Government of **Western Australia**
Department of **Treasury**

Commonwealth Grants Commission
2016 Update

Western Australia's Response to the

Wage Costs Assessment – Staff Discussion Paper CGC 2015-05-S

December 2015

Contents

Response to *Wage Costs Assessment* Discussion Paper 1

General Comments 2

Specific Issues 3

Data Source 3

Discounting 4

Very Remote Populations 4

Appendix A: Comments on Consultants' Draft Report 5

General Comments 7

The HILDA Dataset 7

Number of Observations 7

Representativeness of Observations 9

HILDA and OLS 11

Robustness of Using OLS 11

Number of Explanatory Variables 12

Definitions of Variables 14

Commonwealth Public Servants 14

South Australia and Tasmania: High Public Sector Premiums 15

Competing Hypotheses 15

South Australia and Tasmania as Policy Outliers? 16

Empirical Evidence 18

Danger of Focussing on Single Issues 18

Comparison of wages in major cities vs regions 19

Clarifications Sought in the Consultants' Report 20

Appendix B: Western Australian Agencies' Staffing of Regional Areas 21

Department of Education (DoE) 21

Remuneration in regional areas for public sector employees 21

Ensure service standard levels 24

Western Australia Police 26

Remuneration in regional areas for public sector employees 26

Ensure service standard levels 27

Department of Health (DoH) 28

Remuneration in regional areas for public sector employees 28

Ensure service standard levels 31

Response to *Wage Costs Assessment* Discussion Paper

Key Points

- We continue to believe that the Commonwealth Grants Commission's (CGC's) objective to review the wages assessment by the 2016 Update is overly ambitious.
- We agree that the CGC should continue to make a wage costs assessment.
  - This conclusion is not altered by the Consultants' draft Report (as discussed in Appendix A).
  - For consistency with fiscal equalisation, the assessment should continue to reflect whole-of-State private sector wage pressures (this argument is further bolstered by Western Australian agencies' actions to staff remote regions, presented in Appendix B).
- We agree with using the Australian Bureau of Statistics (ABS) *Characteristics of Employment* (CoE) data for the 2014-15 data year, and retaining the previous assessment for the 2012-13 and 2013-14 data years.
  - Alternatively, the 2012-13 and 2013-14 assessments could be calculated by deflating the 2014-15 assessment by growth in wage price indexes.
- There is no evidence that discounting the wage costs assessment improves fiscal equalisation. The CGC has no clear rationale for discounting.
- As the CoE data does not cover very remote regions, we believe that the CGC should make an adjustment for differential State costs in these regions. This easily meets the CGC's $10 per capita threshold for data adjustments.
  - Western Australia's needs are still likely to be understated due to inadequate sampling in remote regions and the data not covering all forms of employee remuneration.

General Comments

We agree with the discussion paper[1] that an interstate wage costs assessment continues to be appropriate, and that it should continue to reflect private sector wage pressures for the entire State.

- As discussed in our September 2015 submission, the alternative capital city based approach would give some States the capacity to provide a higher service standard than others, so would not be consistent with fiscal equalisation.

We consider that the Consultant's Report, in its current state, provides no basis for changing the wage costs assessment. Appendix A contains comments on the Consultants' draft Report.

Wage pressures are significant in Western Australia, particularly in regional areas. Appendix B provides information on what Western Australian agencies do to attract and retain staff to regional areas. This information demonstrates that the quality of services, and hence the quality of staff, is important. Hence, part of 'what States do' is to ensure that they have quality staff to ensure service standard quality. Enabling some States to pay above market wages would enable them to provide above standard services, which would be inconsistent both with the fiscal equalisation principle and 'what States do'.

On specific issues, we have the following views.

- The new *Characteristics of Employment (CoE)*[2] data can be used to update the wage costs assessment for the 2014-15 data year. However, as recommended by the discussion paper, we believe the previous assessment should be retained for the 2012-13 and 2013-14 data years.
- There is no clear rationale for discounting the assessment.
- The proposed assessment understates costs for States with relatively large very remote populations.

These specific issues are addressed further below.

---

1 CGC 2015-05-S *Wage Costs Assessment.*

2 Australian Bureau of Statistics, *Characteristics of Employment, Australia, August 2014* (cat. no. 6333.0).

Specific Issues

Data Source

The CoE data is so far only available for the 2014-15 data year (and is missing qualifications data, which we understand will be available in later years).

The discussion paper lists the following two options for sourcing wage factors.

- Retain the approach from the 2015 Review, which uses wage price indexes to escalate 2008-09 wage cost factors calculated from the ABS 2009 *Survey of Employment and Training (SET)* (pending getting qualifications included in the CoE data).
- Use data from the *Employee Earnings, Benefits and Trade Union Membership* (EEBTUM) survey for 2012-13 and 2013-14 and CoE data for 2014-15.

The discussion paper concludes that using the 2015 Review approach for the first two data years and the CoE data for the last data year appropriately balances concerns over the CoE data missing qualifications and the SET data becoming progressively out-of-date. This makes sense to us.

We therefore support the discussion paper proposal.

We believe EEBTUM data should not be used unless it is thoroughly reviewed. This would include undertaking an analysis of EEBTUM data for the 2014-15 data year, to compare the results to those from the CoE data. It would only be appropriate to use the EEBTUM data if it gives similar results to the CoE data.

If the CGC is concerned about the SET analysis being too old, it could start with the 2014-15 factors derived from the CoE data, and deflate these to the previous years using wage price indexes.

Discounting

As discussed in our September 2015 submission on the wage costs assessment, in the absence of evidence that discounting improves fiscal equalisation in this case, we believe that the CGC should not discount the wages assessment.

The 2015 Review Report[3] states that the CGC uses discounts when it thinks they will improve the assessments. However, the report does not explain how such improvement is achieved or how the CGC decides that discounting is appropriate. Furthermore, no explanation has been provided by CGC staff.

In the absence of a rationale, we consider that the proposal to apply a discount is inappropriate.

The measurement of the wage costs disabilities is the best available, and there is no reason to expect it to be more likely to be understated than to be overstated. Applying a discount introduces bias into the results.

Very Remote Populations

The ABS CoE survey does not cover very remote regions.

The discussion paper suggests that an adjustment for differential costs across States in very remote regions would be around $30 per capita in 2011, but probably less in other years, so not material.

However, $30 per capita is the materiality threshold for a disability. The threshold for a data adjustment is only $10 per capita.

Therefore, we believe that the CGC should make an adjustment for the very remote regions, based on its analysis of Census data.

