary catchment areas appear reasonable but it is difficult to critically assess whether these areas are reasonable or not without knowing the percentage capture of retail expenditure within each area.

Population forecast data

Since the time of writing, new data has become available on existing population and population forecasts for the defined trade area. The NSW Bureau of Transport Statistics (BTS) has produced travel-zone-level (TZ) population forecasts for these areas. While there are a few boundary issues when comparing against the DES trade area, the BTS figures broadly line up with the DES figures

Cumulative impact

We note that the DES impact analysis examines the impacts of stage 5 and stage 6 independently. We would suggest that the cumulative impact of stages 5 and 6 should also be assessed. This is picked up in the HillPDA peer review and HillPDA go on to consider the combined effects of the two stages in their gravity modelling.

Current trading performance

The current trading performance as well as the anticipated trading level for Narellan appears to be underestimated in the DES report. Since stage 5 is proposed to include two additional full line DDSs, the expanded NTSC would be classified as a regional shopping centre, according to the shopping centre definitions in the Urbis Retail Averages. The typical RTD for a full-line supermarket and mini major within a regional shopping centre is around $10,900 per sqm and $6,945 per sqm respectively. The NTSC after the stage 5 expansion has potential to trade at around $6,260 per sqm (an average RTD for a regional shopping centre), which is about 6% higher than the $5,884 estimated by DES

HillPDA acknowledge this but go on to suggest that the impacts felt by existing traders in Narellan will be much higher than DES estimate and in the range of 15% to 20%. This will result in the net trading performance of the newly expanded centre being tempered somewhat and in turn this will lessen the impact felt by other centres We disagree with this position and suggest that the negative effects on Narellan suggested by HillPDA are probably overstated. The proposed development will result in an elevation of status for Narellan and while there will undoubtedly be some negative impact on individual retailers in Narellan, the net outcome for Narellan as a whole is unlikely to be near the -15%--20% stated by HillPDA.

Expression of impacts

We broadly agree with the way that DES have expressed impacts – i.e. as the change in turnover in the first year of operation compared to the turnover that would have been achieved should the development not have proceeded. However, it would appear that 2016 rather than 2017 should be used as the first full year of operation

While we acknowledge that there is no accepted standard definition for significant impact, we would suggest that a one off trading impact of -10% in the first full year of operation is a reasonable threshold for significance. However, this should be viewed in tandem with the trading performance of the affected centre – i.e. the resultant RTD compared with published benchmarks with the proposed retail floorspace included in the system

The fact that several centres (Oran Park, Harrington Plaza, Camden Town Centre, Mount Annan and Spring Farm) experience a turnover impact great than 10% is a cause for concern. In particular, three centres (Camden, Mount Annan and Macarthur Square) are expected to experience negative growth in their trading levels between 2011 and 2016 following expansion of Narellan. While the latter two centres are currently trading above the benchmark, Camden is performing well below sub-regional indoor centres. Hence, the -5.9% shift (from 2011-16) in retail trade estimated by HillPDA is a legitimate concern for the viability of Camden centre. This should be carefully considered by DP&I in this assessment of the planning proposal.

Effects over time

HillPDA also draw attention to the change in trading performance between now and the anticipated first full year of operation for the expanded centre. Both point in time impacts and current centre performance are relevant considerations when interpreting results from economic impact assessments. In addition to the qualitative discussions above, it would be useful to compare the resultant RTDs of the other centres after the proposed expansion in Narellan with the benchmark RTDs for comparable centres in 2021. The latter measure should take into account the real growth in benchmark RTD over time. Based on the 0.6% per annum real growth in RTD (that HillPDA use to forecast turnovers), benchmark RTDs are expected to grow by over 6% from 2011-21. In comparison to this growth rate, Macarthur Square would also fall short.

While we agree that retail expenditure is likely to continue to grow in the future, we would suggest that the rate of growth is likely to be lower than it has been since 1986 given the challenges faced by the retail industry (e.g. the fact that online retail growth is double that of conventional retail). A slowing rate of growth can be seen in ABS catalogue 8501.0 - Retail Trade, Australia, Mar 2013

NCB testing

In our view the list of positive and negative effects included as part of the DES net community benefit test is not comprehensive. The effects are not quantified and the difference between effects from the proposal's perspective and net effects within the system is not clearly articulated. As it stands, the DES net community benefit test does not cover the elements nor does it follow the method we would expect. The HillPDA analysis expands a little on the DES approach but again, there is no clear distinction of net effects, none of the elements are quantified and there is no assessment of the relative importance of listed costs and benefits.

SGS Summary

Based on the evidence presented in the documents reviewed, the proposed Narellan expansion does appear to result in significant economic impacts for some centres in the defined trade area.

While the DES report suggests that no centres are significantly impacted in either stage 5 or stage 6, the assumed trading performance of the proposed development appears to be on the low side and this will drive lower impacts. Other model inputs appear reasonable and we are comfortable that the criticism of the population forecasts used by DES in unfounded given that the numbers are broadly in line with recent BTS data.

In the HillPDA analysis, significant impacts are shown for some centres both in the 2016 test (stage 5) and the 2021 test (stage 5 and stage 6). HillPDA point to retail expenditure growth (which drives turnover growth at the centres) and suggests that this obviates 'point in time' impacts with the shift in turnover in the periods 2011-2016 and 2011-2021 being positive in all cases except Camden (which shows a -5.9% shift in the period 2011-2016 and -0.1% shift in the period 2011-2021). However, we should point out that Camden is performing well below sub-regional indoor centres and so the 5.9% decline (from 2011-16) in retail trade estimated by HillPDA is a legitimate concern for the viability of this centre. In addition, we suggest that the HillPDA retail expenditure growth forecasts are optimistic. Lower retail growth forecasts would result in greater negative shifts in turnover over time.

It would also be useful to assess the resultant RTDs for all affected centres in the first full year of operation for the expanded centre. These should be compared against benchmark RTDs for relevant centre types. This measure should take into account the real growth in benchmark RTD over time. If we accept the 0.6% per annum real growth in RTD (that HillPDA use to forecast turnovers), benchmark RTDs are expected to grow by over 6% in the period 2011-21. Against RTDs inflated in this way, Macarthur Square would also fall short.

Although we have not run our own retail simulation model, based on the balance of evidence available from the reviewed reports, there appear to be significant impacts at Camden and Macarthur Square. For these centres it may be advisable for further qualitative and quantitative testing to be conducted to assess their ability to accommodate the impacts without jeopardising their viability, role and function. If conducted, this testing should take into account the issues emerging from this peer review.

1 INTRODUCTION

1.1 Background

The planning proposal applies to land known as the Landturn 'Triangle' site at 339 Camden Valley Way, Narellan. The planning proposal applies to both the Landturn site and the existing shopping centre site i.e. it is proposed to amend certain development standards at the existing town shopping centre.

The Landturn site is located is located to the north of the existing shopping centre on the other side of Camden Valley Way, which contains approximately 34,900sqm of retail floorspace. Both sites are in common ownership, and it is proposed that the two sites would be connected by a pedestrian bridge. It is anticipated that the subject land will accommodate approximately 45,000sqm of additional retail floorspace.

The site is currently zoned B5 Business Development under the provisions of Camden LEP 2010 and retail floor space is limited to 11,300sqm. It is proposed that the site be rezoned B2 Local Centre and the limit on retail floor space be removed.

In January 2012, Camden Council submitted a planning proposal to the Department to amend the Camden LEP 2010 to rezone the Landturn 'Triangle' site to enable the expansion of the existing Narellan Town Centre, creating approximately 45,000sqm of additional retail floor space. The Gateway determination approved the progression of the planning proposal for the purposes of public exhibition, subject to conditions (3 February 2012). The planning proposal was publicly exhibited between 17 October 2012 and 30 November 2012.

A revised Gateway Determination was issued in October 2012, which allowed an amended proposal to proceed. The revised proposal increased and extended the operation of proposed height controls and introduced FSR standards. The planning proposal was subsequently exhibited between 17 October 2012 and 30 November 2012.

The planning proposal is supported by detailed economic studies prepared by DES and a peer review by Hill PDA. The studies conclude there is sufficient demand within the primary trade area to justify the planning proposal.

Both Liverpool and Campbelltown Councils, as well as BBC Consulting Planners and Urbis (acting on behalf of the Macarthur Square Shopping Centre and the Campbelltown Mall Shopping Centre), objected to the proposal, among other things due to the perceived adverse impact upon the viability of existing and planned centres within the South West of Sydney, including Campbelltown, Oran Park and Leppington.

1.2 Scope of study

The department is seeking independent advice on the economic impact of the planning proposal, based on a review of the retail analysis and economic impact assessment undertaken by DES and the subsequent peer reviews undertaken by Hill PDA. The review is to have particular regard to:

- The conclusions on impacts to existing and planned centres within the South West of Sydney, including Oran Park, Leppington and Campbelltown
- Submissions received from Liverpool and Campbelltown Councils

- Submissions received from BBC Consulting Planners and Urbis (acting on behalf of the Macarthur Square Shopping Centre and the Campbelltown Mall Shopping Centre.

The department is not seeking an overall recommendation on the merits of proceeding with the rezoning or its compliance with other strategic frameworks. The review is to provide independent assessment of the retail analysis and economic impact modelling undertaken by Hill PDA and DES, in particular the elements of this modelling that has been criticised by submissions. The reviews conclusions will assist the department in understanding the reliability of these impact assessments. These economic impact assessments will be one, albeit an important one, factor in the overall strategic planning decision.

The key documents reviewed as part of this study are:

- **Deep End Services,** Narellan Town Centre Economic Impact Assessment, 30th May 2012
- **HillPDA**, Narellan Town Centre Economic Impact Assessment Peer Review, 18th July 2012
- **BBC Consulting Planners**, Submission on behalf of the GPT Group (including economic impact assessment by **Location IQ**), 30th November 2012
- **Urbis,** letter to Camden Council, 21st November 2012
- **Camden City Council,** letter to NSW DP&I, 2nd April 2013

2 DEEP END SERVICES

The Deep End Services (DES) report is structured into 8 sections:

- Executive summary
- Introduction
- Narellan Town Centre
- Planning context
- Catchment analysis
- Existing and planned centres
- Economic impact assessment
- Net community benefit

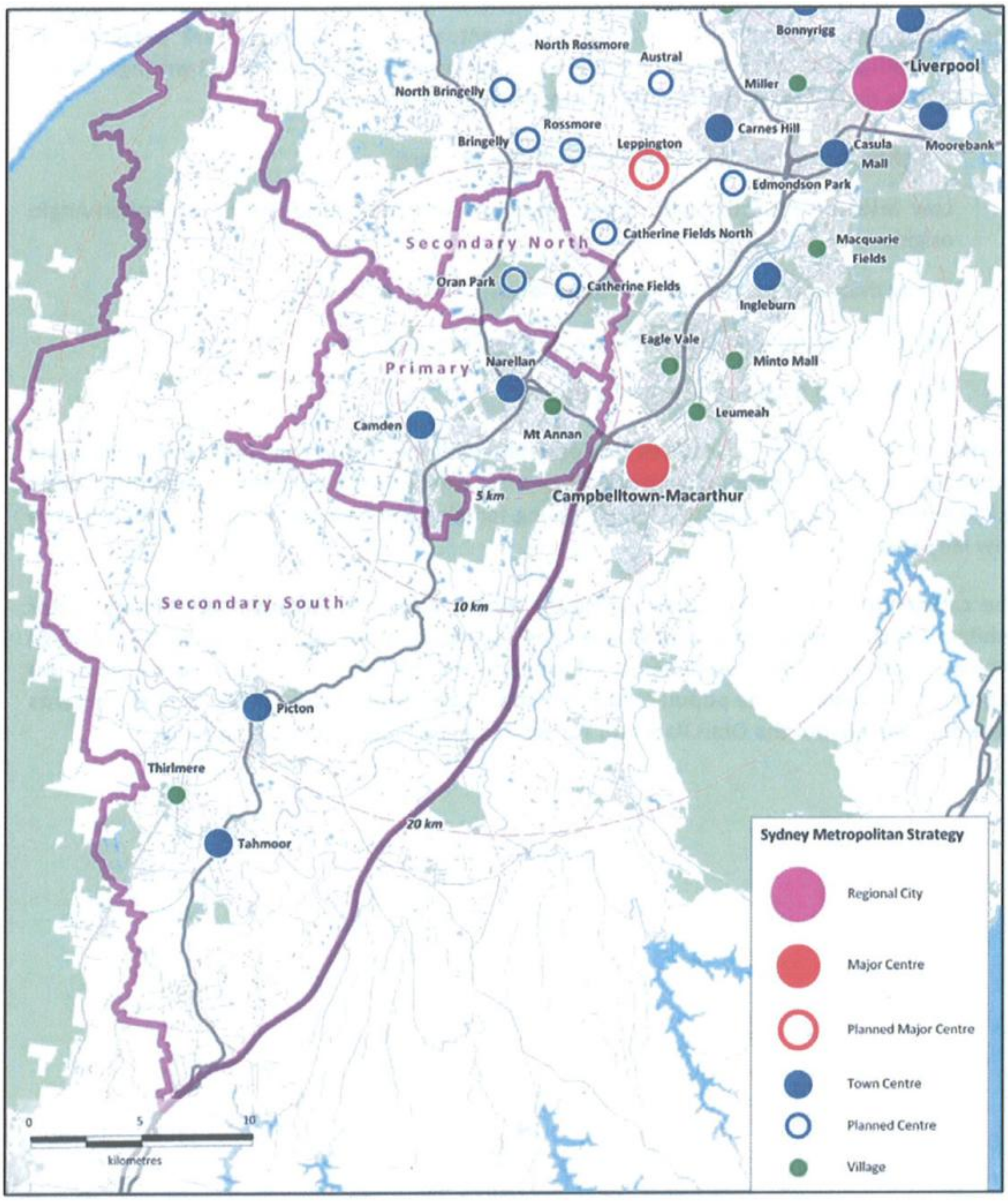
This report focuses on the parts that are important for economic impact assessment – i.e. sections 5, 6, 7 and 8.

2.1 Catchment Analysis

DES define the catchment area for the activity centres according to:

- Composition of the existing, centre and the proposed new elements to be added
- Location of competing centres and the quality and range of retail tenancies on offer within and beyond the catchment
- Urban and natural geography including the pattern and mix of residential and non-residential areas, road networks, topography and other physical barriers
- The provision of transport and parking facilities.
- A central position with respect to ongoing urban growth in and around Narellan and in the SWGC located immediately to the north
- Excellent transport access for people living in the Remembrance Drive corridor, which extends from the SWGC through Narellan and Camden and towards Tahmoor and the rural areas of Wollondilly Shire
- An entrenched position as the main location for discount department store shopping and other higher-order retailing for people living to the west of the Hume Highway corridor;
- The presence of Macarthur Square, Campbelltown Mall and other shopping components that make up the Major Centre at Campbelltown-Macarthur, which together provide regional-level shopping for residents ina wide catchment that extends into the municipalities of Camden and Wollondilly.

The catchment area resulting from this process is shown in the map below.



Source: MapInfo; Deep End Services

The Primary sector comprises the suburbs of Narellan, Camden, Mt Annan, Elderslie, Spring Farm and rural areas immediately to the east of Camden, and extends 3km to the north –east and approximately l0km to the south-west of the NTSC.

The Secondary North sector incorporates the southernmost precincts of the SWGC, consisting of Oran Park, Mary lands, Catherine Fields and Turner Road. The Secondary South sector extends southwards and westwards from the NTSC and includes townships and rural parts of Wollondilly Shire. The main townships within this sector are Picton, Tahmoor, Thirlmere, Bargo and The Oaks, with retail shopping concentrations at Picton and Tahmoor. Access to Narellan is via Remembrance Drive and the Camden Bypass. The boundary for the Secondary South sector is defined by the Hume Highway to the east, and the national parks located to the south and the west.

The DES defined primary and secondary catchments areas appear reasonable but it is difficult to critically assess whether these catchment areas are reasonably or not without knowing the percentage capture of retail expenditure within each area (i.e. how thin is the secondary catchment?). Ultimately, the defined catchment area appears to be the result of judgement rather than an assessment based on empirical evidence. Shopper surveys would provide such an evidence base. Alternatively, retail simulation modelling could define catchment areas for Narellan and other centres in the region.

Demographic analysis

The demographic data for the catchment is sourced from the 2006 Census. Demographic analysis is shown below.

