A Review into the Basis for a Living Wage Rate in New Zealand.
(With additional material)

Brian Scott

1 Executive Summary

There is a growing movement around the world that promotes the concept of a living wage for low income workers. A living wage is defined as “the income necessary to provide workers and their families with the basic necessities of life. A living wage will enable workers to live with dignity and to participate as active citizens in society”\(^1\) Living Wage Aotearoa New Zealand commissioned Peter King and Charles Waldegrave of the Family Centre Social Policy Research Unit to produce a Living Wage rate for New Zealand. King and Waldegrave calculated the living wage rate should be $18.40 per hour. This figure has not been independently verified. This paper reviewed the robustness of their research in terms of assumptions, method, and reliability of the underlying data used.

Key Findings

The assumptions used are debatable:

- That the LW should be based on two adults and two dependents. Only 12% of low income households have two parents and one or two dependents.
- That ten hours of childcare are required per week (even for two 16 year olds)
- That the use of the mean of deciles 1 – 5 expenditures is an appropriate and accurate method to estimate the cost of basic necessities.

Not all household income is accounted for:

- Teenagers’ income (but the associated discretionary expenditure is counted)
- Refunds and trade-ins and sales
- School donation tax refunds

Some expenditure is counted twice:

- Childcare costs (as a separate expense, and as part of Education costs)
- Emergency expenses (such as funerals)

Some expenditure captured may not be considered a “basic necessity” by the community at large:

- Subscription TV
- Associated pet costs
- International travel

---

• Electronic video game systems

Some expenditure is incompatible with the assumption that the household is renting:
• Insurance for dwelling
• Mortgage insurance

The underlying data is unreliable:
• Many of the figures in the underlying Household Expenditure Survey data has been flagged with a notice “that care should be taken in interpreting the expenditure estimates” by Statistics New Zealand, and are likely to have non-sampling errors.

The method used is significantly different from other jurisdictions:
• For example, London’s LW is based on detailed itemised budgets, and weighted averages of a wide range of household types from single to two adults and two children.

Overall LW Rate is likely to be significantly over-estimated.
• The combined effects of the above observations indicates that a LW of $18.40 per hour is likely to be significantly over-estimated.

There may be negative consequences to other firms, employees and the economy in general.
• There is likely to be an economic impact to all firms, whether they pay the Living Wage or not.
• There may be an increase in prices (up to 1.3 percent).

Given that
• the assumptions and method used in the NZ LW Report are materially different to those used in research on the LW in other countries
• There are regulatory, economic, government assistance, and social differences between NZ and other countries and
• The underlying data used in the New Zealand study is unreliable

Then it would be unsafe to assume that the conclusions from overseas research can be applied to estimate impacts of the living wage rate, as calculated by King and Waldegrave, on productivity, staff morale, or poverty, in the New Zealand context.
2 Introduction

There is a growing movement around the world that promotes the concept of a living wage for low income workers. A living wage (LW) is defined as “the income necessary to provide workers and their families with the basic necessities of life. A living wage will enable workers to live with dignity and to participate as active citizens in society” Living Wage Aotearoa New Zealand commissioned Peter King and Charles Waldegrave of the Family Centre Social Policy Research Unit to produce a Living Wage rate for New Zealand. King and Waldegrave calculated the living wage rate should be $18.40 per hour. This figure has not been independently verified. This paper will review the robustness of their research.

Their LW rate has been accepted by the Wellington City Council (December 2013) as a basis for increasing pay rates for low income staff (those currently earning below $18.40) to improve productivity and for staff morale purposes. In addition, pay increases for direct supervisor may also be required for relativity purposes.2

This review will critique the LW Report in the following areas:

- The assumptions
- The method
- The reliability of the underlying data.

Following these sections will be a brief discussion on whether the LW rate identified has any relationship to staff productivity and morale, and to addressing poverty in New Zealand. A review of how other jurisdictions calculate their LW is included in the appendix, as are examples of how the LW will impact various workers.

For further discussion on the wider implications of the Living Wage concept it is worth reading the full reports of Treasury and the Auckland Council’s literature review. Links are provided within this paper.

This review does not discuss whether Local Government or businesses have a role in addressing poverty or income inequity within society.

3 King and Waldegrave LW Report: Summary of Method

The above authors were commissioned by The Living Wage Campaign to provide an empirical basis for determining a Living Wage rate for low income New Zealanders. They approached this objective from

- The output end: the amount of disposable income a LW should provide and
- The input end: the market wage necessary to provide that disposable income, taking into account income tax and State provided financial support such as Working for Families Tax credits, accommodation supplements, and childcare support.