Also, as discussed in our September 2015 submission on the wage costs assessment, it is not clear whether other regional areas (e.g. remote regions) are adequately sampled and whether the CoE survey covers all forms of employee remuneration. Hence, even after adjusting for very remote regions, the assessment is still likely to understate Western Australia's needs.

---

[3] Commonwealth Grants Commission, *Report on GST Revenue Sharing Relativities 2015 Review, Volume 2 – Assessment of State Fiscal Capacities*, (page 17, paragraph 82).

Appendix A: Comments on Consultants' Draft Report

Key Points

- We consider that it is now too late for the Consultants' Report to be transparently considered in the 2016 Update.
- We consider that the Consultants have been tasked with a difficult research issue, and one that would ordinarily in academic circles need to be worked through via a process of multiple papers, peer review, and discussions over a period of years. It is simply not to be expected that the Consultants could master this in a single highly time-constrained study.
- As noted by the Discussant at the Australian Labour Market Research Workshop (not to our knowledge challenged by anyone), there is a need to consider the appropriate econometric techniques associated with using Ordinary Least Squares (OLS) on the Household, Income and Labour Dynamics in Australia (HILDA) dataset.
  - Using OLS on the HILDA dataset can be appropriate if the required assumptions are met.
  - The fact that the dataset follows individuals over time means that there is a lot less information in the dataset than would be the case if the observations were all independent. As a result, the default OLS statistics can substantially overestimate the accuracy of the coefficients compared with using 'cluster robust' measures.
  - There is potentially bias from the ageing sample (though unclear if this is significant).
- It is unclear why the raw national public sector premium in the HILDA dataset is much greater than the premium determined from the ABS Average Weekly Earnings (AWE) data.
- The very limited number of explanatory variables is a major limitation of the Consultants' analysis. The coefficients often vary markedly and seemingly erratically from State to State for both public and private sectors, possibly reflecting explanatory variables (e.g. detailed education, occupation and industry characteristics) that are not modelled.

  - We do not understand the Consultants' aversion to a larger number of explanatory variables, particularly as the CGC's interest is in short-run analysis. While the introduction of more variables results in more correlations between variables and wider error ranges in the estimated coefficients, this does not in itself invalidate the use of OLS to explain wage levels.

- We have concerns about the Consultants' conclusions that South Australia and Tasmania have relatively high public sector premiums.

  - Another study is required to determine, among competing hypotheses, what underlies these premiums – policy, compositional impacts that have not been modelled, or differences between national market effects on the private and public sectors (although it is unclear why such effects would exist).

  - The data we have reviewed in the limited time available does not suggest any special premium for South Australia and Tasmania.

  - We are also concerned about the undue focus on this particular issue to the exclusion of others. Acting on this one issue could bias the overall wage disability results.

- With regard to the comparison of wages in major cities vs regions, we note the following.

  - We have no confidence that the results are sufficiently reliable, reflecting low sample sizes (especially considering the time series nature of the HILDA dataset), the heterogeneity of regional areas, and the limited number of explanatory variables used by the Consultants. There are also significant differences between the Consultants' results from HILDA and the CGC's analysis of 2009 SET data.

  - Even if we assume the data is reliable, the results show similar wage flexibility between major cities and regions for the private and public sectors, and across States, inconsistent with the assumptions underlying the CGC's capital city/rest of State model, and supportive of a whole-of-State model.

- The Consultants' Report contains a number of statements that are unclear or out of context. We ask that the Consultants review the examples we have identified.

General Comments

We consider that it is now too late for the Consultants' Report[1] to be transparently considered in the 2016 Update.

In this regard, we consider that a transparent process should include the following steps:

- State submissions on a final or near final Report;
- the CGC providing the States with its considered views on the Report and the States' submissions;
- the States responding to the CGC's views; and
- the CGC making its final decision.

As a general observation, we consider that the Consultants have been tasked with a difficult research issue, and one that would, in conventional academic circles, need to be carefully considered via a process of multiple papers, peer review, and discussions over a period of years. It is simply not to be expected that the Consultants could master this in a single highly time constrained study.

The discussion of the draft Consultants' Report at the Australian Labour Market Research Workshop highlighted this normal academic practice. Issues were raised and some new directions were suggested, but there should be little expectation of definitive findings in the final Report. Rather, the final Report should be seen an initial step in the research journey.

The HILDA Dataset

Number of Observations

The HILDA Survey is a household-based panel study that began in 2001, and is conducted by Melbourne Research Institute.[2] Its website[3] states the following.

---

1 K. Mavromaras, S. Mahuteau, S. Richardson and R. Zhu (12 November 2015), *Public-private sector wage differentials in Australia: What are the differences by State and how do they impact GST redistribution decisions (Draft)*, National Institute of Labour Studies, Flinders University.

> The important distinguishing feature of the HILDA Survey is that the same households and individuals are interviewed every year, allowing us to see how their lives are changing over time…document the life-course each person takes…panel data can tell us about the antecedents and consequences of life outcomes, such as poverty, unemployment, marital breakdown and poor health, because we can see the paths that individuals take to arrive at these outcomes and the paths they take subsequently.

As we understand it, the Consultants have used pooled OLS to analyse the HILDA dataset, undertaking regressions nationally and for each State, and for each of the public and private sectors.

There is a substantial literature on regression models for panel data (including panel data with large longitudinal datasets such as HILDA). We understand that it is not uncommon to use pooled OLS, and further that pooled OLS can yield consistent (i.e. unbiased) estimates, under appropriate assumptions (see e.g. Cameron & Trivedi, *Microeconometrics: Methods and Applications*, page 699). However, the Consultants should consider whether these assumptions are met for the HILDA dataset.

The literature is also clear that, in panel data modelling, the error term is likely to be correlated over time for each individual. In effect, there is not as much information in the dataset compared to if all the observations were independent. In these circumstances, the usual OLS standard errors (which we understand have been used by the Consultants can be substantially understated. To deal with this, 'cluster robust' measures of standard error are available (where the number of 'clusters' – individuals in the case of panel data – is large) that control for both heteroscedasticity and serial correlation in OLS. These measures of standard error can often be several times larger than the default estimates.

- To illustrate, the draft Consultants' Report refers to 92,373 observations nationally, but this provides less information than it would appear as the observations track only 18,275 individuals over time (i.e. about one individual for every five observations). Individuals' circumstances can be expected to be highly correlated over time.

---

[2] We note that the HILDA dataset is not strictly a panel data series, as not all the same individuals are traced over time. Some individuals enter the dataset or leave; some gain or lose employment, thereby varying their contribution to the employment questions.

[3] https://www.melbourneinstitute.com/hilda/.