Table 6: NTSC catchment area demographic profile, Census 2006

Demographic characteristic	Primary		Secondary North		Secondary South		Total catchment		Sydney
	No	%	No	%	No	%	No	%	No/%
Usually resident population	45,488	-	2,024	-	28,243	-	75,755	-	4,117,947
Total occupied dwellings	14,535	-	575	-	9,163	-	24,273	-	1,413,941
Usually resident persons per dwelling	3.13	-	3.52	-	3.08	-	3.12	-	2.91
Age group - usual residents									
0-9	8,000	18%	260	13%	4,332	15%	12,592	17%	13%
10-19	7,258	16%	348	17%	4,527	16%	12,133	16%	13%
20-29	5,537	12%	254	13%	3,085	11%	8,876	12%	15%
30-39	7,921	17%	263	13%	4,041	14%	12,225	16%	16%
40-49	6,701	15%	292	14%	4,318	15%	11,311	15%	15%
50-59	4,893	11%	328	16%	3,780	13%	9,001	12%	12%
60-69	2,552	6%	179	9%	2,269	8%	5,000	7%	8%
70+	2,626	6%	100	5%	1,891	7%	4,617	6%	9%
Total	45,488	100%	2,024	100%	28,243	100%	75,755	100%	100%
Country of birth - usual residents									
Australia	36,958	85%	1,498	78%	23,201	87%	61,657	85%	66%
United Kingdom	2,616	6%	58	3%	1,489	6%	4,163	6%	5%
New Zealand	467	1%	26	1%	284	1%	777	1%	2%
Italy	198	0%	83	4%	129	0%	410	1%	1%
Other	3,324	8%	254	13%	1,572	6%	5,150	7%	27%
Total(1)	43,563	100%	1,919	100%	26,675	100%	72,157	100%	100%
Annual individual income - usual residents(2)									
Nil or negative	2,606	8%	148	10%	1,913	10%	4,667	9%	10%
$1-$7,800	2,422	8%	89	6%	1,569	8%	4,080	8%	7%
$7,800 - $13,000	3,168	10%	182	13%	2,574	13%	5,924	11%	13%
$13,000 - $20,800	7,872	25%	470	32%	5,578	28%	13,920	26%	25%
$20,800 - $52,000	7,329	23%	343	24%	4,061	20%	11,733	22%	20%
$52,000 - $83,200	5,910	19%	161	11%	3,093	15%	9,164	17%	15%
$83,200 - $104,000	1,194	4%	30	2%	681	3%	1,905	4%	4%
$104,000 or more	1,156	4%	27	2%	568	3%	1,751	3%	6%
Total(1)	31,657	100%	1,450	100%	20,037	100%	53,144	100%	100%
Average per capita income	$26,883	-	$23,185	-	$24,915	-	$26,061	-	$28,580
Variation from Sydney average	-	-5.9%	-	-18.9%	-	-12.8%	-	-8.8%	-
Occupied private dwelling tenure									
Fully owned	3,375	24%	290	52%	2,992	34%	6,657	28%	33%
Being purchased	7,898	56%	188	33%	4,322	49%	12,408	53%	34%
Rented	2,821	20%	84	15%	1,585	18%	4,490	19%	33%
Total(1)	14,094	100%	562	100%	8,899	100%	23,555	100%	100%
Household composition									
Couples with children	7,072	48%	322	53%	4,089	44%	11,483	46%	36%
Couples without children	3,562	24%	148	25%	2,568	27%	6,278	25%	24%
One parent family	1,769	12%	64	11%	975	10%	2,808	11%	11%
Other family	106	1%	0	0%	65	1%	171	1%	1%
Lone person	2,025	14%	58	10%	1,540	16%	3,623	15%	23%
Group	261	2%	11	2%	130	1%	402	2%	4%
Total(3)	14,795	100%	603	100%	9,367	100%	24,765	100%	100%
Motor vehicle ownership per dwelling									
None	541	4%	14	3%	430	5%	985	4%	14%
One	3,844	27%	90	16%	2,350	27%	6,284	27%	40%
Two	6,913	49%	223	40%	3,586	41%	10,722	46%	33%
Three or more	2,864	20%	229	41%	2,472	28%	5,565	24%	13%
Total(1)	14,162	100%	556	100%	8,838	100%	23,556	100%	100%

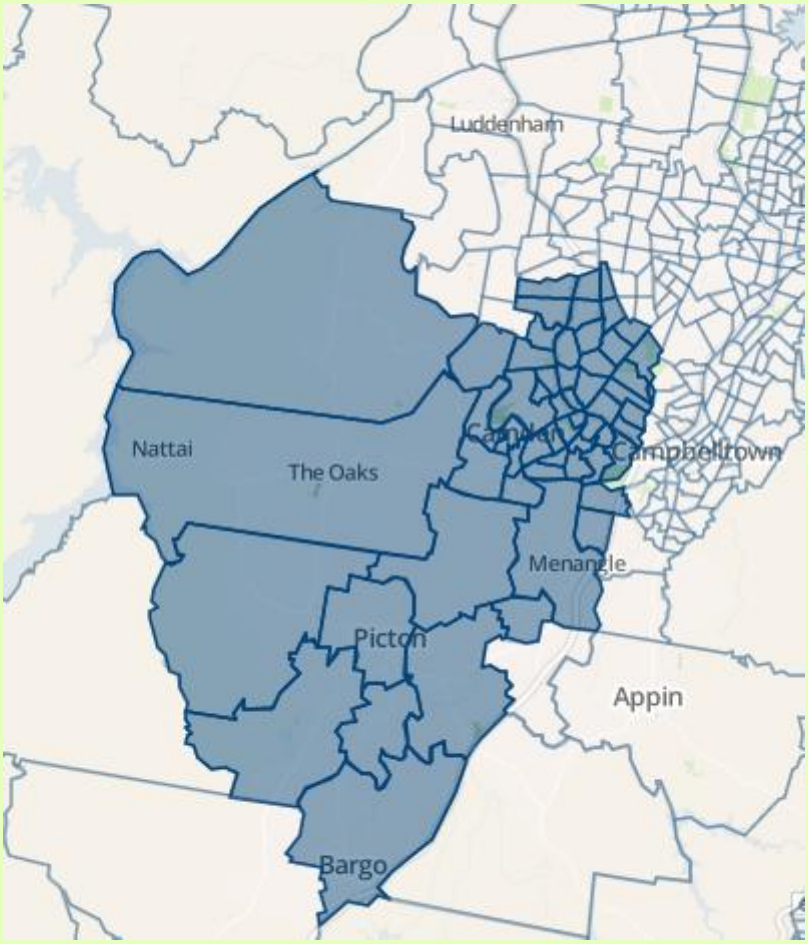
Notes:
(1) Excludes not stated
(2) 15 years and over
(3) Persons in occupied private dwellings

Source: Deep End Services; Australian Bureau of Statistics

While the use of ABS Census data and the summary presented in the DES report is sound, it is not clear how this demographic information is used given that all household expenditure data is sourced from MDS Marketinfo.

Population estimates for the defined catchment area have been sourced from a combination of ABS ERP data, ID Consulting population forecasts for Camden and Wollondilly, recent lot production rates, expected lot yields in the SWGC, lot production data sourced from the MDP.

Since the time of writing of the DES report, new data has become available on existing population and population forecasts for the defined trade area. The NSW Bureau of Transport Statistics (BTS) has produced travel-zone-level (TZ) population forecasts for these areas. While there are a few boundary issues when comparing against the DES trade area[1], the BTS figures broadly line up with the DES figures.



Year	2006	2011	2016	2021	2026	**2011-2016**	**2011-2021**
BTS pop forecast for MTA	78,922	95,306	134,074	165,774	199,675	38,768	70,468
DES pop forecast for MTA	79,089	87,095	120,075	154,605	181,976	32,980	67,510

Population forecasts for each part of the catchment area are shown below.

1 Our Secondary North catchment has a slightly larger catchment to the west of Northern Road (TZ 1388 and 1390). Our Secondary South Trade Area does not extend as far north as the DES Secondary South and does not include Warragamba village Our Secondary South Trade Area includes additional area to the west of Thirlmere. Our Secondary South Trade Area eastern boundary is similar to the DES boundary to the extent that it follows the motorway, but the Douglas Park Travel Zone (1444) has not been included as at least 50% of this TZ extends to the east of the highway and so this TZ has been discounted.

Table 7: Catchment area population, 2006-2026

Catchment area sector	2006	2011	2017	2021	2026
	Population				
Primary	45,389	50,697	60,268	66,796	71,186
Secondary North	2,200	2,635	23,635	50,244	71,389
Secondary South	31,500	33,764	36,172	37,566	39,401
Total	**79,089**	**87,095**	**120,075**	**154,605**	**181,976**
	Population growth (No. per annum)				
Primary	-	1,062	1,595	1,632	878
Secondary North	-	87	3,500	6,652	4,229
Secondary South	-	453	401	348	367
Total	-	**1,601**	**5,497**	**8,633**	**5,474**
	Population growth (% per annum)				
Primary	-	2.2%	2.9%	2.6%	1.3%
Secondary North	-	3.7%	44.1%	20.7%	7.3%
Secondary South	-	1.4%	1.2%	0.9%	1.0%
Total	-	**1.9%**	**5.5%**	**6.5%**	**3.3%**

Source: Deep End Services; Australian Bureau of Statistics; Dart West Developments; NSW Govt Dept of Planning & Infrastructure; forecast i.d.

DES adopts the definition of shopfront retail as used by the ABS in carrying out the 1991/92 Retail Census and the 1998/99 Retail Industry Survey, with auto accessories retailers included and marine equipment and motor vehicle retailers excluded used to estimate the current and future size of the retail market generated by residents of the catchment area

DES uses small area spending information supplied by Market Data Systems (MDS) which is derived from a micro-simulation model based on a number of sources including the ABS Household Expenditure Survey (HES), the Census of Population and Housing and National Accounts data. The MDS product is referred to as MarketInfo 2006/ 07 and represents spending propensity on a wide range of retail items at the small area geographic level for the year ending June 2007

DES subscribes to the Detailed Consumer Spending series produced by Deloitte Access Economics on a quarterly basis for all states in Australia. The data series extends back to 1983/84 and includes forecasts to 2020/21 for 47 commodity items used in the ABS National Accounts. These estimates and forecasts are used to bring the MDS data up to date (to 2011) and then to project this data out to 2021.

SGS supports the use of 06/07 MDS MarketInfo data as source for household expenditure data. The use of Deloitte Access Economics data to bring the Marketinfo numbers up to date also appears sound.

Table 8: Catchment area average retail spending per capita by commodity type 2011

Spending category	Primary	Secondary North	Secondary South	Total	Sydney	Australia
Spend per capita						
ESGs[1]	$3,725	$3,766	$3,780	$3,748	$3,717	$4,114
Takeaway food	$1,077	$987	$1,017	$1,051	$1,093	$841
Takeaway liquor	$801	$742	$792	$795	$804	$649
Dining out	$1,095	$936	$1,040	$1,069	$1,336	$1,035
Total food	**$6,698**	**$6,431**	**$6,630**	**$6,663**	**$6,951**	**$6,638**
Auto accessories	$146	$160	$163	$153	$131	$119
Fashion	$1,333	$1,290	$1,287	$1,314	$1,402	$1,317
Furniture & furnishings	$656	$513	$609	$633	$607	$610
Hardware & garden	$653	$562	$620	$638	$507	$471
Health & beauty	$547	$535	$549	$547	$592	$629
Home appliances & entertainment	$1,115	$1,002	$1,028	$1,078	$1,088	$1,148
Homewares	$229	$208	$226	$227	$222	$210
Non-food groceries	$467	$436	$456	$462	$439	$436
Reading & writing	$459	$438	$448	$454	$525	$425
Recreational goods	$329	$278	$303	$317	$271	$267
Retail services	$496	$471	$488	$492	$560	$486
Total non-food & services	**$6,429**	**$5,894**	**$6,176**	**$6,315**	**$6,345**	**$6,119**
Total retail	**$13,127**	**$12,325**	**$12,805**	**$12,978**	**$13,296**	**$12,757**
Comparison to Sydney average						
Total food	-3.6%	-7.5%	-4.6%	-4.1%		
Total non-food & services	1.3%	-7.1%	-2.7%	-0.5%		
Total retail	**-1.3%**	**-7.3%**	**-3.7%**	**-2.4%**		

Note:
[1]ESGs = Edible Supermarket Goods

Source: Deloitte Access Economics; Market Data Systems

2.2 Existing & planned centres

All relevant activity centres within and beyond the catchment area have been inspected during the preparation of this EIA, with land use and floorspace estimates compiled as at April 2012. Floorspace information has been sourced from a number of sources including:

- New South Wales and Australian Capital Territory Shopping Centre Directory (PCA, 2011/2)
- Shopping Centre News
- DES internal databases.

Table 10: Local activity centres

Precinct	Total retail floorspace[1] (sqm)	Major tenancies	Dist. from Narellan (km)
Regional city			
Liverpool	140,000	Myer (18,766), Target (8,291), Big W (8,250), Woolworths (3,659), Coles (3,876), ALDI (1,400)	27.8
Major Centre			
Campbelltown-Macarthur	171,118	David Jones (12,243), Big W (8,792), Target x2 (7,093, 4,450), Kmart (8,224), Woolworths x3 (4,248, 4,185, 3,883), Coles x2 (3,760, 3,825), Bunnings (11,200), ALDI (1,298)	8.1
Town Centres			
Narellan	31,784	Big W(6,536), Woolworths (3,831), Coles (3,398)	-
Camden (rural)	23,024	Target Country (2,000), Woolworths (3,920), Coles (2,929)	4.5
Tahmoor (rural)	12,560	Woolworths (3,520), Bi Lo (2,425), ALDI (1,450)	32.7
Picton (rural)	9,572	Coles (2,893), IGA (1,310)	24.7
Villages			
Mt Annan	13,584	Woolworths (3,660), Coles (3,220), ALDI (1,274)	3.0
Eagle Vale	6,636	Woolworths (4,306)	13.0
Thirlmere (rural)	2,824	IGA (469)	31.5
Small Villages			
Rosemeadow-Ambarvale	7,374	Woolworths (3,677), ALDI (1,597)	11.7
Harrington Park	3,600	Coles (2,185)	2.2
Bargo (rural)	2,000	IGA (250)	41.0
The Oaks (rural)	1,500	IGA (350)	20.1
Raby	1,435	IGA (880)	14.5
Bulky goods			
Campbelltown bulky goods	58,173	Harvey Norman, Fantastic Furniture, The Good Guys, Nick Scali	9.2
Narellan periphery	20,380	Bunnings	-
Turner Road	11,264	Masters	3.1

Notes:
[1] Excludes upper level floorspace, office buildings, vacant & non-retail

The report notes that where floorspace figures are unavailable from published or other sources, estimates have been made through on-street observations, shop front surveys and using online e-satellite imagery.

The steps that DES followed to obtain the floorspace estimates appear to be sound

The DES report profiles each centre in terms of its floorspace provision, its retail profile and its function. Several proposals have been identified which are relevant to the consideration of future sales and impacts of the proposed NTSC expansion. Proposed developments described are:

- Spring Farm
- Tahmoor
- Oran Park Town Centre
- Gregory Hills
- Turner Rd
- Camden Town Centre
- Campbelltown Macarthur
- Leppington Major Centre
- Emerald Hill
- Catherine Fields and Catherine Fields North

Sales estimates are produced through the following

- Detailed inspections and land use surveys of the centres and precincts
- Publicly available centre-specific information contained in sources such as:
- Property Council of Australia - NSW & ACT Shopping Centre Directory, 2011

- Shopping Centre News
- Annual reports and/or investor presentations made by shopping cent re owners
- Industry averages
- Experience in working with retailers located in some of the centres
- Internal databases

Table 11: Local activity centres, floorspace distribution by product category, May 2012