  - When broken up between public and private sectors, and between States, the number of individuals can be quite small. For example, for Western Australia, the survey appears to sample about 1,300 individuals in the private sector and 400 individuals in the public sector (based on a ratio of one individual for every five observations).

  - For the Australian Capital Territory, the Northern Territory and Tasmania, the sample sizes become much smaller. The Consultants have acknowledged (in a footnote on p. 10 of their draft Report) that estimates for Tasmania and the Northern Territory should be interpreted with caution.[4]

- This may be compared with the CGC's analysis of wage costs using the ABS *Characteristics of Employment* survey, which is based on around 19,000 individuals (similar to the HILDA dataset).

  - The CGC has undertaken regression analysis only at a national level, with a single parameter for each State (or two parameters for the capital city/rest of State analysis). The CGC, unlike the Consultants, has not attempted a stand-alone analysis of each State.

  - Moreover, in undertaking its public sector wage analysis (around 3,300 individuals nationally), the CGC has only sought to establish a general relationship with the private sector results, and not to draw conclusions in relation to individual States.

Representativeness of Observations

HILDA and ABS Average Weekly Earnings (AWE)

A comparison of the Consultants' summary statistics (Table 1, page 5) with AWE data[5] shows consistently that raw public wages are higher than raw private wages. However, the size of the difference is not consistent between the two datasets.

[4] Despite this, the Consultants conclude (in the first paragraph of their draft Report) that the wage gap between public sector and private sector employees is highest in the Australian Capital Territory, Northern Territory and Tasmania.

[5] Australian Bureau of Statistics, *Average Weekly Earnings, Australia, May 2015* (cat. no. 6302.0).

- AWE statistics imply that national public wages are on average 8.5% higher than national private wages from 2001 to 2013 inclusive (with an apparent structural break at 2007, where the pre-2007 average public premium is 9.6% and 7.5% following). See Table A1.
- By contrast, the Consultants' gap gives the public sector a 23.3% premium (assumed to be an average over all the years).
- Such differing results imply that HILDA is a non-representative sample.

Table A1: Full time total earnings in the public and private sectors, 2001 to 2013

	Total Earnings ($)		Public Premium
	Public	Private	
May-2001	938.50	832.1	12.8%
Nov-2001	955.90	857.7	11.4%
May-2002	975.70	877.5	11.2%
Nov-2002	989.20	906.5	9.1%
May-2003	1,017.30	935.9	8.7%
Nov-2003	1,038.40	962.6	7.9%
May-2004	1,057.30	962.9	9.8%
Nov-2004	1,082.10	998.4	8.4%
May-2005	1,098.00	1,032.3	6.4%
Nov-2005	1,135.50	1,046.9	8.5%
May-2006	1,156.70	1,051.1	10.0%
Nov-2006	1,184.90	1,068.5	10.9%
May-2007	1,202.50	1,102.4	9.1%
Nov-2007	1,223.20	1,131.4	8.1%
May-2008	1,235.30	1,154.6	7.0%
Nov-2008	1,273.40	1,194.1	6.6%
May-2009	1,304.50	1,214.8	7.4%
Nov-2009	1,348.90	1,256.2	7.4%
May-2010	1,381.50	1,277.2	8.2%
Nov-2010	1,419.10	1,302.7	8.9%
May-2011	1,445.40	1,333.1	8.4%
Nov-2011	1,472.40	1,367.9	7.6%
May-2012	1,494.50	1,390.9	7.4%
Nov-2012	1,536.20	1,436.7	6.9%
May-2013	1,559.60	1,462.4	6.6%
Nov-2013	1,584.80	1,478.0	7.2%

Source: Australian Bureau of Statistics, *Average Weekly Earnings, Australia, May 2015* (cat. no. 6302.0)

Ageing of the HILDA Cohort

The sample of individuals in HILDA ages over time. The Consultants' draft Report shows (Table 7, page 15) that the 2008-2013 observations are about a year older than the 2001-2007 observations. The ageing effect is partly offset by an infusion of new individuals in 2011, and we would expect differences between individual years (e.g. 2001 vs 2010) to be greater.

Without further analysis, all that can be said is that it is unclear how well the HILDA sample captures the general population across the period 2001-2013. One might speculate that the ageing of the sample could influence the values of the 'wave' coefficients (which are year-specific).

HILDA and OLS

Robustness of Using OLS

As noted by the Discussant at the Australian Labour Market Research Workshop, there is a need to consider the appropriate econometric techniques associated with using OLS on the HILDA dataset.

- We agree, and are not aware that anyone challenged this.

It is standard best practice to test the appropriateness of using OLS where there is some unusual property of the dataset that may raise questions about the applicability of OLS. In this case, the unusual property is the relatedness of groups of observations through belonging to the same person over time, which raises the prospect of correlations among the individual error terms, and perhaps other issues.

There are standard assumptions that must be satisfied to justify the use of OLS models, which include:

- the relationship between dependent and independent variables is linear and additive;
- the error terms are statistically independent;
- the error terms are homoscedastic; and
- errors are normally distributed.

Standard tests (such as plotting the residuals) can indicate the robustness of using OLS on the HILDA dataset, and should be presented in the final Report.

Number of Explanatory Variables

Theory Issues

The Consultants' draft Report acknowledges (page 4) that the chosen variables are not comprehensive, but also argues (page 13) that it is not appropriate to augment its analysis with occupation variables. The latter argument is difficult to follow.

- "There is an argument that the qualification levels have a diversity within them of distinct skills and ability, so that they are only a broad proxy for the level of human capital."

  We agree. The Consultants' qualification levels (year 12, certificate, diploma, university) are extremely broad.

- "For this reason, there can be an argument that wage regressions should also include level of occupation."

  We agree. The skills required for a particular job are often more specific than the skills that can be found in people with, for example, a university qualification.

- "The argument against this is that …"

  - "qualification and occupation are correlated, hence the independent effects of each are difficult to quantify …"

    One problem with this argument is that the Consultants' qualification variables are very broad, so there is no well-defined 'independent' qualification effect – it is context dependent. Another problem with this argument is that it implies that there is necessarily a problem with correlated explanatory variables. However, such correlations do not invalidate the ability of OLS to predict the dependent variable. We agree that correlations lead to greater fuzziness in the coefficient values, but that simply reflects the reality that the coefficients of valid explanatory variables often cannot be uniquely specified even in principle.

- "and there is no theoretical reason why a given level of qualification should be differently rewarded in different occupations."

  But as we have noted, the qualification variables are very broad, and the reward to the qualification will depend on the fit between the particular details of qualification and particular details of occupation.

Overall, these considerations suggest that there is a strong case to include occupation variables when the qualification variables are broad.