	Floorspace (sqm)																	
	Food					Non-food & services												
Activity Centre	ESGs	Takeaway food	Takeaway liquor	Dining	Total food	Fashion	Auto acc.	Furniture & furn.	Hardware & garden	Health & Beauty	Home appliances & entertainment	Homewares	Non-food groceries	Reading & writing	Rec. goods	Retail services	Total non-food & services	Total retail
Primary																		
Narellan Town Centre	7,903	1,351	713	1,465	11,431	8,519	314	997	640	1,777	2,052	1,469	878	512	1,268	1,925	20,353	31,784
Narellan Town Shopping Centre	7,593	1,021	437	925	9,975	8,375	136	911	616	1,777	1,986	1,389	878	512	1,208	1,415	19,205	29,180
Narellan TC periphery	310	330	276	540	1,456	144	178	86	24	0	66	80	0	0	60	510	1,148	2,604
Narellan other	80	610	0	570	1,260	360	36	4,920	10,113	0	2,052	438	0	0	1,201	0	19,120	20,380
Camden Town Centre	5,854	1,350	545	2,145	9,895	3,093	8	1,232	401	1,311	856	1,467	662	720	1,204	2,175	13,129	23,024
Harrington Plaza	1,903	85	66	440	2,494	139	4	20	42	329	64	82	207	64	42	115	1,106	3,600
Mount Annan	6,666	1,455	722	635	9,478	513	5	25	179	991	215	295	746	301	101	735	4,106	13,584
Total Primary	**22,407**	**4,851**	**2,045**	**5,255**	**34,557**	**12,623**	**367**	**7,194**	**11,375**	**4,408**	**5,240**	**3,750**	**2,493**	**1,598**	**3,815**	**4,950**	**57,814**	**92,372**
Secondary South																		
Thirlmere	706	250	489	180	1,625	69	5	17	200	149	26	158	72	129	128	245	1,199	2,824
Picton	3,319	660	461	715	5,155	720	10	277	523	411	159	597	383	226	330	780	4,417	9,572
Tahmoor	5,835	815	255	560	7,465	557	9	109	487	871	342	478	705	419	316	800	5,095	12,560
Total Secondary South	**9,861**	**1,725**	**1,204**	**1,455**	**14,245**	**1,347**	**24**	**403**	**1,211**	**1,432**	**527**	**1,234**	**1,160**	**775**	**774**	**1,825**	**10,711**	**24,956**
Secondary North																		
Turner Road Precinct	0	80	0	0	80	0	0	1,974	7,237	0	1,974	0	0	0	0	0	11,184	11,264
Total Secondary North	**0**	**80**	**0**	**0**	**80**	**0**	**0**	**1,974**	**7,237**	**0**	**1,974**	**0**	**0**	**0**	**0**	**0**	**11,184**	**11,264**
Total catchment	**32,268**	**6,656**	**3,250**	**6,710**	**48,883**	**13,970**	**391**	**9,571**	**19,823**	**5,840**	**7,740**	**4,984**	**3,653**	**2,373**	**4,590**	**6,775**	**79,709**	**128,592**
Beyond																		
Campbelltown Town Centre & periphery	24,133	5,635	2,691	5,778	38,236	47,937	1,420	6,120	11,004	10,688	15,097	14,251	3,022	5,092	10,841	7,411	132,882	171,118
Campbelltown Mall	8,750	736	514	300	10,300	11,790	202	908	900	3,476	2,971	3,138	1,124	885	2,705	954	29,052	39,352
Macarthur Square	8,213	1,662	1,601	1,523	12,999	26,717	198	1,312	883	4,539	7,578	6,170	982	2,312	4,912	2,661	58,265	71,264
Marketfair	4,354	390	140	160	5,044	1,799	0	102	93	531	98	243	350	240	226	320	4,002	9,046
Campbelltown remainder	2,816	2,847	436	3,795	9,893	7,630	1,020	3,798	9,128	2,142	4,452	4,700	566	1,655	2,998	3,475	41,564	51,457
Campbelltown bulky goods	0	1,460	0	1,000	2,460	338	2,240	29,471	2,125	0	11,516	323	302	200	9,199	0	55,713	58,173
Rosemeadow - Ambarvale	4,322	190	282	80	4,874	242	13	75	118	541	160	278	507	245	112	210	2,500	7,374
Kearns NAC	599	120	190	0	909	13	0	0	7	47	13	10	60	67	10	60	286	1,195
Raby NAC	731	245	0	0	976	18	0	0	9	125	18	12	79	72	12	115	459	1,435
Claymore NAC	666	120	180	0	966	18	0	0	9	172	18	12	81	72	12	0	394	1,360
Eagle Vale Marketplace	3,459	545	369	0	4,374	164	11	55	98	645	141	219	415	222	103	190	2,263	6,636
Total beyond	**33,910**	**8,315**	**3,712**	**6,858**	**52,795**	**48,729**	**3,684**	**35,721**	**13,369**	**12,218**	**26,962**	**15,103**	**4,467**	**5,969**	**20,288**	**7,986**	**194,496**	**247,291**

Source: Deep End Services

Table 12: Local activity centres, sales estimates (2010/11) by major spending category

Activity Centre	Floorspace (sqm)			Estimated sales 2010/11 ($m)($2011)			Trading level ($/sqm)		
	Food	Non-food & services	Total retail	Food	Non-food & services	Total retail	Food	Non-food & services	Total retail
Primary									
Narellan Town Centre	11,431	20,353	31,784	87.8	116.9	204.7	$7,680	$5,744	$6,440
Narellan Town Shopping Centre	9,975	19,205	29,180	81.2	113.5	194.7	$8,144	$5,908	$6,672
Narellan TC periphery	1,456	1,148	2,604	6.6	3.4	10.0	$4,500	$3,000	$3,839
Narellan Other	1,260	19,120	20,380	6.9	37.8	44.7	$5,500	$1,975	$2,193
Camden TC	9,895	13,129	23,024	71.0	64.9	135.9	$7,174	$4,943	$5,902
Harrington Plaza	2,494	1,106	3,600	15.3	5.8	21.1	$6,143	$5,228	$5,862
Mount Annan	9,478	4,106	13,584	87.9	29.7	117.6	$9,270	$7,242	$8,657
Total primary	**34,557**	**57,814**	**92,372**	**268.9**	**255.1**	**524.0**	$7,781	$4,412	$5,672
Secondary South									
Tahmoor	7,465	5,095	12,560	63.9	29.7	93.6	$8,555	$5,831	$7,450
Picton	5,155	4,417	9,572	34.6	19.7	54.3	$6,718	$4,463	$5,678
Thirlmere	1,625	1,199	2,824	8.5	3.6	12.2	$5,257	$3,038	$4,315
Total Secondary South	**14,245**	**10,711**	**24,956**	**107.0**	**53.1**	**160.1**	**$7,514**	**$4,954**	**$6,415**
Secondary North									
Turner Rd bulky goods	80	11,184	11,264	0.4	24.6	25.0	$5,200	$2,200	$2,221
Total Secondary North	**80**	**11,184**	**11,264**	**0.4**	**24.6**	**25.0**	**$5,200**	**$2,200**	**$2,221**
Total catchment	**48,883**	**79,709**	**128,592**	**376.3**	**332.8**	**709.1**	**$7,699**	**$4,175**	**$5,514**
Beyond									
Campbelltown-Macarthur	38,236	132,882	171,118	295.8	654.9	950.6	$7,736	$4,928	$5,555
Macarthur Square	12,999	58,265	71,264	117.4	356.9	474.4	$9,033	$6,126	$6,656
Campbelltown Mall	10,300	29,052	39,352	87.3	131.4	218.7	$8,472	$4,523	$5,556
Marketfair Campbelltown	5,044	4,002	9,046	21.6	16.3	37.9	$4,272	$4,077	$4,186
Campbelltown remainder	9,893	41,564	51,457	69.5	150.2	219.8	$7,030	$3,614	$4,271
Campbelltown bulky goods	2,460	55,713	58,173	13.5	195.0	208.5	$5,500	$3,500	$3,585
Eagle Vale	4,374	2,263	6,636	41.9	17.2	59.2	$9,584	$7,617	$8,914
Rosemeadow-Ambarvale	4,874	2,500	7,374	39.0	15.5	54.5	$8,001	$6,193	$7,388
Claymore	966	394	1,360	5.0	1.8	6.8	$5,189	$4,485	$4,985
Kearns	909	286	1,195	5.2	1.4	6.7	$5,774	$4,952	$5,577
Raby	976	459	1,435	6.0	2.3	8.3	$6,167	$4,996	$5,793
Total beyond	**52,795**	**194,496**	**247,291**	**406.5**	**888.0**	**1,294.6**	**$7,700**	**$4,566**	**$5,235**

Source: Deep End Services

Table 13: Local activity centres, sales estimates (2016/17) by major spending category – no change scenario

Activity Centre	Floorspace (sqm) Food	Floorspace (sqm) Non-food & services	Floorspace (sqm) Total retail	Forecast sales ($m)($2011) Food	Forecast sales ($m)($2011) Non-food & services	Forecast sales ($m)($2011) Total retail	Trading level ($/sqm) Food	Trading level ($/sqm) Non-food & services	Trading level ($/sqm) Total retail
Primary									
Narellan Town Centre	11,431	20,353	31,784	92.5	120.5	213.0	$8,093	$5,920	$6,701
Narellan Town Shopping Centre	9,975	19,205	29,180	84.6	116.6	201.1	$8,478	$6,070	$6,893
Narellan TC periphery	1,456	1,148	2,604	7.9	3.9	11.8	$5,455	$3,401	$4,549
Narellan Other	1,260	19,120	20,380	8.6	43.7	52.3	$6,807	$2,286	$2,565
Spring Farm	3,375	1,625	5,000	20.0	9.2	29.2	$5,933	$5,676	$5,849
Camden TC	9,895	13,129	23,024	83.3	70.3	153.6	$8,421	$5,356	$6,673
Harrington Plaza	2,494	1,106	3,600	16.4	6.5	23.0	$6,596	$5,889	$6,378
Mount Annan	9,478	4,106	13,584	94.3	32.5	126.8	$9,948	$7,923	$9,336
Total primary	**37,932**	**59,439**	**97,372**	**315.2**	**282.8**	**597.9**	**$8,309**	**$4,757**	**$6,141**
Secondary South									
Tahmoor	9,442	12,247	21,689	80.1	52.3	132.4	$8,480	$4,273	$6,104
Picton	4,855	7,217	12,072	36.6	27.9	64.5	$7,543	$3,862	$5,342
Thirlmere	1,625	1,199	2,824	9.3	3.7	13.1	$5,740	$3,108	$4,623
Total Secondary North	**15,922**	**20,663**	**36,585**	**126.0**	**83.9**	**209.9**	**$7,915**	**$4,062**	**$5,739**
Secondary North									
Turner Rd bulky goods	400	11,184	11,584	4.0	40.1	44.2	$10,053	$3,589	$3,812
Oran Park	5,862	3,554	9,416	38.7	22.7	61.4	$6,607	$6,383	$6,522
Gregory Hills	4,625	2,375	7,000	27.8	13.7	41.5	$6,001	$5,776	$5,925
Total Secondary South	**10,887**	**17,113**	**28,000**	**70.5**	**76.5**	**147.1**	**$6,476**	**$4,473**	**$5,252**
Total catchment	**64,741**	**97,215**	**161,957**	**511.7**	**443.3**	**954.9**	**$7,904**	**$4,560**	**$5,896**
Beyond									
Campbelltown-Macarthur	38,236	132,882	171,118	360.1	735.3	1,095.4	$9,419	$5,533	$6,401
Macarthur Square	12,999	58,265	71,264	145.5	405.3	550.9	$11,197	$6,957	$7,730
Campbelltown Mall	10,300	29,052	39,352	105.3	145.0	250.3	$10,223	$4,992	$6,361
Marketfair Campbelltown	5,044	4,002	9,046	25.9	18.1	44.0	$5,126	$4,526	$4,861
Campbelltown remainder	9,893	41,564	51,457	83.4	166.8	250.2	$8,434	$4,013	$4,863
Campbelltown bulky goods	2,460	55,713	58,173	16.2	216.5	232.7	$6,598	$3,886	$4,001
Eagle Vale	4,374	2,263	6,636	46.8	17.8	64.6	$10,694	$7,865	$9,729
Rosemeadow-Ambarvale	4,874	2,500	7,374	46.8	17.2	64.0	$9,599	$6,875	$8,676
Claymore	966	394	1,360	6.0	2.0	8.0	$6,226	$4,979	$5,865
Kearns	909	286	1,195	6.1	1.5	7.6	$6,720	$5,388	$6,401
Raby	976	459	1,435	7.1	2.5	9.6	$7,251	$5,436	$6,670
Total beyond	**52,795**	**194,496**	**247,291**	**489.1**	**992.7**	**1,481.9**	**$9,265**	**$5,104**	**$5,992**

Source: Deep End Services

Total sales for identified centres within the catchment is forecast to increase from $709.1 million (as shown in Table 12) to a total of $954.9 million in 2016/17, which is adopted as the first full year of trade for the Stage 5 expansion at NT5C. Future sales figures are expressed in constant 2011 dollars

Of total forecast sales at centres in the catchment, an estimated $823.1 million (or 86%) is derived from spending by catchment residents. When compared against the forecast retail spending market in the catchment ($1,625.6 million, as shown in Table 9), these estimated sales to catchment residents represent approximately 51% of total spending capacity, which indicates that escape spending in 2017 in the absence of NTSC stage 5 would be 49%, or $802.5 million.

We accept that the lack of regional shopping centres in the MTA is likely to result in relatively higher escape expenditure to higher order centres such as Campbelltown-Macarthur and Liverpool centre. However, DES need to provide the more evidences to support the assumed level of escape expenditure.

2.3 Economic Impact Assessment

The DES report completes the economic impact assessment *independently* for Stage 5 of the NTSC expansion (assumed to have taken place prior to 2016/17), and for Stage 6 (involving additional retail development to occur prior to 2020/21). The findings are presented as a series of sequential steps:

- Generation of projected retail sales for the expanded NTSC for each development stage
- Assessment of sales impacts on other centres within or just beyond the catchment area
- Assessment of new employment and other economic effects accruing to the community

We note that the DES impact analysis examines the impacts of stage 5 and stage 6 independently. We would suggest that the cumulative impact of stage 5 and stage 6 should also be assessed.

The forecasts are made on the basis of the following information, data inputs and assumptions:

- The existing uses and proposed changes to the tenancy mix will be as set out in Section 3 of the DES report
- The development will be attractively- designed and incorporate adequate car parking, easy access and legible pedestrian routes through the centre
- Expenditure levels for catchment area sectors will be as set out in Section 5 of the DES report
- New competitive retail developments will be as described in Section 6.2 (and incorporated into the base case sales projections) of the DES report
- The first full financial year of trading for the full expanded centre will be 2016/17.

Stage 5 expansion

For the stage 5 expansion, retails sales projections are shown below:

Table 14: NTSC Stage 5 – retail sales projection (2016/17)

Tenancy type	Floorspace (sqm) Food	Floorspace (sqm) Non-food & services	Floorspace (sqm) Total retail	Forecast sales ($m) Food	Forecast sales ($m) Non-food & services	Forecast sales ($m) Total retail	Trading level ($/sqm) Food	Trading level ($/sqm) Non-food & services	Trading level ($/sqm) Total retail
Majors									
Supermarkets	6,998	2,333	9,331	58.6	19.3	78.0	$8,375	$8,293	$8,355
DDS	912	17,324	18,236	3.3	61.9	65.2	$3,593	$3,572	$3,573
Sub-total majors	*7,910*	*19,657*	*27,567*	*61.9*	*81.2*	*143.1*	$7,824	$4,132	$5,192
Mini-majors	2,866	8,288	11,153	14.5	38.9	53.3	$5,045	$4,692	$4,783
Specialties	5,585	17,540	23,125	49.5	117.9	167.4	$8,869	$6,721	$7,240
Total retail	**16,361**	**45,484**	**61,845**	**125.9**	**238.0**	**363.9**	**$7,694**	**$5,233**	**$5,884**
Non retail			13,935						
Total centre			**75,780**						

Source: Deep End Services

As stage 5 is proposed to include two additional full line DDS, the expanded NTSC would be classified as a regional shopping centre, according to the shopping centre definitions in the Urbis Retail Averages. The typical RTD for a full-line supermarket and mini major within a regional shopping centre is around $10,900 per sqm and $6,945 per sqm respectively, these are higher than the DES numbers in table 14. In addition, the NTSC after the stage 5 expansion has potential to trade at around $6,260 per sqm (an average RTD for a regional shopping centre), which is about 6% higher than the $5,884 estimated by DES.

After the proposed Stage 5 expansion, NTSC is projected to achieve total retail sales of $363.9 million in 2016/17, representing a net increase of +$162.8 million compared to the no change scenario (refer Table 13). The expanded centre is expected to achieve an average trading level of $5,884 per sqm in its first year of operation (refer Table 14), which is a decline in average sales performance compared with 2011 and is a result of an increase in floorspace devoted to non-food specialties and lower-trading discount department stores. Compared with existing (2011) sales, the following changes in turnover performance are expected:

- A marginal decline in supermarket turnover performance from $8,429 per sqm to $8,355 per sqm, due to increased competition from new supermarkets to be constructed in the region
- A decline in the average trading level of all majors (i.e. including DDSs) from $6,822 per sqm in 2011 to $5,192 per sqm after Stage 5, with competitive impacts also felt by the Big W due to the establishment of a new Big W at Tahmoor and two new DDSs within the centre
- An increase in average sales at mini majors, from $3,461 per sqm in 2011 to $4,783 per sqm in 2017, with the introduction of new mini majors well placed to achieve good sales levels
- A marginal increase in turnover performance for specialty stores, from $7,178 per sqm in 2011 to $7,240 per sqrn in 2017

The two supermarkets are forecast to achieve $78.0 million in turnover in the first year, which is a reasonable sales performance for two large supermarkets in a sub-regional centre. The two new DDSs, in addition to the existing Big W, are anticipated to generate total combined sales of $65.2 million, with mini-majors genera ting $53.3 million of sales and retail specialty tenancies adding another $167.4 million of sales. All of these trading levels are assessed as being supportable and attractive to potential tenants, Turnover growth would be expected to occur after 2017 in line with the increase in expenditure capacity in the catchment

The projected market shares by catchment area sector for the expanded NTSC are set out in Table 15. The table shows that the expanded centre is projected to achieve a 21.9% market share of total retail spending in the Primary sector, with an average of 17.8% across the total catchment area.

Table 15: NTSC Stage 5 – market share estimates (2016/17)

Catchment area sector	Spending market ($m) Food	Non-food & services	Total retail	Market share (%) Food	Non-food & services	Total retail	Forecast sales ($m) Food	Non-food & services	Total retail
Primary	433.2	389.0	822.2	15.6%	29.0%	21.9%	67.6	112.8	180.4
Secondary									
Secondary North	174.9	146.7	321.6	9.8%	25.0%	16.7%	17.1	36.7	53.8
Secondary South	257.2	224.6	481.8	8.1%	15.0%	11.3%	20.8	33.7	54.5
Total Secondary	432.1	371.3	803.4	8.8%	19.0%	13.5%	38.0	70.4	108.3
Total catchment area	865.3	760.2	1,625.6	12.2%	24.1%	17.8%	105.6	183.2	288.7
Beyond trade area	-	-	-	16.1%	23.0%	20.7%	20.3	54.8	75.2
Total	-	-	-	-	-	-	**125.9**	**238.0**	**363.9**

Source: Deep End Services

Stage 6 expansion

Indicative sales forecasts for the proposed Stage 6 expansion to the NTSC have been prepared on the basis of the additional retail elements proposed to be included in this stage (as described in Section 3). Indicative forecasts have been prepared for the year 2020/2 1, recognising the degree of uncertainty involved in projecting sales levels over a long time period.