In general, there is a case to include further variables if they contribute information that cannot be gleaned from the existing variables.

Practical Issues

We consider the Consultants' decision to severely limit the number of explanatory variables is in practice a major limitation of their analysis.

The coefficients of the explanatory variables often vary markedly and seemingly erratically from State to State for both public and private sectors. For example, the results suggest that:

- being married and in the public sector in Western Australia leads to a 22% increase in average hourly wage, but only 11% in New South Wales and 4% in Victoria;

- being separated or divorced in the public sector in Western Australia leads to a 33% increase in average hourly wage, and only 12% in New South Wales, but a **reduction** of 26% in the Northern Territory; and

- returns to a university qualification in the public sector range from 24% in the Northern Territory to 48% in Western Australia and South Australia. The margin between the private sector return and public sector return varies from +11% in the ACT to -13% in South Australia. This margin contributes to the public sector premiums calculated by the Consultants (discussed below).

To us, these results suggest that the ***intrinsic*** explanatory power of many of the Consultants' explanatory variables (e.g. having a piece of paper inscribed 'university qualification') is not very strong, but that they are picking up explanatory power by association from explanatory variables (such as detailed qualification and occupation characteristics) that have not been modelled. For example, in some States, the mix of university qualifications may have less income potential than the mix in other States. Similarly, different returns to university qualifications in the private and public sectors may reflect the different mix of such qualifications in these two sectors.

State policies may also contribute to the variations observed in the public sector. The statistical error bounds of the coefficients may also be understated, reflecting issues with the HILDA dataset discussed above.

The Way Forward

To summarise, the variables used by the Consultants are very broad and context dependent. Additional explanatory variables are needed to reflect that context and bring it into the model.

The Consultants' own modelling demonstrates the value of adding extra variables. When extra variables are added to their national analysis (Table 4, page 7), the results (Table 8, page 14) show many coefficients becoming flatter as expected. For example, the public sector university qualification coefficient drops from 38% to 22%.

Definitions of Variables

While we broadly understand the meaning of the variables used by the Consultants, it would be helpful if detailed definitions were supplied, as there can be doubt about the precise meaning of 'tenure on the current job', 'long term health condition', 'living in a major city', etc.

Commonwealth Public Servants

We understand that Commonwealth public servants are lumped in with State public servants.

The Consultants have acknowledged that the Australian Capital Territory is a special case, but it would be helpful if the Consultants included some analysis of the presence of the Commonwealth public sector in each State, to understand better whether this could be an issue beyond the Australian Capital Territory.

South Australia and Tasmania: High Public Sector Premiums

The Consultants have used their State-by-State regressions, together with Blinder-Oaxaca decomposition analysis, to determine relatively high public sector premiums for South Australia and Tasmania (Table 5, page 10)[6]. The Consultants have interpreted this as reflecting a national market effect for the public sector.

We don't believe that the Consultants have made a case for this conclusion. We discuss this under several headings below.

Competing Hypotheses

The Consultants' econometric analysis does not explain why South Australia and Tasmania have high public sector premiums. The national market explanation is one hypothesised explanation. Other hypotheses are:

- South Australia and Tasmania have policies to pay their public sectors more than other States; or
- the premiums reflect composition effects that have not been modelled by the Consultants.

These hypotheses need to be considered and either supported or rejected on the basis of evidence.

The premium is dependent on the power of the explanatory variables to estimate the portion of the gap attributable to workforce characteristics (composition effects). Yet, the discussion in the previous section, about the small number and broad nature of explanatory variables used by the Consultants, strongly suggests that composition effects have not been reliably modelled. For example, we noted above the variations across States in the differential impact of university qualifications between the public and private sectors, which we suggest reflect at least partly the differences in the detailed characteristics of these qualifications across States and between the private and public sectors.

In this regard, the need for caution in interpreting the Blinder-Oaxaca analysis is noted in the literature:

[6] The Australian Capital Territory also has a high premium but the Consultants consider the Australian Capital Territory (and the Northern Territory) to be a special case.

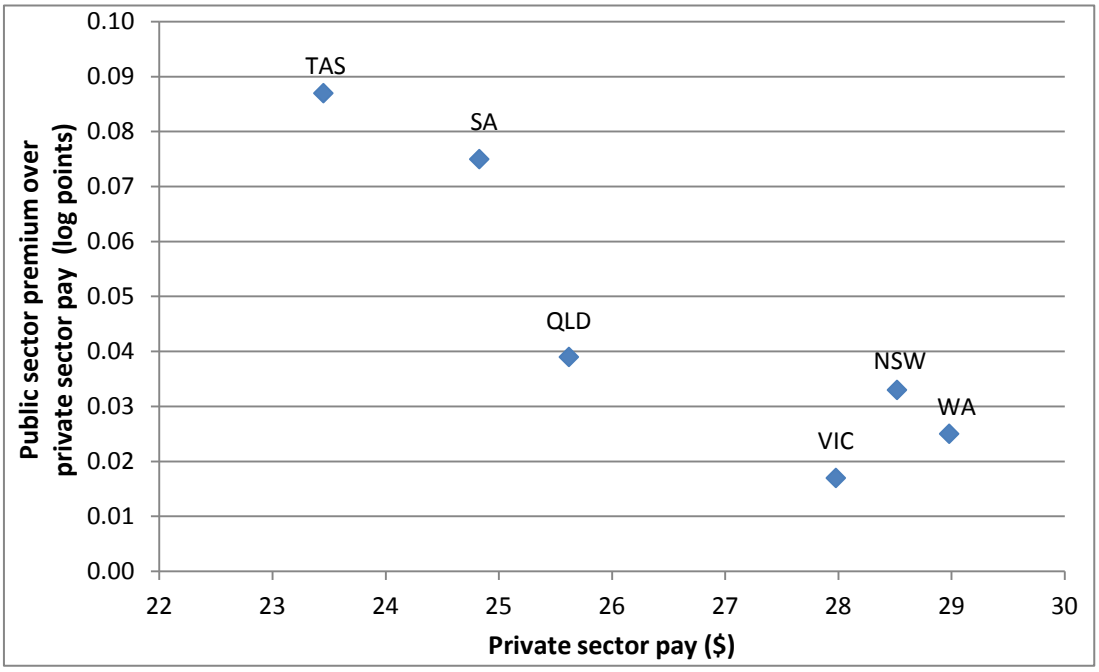
> From an empirical perspective, the most serious problem that this methodology [i.e. Blinder-Oaxaca decomposition] has is that since estimates of the coefficients capture biases generated from information problems, errors in the variables and selectivity processes, the interpretation of this residual … is debatable. *(CG Ospino, PR Vasquez and NB Narváez, Oaxaca-Blinder wage decomposition: Methods, critiques and applications. A literature review, Revista de Economía del Caribe, no. 5, pp 237-274)*

With regard to the hypothesised public sector national market effect, it is not evident why, for example, a public sector teacher or nurse is subject to different market forces than an equivalent private sector teacher or nurse. This is a matter for empirical analysis, which the draft Report has not done. We look at some data below.