After the completion of Stage 6 of the NTSC expansion, the centre is projected to achieve total retail sales of $475.6 million in 2020/21. This represents a net increase in sales of +$71.8 million when compared against the sales that would have been achieved in the same year if the expansion did not take place. The centre, post Stage 6, is expected to achieve an average trading level of $5,876 per sqm in its first year of operation.

As with the previous comment, the average trading level of $5,876 per sqm appears to be on the low side, compared to the average RTD for a regional shopping centre. If the centre is currently underperforming we would suggest that an expansion is unlikely.

It is important to note that obtaining an accurate estimate for the turnover of the NTSC after the stage 5 or 6 expansion is critical to the impact assessment. It may be appropriate to apply sensitivity testing to the turnover estimate given the degree of uncertainty involved in projecting sales levels over a long time period (as recognised by DES).

The projected market shares by catchment area sector for the NTSC following Stage 6 are set out in Table 16

Table 16: NTSC Stage 6 – market share estimates (2020/21)

Catchment area sector	Spending market ($m) Food	Non-food & services	Total retail	Market share (%) Food	Non-food & services	Total retail	Forecast sales ($m) Food	Non-food & services	Total retail
Primary	500.3	449.6	950.0	14.8%	30.3%	22.2%	74.2	136.4	210.6
Secondary									
Secondary North	389.5	325.8	715.3	8.2%	21.9%	14.5%	32.0	71.5	103.4
Secondary South	278.2	278.2	556.5	7.8%	16.2%	12.0%	21.7	45.2	66.9
Total Secondary	667.8	604.0	1,271.8	8.0%	19.3%	13.4%	53.7	116.6	170.3
Total catchment area	1,168.1	1,053.6	2,221.7	10.9%	24.0%	17.1%	127.8	253.1	380.9
Beyond trade area	-	-	-	15.2%	22.1%	19.9%	22.9	71.8	94.7
Total	-	-	-	-	-	-	**150.7**	**324.9**	**475.6**

Source: Deep End Services

In addition, tables 15 and 16 in the DES report provide the projected market shares by catchment area sector for the NTSC following Stage 5 and 6. Since these market share assumptions form the basis of the distribution of trading impacts on competitive centres, it would be critical for DES to state clearly how these market shares were derived.

Impacts from Stage 5

Competitive trading impacts arising from the proposed expansion to NTSC (Stages 5 and 6) have been assessed by distributing the additional sales achieved by the expanded NTSC across the network of activity centres in the catchment and beyond. The distribution of competitive trading impacts has been made with consideration given to:

- Each competing centre's geographic location and ease of access to the NTSC
- The existing mix of retailers at each centre, including the extent of direct store-on-store competition having regard for the components of the expanded NTSC
- Forecast market shares achieved by each centre in the catchment in the absence of development
- The likelihood of capturing an additional share of spending in each broad product group, having regard for NTSC's location with respect to other competing higher-order centres such as Campbelltown-Macarthur

We agree with the input assumptions for the redistribution of expenditure within the defined retail system (retail impact analysis) but it is not clear how these elements have been taken into account. As it stands, it appears that the impact assessment is largely based on professional judgment.

The proposed new retail elements associated with the Stage 5 expansion at NTSC include a larger and better-located Coles supermarket, two new DDSs, the introduction of more mini-major stores and a large increase in specialty retail floorspace.

A summary of the forecast changes in trading levels arising from the proposed Stage 5 expansion is provided in Table 17 for the identified centres within and beyond the catchment. These impacts are presented as one-off reductions in sales compared to the sales that would otherwise have been expected to be recorded in 2016/17 if the proposed expansion did not occur (and asset out in Table 13). All figures are expressed in 2011 dollars.

We broadly agree with the way that DES have expressed impacts – i.e. as the change in turnover in the first year of operation compared to the turnover that would have been achieved should the development not have proceeded. However, it would appear that 2016 rather than 2017 should be used as the first full year of operation. Using 2017 will have the result of lessening the impacts on competing centres.

The DES reports the impact on each centre within the catchment separately and then concludes that the total impact on catchment area centres (excluding NTSC) is a relatively minor -7.0% (or -$53.1 million). Similarly, having regard for the generally healthy trading performance of centres in the catchment area, none of these one-off sales impacts are assessed as being capable of threatening the viability of any of the identified cent res outside of the catchment area.

Impacts from stage 6

An examination of the potential trading impacts arising from the proposed Stage 6 expansion to the NTSC, which is expected to take place in 2020/21, has been made on the basis of the following approach:

- Prepare forecasts of retail sales at each of the identified centres in 2020/21, in the absence of the proposed Stage 6 development, but including the anticipated developments likely to arise elsewhere in the region (as described in Section 6.2). These forecasts are made with reference to the population and spending growth that is forecast to occur in the catchment over the period 2017-2021.

- Incorporate the additional retail sales generated by the Stage 6 expansion (as detailed in Section 7.1).
- Estimate the likely changes in sales levels experience at each of the competing centres, having regard for the competitive context and the type of new retail components that are proposed to be added to the centre.

A summary of the forecast impacts for activity centres within and beyond the catchment is included in Table 17, and are expressed as one-off reductions in sales compared to the sales which would otherwise have been expected to be recorded in 2020/21 in the absence of the Stage 6 expansion

In no case does the predicted impact exceed a 5% reduction in sales that would otherwise have been achieved. Importantly, in each case where impacts are expected to occur as a result of the Stage 6 expansion, a substantial increase in sales performance is anticipated to occur between 2017 (i.e. after the Stage 5 development at NTSC) and 2021 following the Stage 6 expansion.

Impact on planned centres

Impacts on Leppington have been modelled in Table 17, and indicate a relatively minor -2.0% reduction in sales that would otherwise have occurred in 2021 in the absence of NTSC Stage 6. Impacts on other town centres at Catherine Field and Catherine Field North have not been modelled because the timing of urban development in the relevant precincts is not likely to support the establishment of these centres prior to 2021.

Overall, the implication from this examination of centre development opportunities in the SWGC is that the expansion to the NTSC will not have any material effect on the scale or type of retail development that is likely to occur in planned centres over the period until 2021. By this time, Leppington is likely to have established itself as a sub-regional shopping location and with a particular competitive position because of the transport services available at the centre

In the longer term, retail development at Leppington will be supported by the very significant level of population growth that is anticipated to occur throughout the SWGC over time, with the local resident population reaching approximately 330,000 people when fully developed. As noted in the HillPDA analysis (Retail Floarspace and Staging Capacity Project, 2010), the total retail floorspace demand generated by these residents in the SWGC is well in excess of the planned scale of retail development in the identified centres located in individual precincts, with potential for Leppington to accommodate more retail development than initially planned.

Table 17 Forecast retail sales impacts on local activity centres, Stage 5 NTSC (2016/17) & Stage 6 NTSC (2020/21)

	Existing 2011		Stage 5 2017				Stage 6 2021			
Activity Centre	**Floorspace, sqm**	**Total sales ($M)**	**Pre-impact sales ($M)**	**Post-impact sales ($M)**	**Impact ($M)**	**Impact (%)**	**Pre-impact sales ($M)**	**Post-impact sales ($M)**	**Impact ($M)**	**Impact (%)**
Primary										
Narellan Town Centre	31,784	204.7	213.0	375.3	+162.3	+76.2%	416.8	488.5	+71.8	+17.2%
Narellan Town Shopping Centre	29,180	194.7	201.1	363.9	+162.7	+80.9%	403.8	475.6	+71.8	+17.8%
Narellan TC periphery	2,604	10.0	11.8	11.4	-0.4	-3.7%	13.0	12.9	-0.0	-0.2%
Narellan Other	20,380	44.7	52.3	51.0	-1.3	-2.5%	54.8	54.3	-0.5	-0.8%
Spring Farm	-	-	29.2	27.1	-2.1	-7.3%	31.3	31.1	-0.2	-0.7%
Camden TC	23,024	135.9	153.6	140.0	-13.6	-8.8%	159.0	155.2	-3.9	-2.4%
Harrington Plaza	3,600	21.1	23.0	21.5	-1.5	-6.6%	24.8	24.5	-0.2	-1.0%
Mount Annan	13,584	117.6	126.8	117.0	-9.9	-7.8%	134.6	133.3	-1.3	-1.0%
Total primary	**92,372**	**524.0**	**597.9**	**731.9**	**+133.9**	**+22.4%**	**821.3**	**886.9**	**+65.6**	**+8.0%**
Secondary South										
Tahmoor	12,560	93.6	132.4	122.6	-9.8	-7.4%	131.4	129.4	-2.0	-1.5%
Picton	9,572	54.3	64.5	62.1	-2.4	-3.7%	66.5	66.5	-	-
Thirlmere	2,824	12.2	13.1	12.9	-0.1	-0.9%	13.9	13.9	-	-
Total Secondary North	**24,956**	**160.1**	**209.9**	**197.7**	**-12.3**	**-5.8%**	**211.8**	**209.8**	**-2.0**	**-0.9%**
Secondary North										
Turner Rd bulky goods	11,264	25.0	44.2	42.1	-2.1	-4.7%	118.0	115.8	-2.1	-1.8%
Oran Park	-	-	61.4	54.8	-6.6	-10.7%	122.1	116.0	-6.1	-5.0%
Gregory Hills	-	-	41.5	38.2	-3.3	-8.0%	42.1	40.9	-1.2	-2.8%
Total Secondary South	**11,264**	**25.0**	**147.1**	**135.1**	**-12.0**	**-8.2%**	**282.2**	**272.8**	**-9.4**	**-3.3%**
Total catchment	**128,592**	**709.1**	**954.9**	**1,064.6**	**+109.6**	**+11.5%**	**1,315.3**	**1,369.5**	**+54.2**	**+4.1%**
Beyond										
Campbelltown-Macarthur	171,118	950.6	1,095.4	1,028.3	-67.0	-6.1%	1,066.7	1,027.2	-39.5	-3.7%
Macarthur Square	71,264	474.4	550.9	510.4	-40.5	-7.4%	532.5	506.2	-26.3	-4.9%
Campbelltown Mall	39,352	218.7	250.3	235.9	-14.4	-5.8%	244.7	238.4	-6.3	-2.6%
Marketfair Campbelltown	9,046	37.9	44.0	42.7	-1.2	-2.8%	42.9	42.7	-0.2	-0.4%
Campbelltown remainder	51,457	219.8	250.2	239.4	-10.8	-4.3%	246.6	239.9	-6.7	-2.7%
Campbelltown bulky goods	58,173	208.5	232.7	225.9	-6.8	-2.9%	217.5	216.5	-1.0	-0.5%
Eagle Vale	6,636	59.2	64.6	63.4	-1.1	-1.7%	66.8	66.4	-0.4	-0.6%
Rosemeadow-Ambarvale	7,374	54.5	64.0	63.3	-0.6	-1.0%	61.7	61.7	-	-
Claymore	1,360	6.8	8.0	7.9	-0.1	-1.0%	7.7	7.7	-	-
Kearns	1,195	6.7	7.6	7.6	-0.1	-1.0%	7.6	7.6	-	-
Raby	1,435	8.3	9.6	9.5	-0.1	-1.0%	9.4	9.4	-	-
Leppington	-	-	-	-	-	-	110.7	108.5	-2.2	-2.0%
Total beyond	**247,291**	**1,294.6**	**1,481.9**	**1,406.0**	**-75.9**	**-5.1%**	**1,437.4**	**1,396.5**	**-40.9**	**-2.8%**
Other centres not specified					-33.8				-13.3	

Source: Deep End Services

2.4 Mitigating factors

A number of important mitigating factors need to be considered in reviewing the potential trading impacts

- Strong retail spending growth. Annual retail expenditure by catchment residents is forecast to increase by $495.3 million over the period 2011 to 2017, and by a further $561.3 million over the period 2017 to 2021
- Strong average trading levels. Some of the identified centres already achieve strong average sales performance, and so the reduction in sales due to the NTSC expansion will have a lower impact on the viability of these centres
- Business response. The viability of particular businesses will be either more or less affected by the increase in competition depending on the type of retailer

We agree with the mitigating factors as described. Of the list in the DES report we would suggest that the resulting trading performance expressed in terms of the retail turnover density (RTD) is the most important consideration.

2.5 Other benefits

The proposed expansion will create new direct employment and support indirect employment for other workers in the local economy. Assumptions used in this analysis are:

- Direct employment will be gene rated at rates varying from 1.0 FTE positions per 100 sqm for the mini-majors to 6.1 FTE positions per 100 sqm for specialty retail tenants. These rates are applied to the net additional floors pace provided at the expanded NTSC, and are then divided by two to calculate the FTE job creation, recognising that many of the retail jobs will be part-time or casual positions.
- Indirect employment has been calculated using industry-specific Type 2B employment multipliers published by the ABS for 1996/97. These multipliers are the most current available within Australia. As is standard industry practice, the number of indirect jobs has been divided by two to more accurately reflect the number of jobs supported within the region rather than across the broader national economy.

The floorspace per job estimates used to generate on site employment numbers are low (so will result in high job numbers) but are still within a reasonable range.

It is estimated that a total of 708 direct FTE jobs and a further 476 indirect FTE jobs will be generated in the local economy as a result of Stage 5 of the expansion to the NTSC. Overall, the conclusion is that the expansion to the NTSC will generate a very considerable amount of new ongoing employment as a result of the additional retail and commercial uses proposed to be delivered on the site. A further 339 direct FTE jobs and 216 indirect FTE jobs will be generated in the local economy as a result of Stage 6 of the NTSC expansion.

The development is unlikely to introduce many new jobs to the system – rather the effect is more akin to a redistribution of employment within the system. While we agree that from a project perspective the proposed development will result in employment generation, the fact that expenditure is being drawn from other retailers may result in job losses elsewhere in the retail system. Though it is not possible to model the reaction of individual businesses to the turnover loss, it is likely that the net employment effect in the system as a whole will be small if not zero.

Notwithstanding the comments above, the proposal may have merit in terms of providing more retail floorspace and hence boosting local employment opportunities if the other centres in the system do not have the capacity to meet the forecast growth in retail spending.

Employment will be created during the construction phase of the proposed expansion. Applying average construction wages for the building industry, this translates to an estimated 370 FTE jobs pa during construction of Stage 5, and a further 440 jobs pa over the shorter construction period for Stage 6. A multiplier of 0.876 applied to the total number of directly employed positions suggests an additional 710 indirect FTE jobs would be supported during the construction phases. It is therefore estimated that construction of the proposed expansion to NTSC would support a total of 1,520 additional FTE jobs during the construction phases for both Stages.

A number of other benefits would accrue to the local community as a result of the proposed expansion of the shopping centre at Narellan. These include:

- Providing choice in DDS shopping, with the accommodation of two additional DDS brands.
- An improvement in supermarket offering with the provision of a large, new-format Coles store, thereby increasing the quality, choice and convenience of supermarket shopping in the area.
- Increasing the range and quality of specialty retailing, including the addition of national retail brands currently not on offer within the local region.
- Retention of retail spending that would otherwise escape outside the catchment, thereby supporting the provision of local employment opportunities.
- Development of an under-utilised site located at the core of Narellan Town Centre, in a manner that delivers an integrated solution that will assist in activating the whole of the town centre for ret ail shopping and other services.
- Provision of higher-order shopping for new residents in the southern part of the SWGC, prior to the establishment of larger centres that are more conveniently located within these precincts.
- Support for a range of uses such as a gym, offices and food dining which would be developed in conjunction with the retail elements of the centre.
- Significant environmental benefits associated with a reduction in travel time for residents in the communities of Camden and Wollondilly to access higher-order shopping, entertainment and commercial services.

2.6 Net community benefit

The forecast impacts on sales due to the expansion of NTSC will not threaten the viability of any of the existing or planned activity centres in the region. The assessed one-off sales impacts on competitive retail facilities are well below the range of -15% to -20% which is generally considered the minimum necessary to threaten the viability of a precinct.

While we acknowledge that there is no accepted standard definition for significant impact, we would suggest that a one off trading impact of -10% in the first full year of operation is a reasonable threshold for significance. However, this should be viewed in tandem with the trading performance of the affected centre – i.e. the resultant RTD compared with published benchmarks with the proposed retail floorspace included in the system.

The positive impacts of the expansion, including significant new employment opportunities, improved retail facilities including access to higher-order retailing, retention of local retail spending, development of an important strategic site for high-value uses, and reduced travel times, far outweigh the relatively minor one-off reductions in sales that would be experienced by the local activity centres

The conclusion, therefore, is that the proposed expansion of Narellan Town Shopping Centre would deliver a substantial positive net community benefit

In our view the list of positive and negative effects included as part of the net community benefit test is not comprehensive. The effects are not quantified and the difference between effects from the proposal's perspective and net effects within the system is not clearly articulated. As it stands, the DES net community benefit test does not cover the elements nor does it follow the method we would expect (e.g. an analysis of net rent effects in the system).