South Australia and Tasmania as Policy Outliers?

The Consultants support their case for a public sector national market effect by claiming that there is a good correlation between private sector pay and public sector premiums across States[7] (illustrated in our Chart A1). Obviously this analysis depends on the reliability of the composition/premium estimates, as discussed above.

Chart A1: Consultants' comparison of private sector pay and public sector premiums



Source: Constructed from Consultants' report, Table 5, page 10

[7] Consultants' Report, page 12.

However, even setting aside reliability issues, we consider that it is inappropriate to compare raw private sector pay levels with public sector premiums, as the comparison is affected by the different compositions of the public and private sectors[8]. Adjustment of private pay levels to reflect the public sector composition (see Chart A2) indicates that there is no systematic national market effect across the States, but that it is a case of Tasmania/South Australia versus the remaining States.

This makes it more plausible that South Australia and Tasmania are simply policy outliers, or the 'victims' of inaccuracy in the identification of composition/premium effects.

Chart A2: Comparison of adjusted private sector pay (to reflect public sector composition) and public sector premiums

Source: Constructed from Consultants' report, Table 5, page 10, adjusted to standardise to public sector workforce characteristics.

[8] The Consultants found that, for all States but Northern Territory, the reason for higher public wages was largely due to a higher quality workforce. To appropriately compare private sector pay levels with public sector premiums requires standardising the private sector workforce to the public sector workforce. We have adjusted the private sector pay by adding the derived composition log points (attributable to the public sector workforce) to the log average pay, for each State.

Empirical Evidence

Given the limited time available we have not been able to gather much empirical evidence.

- We calculated premium estimates using the 2011 Census data from the Australian Bureau of Statistics for school teachers and registered nurses, using personal income as a proxy for wages (Table A2). We did not find any special premium for South Australia and Tasmania.

Table A2: School Teachers and Registered Nurses Salary Comparison (Public/Private Ratio), 2011 Census year

Occupation	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	Aust.
School Teachers	1.098	1.054	1.053	**1.061**	1.025	**1.087**	1.020	1.022	**1.070**
Registered Nurses	1.209	1.110	1.216	**1.140**	1.094	**1.166**	1.054	1.137	**1.163**

Source: 2011 Census data, Australian Bureau of Statistics.

- We compared the annual salaries of registered nurses at the top of Level 1 across States in both the public sector and the private acute sector using data from the latest nurses pay check publication, released in September 2015 (Table A3). Again, we found no special premium for South Australia and Tasmania.

Table A3: Industry Salary Comparison for Registered Nurses at Top of Level 1 (Public/Private Ratio), 2012-13 data year

Occupation	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	Aust.
Registered Nurses	1.078	1.048	1.147	**1.150**	1.094	**1.041**	1.135	1.084	**1.093**

Source: Nurses pay check publication, September 2015.

Danger of Focussing on Single Issues

We are concerned about the undue focus on the issue of South Australia's and Tasmania's high public premiums (as modelled by the Consultants), to the exclusion of other unexplained issues (e.g. Victoria's low public premium, or Western Australia's concern that the CGC private sector regression analysis seems to understate the observed difference between Western Australian and national wages). Acting on this one issue could bias the overall wage disability results.

Comparison of wages in major cities vs regions

The draft Report examines whether public and private sector wages vary by region. However, we are not convinced the results are sufficiently reliable to be used. We note the following issues.

- **Low sample sizes in regions**. For example there are only 499 public sector observations for Western Australia (Table 11a, page 19) corresponding to perhaps 100 individuals (see discussion above on the HILDA dataset).

- **The heterogeneity of regional areas**. Regions within a State vary in terms of remoteness, nature of the local economy (urban, agricultural, mining, etc.), and strength of the local economy. This heterogeneity creates greater risks that small sample sizes will not be representative.

- **Limited number of explanatory variables used by the Consultants**. Here, as elsewhere, the limited number and broad nature of the explanatory variables acts to reduce the reliability of the results, particularly given the heterogeneity of the regions.

In our previous submission we also questioned the reliability of the CGC's capital city/rest of State analysis of the 2009 SET data. These analyses show significant differences.

- The CGC's analysis of the 2009 private sector SET data shows that "While private sector wages differ in capital cities to the rest of State, this difference is not significant in the public sector. Public sector wages are more homogenous between capital cities and the remainder of the State than private sector wages." (CGC's July 2015 *Discussion Paper on the Wage Costs Assessment*, Attachment A, paragraph 10.)

- By contrast, the Consultants' analysis (Table 11c, page 20) shows (under the 'Coefficient' heading) that both the public and private sectors pay more for major city workers on a constant quality basis, and the premium each sector pays for a constant quality workforce is about the same within each jurisdiction.

If we were to accept the Consultants' results as reliable, they show similar wage flexibility between major cities and regions for both the private and public sectors, across States. This is inconsistent with the assumptions underlying the CGC's capital city/rest of State model, and supportive of a whole of State model.

Clarifications Sought in the Consultants' Report

The Consultants' draft Report contains a number of statements that are unclear or out of context. We ask that the Consultants review the two examples we have identified, as follows.

Page 9, "WA in particular retained the public sector wage momentum up to 2011 (a 10% growth [from 2007]) as its private sector pay growth slowed – to 4% [from 2007]"

This comment seems out of context. Nationally, public and private wages grew at nearly the same rate (10% vs 9%) from 2001 to 2007, but in Western Australia during this period public wages grew less (14%) than in the private sector (20%). This could mean that, as at 2007, there was more pent up pressure for public sector wage increases in Western Australia than nationally. This could explain why Western Australia's public sector wages grew 10% from 2007 to 2011, while private sector wage growth was only 4%.

Page 25, "When public sector pay is compared across jurisdictions (we make this comparison relative to NSW), Vic, SA and Qld pay less for a given quality workforce and the ACT and NT pay more. WA and Tas pay about the same as NSW. With the exception of Tas, which has a relatively low paid private sector, a similar pattern is found in the private sector workforces, but the differences are smaller."

We cannot identify the source of these 'given quality' comparisons, given that the data provided in the report have not to our knowledge been standardised to a constant quality across jurisdictions.