3 HILL PDA

Hill PDA was commissioned by Camden Council ('Council') to complete a peer review of the 'Narellan Town centre: Economic Impact Assessment ('the EIA') undertaken by Deep End services (dated 30th May 2012). The EIA seeks to justify the proposed extension of Narellan Town centre through the rezoning of adjacent land to B2 Local Centre zone as described in the Camden Local Environmental Plan 2010.

The advice contained in the Hill PDA letter follows on from their previous peer review of the 'Narellan Town Centre: Retail Analysis' prepared by Deep End Services in August 2011. The previous peer review (dated November 2011) concluded that:

> "In our view the rezoning can be justified in economic terms, given identified need in the local area end the proximity of the Subject Site to Narellen Town Centre. If the rezoning were to proceed, economic impact upon existing centres and in particular on Camden would need to be carefully considered and quantified once the final floorspace mix and timing or staging of development is known. The submission of an economic impact statement should be a requirement at the rezoning or DA stage. It should be mandatory that the applicant prepare an economic and social impact assessment and a sequential or net community benefit test in accordance with the Draft Centres Policy."

This SGS review of the HillPDA letter focusses on the elements directly related to the economic impact assessment – i.e. the 'critique of retail analysis'

3.1 Critique of retail analysis

Trade Area

HillPDA note that the trade area remains unchanged from that provided in the Narellan Town Centre: Retail Analysis (2011) and find the trade area to be reasonable.

While we agree with HillPDA that the trade area as described appears reasonable, it is ultimately a matter of judgment. Empirical evidence could be gathered from shopper surveys to support the trade area. Shopper surveys would provide such an evidence base. Alternatively, retail simulation modelling could define catchment areas for Narellan and other centres in the region

Population

HillPDA pick up an error in the DES reporting of 2011 population numbers where the EIA states that the population in the Secondary North sector in 2006 is 2,200 persons and in 2011 it is 2,635 persons. In the previous report, the population in 2011 is stated as being 2,200persons. Furthermore, we have checked the population assumptions in the EIA against the Forecast.id data referenced. It would appear that for the Secondary North trade area the Foracast.id projections are well below those of the EIA at 2017 and 2021. It is not possible to reconcile the data used in the EIA because the assumptions, and the source of these assumptions, have not been provided.

HillPDA note that 2011 ABS Census data has been published after the DES report was written. Although the trade area boundaries are not an exact fit with ABS boundaries, this nevertheless provides a useful comparison for the DES population numbers. The HillPDA analysis shows that the ABS numbers are substantially lower (13,885 lower for the combined primary and secondary catchment area).

Household retail expenditure

HillPDA have compared this to our household expenditure data, which is sourced from Marketinfo 2009, and find it to be consistent.

We agree with the use of Marketinfo for household expenditure data.

HillPDA calculate that that a real retail expenditure growth rate of 0.8% per annum has been used by DES and suggest that this is relatively modest and compares to a rate of 1.2% currently used by Hill PDA and which has been derived from tracking the historic trend since 1986.

While we agree that retail expenditure is likely to continue to grow in the future, we would suggest that the rate is growth is likely to be lower than it has been since 1986 given the challenges faced by the retail industry (e.g. the fact that online retail growth is double that of conventional retail). A slowing rate of growth can be seen in ABS catalogue 8501.0 - Retail Trade, Australia, Mar 2013

Total spending

Total retail spending is derived by multiplying per capita expenditure with population estimates. HillPDA suggest that the population forecasts should be lower and this will drive a lower expenditure forecast. However they also suggest that this will be partially offset by higher retail growth rates.

We disagree with the HillPDA assertion that the DES population (and therefore expenditure) estimates are too high. Recently published BTS population forecasts for the trade area appear to broadly line up with the DES numbers.

As previously noted, when assessing total spending, the HillPDA assumption regarding future retail expenditure growth appear to be optimistic in that the growth trends observed since 1986 is expected to continue into the future.

Existing & proposed centres

HillPDA confirm that the floorspace data used by DES is broadly in line with HillPDA floorspace data for the listed centres.

We agree with HillPDA that the DES floorspace estimates for centres in the defined trade area are reasonable.

HillPDA agree with the assessment and timing of proposed developments presented in the EIA, although their view is that the planned centre at Spring Farm is likely to comprise a larger component of retail floorspace than has been assumed in the EIA. This has been adjusted in our gravity models.

We disagree with the suggestion that DES have understated the floorspace at Spring Farm. DE$S figures appear to line up with the proposed Spring Farm Masterplan (as published on Camden Council's website)

2011 Sales

HillPDA note that estimated turnover of existing centres in the EIA differs markedly from those quoted in the previous Retail Analysis (2011) and suggest that this may reflect that more up·to-data data on existing floorspace. HillPDA concur with the turnovers of MI Annan, Thurlmere, Claymore, Kearns, Raby and Rosemeadow, however they disagree with estimated turnover at a numbers of centres

- **Narellan**. The turnover of Narellan has been underestimated. Narellan Town Centre alone recorded a turnover of S223.96m for the October 2010 to September 2011 period as sourced from Shopping Centre News (SCN) Little Guns (2011). By comparison the EIA estimates that without additional floorspace the turnover of the centre would be S201.1m in 201612017, which is well below the 201012011 SCN turnover despite the growth which can be expected between 2011 and 2017

- **Camden**. The turnover of Camden has been overestimated. Previously in the Retail Analysis it was S95.4m which was deemed too low by Hill PDA, however we consider S135.9m to be too high and above benchmark rates tor similar sized "main street shopping centres. In our view the turnover of the Camden is likely to be around S110m which is consistent with our previous advice. This performance is more likely to be the average for older main street centres

- **Harrington Plaza**. We believe that Harrington Plaza has a higher turnover than the S21m assumed in the EIA We estimate the turnover of this centre to be $29m in 2011 consistent with our previous advice.

- **Eagle Vale Marketplace**. Eagle Vale Marketplace has a higher reported turnover than the level assumed in the EIA at $63.3m for the August 2010 to July 2011 period as sourced from SCN Mini Guns (2011).

For current sales data HillPDA uses 'Shopping Centre News'. We agree that this is a good source for turnover estimates. Using this data, we agree with HillPDA that the current turnover estimated or Narellan presented by DES appear to be on the low side.

Hill PDA also note that Narellan is currently trading very well.

- Achieved a sales to floorspace level of $8,278/sqm in 2010/11, being 23% above the median of $6,7481sqm.
- Was ranked 23 out of 103 similar sized centres (of between 20,001sqm and 45,000 sqm) nationally as recorded by SCN.
- Has increased its turnover by $12.69m or 6% compared to the 2009-2010 period.

3.2 Economic impact assessment

Gravity modelling

Rather than examining the projected future sales and impacts derived in the EIA individually, Hill PDA has prepared bespoke gravity models to quantify the potential impacts. In their view it is appropriate to test the economic impacts a year after opening, once the development has reached a settled pattern of trading. Therefore, Stage 1 should be tested at 2016 rather than 2017 given that the EIA states that the first phase will be completed by the end of 2015 (page 10 of the EIA).

We agree with the HillPDA position that it is appropriate to test the economic impacts a year after opening, once the development has reached a settled pattern of trading and therefore the Stage 1 should be tested at 2016 rather than 2017 given that the EIA states that the first phase will be completed by the end of 2015.

Table 2 - Narellan Town Centre: Marginal Turnover of the Proposed Development in 2016 and 2021

Retail Store Type	Total Additional Floorspace (sqm)**		Target Turnover ($/sqm)***			Total Turnover ($m)	
	2016	2021	2011	2016	2021	2016	2021
Coles	2,102	2,102	9,500	9,788	10,086	20.6	21.2
DDS* 1	6,200	6,200	4,000	4,121	4,247	25.6	26.3
DDS 2	5,500	5,500	4,000	4,121	4,247	22.7	23.4
Depart. Store	0	12,000	3,000	3,091	3,185	0.0	38.2
Mini-Majors	8,500	10,500	5,000	5,152	5,308	43.8	55.7
Specialties	10,363	15,463	5,500	5,667	5,839	58.7	90.3
Total	32,665	51,765				171.3	255.1

* DDS – discount department store.
** Source: Narellan Town Centre – Economic Impact Assessment, Deep End Services (May 2012)
*** Source: Various including ABS Retail Survey 1998-99, Shopping Centre News
Note: Target turnover levels are forecast to increase at a rate of 0.6% per annum above the CPI rate in line with the historic trend

The HillPDA figures for current RTD appear to be a little low. We would suggest using around $10,900 per sqm for a supermarket and around $6900 per sqm for mini majors. The closest Dan Murphy's store is in the Campbelltown Centre. A mini-major like Dan Murphy's could be trading as high as $13,000 per sqm.

The differing turnover figures are a result of differing assumptions regarding RTDs, different 'start date' at 2016 rather than 2017 in the DES report and the fact that the DES does not inflate RTDs over time.

The input assumptions for the HillPDA gravity model are listed as:

1. Like for like stores compete with one another. That is a grocery food retailer will compete with existing grocery food retailers in the locality, and likewise with specialty stores.
2. The level of redirected expenditure from a centre is directly proportional to the turnover of that centre. Hence more expenditure will be drawn from a centre that has higher trading levels,
3. The level of redirected expenditure from a centre is indirectly proportional to the distance from the subject site in terms of drive time. This is based on the premise that shoppers will try to minimise distance, time and travel costs when travelling to undertake shopping - particularly 'chore" shopping (predominantly for food, groceries and other regular items).
4. Impacts of trade and business related sales are not included in the gravity models. Trade related expenditure is likely to be redirected from a wide variety of destinations, many of which are wholesale and trade warehouses located in industrial areas. As such, they have not been included hare.

Gravity modelling is appropriate to determine the likely retail impacts. SGS retail gravity modelling assumes that redirected turnover is a function of the competing offer of centres in the retail landscape where expenditure capture is determined by travel time (rather than distance used in the HillPDA model), the size of the centre, and its attractiveness as a retail destination determined by any attracting factors other than its size (such as opening hours, number of on-site car spaces etc.)

Table 3 - Retail impact of Narellan Town Centre in 2016 ($m 2010)

	1	2	3	4	5	6	7	8	9
Retail Centre	Distance from Subject Site (mins)	Approx. Retail Floor Space (sqm)	Turnover in 2011 ($m)	Turnover in 2016 without Proposal ($m)	Turnover in 2016 with Proposal ($m)	Immediate Shift in Turnover ($m)	% Shift in Turnover in 2016	Shift in turnover 2011 to 2016 ($m)	% Shift in turnover 2011 to 2016
Proposed Centre					171.4	171.4			
Narellan TC		31,800	224.0	262.2	247.7	-14.4	-5.5%	23.8	10.6%
Total Centre		*31,800*	*224.0*	*262.2*	*419.2*	*157.0*	*59.9%*	*195.2*	*87.2%*
Camden	7.0	23,000	110.0	119.1	103.5	-15.6	-13.1%	-6.5	-5.9%
Harrington Plaza	5.0	3,600	29.0	33.9	29.1	-4.8	-14.3%	0.1	0.4%
Mount Annan	6.0	13,600	117.6	131.1	116.5	-14.6	-11.2%	-1.1	-1.0%
Thirlmere	33.0	2,800	12.2	13.9	13.7	-0.2	-1.4%	1.5	12.6%
Picton	23.0	9,550	60.0	70.2	68.5	-1.7	-2.4%	8.5	14.2%
Tahmoor	32.0	21,700	90.0	101.8	99.3	-2.5	-2.5%	9.3	10.4%
Turner Road	5.0	11,200	39.1	42.6	42.6	0.0	0.0%	3.4	8.8%
Campbelltown	13.0	127,300	527.0	570.5	543.7	-26.8	-4.7%	16.7	3.2%
Macarthur Square	12.0	75,200	537.3	581.7	526.4	-55.3	-9.5%	-10.9	-2.0%
Rosemeadow	16.0	7,350	55.0	59.5	57.6	-1.9	-3.2%	2.6	4.8%
Kearns	14.0	1,200	6.7	7.1	6.9	-0.2	-3.3%	0.2	2.7%
Raby	15.0	1,450	8.3	8.8	8.5	-0.3	-3.4%	0.2	2.5%
Claymore	15.0	1,350	6.8	7.2	7.0	-0.2	-3.3%	0.2	2.7%
Eagle Vale	16.0	6,650	63.3	67.2	65.0	-2.2	-3.2%	1.7	2.7%
Spring Farm	7.0	-	-	42.8	38.4	-4.4	-10.2%	-	-
Oran Park	6.0	-	-	60.9	51.8	-9.1	-14.9%	-	-
Other Localities						-17.1			
TOTAL		**337,750**	**1,886.3**	**2,180.7**	**2,197.8**	**0.0**	**0.8%**	**221.2**	**16.5%**

1 Drivetime in minutes derived from Googlemaps.
2 Various including Shopping Centre News, PCA Shopping Centres Directory, Hill PDA Floorspace Surveys.
3 Various including Shopping Centre News, PCA Shopping Centres Directory, Shopping Centre Annual Reports, Urbis Retail Averages, Other Consultancy Reports and Hill PDA Estimate.
4 Allows for population growth (variable for each centre) and real growth in retail spend per capita of 1.2% per annum in line with historic trend since 1986 (Hill PDA Calculation from ABS Retail Sales, population estimates and CPI indexes).
5 The turnover of localities following the proposed development. The forecast turnover of the proposed development is distributed between localities based on distance and size.
6 Immediate shift in turnover. This is difference between the development and the do nothing options (i.e. Column 4 minus Column 5).
7 Immediate percentage shift is shift in turnover divided by the turnover in 2011 without the development proceeding.
8 This is the shift in turnover from 2011 to 2016 after the opening of the new development.
9 This is shift in turnover from 2011 to 2016 divided by the based turnover in 2011.

Impact in 2016

HillPDA state that there are no universal measures of significance of economic impact. There are references in various consultancy reports and statements in the Land & Environment Court which suggest ll1at a loss of trade below 5% is considered insignificant. 5% to 10% is low to moderate. 10% to 15% is moderate to high. and above 15% is a strong or significant impact.

Based on this measure no centres will experience a strong impact - that is greater than 15% loss in trade. Five centres are expected to experience moderate to strong impacts (10% to 15% loss in trade). These centres are Oran Park, Camden, Harrington Plaza, Mount Annan and Spring Farm. Impacts on the remaining centres are expected to be below 10% and within acceptable normal competitive range. The centres with moderate to strong impacts are now considered.

While we acknowledge that there is no accepted standard definition for significant impact, we would suggest that a one off trading impact of -10% in the first full year of operation is a reasonable threshold for significance. However, this should be viewed in tandem with the trading performance of the affected centre – i.e. the resultant RTD compared with published benchmarks with the proposed retail floorspace included in the system.

Based on this measure no centres will experience a strong impact - that is greater than 15% loss in trade. Five centres are expected to experience moderate to strong impacts (10% to 15% loss in trade). These centres are Oran Park, Camden, Harrington Plaza. Mount Annan and Spring Farm

- Oran Park will experience an impact of -14.9% or $9.1m loss in trade. Oran Park will be a new centre in 2016 and we have assumed that it would trade at benchmark levels. An impact of this level would not jeopardise its commercial Viability given the extent of population growth in its trade area beyond 2016.

- Harrington Plaza will experience an impact of -14.3% in trade or -$4.8rn. Although this is a relatively strong impact. Harrington Plaza is a well performing centre and can absorb this level of impact without its viability being jeopardised.
- Camden Town Centre will experience an impact of -13.1% in trade or -$15.6m. Camden is currently performing similar to older strip centres but well below sub-regional centres indoor centres (as defined by PCA) and hence is more vulnerable to adverse impacts of this level. However, the centre can expect to experience some growth in the expenditure captured over the 2011 to 2016 period as a result of real expenditure growth and population growth in its trade area.
- Mount Annan which will experience an impact of -11.2% or -$14.6m. This centre is currently trading strongly at above benchmark levels and therefore can sustain an impact of this level.
- Spring Farm which will experience an impact a little over -10.2% loss in trade or -$4.4m. This will be a new centre with a dedicated residential trade area and could sustain this level of impact.

The fact that several centres (Oran Park, Harrington Plaza, Camden Town Centre, Mount Annan and Spring Farm) experience a turnover impact great than 10% is a cause for concern. In particular, three centres (Camden, Mount Annan and Macarthur Square) are expected to experience negative growth in their trading levels between 2011 and 2016 following expansion of Narellan. While the latter two centres are currently trading above the benchmark, Camden is performing well below sub-regional indoor centres. Hence, the -5.9% shift (from 2011-16) in retail trade estimated by HillPDA is a legitimate concern on the viability of Camden centre. This should be carefully considered by DP&I in this assessment of the planning proposal.

However, we would need to our own retail simulation modelling with adjusted population and expenditure figures, and adjusted RTD figures to confirm this.

HillPDA highlight that these are point in time impacts only – i.e. that these centres will experience a growth in trade as retail expenditure in the system grows.

We agree that is useful to also examine the changing nature of trading performance over time, however we maintain that that most significant considerations in terms of retail impact are the change in turnover in the first full year of operation plus the resultant RTD at that time.