Appendix B: Western Australian Agencies' Staffing of Regional Areas

Key Points

- Western Australia is compelled to pay substantial compensation and allowances to staff in its regional and remote areas.
- Western Australia ensures that service standard levels are as consistent as possible across the State, to enable residents of remote towns to receive a comparable standard of services as those in the metropolitan area.
- Part of 'what States do' is to ensure that they have quality staff to ensure service standard quality.
    - The CGC's proposed capital city assessment would give some, but not all, States capacity to pay above market wages in their regional areas, which would enable those States to provide above standard services.
    - This would be inconsistent with the fiscal equalisation principle and 'what States do'.
- Data are provided for Western Australia's education, police and health sectors.

Department of Education (DoE)

Remuneration in regional areas for public sector employees

- The same base wage is paid across the State, and is largely based on capital city. The base wage is set by industrial relations and industrial instruments (common industry awards, etc.). However, additional compensation and allowances are paid to staff from remote Western Australian locations.
- Regional Price Index has been used to determine allowances – resulting in uplifts of up to $15,000. These allowances recognise, in part, the location of a school and offset the lack of social amenities. The housing of DoE employees is not provided under awards – it is not an industrial matter.

- Labour costs includes wages, plus compensation in the form of:
  - Free/subsidised accommodation;
  - Extra leave (e.g. one week);
  - Early accrual of leave;
  - Three grades of hard to staff schools – Metro Teaching Service (MTP), Country Teaching Service (CTP), Remote Teaching Service (RTS);
  - Travel allowances;
  - Subsidies for air-conditioning;
  - Some benefits of buying and selling home; and
  - Cash component allowance.
- Without additional compensation, the DoE would not be able to recruit staff in regions or hard to staff areas (low socio-demographic).
- The DoE was forced to increase wages due to a mass exodus of teachers. As a result, Western Australian teachers are still the highest paid in the nation, though the gap has narrowed.
- The DoE needs to ensure it can attract quality staff to and retain them in challenging environments. Teachers located in rural areas are entitled to allowances under either the CTP or RTS as incentives to work in regional schools that are difficult to staff.
- DoE data on the cost of Government Regional Officer Housing (GROH) support, provided to attract quality staff to regional and remote areas is shown in Table B1.
  - The total rent subsidy paid by DoE over 2014-15 totalled $72,318,177.
    - The current number of tenants is 1,942
    - Average subsidy per tenant = $37,239 per annum
    - Number of properties provided by GROH to accommodate RTS teachers who do not pay rent = 249.

Table B1: Costs associated with housing of DoE employees, 2014-15

Costs	% DoE costs	DoE Costs per annum
Total Rent subsidy	100% is a Department cost	$72,318,177
Electricity costs ($323,730)	Majority recoverable from tenants but approx. 10% is a Department cost	$32,373
Water charges ($18,309)	Majority recoverable from tenants but approx. 10% is a Department cost	$1,831
Tenant liability ($57,956)	Majority recoverable from tenants but approx. 10% is a Department cost	$5,796
Debt collection charges ($2,582)	Approx. 60% relates to employee housing	$1,549
Contract cleaning ($22,868)	Approx. 60% is a Department cost	$13,721
Contract gardening and mowing services ($24,151)	Approx. 70% is a Department cost	$16,906
Security patrols	100% is a Department cost	$68,800
Furniture and maintenance costs[1]	100% is a Department cost	$3,127
Accommodation intrastate ($947,407)	Approx. 50% is housing-related (e.g. GROH house not sourced or ready)	$473,853
Total of these associated costs incurred in 2014-15		**$72,936,133**

Source: DoE data on the cost of Government Regional Officer Housing (GROH), 2014-15.

- Incentive Allowances for employees in county and remote schools

Teachers and Administrators

- The *School Education Act Employees' General Agreement 2014* (the Agreement) continues to recognise the requirement to attract and retain teachers and administrators to specific schools in regional areas. The Agreement provides an incentive allowance for teachers and administrators who are employed in schools that form part of the CTP and the RTS.

- Schools listed in the CTP are allocated to Bands A, B or C and teachers/administrators at these schools are paid allowances of $13,730, $10,210 and $8,020 per annum respectively.

- Schools listed in the RTS are allocated to Bands R1, R2 or R3 and teachers/administrators at these schools are paid allowances of $20,870, $18,120 and $15,370 per annum respectively.

[1] DoE also owns 28 dongas located in remote Aboriginal communities. These were initially provided as interim housing pending GROH's final solution. The bulk of these are now used by schools as visitor accommodation, but currently 10 are still being used as employee accommodation.

- In addition the *Teachers (Public Sector Primary and Secondary Education) Award 1993* (the Award) provides for the payment of a locality allowance and a country incentive allowance for teachers and administrators.

- The amount of the locality allowance varies depending on the town in which they are located. The country incentive allowance is an additional payment paid as a percentage of the locality allowance for each continuous year of service at the school (up to a maximum of 4 years) beyond the initial two year appointment.

School Psychologists

- In 2010, the DoE received approval from the Department of Commerce to administratively pay an above-award/agreement allowance equivalent to the CTP or RTS to school psychologists in specific schools identified as having a historical difficulty in attracting and retaining school psychologists.

Other Department of Education employees

- The *Public Service and Government Officers General Agreement 2014* provides employees located at Kintore, Warburton, Balgo, Kalumburu, Warakuna/Docker River, Bidyadanga, Dampier Peninsula, Warnum and Jigalong, Blackstone, Burringurrah, Oombulgurri and Loomawith a remote community allowance of $3,500 per annum.

Ensure service standard levels

- All teachers and principals are expected to meet national standards e.g. the level of work needs to be the same in a remote areas as in the metropolitan area.

- The aim is for national equivalence of school standards across the State (not documented, but rather an operating principle).

- Overall accountability and performance in schools is informed by the School Performance Management System (SPMS), which provides data on individual schools across five domains of their performance. Where a school falls below standards, the SPMS indicates an area of concern in a particular school. There are currently 16 performance measures in SPMS. They utilise a system of red lights which indicate 'below the expected performance range'.

- DoE has composed a team of reviewers – the Expert Review Group (ERG) – to evaluate schools including undertaking reviews of and reports on schools with identified areas of exemplary practice. Each school is monitored through a dashboard of indicators.

- ERG investigation and subsequent processes provide principals and staff with detailed feedback about performance, including findings and prescribed strategies directed at improving outcomes for the school.

- In pursuit of service standards in Western Australia, there are two current programs that are supporting schools to meet service requirements and quality standards across the entire public education system.

  - One is a short term targeted initiative to assist principals to guide provisionally registered teachers toward being registered as proficient by the end of 2016.

    - The program invests heavily to bring many teachers up to a mandatory 'proficient' standard, including an initiative to build high quality teaching in all Western Australian schools. DoE is working closely with schools to ensure the Teacher Registration Board of WA (TRBWA) requirement, that those teachers who have Provisional Registration for three years or more, achieve Full Registration before the end of 2015 when their Provisional Registration will cease.

    - To gain Full Registration, teachers must submit a portfolio of evidence against the seven standards in the TRBWA's Professional Standards for Teaching in WA demonstrating a Proficient level of teaching. Teachers may be deregistered if they are not declared Proficient by their Principal, and therefore can no longer be employed by the Department.

  - The other is information on the Attracting Outstanding Principals trial which is designed to attract exemplary school leaders to schools in disadvantaged communities to build positive and effective relationships that will improve student learning in those environments.

    - Participating principals are required to develop a performance agreement in negotiation with their line manager. The agreement outlines measurable and challenging targets and milestones that relate to the school's context, and provides a focus for educational reform strategies. The agreement is reported against and reviewed annually during the trial.

Western Australia Police

Remuneration in regional areas for public sector employees

- Police wages are set to allow recruitment in the capital city.
- Staffing in regional/remote areas relies on financial inducements, lifestyle preferences and enhanced career prospects.
- Financial inducements can be very good. For the 12 Multi-Function Police Facilities in remote areas, these include pay at a higher rank, a 40% loading on that higher rank, extra leave, travel allowances and free housing, electricity and water.
- Police data of the total incentives/payment (remuneration) provided to officers who work in Regional WA shows that approximately $1,515,614 was paid by Police per annum, shown in Table B2 below. These payments are over and above the normal pay of an officer working in the Metro area.

Table B2: Incentives/payment (remuneration) provided to Police officers who work in Regional WA, 2014-15

Incentive/Benefit	Costs per annum
Locality Allowance	$135,000
Subsidised Housing	$594,892
District Allowance	$348,412
44 Hour Week	$443,482
Air-conditioning Subsidy	*Not available*
Annual Leave Travel Concession[(a)]	*Not available*
Additional Weeks (40 hours) annual leave (in the NW)	*Not available*
Preferential return to Perth	*Not available*
Attraction payment	$466,500
Retention payment	$570,250
Approx. total of costs incurred per annum	**$1,515,614**

(a) Annual Leave Travel Concessions will vary based on family size and mode of travel. They also include travel days. Officers must complete 12 months service to be eligible for the entitlement.

Source: Western Australian Police data, Remuneration packages by town in Regional WA, 2014-15.

- Additionally, the following benefits can apply:
  - Metropolitan and Country Lodging Allowance (stationed outside the metro area and not provided with quarters) - $600 p/a; and
  - For Multi-Function Police Facilities:

- Officer In Charge (OIC) paid at Senior Sergeant Country OIC rate;
- Non-OIC paid at Sergeant rate;
- OIC and non-OIC receives a 40% salary loading (on their applicable base rate) in lieu of overtime, 44 hour week arrangement and shift allowances;
- Remote Community Allowance ($3,500 p/a);
- Free housing;
- Free electricity and water;
- 160 hours of Remote Community Leave for each completed year of service stationed at the MFPF; and
- An additional annual leave travel concession (to total two weeks) per year.

Ensure service standard levels

- WA Police has a set of targets which are aimed to be achieved in all areas of the State. WA Police compiles regular reports on achieved performance against targets at a detailed geographical level, so it can identify problems. Targets are set to be realistic given the available budget.
- Police are accountable for meeting targets through Parliamentary scrutiny and questioning of the WA Police head.
- There are three levels of response if targets are not being achieved in a particular area tactical – e.g. extra police for short term crime spike; operational – longer term police deployments to deal with a systemic problem such as meth dealing; strategic – adjust long-term staffing level or restructure operations). This is in addition to monitoring to ensure operations are efficient.
- The State Government's commitment to 550 extra staff will all go to regional and remote areas.

Department of Health (DoH)

Remuneration in regional areas for public sector employees

- If private wages are used, DoH confirmed it doesn't capture all the benefits that are paid to public sector staff, therefore doesn't capture all the remote area costs.
- Remote area costs in WA are greater than other States e.g. the cost of living is higher in remote WA than in remote Eastern States.
- The base wage paid across the State is the same – the award rate which is largely based on the capital city. However the allowances vary across the State depending on the regions i.e. the unit labour cost of staff in remote areas is greater but not from base wage but from other drivers such as allowances.
- Labour costs include wages, plus cost allowances (compensation) in the form of:
  - Subsidised accommodation – Housing is provided to some DoH staff at a discounted rate (subsidised private rentals or State housing) including the additional costs of Administrative Housing Officers (see Table B3);
  - District Allowances (see Table B4);
  - Other Staff Allowances (see Table B5); and
  - Churn/Turnover costs – turnover leads to recruitment costs, loss of productivity, training costs, airfares, overtime, etc. (see Table B6).

Table B3: Estimated cost of Western Australian Country Health Service (WACHS) staff accommodation, 2014-15

WA REGION	Admin Housing Officers wages ($)	Owned Properties Costs[(a)] ($)	Leased Properties Costs ($)	Home Ownership Subsidy Scheme ($)	Rental Subsidies ($)	Total Cost ($)
NORTH WEST	***586,119***	***3,668,311***	***28,829,891***	***219,321***	***125,256***	***37,097,209***
Kimberley	291,960	1,376,575	12,502,831	210,221	125,256	15,883,418
Pilbara	294,159	2,291,736	16,327,060	9,100	-	21,213,792
SOUTH WEST	***90,233***	***701,607***	***1,738,445***	***1,406***	***119,131***	***3,352,429***
Great Southern	12,117	96,897	778,689	1,406	28,911	1,014,917
South West	39,058	72,146	285,847	-	90,219	559,416
Wheatbelt	39,058	532,564	673,909	-	-	1,778,096
OTHER REMOTE						
Midwest	125,975	407,912	1,876,213	74,811	-	2,892,824
Goldfields	81,804	498,862	1,192,072	163,776	58,460	2,493,834
METRO AREA						
Central Office	-	-	15,429	-	12,034	27,463
WACHS TOTAL	**298,011**	**1,608,381**	**4,822,159**	**239,993**	**189,625**	**8,766,549**

(a) includes Depreciation and Maintenance

Source: WACHS data, Estimated cost of staff accommodation, 2014-15.