HillPDA reiterate that they believe the EIA has grossly underestimated the impacts on existing retailers in Narellan and that as much as $50m or more would be redirected from them. Under this scenario the impacts on the above mentioned centres would be lessened

While the impacts on traders in Narellan is not strictly a planning consideration in so far as they are all part of the same centre, there are implications for other centres, if the resultant trading performance of Narellan has been underestimated. HillPDA suggest that DES has underestimated impacts on Narellan. As a result, they suggest that assumed trading performance is higher than it should otherwise be and this has the effect of overestimating the impacts on other centres. Consistent with this argument, *Urbis Retail Averages* indicate that on average a sub-regional shopping centre (the current classification of the NTSC) has a higher RTD than a regional shopping (the classification of the NTSC after expansion), while the RTD for specialties in a regional shopping would be higher. However, these benchmark RTD figures suggest that the differences are small.

Impact in 2021

The cumulative impact of stage 5 and 6 expansions was assessed. The assessment shows that Oran Park, Harrington Plaza and Camden centres are expected to experience a strong or significant impact of over 15%.

The impact on Oran Park is strong at an estimated -25.2% or -$30m. Under normal circumstances this level of impact would be expected to adversely jeopardise the performance of a centre to the extent where its viability may be impacted. However, Oran Park will grow to accommodate some 50,000 sqm floorspace when fully developed and is located within an area set to accommodate a significant increase in population. In light of this HillPDA consider this high level of impact to be sustainable by the centre.

HillPDA find that the impact on Harrington Plaza is -15.3% or -$6.1m. As noted previously, this centre performs well and is expected to benefit from population and real retail spend growth in the trade area over the 2011 to 2021 which will mitigate the point in time impacts projected.

Camden is forecast to experience a point in time impact of -14.8% or a$19.1m loss of trade. HillPDA suggest the centre could accommodate this level of impact without jeopardising its role or commercial viability. However as previously stated it is unlikely that any significant investment in the centre could be secured over the 2011 to 2021 period as a result of the proposed expansion in Narellan.

In addition, HillPDA suggest the following centres are expected to experience 10-15% impacts:

- Mt Annan (-$17.5m or ·12.0% loss of trade). This level of impact could be absorbed by Mt Annan in light of its strong trading performance and the growth in trade it can be expected to experience over time.
- Macarthur Square (-$73.3m or ·11.6%). Current (2011 based) data indicates that the centre is trading a per square metre rate which is broadly comparable to similar sized centres in Australia ($6,665/sqm, compared to the median of $6,758/sqm). In the context of this and of the projected total trading level of this centre in 2021 post-development ($556m) an impact of this magnitude is sustainable.
- Spring Farm (-$4.8m or -10.7%). Assuming that the centre trades at benchmark levels once it is developed in 2014/15, the levels of impact identified in 2016 and 2021 would be sustainable.
- Leppington (-$10.1m or -10.5%). Retail facilities in Leppington would be at an early stage of development in 2021, and given the quantum of floorspace which will be developed in this centre (which is a Planned Major Centre) these levels of impact would be sustainable without prejudicing its commercial viability.

HillPDA reiterate that the results above are based on a high impact scenario within which the impact on existing retailers in Narellan is expected to be modest. HillPDA suggest the impact on existing retailers in Narellan will be much greater than allowed for in this modelling, which will equate to a *correspondingly lower impact* on the other centres.

Both point in time impacts and current centre performance are relevant considerations for interpreting results from the economic impact assessment. In addition to the qualitative discussions above, it would be useful to compare the resultant RTDs of the other centres after the proposed expansion in Narellan with the benchmark RTDs for comparable centres in 2021. The latter measure should take into account the real growth in benchmark RTD over time. Based on the 0.6% per annum real growth in RTD (that HillPDA use to forecast turnovers), benchmark RTDs are expected to grow by over 6% from 2011-21. In comparison to this growth rate, Macarthur Square would also fall short.

We agree that the proposed expansion in Narellan may result in a negative impact on the trading performance of the existing centre as a whole. However, certain type of retailers, such as supermarkets, may also benefit from the higher volume of patrons attracted by the new additions of the DDS and DS, particularly given that the proposed increase in supermarket floorspace is relatively marginal compared to the size of the proposed expansion. Overall, we suggest the net negative impact on Narellan centre is likely to be small and would not therefore have the effect of resulting in significantly lower impacts on competing centres compared with the DES analysis.

Impact beyond 2021

Beyond 2021 HillPDA state that the impacts of the proposed expansion of Narellan Town Centre on existing and planned centres in the surrounding area would diminish over time, as real expenditure and population growth increase the quantum of household expenditure available

HillPDA note that the EIA does not model the economic impacts of the proposed development on centres which would be developed post-2021 but given the level of population growth anticipated in the SWGC the development of Catherine Field and Catherine Field North would be viable even with the proposed expansion at Narellan. With respect to Leppington, the economic impacts of the proposed development identified are sustainable

3.3 Employment

Permanent employment creation

Hill PDA note that there appear to be a number of mathematical errors in the calculations of job numbers presented in Tables 19 and 20 of the EIA and go on to calculate full and part time jobs associated with the development.

Table 5 indicates that the EIA quantifies less jobs being supported than Hil PDA. However, Hi l PDA estimates relate to full and part lime jobs whereas the EIA refers to FTE. By their owbn estimates, HillPDAs employment numbes would equate to around 909 FTE jobs by 2016 and 403 FTE jobs in 2021. Therefora employment would be lower than that calculated in the EIA.

Construction employment

HillPDA calculate 1,168 job years supported directly, 911 job years through production induced effects, 2,721 job years through consumption induced effects, 4,800 job years in total (direct, production and consumption induced effects. These direct job year calculations are higher than those estimated in the EIA, although economic multipliers eventuating from the proposed development have not been quantified in the EIA

3.4 Net community benefit test

Hill PDA state that the EIA has omitted to consider the following:

- The level of available (or potentially available) ftoorspace in existing centres and, if any, why.it cannot be used for the purposes proposed in the rezoning proposal.
- Infrastructure cost implications.
- Evaluation of the enteral costs and benefits of the proposal (i.e. the externalities) (Hill POA emphasis).
- Whether the amended LEP is likely to create a precedent or create or change the expectations of the landowner or other landholders.
- Whether existing public infrastructure (roads, rail, utilities) is capable of servicing the proposed site.
- The extent of pedestrian, cycle and public transport access now or in the future.
- The impact on amenity in the location and in the wider community.
- Whether the public domain will improve.

Hill PDA also note that the NCBT should acknowledge both positive and negative benefits to the community which would eventuate from a proposed development, then form a view as to the net community benefit. The EIA only considers positive benefits.

Positive attributes are listed as:

- The economic impacts of the proposed development would be capable of being absorbed by existing and planned centres without jeopardising their commercial viability
- Additional choice for residents of the trade area and reducing their need to travel
- Price competition
- Supporting jobs and economic growth in Camden LGA
- Additional employment and economic multipliers impacts
- Pedestrian links between the existing and proposed developments to encourage foot traffic

Negative attributes are listed as:

- Reduced potential for investment in other centres in the trade area particularly Camden
- Loss of for redevelopment for alternative employment generating uses
- Increased pressure on road network around Narellan Town Centre

We agree with HillPDA that the DES net community benefit test falls short of the mark. However, as with the DES study, in our view the list of positive and negative effects included as part of the net community benefit test is not comprehensive. The effects are not quantified and the difference between effects from the proposal's perspective and net effects within the system is not clearly articulated. As it stands, the DES net community benefit test does not cover the elements nor does it follow the method we would expect (e.g. an analysis of net rent effects in the system).

4 LOCATION IQ

BBC Consulting Planners (BBC) has been commissioned by The GPT Group and Australian Prime Property Fund (GPT), the owners of the Macarthur Square shopping centre, to prepare on their behalf a submission to the Planning Proposal relating to the Landturn 'Triangle' site ("the Site"). BBC have reviewed the exhibited materials in consultation with:

- Location IQ,
- Lend Lease Design Architect,
- Henry Davis York – Planning Solicitors,

The submission prepared by BBC concludes that the proposal

> *"will have unacceptable and far reaching economic impacts on existing and planned Strategic Centres, including the Major Centre of Campbelltown-Macarthur, which is identified as a future Regional City. "*

The grounds of objection are summarised from pages 4 to 13 of GPT's submission. While many relate to the planning matters, this peer review focuses on those grounds relating to economic impact matters (i.e. concerns raised under chapter 6 of the submission as well as the Location IQ report).

4.1 Floorspace at 1:1 Can Exceed Estimates

BBC state that the EIA accompanying the planning proposal is based on an increase in size of the existing Narellan Town Centre to 95,780 sqm. However, the planning proposal is not just for this amount of floorspace, but to amend the floorspace ratio over a larger area to allow an FSR of 1:1 across a broader area. The total GLAR allowance on the proponent's landholdings will be around 125,000 sqm, or, we estimate, 170,000 sqm, over Narellan as a whole. The EIA therefore significantly understates the likely impacts from the development.

We agree that a larger level of floorspace at Narellan would have a great impact on other centres (assuming viability and all other things being equal). However, as noted in Camden Councils letter to the Department, the calculations identified in the submissions are the potential maximum and not the actual floor space proposed. The draft DCP, Planning Proposal, and relevant studies, assessments, etc. are based on a proposed NTC expansion that would ultimately achieve a GLAR of approximately 88,000 sqm.

4.2 Errors in EIA assessment

Location IQ has demonstrated that the population levels used to project future sales and sales impacts are significantly overstated, leading to an under estimation of impacts on other centres. Location IQ has also raised concerns with the unrealistically high allocation of impacts to "other centres" which are not specified in the report and where an impact of $33.8 million has been allocated, effectively for stores which would be at least 20 km away from the Narellan Town Centre. This accounts for some 20% of projected additional sales for the Narellan Town Centre and is unrealistic.

Hill PDA's peer review appears to agree with both of these concerns. These errors lead to incorrect conclusions being drawn about the scale of impact on various centres, and economic impacts will be more significant than the information made available to Council would suggest.

We disagree with the Location IQ assertion that DES have overestimated the future population. As previously noted, recent BTS population forecasts for the trade area appear to broadly line up with the DES numbers.

It should be noted that Forecast i.d. would have produced a set of population forecasts that are different (probably lower in this case) to the DP&I's 2010 Interim Population Forecasts that are used in the BTS Forecasts as LGA control totals.

4.3 Impact levels are 'very high'

Location IQ note that the impacts of the development, on a cumulative basis, result in very high impacts, i.e. significantly above 10% for a range of centres including:

- Camden Town Centre
- Oran Park Town Centre (planned)
- Gregory Hills (planned)
- Campbelltown – Macarthur in total but particularly Macarthur Square

The impacts, allowing for a centre expansion to 125,000 sqm, would result in much higher impacts again, particularly for Macarthur Square, Campbelltown and the Camden Town Centre. Impacts could even be over 15% if the full achievable floorspace is built in the short term, potentially putting other retail facilities in the surrounding area in jeopardy.

We agree that an impact greater than 10% is normally considered significant. However, EIA needs to consider the resultant RTDs as well, as discussed earlier.

4.4 Unacceptable Impacts on Macarthur/Campbelltown

Location IQ note that the impacts of the development, on a cumulative basis, result in very high economic impact. Retail growth at centres such as Campbelltown – Macarthur will be non-existent over a ten year period. This will also clearly impact on the ability for a larger and more diverse retail offer in Campbelltown – Macarthur that would include two department stores similar to other Major Centres in Sydney, such as Bondi Junction, Chatswood, Hornsby and Castle Hill.

Not only are the impacts on Macarthur Square/Campbelltown high in percentage terms, but also in dollar terms, estimated at $67 million in the first year by Deep End Services from Stage Five or 40% of the total additional sales for the Narellan Town Centre. As a comparison, the Hill PDA estimate is $80 million in the first year of this development. In simple terms, to put this impact in perspective, this is equivalent to around one third of the sales of the existing Narellan Town Centre or, at $5,000 per sqm, the equivalent of 16,000 sqm of retail floorspace that otherwise would have been supportable at Campbelltown – Macarthur.

A key concern is whether it is reasonable for an unplanned development to impact on a designated Major Centre, such as Campbelltown – Macarthur, in combination by the order of $70 - $80 million from a Stage Five expansion of the centre, with a further impact of $40 - $50 million five years later from the Stage Six expansion of the Narellan Town Centre. This is particularly the case when the effect of all of the above is that sales within the Campbelltown – Macarthur Square area are projected to remain static over the next ten year period, as a result of the proposed expansion of Narellan Town Centre.

BBC state that the expansion at Narellan will clearly come at the expense of any future growth at Campbelltown – Macarthur, including further major developments at Macarthur Square such as a department store and other higher order non-food specialty shops. Significant public investment has occurred based on sound planning for the development of Macarthur Square/Campbelltown as a Major Centre with a range of multi-purpose uses. The inefficient use of this investment will potentially result from the proposed expansion of Narellan.

Location IQ suggests that the likely impact of a static sales level (in real terms) at Campbelltown – Macarthur over the next ten years is at odds with the role of Campbelltown – Macarthur as a future Regional City in the Sydney Metropolitan Strategy. BBC conclude that the development will impact on the potential for Campbelltown – Macarthur to become a Regional City, by effectively creating an unplanned second Major Centre rather than one concentrated Regional Centre that would allow for employment growth in Campbelltown.

We agree that the assertion by Location IQ that the expansion at Narellan will come at the expense of future growth at other centres, such as Campbelltown – Macarthur. HillPDA finds that the turnover impact on Macarthur Square would be 11.3% after the stage 6 expansion. This is above the 10% threshold level and should be considered significant, particularly given that centre is currently trading slightly below the median of the RTDs of comparable centres.

4.5 Unsustainable levels of department store and DDS floorspace

BCC suggests that an oversupply of department store and DDS floorspace would arise, meaning that planned facilities at Leppington and Oran Park will be delayed in the order of 5-10 years. However, these are the areas where population growth will occur and these residents should be provided with local retail facilities.

Further, there is a high risk of investment in retail facilities in the market which could not support them, resulting in greater impacts and possible vacancy levels at other centres as a result of the proposed development.

An oversupply of department store and DDS floorspace is a legitimate concern, particularly if this will result in a delay in the proposed planned floorspace in growth areas, such as Leppington and Oran Park. However, this argument lacks a proper demand assessment and impact assessment for DS and DDS floorspace.

4.6 Impact on Leppington is unacceptable

Location IQ notes that while the Planning Proposal would not hinder or delay the first stage of Leppington Town Centre, Leppington it is planned to be the Major Centre for the south west sector, incorporating a department store, and would be highly reliant on servicing the defined secondary north sector of the Narellan trade area to support this type of tenant (given the required 150,000 – 200,000 persons needed to support a department store).

The exclusion of at least 70,000 persons within the defined Narellan Town Centre secondary north sector from the Leppington Town Centre catchment (because they are being serviced by Narellan) would, in Location IQ's opinion, delay the provision of a department store at the Leppington Town Centre, in the order of 10 years. This is contrary to the planning for the South West Corridor, with Leppington Town Centre designated as a Major Centre situated around a major railway station and centrally located to the future South West Growth Centre population. This is where population growth will occur and these residents should be provided with appropriate retail facilities.

HillPDA's EIA suggests that the proposed expansion in 2021 would have a 10.5% impact on the turnover of the Leppington Major Centre, which is just above the 10% threshold level. SGS can not comment on the impact on the DS commodity group, given that the expansion at Narellan does not propose an additional department store.

4.7 The notion of securing escape expenditure is flawed

A key driver for Council support for the elevation of Narellan to a Major Centre appears to be to enable Camden LGA to claw back 'escaped' expenditure from other LGAs. This is precisely why planning for strategic centres of this scale should be undertaken on a subregional or metropolitan level. The alternative to metropolitan centres planning is for every Council to seek to create the biggest and best centre to the detriment of all others, which flies in the face of sound strategic planning.

The Camden LGA boundary is very close to the Campbelltown - Macarthur Major Centre as shown on Plan, and is less than 3km from Macarthur Square. It is inevitable that expenditure will "escape" out of the LGA.

Location IQ note that in an outer suburban area such as Narellan, with the majority of its population within 5 – 10 km of the Macarthur – Campbelltown Major Centre, it would not be expected or reasonable for the Narellan trade area to retain the majority of spending. This is reflected in the hierarchy of centres, and it is natural to have a level of escape expenditure to higher order centres. This does not justify the need for the proposed development at Narellan.

We broadly agree with Location IQ that it would not be expected or reasonable for the Narellan trade area to reclaim all of the escape expenditure or retain the majority of spending. While we may expect some escape expenditure to be reclaimed it is natural to have a level of escape expenditure to higher order centres and similarly we agree that it does not justify the need for the proposed development at Narellan

5 URBIS

5.1 Economic considerations

Urbis have conducted a high level review of the economic grounds for the proposed development as presented in the two DES reports and peer reviews by Hill PDA. Urbis have a number of concerns that a development of the scale proposed does not reflect a timely and sustainable delivery of new retail floor space from an economic perspective. We have particular concerns in relation to the development's likely effects on establishing higher order retailing in other designated centres in the South West Growth Centre (SWGC), including Oran Park Town Centre and Leppington Major Centre. There are also a number of assumptions and outcomes in DES's analysis that Urbis contend.

Trade area

Regarding the trade area definition, Urbis make the following comments:

- In our view the trade area defined by DES is an appropriate reflection of the area that is likely to be served by NTC in the short term. However, we note that the ultimate catchment for the centre will be noticeably different when the proposed Major Centre at Leppington is fully developed.
- The DES trade area extends almost 10 kms north of the subject site, approaching the future primary catchment of Leppington. If the retail hierarchy is established as planned, Leppington is intended and will ultimately serve a higher order role than Narellan. Accordingly, the relevance of NTC in the northernmost parts of its catchment can be expected to diminish over time.
- Furthermore, the trade area reflects the likely catchment for the NTC at the scale that is proposed. If Narellan were to develop as a smaller centre relative to Leppington and Campbelltown-Macarthur as intended, it would not draw as strongly from the defined secondary sectors. Residents in the secondary south sector already have convenient access to the higher order centres in Campbelltown via the arterial and sub-arterial road network, while the secondary north will ultimately be served by a number of centres, including Oran Park and Leppington.
- As such, we believe that parts of the trade area reflect a somewhat artificial market that would otherwise not be available to NTC if it was developed as intended in relative terms. This has implications for much of the DES analysis, particularly the *Retail Analysis* report which uses the trade area to demonstrate an apparent need and demand for the proposed development.

While we agree with the Urbis observation that the future growth of Leppington will eat into the DES defined trade area to the north we do not agree that parts of the trade area reflect a somewhat 'artificial market' that would otherwise not be available to NTC if it was developed as intended. What is important however, is that the change in market share for Narellan and competing centres is properly considered over time. For example, the resultant market share and RTD for Narellan in future with the proposed development at Narellan should not be such that it threatens its viability, role and function

Future floorspace requirements

Regarding floorspace forecasts, Urbis make the following comments:

- In deriving the future floorspace requirements of the trade area and the broader region, DES's Retail Analysis has adopted the national benchmark of 2.2 sqm per capita, less an allowance of 0.5 sqm for homemaker, bulky good and freestanding retailers. In our view, it is not appropriate to assess the retail requirements of the trade area with the national benchmark. This benchmark incorporates outlet centres, capital cities and leading metropolitan shopping centres which are generally not present in outer metropolitan markets.

- Urbis estimates that capital city CBDs and the Top 10 regional centres account for approximately 0.3 sqm of the national benchmark, while the outlet centre share is virtually negligible. If these centre types are removed to derive a more appropriate benchmark for outer suburban regions, the revised benchmark is approximately 1.4 sqm per capita.
- This revised benchmark is only slightly above DES's forecast provision of 1.34 sqm per capita in the trade area in 2036, which includes the proposed expansion to NTC. With two designated Major Centres also serving trade area residents and situated just outside the catchment (i.e. Campbelltown-Macarthur and Leppington), it appears that the catchment will be served by a very large provision of floorspace by 2036 with the NTC proposal.

Regional centre capacity

Regarding the regional centre capacity, Urbis make the following comments:

- The DES Retail Analysis report provides a brief assessment of the capacity to support a regional-scale shopping centre in the trade area. It is concluded that a centre would be supportable based on the population of the trade area alone. However, this effectively ignores the existing higher order retail centres in Campbelltown-Macarthur (Macarthur Square and CMSC), which are situated less than 7 kms east of NTC.
- We note that DES's own core catchment analysis of outer suburban regional centres shows that there are few examples of regional centres situated within 7 kms of each other. The examples that do exist are within more densely populated urban areas than the Narellan/Campbelltown region. To this end, we are not satisfied that the development of high order retailing at Narellan, including a department store, is an optimal outcome from a retail performance perspective. The proposed development will invariably dilute consumer spending between two high order centres that are situated in relatively close proximity to each other. This is not consistent with the principle of providing appropriate differentiation between centres within a retail hierarchy.

Economic impacts

Regarding the economic impacts, Urbis make the following comments:

- We concur with most of the comments made in Hill PDA's Peer Review of the EIA. In particular, we agree that the EIA should provide more detail in relation to the assumptions behind the population forecasts, which are a fundamental input for the turnover and impact analysis. The discrepancies identified between the Forecast i.d. and DES forecasts are clearly concerning and require further clarification.
- However, we do not agree with Hill PDA's assessment that the proposed development will impact existing retailers in Narellan by 15-20%. The proposed development reflects a significant elevation of Narellan as a retail destination and can be expected to expand the centre's draw significantly in the short term. This will provide positive spin-off benefits to existing retailers in Narellan and we expect that these benefits would largely mitigate any direct trading impact. Accordingly, we do not agree with Hill PDA that DES is likely to have underestimated the impact on other centres by underestimating impacts on existing retailers in Narellan.
- We also note that the owner of the subject site has rights to develop additional floorspace to the NTC which include, but are not limited to, increasing the FSR on the existing NTC site to 1:1, and an existing approval for 5,000 sqm of retail on the Elyard Street site. If these rights were to be acted upon, the Town Centre could accommodate retail floorspace in the order of 120,000 sqm. This reflects an increase of over 90,000 sqm on the existing floorspace, which is around 75% higher than the increase proposed in the EIA.

- In view of this, if the area was developed to its full capacity, one would expect that the impact of Narellan on other centres would be substantially higher than forecast by DES and Hill PDA, and highest for centres such as Campbelltown and Leppington given their bias towards discretionary retailing.
- Overall, we concur with the view that Narellan is an appropriate location to serve some of the higher order shopping requirements of existing residents and also initial residents in the southern SWGC. However, it is imperative that the scale of any additional floorspace should not be to the long term detriment of the planned centres hierarchy.

We share the concern expressed by Urbis over the population forecasts and the apparent discrepancy between DES figures and Forecast i.d. figures. However, recent BTS data appears to support the DES forecasts, with population numbers for the defined area being broadly similar after accounting for boundary effects.

We agree with the Urbis position that the negative effects on Narellan that are suggested by HillPDA are probably overstated. The proposed develop will result in an elevation of status for Narellan and while there will undoubtedly be some native impact on individual retailers in Narellan, the net outcome for Narellan as a whole is unlikely to be near the -15% to -20% stated by HillPDA.

The potential for a much higher level of floorspace to be developed at Narellan is significant. Obviously all other things being equal, a higher floorspace level at Narellan would draw a higher level of expenditure away from other centres resulting in greater economic impacts.

6 CAMDEN COUNCIL

In a letter to the Department dated 2nd April 2013, Camden City Council (CCC) included a report which summarises submissions received during the exhibition period for the proposed rezoning on the Landturn Triangle site in Narellan. While mostly dealing with statutory planning matters, the elements relating to economic impact are contained in the 'Review of Submissions' section under 'Key Issues' and the sub headings 'Total Retail Floorspace' and 'Negative impacts on other centres'.

6.1 Total retail floor space

CCC note that submissions to the proposal raised concern in relation to the potential maximum retail floor space that the subject NTC lands can accommodate. It is noted within the submissions that the studies are based on the one to one ratio of land to gross floor area (GFA). Gross Lettable Area – Retail (GLAR) is core retail space, excluding ancillary and supporting development such as loading docks, plant room, car parking, etc. calculated as a percentage of the GFA. The current NTC GLAR is 72% of the GFA. Based on this calculation, the proposed NTC expansion is capable of accommodating a potential maximum 125,000sqm of GLAR.

However, it is stressed that the calculations identified in the submissions are the potential maximum and not the actual retail floor space as proposed. The draft DCP, Planning Proposal, and relevant studies, assessments and reports are based primarily on advanced conceptual drawings which would see the proposed NTC expansion ultimately achieve a GLAR of approximately 88,000 sqm.

CCC point to HillPDAs assertion that the long term situation (i.e. 2036) for the Macarthur region will experience a significant 50,000sqm undersupply of retail floor space assuming all developments in the pipeline are realised.

Notwithstanding the above, the Hill PDA peer review also states that given the 50,000sqm undersupply is met, there would still be escaped expenditure of 22% to the regional or major centres. This leads to the conclusion that the existing and planned centres throughout the Macarthur region can sustain a strong local market and be economically viable in the long term. Therefore, it is considered that the proposed retail floor space of 88,000sqm or above can be appropriately accommodated on the site and economically sustainable into the future.

While we may expect some escape expenditure to be reclaimed, it is natural to have a level of escape expenditure to higher order centres and similarly we suggest that it does not justify the need for the proposed development at Narellan.

6.2 Negative impacts on other centres

CCC highlight that the Economic Impact Assessment undertaken by DES demonstrated that the centres within the Macarthur Region will experience a loss in trade. Using separate modelling, the loss in trade was confirmed by the Hill PDA peer review, stating that particularly at Macarthur Square the loss of trade is -4.9% (DES) or -11.6% (Hill PDA), which are both considered to be a low to moderate impact. However, Hill PDA consider that the impacts are within and acceptable normal competitive range' and should be viewed as a matter of competition not being a relevant matter for consideration

While we acknowledge that there is no accepted standard definition for significant impact, we would suggest that a one off trading impact of -10% in the first full year of operation is a reasonable threshold for significance. However, this should be viewed in tandem with the trading performance of the affected centre – i.e. the resultant RTD compared with published benchmarks with the proposed retail floorspace included in the system

The fact that several centres (Oran Park, Harrington Plaza, Camden Town Centre, Mount Annan and Spring Farm) experience a turnover impact great than 10% is a cause for concern. In particular, three centres (Camden, Mount Annan and Macarthur Square) are expected to experience negative growth in their trading levels between 2011 and 2016 following expansion of Narellan. While the latter two centres are currently trading above the benchmark, Camden is performing well below sub-regional indoor centres. Hence, the -5.9% shift (from 2011-16) in retail trade estimated by HillPDA is a legitimate concern for the viability of Camden centre. This should be carefully considered by DP&I in this assessment of the planning proposal

Both point in time impacts and current centre performance are relevant. It would be useful for the economic impact analysis to compare the resultant RTDs of the other centres after the proposed expansion in Narellan with the benchmark RTDs for comparable centres in 2021. The latter measure should take into account the real growth in benchmark RTD over time. Based on the 0.6% per annum real growth in RTD (that HillPDA use to forecast turnovers), benchmark RTDs are expected to grow by over 6% from 2011-21. In comparison to this growth rate, Macarthur Square centre also falls short

The Economic Impact Assessment and the HillPDA peer review also calculates the total growth that centres are expected to experience from now untill 2021. The assessments demonstrate the difference between growth in an undeveloped scenario and growth with the proposed NTC expanded scenario. Using Macarthur Square with the largest turnover as an example, should the proposed NTC expansion not be constructed, Macarthur square is stated as experiencing a 17% growth from now to 2021. However, should the proposed NTC expansion be constructed, it is also expressed that Macarthur Square will still experience a 3.6% growth from now to 2021.

While we acknowledge that the change in turnover from current levels to the first operational year of the expanded facility is a useful measure. We would argue that most significant measures are turnover impact in the first year of operation (with facility vs. without facility) combined with an assessment of trading performance (RTDs) at that time

We would also suggest that the HillPDA assumed retail expenditure growth figures are on the high side and that the rate is growth is likely to be lower than it has been since 1986 given the challenges faced by the retail industry (e.g. the fact that online retail growth is double that of conventional retail). A slowing rate of growth can be seen in ABS catalogue 8501.0 - Retail Trade, Australia, Mar 2013

Hill PDA state that all calculations are 'based on a high impact scenario'. Given this conservative approach, it is considered that the economic impacts that will realistically be expected are lower than those which have been presented

We disagree with CCC's assertion that HillPDAs approach is 'conservative' as they have modeled a 'high impact scenario'. The 'high impact scenario' is based on an assumption that trading performance (RTD) at an expanded centre will not be significantly lower than the current centre. We would suggest that this is a sensible assumption rather than a conservative one.

7 SUMMARY & CONCLUSION

Summary of findings

A summary of the main points emerging is given below for each principal economic impact assessment/ peer review.

Deep End Services

18. The DES defined primary and secondary catchments areas appear reasonable but it is difficult to critically assess whether these catchment areas are reasonably or not without knowing the percentage capture of retail expenditure within each area (i.e. how thin is the secondary catchment?). Ultimately, the defined catchment area appears to be the result of judgement rather than an assessment based on empirical evidence. Shopper surveys would provide such an evidence base. Alternatively, retail simulation modelling could define catchment areas for Narellan and other centres in the region.
19. While the use of ABS Census data and the summary presented in the DES report is sound, it is not clear how this demographic information is used given that all household expenditure data is sourced from MDS Marketinfo.
20. Since the time of writing, more data has become available on existing population and population forecasts for the defined trade area. The NSW Bureau of Transport Statistics (BTS) has produced travel-zone-level (TZ) population forecasts for these areas. While there are a few boundary issues when comparing against the DES trade area , the BTS figures broadly line up with the DES figures
21. SGS supports the use of 06/07 MDS MarketInfo data as source for household expenditure data. The use of Deloitte Access Economics data to bring the Marketinfo numbers up to date also appears sound.
22. The steps that DES followed to obtain the floorspace estimates appear to be sound
23. We note that the DES impact analysis examines the impacts of stage 5 and stage 6 independently. We would suggest that the cumulative impact of stage 5 and stage 6 should also be assessed.
24. Since stage 5 is proposed to include two additional full line DDS, the expanded NTSC would be classified as a regional shopping centre, according to the shopping centre definitions in the Urbis Retail Averages. The typical RTD for a full-line supermarket and mini major within a regional shopping centre is around $10,900 per sqm and $6,945 per sqm respectively, these are higher than the DES numbers in table 14. In addition, the NTSC after the stage 5 expansion has potential to trade at around $6,260 per sqm (an average RTD for a regional shopping centre), which is about 6% higher than the $5,884 estimated by DES.
25. As with the previous comment, the average trading level of $5,876 per sqm appears to be on the low side, compared to the average RTD for a regional shopping centre. If the centre is currently underperforming we would suggest that an expansion is unlikely.
26. It is important to note that obtaining an accurate estimate for the turnover of the NTSC after the stage 5 or 6 expansion is critical to the impact assessment. It may be appropriate to apply sensitivity testing to the turnover estimate given the degree of uncertainty involved in projecting sales levels over a long time period (as recognised by DES).
27. We agree with the input assumptions for the redistribution of expenditure within the defined retail system (retail impact analysis) but it is not clear how these elements have been taken into account. As it stands, it appears that the impact assessment is largely based on professional judgment.

28. We broadly agree with the way that DES have expressed impacts – i.e. as the change in turnover in the first year of operation compared to the turnover that would have been achieved should the development not have proceeded. However, it would appear that 2016 rather than 2017 should be used as the first full year of operation. Using 2017 will have the result of lessening the impacts on competing centres.

29. We agree with the mitigating factors as described. Of the list in the DES report we would suggest that the resulting trading performance expressed in terms of the retail turnover density (RTD) is the most important consideration.

30. The floorspace per job estimates used to generate on site employment numbers are low (so will result in high job numbers) but are still within a reasonable range

31. The development is unlikely to introduce many new jobs to the system – rather the effect is more akin to a redistribution of employment within the system. While we agree that from a project perspective the proposed development will result in employment generation, the fact that expenditure is being drawn from other retailers may result in job losses elsewhere in the retail system. Though it is not possible to model the reaction of individual businesses to the turnover loss, it is likely that the net employment effect in the system as a whole will be small if not zero.

32. Notwithstanding the comments above, the proposal may have merit in terms of providing more retail floorspace and hence boosting local employment opportunities if the other centres in the system do not have the capacity to meet the forecast growth in retail spending.

33. While we acknowledge that there is no accepted standard definition for significant impact, we would suggest that a one off trading impact of -10% in the first full year of operation is a reasonable threshold for significance. However, this should be viewed in tandem with the trading performance of the affected centre – i.e. the resultant RTD compared with published benchmarks with the proposed retail floorspace included in the system.

34. In our view the list of positive and negative effects included as part of the net community benefit test is not comprehensive. The effects are not quantified and the difference between effects from the proposal's perspective and net effects within the system is not clearly articulated. As it stands, the DES net community benefit test does not cover the elements nor does it follow the method we would expect (e.g. an analysis of net rent effects in the system).

HillPDA

1. While we agree with HillPDA that the trade area as described appears reasonable, it is ultimately a matter of judgment. Empirical evidence could be gathered from shopper surveys to support the trade area. Shopper surveys would provide such an evidence base. Alternatively, retail simulation modelling could define catchment areas for Narellan and other centres in the region

2. We agree with the use of Marketinfo for household expenditure data.

3. While we agree that retail expenditure is likely to continue to grow in the future, we would suggest that the rate is growth is likely to be lower than it has been since 1986 given the challenges faced by the retail industry (e.g. the fact that online retail growth is double that of conventional retail). A slowing rate of growth can be seen in ABS catalogue 8501.0 - Retail Trade, Australia, Mar 2013

4. We disagree with the HillPDA assertion that the DES population (and therefore expenditure) estimates are too high. Recently published BTS population forecasts for the trade area appear to broadly line up with the DES numbers.

5. As previously noted, when assessing total spending, the HillPDA assumption regarding future retail expenditure growth appear to be optimistic in that the growth trends observed since 1986 is expected to continue into the future.