Table B4: Estimated WACHS District Allowances, 2014-15

WA REGION	Total Cost ($)
NORTH WEST	***25,758,361***
Kimberley	12,731,468
Pilbara	13,026,893
SOUTH WEST	***162,267***
Great Southern	104,788
South West	2,740
Wheatbelt	54,739
OTHER REMOTE	
Midwest	3,088,494
Goldfields	2,490,313
METRO AREA	
Central Office	231,172
WACHS TOTAL	**31,730,607**

Source: WACHS data, District Allowances, 2014-15

Table B5: Estimated cost of WACHS Staff Allowances and Benefits in North West and Remote WA, 2014-15

WA REGION	Additional leave and travel days[a] ($)	Leave Travel Concession ($)	Gratuities[b] ($)	Other Allowances[c] ($)	Total Cost ($)
NORTH WEST	***3,275,019***	***1,823,810***	***881,355***	***2,348,391***	***8,328,575***
Kimberley	2,052,087	1,344,365	583,440	1,721,023	5,700,914
Pilbara	1,222,932	479,445	297,915	627,368	2,627,661
OTHER REMOTE					
Midwest	456,099	98,013	228,530	573,482	1,356,124
Goldfields	133,626	12,064	155,451	219,086	520,227
WACHS TOTAL	**3,864,744**	**1,933,886**	**1,265,336**	**3,140,959**	**10,204,925**

(a) Includes one week additional leave plus up to four days travel days

(b) Gratuities includes gratuity costs for Ordinary pay, Annual leave paid, Long service leave paid, Special/short holidays, Public Holidays and Toil.

(c) Other Allowances includes Travel allowances, Car allowances and airfare allowances, Air-conditioning reimbursement costs, Gas, Power and Water costs and Staff relocation costs.

Source: WACHS data, Estimated Cost of Allowances and Benefits in North West and Remote WA, 2014-15.

Table B6: Estimated Churn/Turnover costs for WACHS Staff, 2014-15

WA REGION	2014-15 Staffing (FTE)	Turnover (FTE)	Annual Turnover Rate (%)	Total Cost[a] ($)	Avg cost per position ($)
NORTH WEST	***1,774***	***256***	***14.4%***	***5,459,348***	***21,326***
Kimberley	1,031	152	14.7%	3,384,949	22,269
Pilbara	743	104	14.0%	2,074,399	19,946
SOUTH WEST	***3,623***	***264***	***7.3%***	***4,467,355***	***16,922***
Great Southern	972	68	7.0%	1,143,385	16,814
South West	1,581	120	7.6%	2,066,666	17,222
Wheatbelt	1,070	76	7.1%	1,257,304	16,543
OTHER REMOTE					
Midwest	1,037	180	17.4%	3,199,924	17,777
Goldfields	734	148	20.2%	2,546,316	17,205
METRO AREA					
Central Office	328	32	9.8%	155,076	4,846
WACHS TOTAL	**11,118**	**1,144**	**10.3%**	**20,295,375**	**17,741**

(a) Total Cost includes advertising, interview and selection process, relocation costs, training, use of Agency staff during vacancy period and other various costs.

Source: WACHS data, Estimated Churn/Turnover costs for staff, 2014-15.

- DoH pays regional staff a 'Country package' that includes subsidies, car allowances, additional leave, airfares, travel days and loadings.

- Without additional compensation, Western Australia would not be able to recruit staff in regions or hard to staff areas (low socio-demographic). There is a struggle to get high quality people in Western Australian remote areas.

  - Western Australia pays more to recruit/retain because it is less attractive to workers and dependent on migration.

- Liveability is a significant factor in the need to pay allowances. Western Australian regional/remote areas are generally more isolated and less attractive than regional/remote areas in other states. Within Western Australia, there is more desire to live in the South West than the North West.

Ensure service standard levels

- There are national standards that need to be met across Western Australia (e.g. operating theatres in remote Western Australia needs to provide the same level of care, staffing levels, skills etc.)

  - There are less training opportunities for staff in remote areas, but they still meet the State standards.

- The functions of staff are not always the same across the State e.g. a Remote Emergency Department Nurse has a broader scope of practice than nurses from capital cities.

- DoH undertook a recent study to determine why Port Hedland obstetrics had such a high cost to the State. It was found in order to operate to the required standard of service they have to have a certain amount of obstetricians, nurses, equipment, theatres etc.

- If minimum standards cannot be met at acceptable cost at a certain location then DoH will not provide services in that location e.g. in Katanning they do not provide obstetric services as they cannot afford it and therefore give alternatives and provide services in different areas.

- From 2006 WACHS commenced the introduction of health service wide Clinical Governance policies, structures and processes.

  - This included continuation of existing regional accreditation programs through the Australian Council on Healthcare Standards (ACHS) Evaluation and Quality Improvement (EQuIP) program.

- Part of the Job Description Form is for one of the core regional Safety and Quality included responsibility for coordinating and facilitating the EQuIP program.

  - This included centralised central office and regional structures of dedicated Safety and Quality roles.

- In 2010 Australian Health Ministers endorsed the Australian Health Service Safety and Quality Accreditation (AHSSQA) Scheme as the national accreditation model for all jurisdictions.

  - The AHSSQA Scheme incorporates accreditation to the National Safety and Quality Health Service (NSQHS) Standards. The NSQHS Standards comprise 10 standards outlining the mandatory requirements: two overarching standards for governance and partnering with consumers and seven clinically focused standards. The NSQHS Standards were endorsed by Australian Health Ministers in September 2011.

  - These 10 NSQHS Standards are:

    1. Governance for Safety and Quality in Health Service Organisations
    2. Partnering with Consumers
    3. Preventing and Controlling Healthcare Associated Infections
    4. Medication Safety
    5. Patient Identification and Procedure Matching
    6. Clinical Handover
    7. Blood and Blood Products
    8. Preventing and Managing Pressure Injuries
    9. Recognising and Responding to Clinical Deterioration in Acute Health Care
    10. Preventing Falls and Harm from Falls

- WACHS, as for all public and private hospitals and private day hospitals nationally are required to achieve accreditation to the NSQHS Standards i.e. health services across all jurisdictions are required to meet the same standard requirements.

- The WACHS seven regions each have contracts with ACHS, one of the accreditation agencies approved under the AHSSQA Scheme, to provide an external assessment and accreditation of their services. Until 2015 this has been on a 4 year cycle comprising:
  - An on-site surveys every two years conducted over 4-5 days (depending on the number of facilities the region has); and
  - Submission of a self-assessment in the interim years.
- The NSQHS Standards have been implemented in WACHS from 2012 within the existing Safety and Quality structure and resources. Coordination and facilitation continues to be provided by one of the core positions within the regional Safety & Quality structures.
- This has been done within existing resources: no new resources have been introduced to implement the NSQHS Standards.