6. We agree with HillPDA that the DES floorspace estimates for centres in the defined trade area are reasonable.

7. We disagree with the suggestion that DES have understated the floorspace at Spring Farm. DE$S figures appear to line up with the proposed Spring Farm Masterplan (as published on Camden Council's website)
8. For current sales data HillPDA uses 'Shopping Centre News'. We agree that this is a good source for turnover estimates. Using this data, we agree with HillPDA that the current turnover estimated or Narellan presented by DES appear to be on the low side.
9. We agree with the HillPDA position that it is appropriate to test the economic impacts a year after opening, once the development has reached a settled pattern of trading and therefore the first phase should be tested at 2016 rather than 2017 given that the EIA states that the first phase will be completed by the end of 2015.
10. The HillPDA figures for current RTD appear to be a little low. We would suggest using around $10,900 per sqm for a supermarket and around $6900 per sqm for mini majors. The closest Dan Murphy's store is in the Campbelltown Centre. A mini-major like Dan Murphy's could be trading as high as $13,000 per sqm.
11. Gravity modelling is appropriate to determine the likely retail impacts. SGS retail gravity modelling assumes that redirected turnover is a function of the competing offer of centres in the retail landscape where expenditure capture is determined by travel time (rather than distance used in the HillPDA model), the size of the centre, and its attractiveness as a retail destination determined by any attracting factors other than its size (such as opening hours, number of on-site car spaces etc.)
12. While we acknowledge that there is no accepted standard definition for significant impact, we would suggest that a one off trading impact of -10% in the first full year of operation is a reasonable threshold for significance. However, this should be viewed in tandem with the trading performance of the affected centre – i.e. the resultant RTD compared with published benchmarks with the proposed retail floorspace included in the system.
13. The fact that several centres (Oran Park, Harrington Plaza, Camden Town Centre, Mount Annan and Spring Farm) experience a turnover impact great than 10% is a cause for concern. In particular, three centres (Camden, Mount Annan and Macarthur Square) are expected to experience negative growth in their trading levels between 2011 and 2016 following expansion of Narellan. While the latter two centres are currently trading above the benchmark, Camden is performing well below sub-regional indoor centres. Hence, the -5.9% shift (from 2011-16) in retail trade estimated by HillPDA is a legitimate concern for the viability of Camden centre. This should be carefully considered by DP&I in this assessment of the planning proposal.
14. However, we would need to our own retail simulation modelling with adjusted population and expenditure figures, and adjusted RTD figures to confirm this.
15. We agree that is useful to also examine the changing nature of trading performance over time, however, we maintain that that most significant considerations in terms of retail impact are the change in turnover in the first full year of operation and the resultant RTD at that time.
16. While the impacts on traders in Narellan is not strictly a planning consideration in so far as they are all part of the same centre, there are implications for other centres, if the resultant trading performance of Narellan has been underestimated. HillPDA suggest that DES has underestimated impacts on Narellan. As a result, they suggest that assumed trading performance is higher than it should otherwise be and this has the effect of overestimating the impacts on other centres. Consistent with this argument, Urbis Retail Averages indicate that on average a sub-regional shopping centre (the current classification of the NTSC) has a higher RTD than a regional shopping (the classification of the NTSC after expansion), while the RTD for specialties in a regional shopping would be higher. However, these benchmark RTD figures suggest that the differences are small.
17. Both point in time impacts and current centre performance are relevant considerations for when interpreting results from economic impact assessment. In addition to the qualitative discussions above, it would be useful to compare the resultant RTDs of the other centres after the proposed expansion in Narellan with the benchmark RTDs for comparable centres in 2021. The latter

measure should take into account the real growth in benchmark RTD over time. Based on the 0.6% per annum real growth in RTD (that HillPDA use to forecast turnovers), benchmark RTDs are expected to grow by over 6% from 2011-21. In comparison to this growth rate, Macarthur Square would also fall short.

18. We agree that the proposed expansion in Narellan may result in a negative impact on the trading performance of the existing centre as a whole. However, certain type of retailers, such as supermarkets, may also benefit from the higher volume of patrons attracted by the new additions of the DDS and DS, particularly given that the proposed increase in supermarket floorspace is relatively marginal compared to the size of the proposed expansion. Overall, we suggest the net negative impact on Narellan centre is likely to be small and would not therefore have the effect of resulting in significantly lower impacts on competing centres compared with the DES analysis.
19. We agree with HillPDA that the DES net community benefit test falls short of the mark. However, as with the DES study, in our view the list of positive and negative effects included as part of the net community benefit test is not comprehensive. The effects are not quantified and the difference between effects from the proposal's perspective and net effects within the system is not clearly articulated. As it stands, the DES net community benefit test does not cover the elements nor does it follow the method we would expect (e.g. an analysis of net rent effects in the system).

Location IQ

1. We agree that a larger level of floorspace at Narellan would have a great impact on other centres (assuming viability and all other things being equal). However, as noted in Camden Councils letter to the Department, the calculations identified in the submissions are the potential maximum and not the actual floor space proposed. The draft DCP, Planning Proposal, and relevant studies, assessments, etc. are based on a proposed NTC expansion that would ultimately achieve a GLAR of approximately 88,000 sqm.
2. We disagree with the Location IQ assertion that DES have overestimated the future population. As previously noted, recent BTS population forecasts for the trade area appear to broadly line up with the DES numbers.
3. It should be noted that Forecast i.d. would have produced a set of population forecasts that are different (probably lower in this case) to the DP&I's 2010 Interim Population Forecasts that are used in the BTS Forecasts as LGA control totals.
4. We agree that an impact greater than 10% is normally considered significant. However, EIA needs to consider the resultant RTDs as well, as discussed earlier.
5. We agree that the assertion by Location IQ that the expansion at Narellan will come at the expense of future growth at other centres, such as Campbelltown – Macarthur. HillPDA finds that the turnover impact on Macarthur Square would be 11.3% after the stage 6 expansion. This is above the 10% threshold level and should be considered significant, particularly given that centre is currently trading slightly below the median of the RTDs of comparable centres.
6. An oversupply of department store and DDS floorspace is a legitimate concern, particularly if this will result in a delay in the proposed planned floorspace in growth areas, such as Leppington and Oran Park. However, this argument lacks a proper demand assessment and impact assessment for DS and DDS floorspace.
7. HillPDA's EIA suggests that the proposed expansion in 2021 would have a 10.5% impact on the turnover of the Leppington Major Centre, which is just above the 10% threshold level. SGS can not comment on the impact on the DS commodity group, given that the expansion at Narellan does not propose an additional department store.
8. We broadly agree with Location IQ that it would not be expected or reasonable for the Narellan trade area to reclaim all of the escape expenditure or retain the majority of spending. While we may expect some escape expenditure to be reclaimed it is natural to have a level of escape expenditure to higher order centres and similarly we agree that it does not justify the need for the proposed development at Narellan

Urbis

1. While we agree with the Urbis observation that the future growth of Leppington will eat into the DES defined trade area to the north we do not agree that parts of the trade area reflect a somewhat 'artificial market' that would otherwise not be available to NTC if it was developed as intended. What is important however, is that the change in market share for Narellan and competing centres is properly considered over time. For example, the resultant market share and RTD for Narellan in future with the proposed development at Narellan should not be such that it threatens its viability, role and function
2. We share the concern expressed by Urbis over the population forecasts and the apparent discrepancy between the DE#S figures and the Forecast i.d. numbers. However, recent BTS data appears to support the DES forecasts with population numbers for the defined area being broadly similar after accounting for boundary effects.
3. We agree with the Urbis position that the negative effects on Narellan that are suggested by HillPDA are probably overstated. The proposed develop will result in an elevation of status for Narellan and while there will undoubtedly be some native impact on individual retailers in Narellan, the net outcome for Narellan as a whole is unlikely to be near the 15%-20% stated by HillPDA.
4. The potential for a much higher level of floorspace to be developed at Narellan is significant. Obviously all other things being equal, a higher floorspace level at Narellan would draw a higher level of expenditure away from other centres resulting in greater economic impacts.

Camden Council

8. While we may expect some escape expenditure to be reclaimed, it is natural to have a level of escape expenditure to higher order centres and similarly we suggest that it does not justify the need for the proposed development at Narellan.
9. While we acknowledge that there is no accepted standard definition for significant impact, we would suggest that a one off trading impact of -10% in the first full year of operation is a reasonable threshold for significance. However, this should be viewed in tandem with the trading performance of the affected centre – i.e. the resultant RTD compared with published benchmarks with the proposed retail floorspace included in the system
10. The fact that several centres (Oran Park, Harrington Plaza, Camden Town Centre, Mount Annan and Spring Farm) experience a turnover impact great than 10% is a cause for concern. In particular, three centres (Camden, Mount Annan and Macarthur Square) are expected to experience negative growth in their trading levels between 2011 and 2016 following expansion of Narellan. While the latter two centres are currently trading above the benchmark, Camden is performing well below sub-regional indoor centres. Hence, the -5.9% shift (from 2011-16) in retail trade estimated by HillPDA is a legitimate concern for the viability of Camden centre. This should be carefully considered by DP&I in this assessment of the planning proposal
11. Both point in time impacts and current centre performance are relevant. It would be useful for the economic impact analysis to compare the resultant RTDs of the other centres after the proposed expansion in Narellan with the benchmark RTDs for comparable centres in 2021. The latter measure should take into account the real growth in benchmark RTD over time. Based on the 0.6% per annum real growth in RTD (that HillPDA use to forecast turnovers), benchmark RTDs are expected to grow by over 6% from 2011-21. In comparison to this growth rate, Macarthur Square would also fall short.
12. While we acknowledge that the change in turnover from current levels to the first operational year of the expanded facility is a useful measure. We would argue that most significant measures are turnover impact in the first year of operation (with facility vs. without facility) combined with an assessment of trading performance (RTDs) at that time
13. We would also suggest that the HillPDA assumed retail expenditure growth figures are on the high side and that the rate is growth is likely to be lower than it has been since 1986 given the challenges faced by the retail industry (e.g. the fact that online retail growth is double that of

conventional retail). A slowing rate of growth can be seen in ABS catalogue 8501.0 - Retail Trade, Australia, Mar 2013

5. We disagree with CCC's assertion that HillPDAs approach is 'conservative' as they have modeled a 'high impact scenario'. The 'high impact scenario' is based on an assumption that trading performance (RTD) at an expanded centre will not be significantly lower than the current centre. We would suggest that this is a sensible assumption rather than a conservative one.

7.1 SGS Conclusion

The DES defined primary and secondary catchments areas appear reasonable but it is difficult to critically assess whether these catchment areas are reasonably or not without knowing the percentage capture of retail expenditure within each area

Population forecast data

Since the time of writing, more data has become available on existing population and population forecasts for the defined trade area. The NSW Bureau of Transport Statistics (BTS) has produced travel-zone-level (TZ) population forecasts for these areas. While there are a few boundary issues when comparing against the DES trade area, the BTS figures broadly line up with the DES figures

Cumulative impact

We note that the DES impact analysis examines the impacts of stage 5 and stage 6 independently. We would suggest that the cumulative impact of stage 5 and stage 6 should also be assessed. This is picked up in the HillPDA peer review and HillPDA go on to consider the combined effects of the two stages in their gravity modelling.

Current trading performance

The current trading performance as well as the anticipated trading level for Narellan appears to be underestimated in the DES report. Since stage 5 is proposed to include two additional full line DDS, the expanded NTSC would be classified as a regional shopping centre, according to the shopping centre definitions in the Urbis Retail Averages. The typical RTD for a full-line supermarket and mini major within a regional shopping centre is around $10,900 per sqm and $6,945 per sqm respectively. The NTSC after the stage 5 expansion has potential to trade at around $6,260 per sqm (an average RTD for a regional shopping centre), which is about 6% higher than the $5,884 estimated by DES

HillPDA acknowledge this but go on to suggest that the impacts felt by existing traders in Narellan will be much higher than DES estimate and in the range of 15% to 20%. This will result in the net trading performance of the newly expanded centre being tempered somewhat and in turn this will lessen the impact felt by other centres We disagree with this position and suggest that the negative effects on Narellan that are suggested by HillPDA are probably overstated. The proposed develop will result in an elevation of status for Narellan and while there will undoubtedly be some native impact on individual retailers in Narellan, the net outcome for Narellan as a whole is unlikely to be near the 15%-20% stated by HillPDA.

Expression of impacts

We broadly agree with the way that DES have expressed impacts – i.e. as the change in turnover in the first year of operation compared to the turnover that would have been achieved should the development not have proceeded. However, it would appear that 2016 rather than 2017 should be used as the first full year of operation

While we acknowledge that there is no accepted standard definition for significant impact, we would suggest that a one off trading impact of -10% in the first full year of operation is a reasonable threshold for significance. However, this should be viewed in tandem with the trading performance of the affected centre – i.e. the resultant RTD compared with published benchmarks with the proposed retail floorspace included in the system

The fact that several centres (Oran Park, Harrington Plaza, Camden Town Centre, Mount Annan and Spring Farm) experience a turnover impact great than 10% is a cause for concern. In particular, three centres (Camden, Mount Annan and Macarthur Square) are expected to experience negative growth in their trading levels between 2011 and 2016 following expansion of Narellan. While the latter two centres are currently trading above the benchmark, Camden is performing well below sub-regional indoor centres. Hence, the -5.9% shift (from 2011-16) in retail trade estimated by HillPDA is a legitimate concern for the viability of Camden centre. This should be carefully considered by DP&I in this assessment of the planning proposal.

Effects over time

HillPDA also draw attention to the change in trading performance between now and the anticipated first full year of operation for the expanded centre. Both point in time impacts and current centre performance are relevant considerations for when interpreting results from economic impact assessment. In addition to the qualitative discussions above, it would be useful to compare the resultant RTDs of the other centres after the proposed expansion in Narellan with the benchmark RTDs for comparable centres in 2021. The latter measure should take into account the real growth in benchmark RTD over time. Based on the 0.6% per annum real growth in RTD (that HillPDA use to forecast turnovers), benchmark RTDs are expected to grow by over 6% from 2011-21. In comparison to this growth rate, Macarthur Square table would fall short.

While we agree that retail expenditure is likely to continue to grow in the future, we would suggest that the rate is growth is likely to be lower than it has been since 1986 given the challenges faced by the retail industry (e.g. the fact that online retail growth is double that of conventional retail). A slowing rate of growth can be seen in ABS catalogue 8501.0 - Retail Trade, Australia, Mar 2013

NCB testing

In our view the list of positive and negative effects included as part of the DES net community benefit test is not comprehensive. The effects are not quantified and the difference between effects from the proposal's perspective and net effects within the system is not clearly articulated. As it stands, the DES net community benefit test does not cover the elements nor does it follow the method we would expect. The HillPDA analysis expands a little on the DES approach but again, there is no clear distinction of net effects, none of the elements are quantified and there is no assessment of the relative importance of listed costs and benefits.

SGS Summary

Based on the evidence presented in the documents reviewed, the proposed Narellan expansion does appear to result in significant economic impacts for some centres in the defined trade area.

While the DES report suggests that no centres are significantly impacted in either stage 5 or stage 6, the assumed trading performance of the proposed development appears to be on the low side and this will drive lower impacts. Other model inputs appear reasonable and we are comfortable that the criticism of the population forecasts used by DES in unfounded given that the numbers are broadly in line with recent BTS data.

In the HillPDA analysis, significant impacts are shown for some centres both in the 2016 test (stage 5) and the 2021 test (stage 5 and stage 6). In 2016 significant impacts (>10%) are shown for Camden, Harrington Plaza, Mount Annan, Spring Farm, and Oran Park. In 2021 significant impacts (>10%) are shown for Camden, Harrington Plaza, Mount Annan, Macarthur Square, Spring Farm, Oran Park and Leppington.

HillPDA point to retail expenditure growth (which drives turnover growth at the centres) and suggests that this obviates 'point in time' impacts with the shift in turnover in the periods 2011-2016 and 2011-2021 being positive in all cases except Camden (which shows a -5.9% shift in the period 2011-2016 and -0.1% shift in the period 2011-2021). However, we should point out that Camden is performing well below sub-regional indoor centres and so the 5.9% decline (from 2011-16) in retail trade estimated by HillPDA is a legitimate concern for the viability of this centre. In addition, we suggest that the HillPDA retail expenditure growth forecasts are optimistic. Lower retail growth forecasts would result in greater negative shifts in turnover over time.

It would also be useful to assess the resultant RTDs for all affected centres in the first full year of operation for the expanded centre. These should be compared against benchmark RTDs for relevant centre types. This measure should take into account the real growth in benchmark RTD over time. If we accept the 0.6% per annum real growth in RTD (that HillPDA use to forecast turnovers), benchmark RTDs are expected to grow by over 6% in the period 2011-21. Against RTDs inflated in this way, Macarthur Square would also fall short.

Although we have not run our own retail simulation model, based on the balance of evidence available from the reviewed reports, there appear to be significant impacts at Camden and Macarthur Square. For these centres it may be advisable for further qualitative and quantitative testing to be conducted to assess their ability to accommodate the impacts without jeopardising their viability, role and function. If conducted, this testing should take into account the issues emerging from this peer review.

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