Five focus groups (three in Wellington, two in Auckland), with an average of eight participants from low to middle income households, were asked to estimate 15 household expenditures for categories such as food, rent, and insurance. The expenditure categories roughly corresponded to the groups

used in the Household Economic Survey (HES) conducted by Statistics New Zealand. Participants were also asked to make an estimation for exceptional emergency (attending a funeral or tangihanga or medical costs), that could destabilise the household if there was no funds available. The participants were asked to be realistic while at the same time being aspirational.

The participants were given the following household conditions:³

- The household consists of two adults and two dependent children. (This household composition was chosen as it is the minimum required for population replacement, and for simplicity and clarity.)
- One child is a teenager, and one is under ten years old.
- Both children are attending school.
- “Income” includes the value of all money, goods and services received by the household regardless of the source.
- The financial circumstances of the household are not expected to change significantly.
- The members of the household are drawing on a common pool of resources and the earned market income of one or both of the two adults.
- There are costs relating to generating income, such as travel to and from work, work clothes, meals, and tools.
- Work done within the household has no financial value.
- The goods and services that are available, including public services, will continue to be available at the same cost.
- The householder has access to good information on options that affect income and expenditure decisions and has a very good ability to manage a household budget.

Budget assumptions stated included:

- Allow for meals for visitors at least once a week.
- We do not want State Housing rent levels, because most poor people cannot gain access to one.
- Landline rental plus toll calls for keeping in touch with family outside the free calling area.
- Cell phone calls.
- Annual holiday for one week away from home area for all family members.
- To meet school “donations” and cost of activities common to all pupils.

The groups collectively estimated that weekly expenditure for the above conditions was $1,881, which is close to what is reported by deciles 9-10 in the HES, where decile 1 households have the lowest incomes and, and decile 10 households the highest. The authors concluded that this reflected valid aspirations, and that the participants had difficulty estimating irregular expenses.

The authors decided that the focus group estimates were indefensible, and moderated them against various secondary sources:

- Department of Human Nutrition, University of Otago, Food Cost Survey (food costs). Mean of various combinations of household depending on ages of dependents.
- Ministry of Business, Innovation and Employment (rent costs). Average lower quartile rents. National value was $275pw, while Auckland was significantly higher at $438pw.

• Statistics New Zealand, Household Economic Survey HES (other expenditures). Generally the rate used was the average of deciles 1 – 5 expenditure for each category.

An allowance was made for “exceptional emergencies” and for non-mortgage interest payments, totalling $66 per week.

The sum of expenses was then used as a basis to find out what taxable income per hour required to meet these expenses. The income calculation took into account:

• Income taxes
• Both adults earn the same hourly rate. One works 40 hours, the other 20 hours.
• KiwiSaver deductions
• Taxpayer Assistance (Called “entitlements” in LW Report)
  o Accommodation supplement
  o Working for Families Tax Credits
  o Working for Families In-work Tax Credit
  o Government childcare assistance

Using the assumptions, methods and data sources described above, the authors calculated four possible rates for the Living Wage, as shown in table 1 below. On the basis that disposable income in column five (HES Deciles 1-5 average) is equal to 77% of the median disposable income, and 64% of the target households’ median disposable income, then the Living Wage rate should be $18.40 (rounded down one cent).

There are two qualifications noted in the Report. First, there are regional variations in rent, with Auckland being considerably higher than the national average: government accommodation supplements should be increased in Auckland. Secondly, if any tax rates or government income support entitlements change then the hourly rate would need to be adjusted accordingly. They also comment that the State already provides a significant role in supplementing incomes, and the State should be encouraged to do more to create the conditions where people can have a living wage.
Table 1 Adapted from King and Waldegrave Table 3 Living Wage Calculation (Modified by adding a notes column)

<table>
<thead>
<tr>
<th>Expenditure Categories from HES Plus Childcare</th>
<th>HES Average</th>
<th>FG Average</th>
<th>Revised FG Average</th>
<th>HES Deciles 1 – 5 Average</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food</td>
<td>256</td>
<td>313</td>
<td>226*</td>
<td>226*</td>
<td>*Food cost survey</td>
</tr>
<tr>
<td>Clothing and footwear [Clothing / Shoes]</td>
<td>34</td>
<td>79</td>
<td>79</td>
<td>18</td>
<td>HES Includes school uniforms</td>
</tr>
<tr>
<td>Actual rentals for housing [Housing]</td>
<td>90</td>
<td>378</td>
<td>275</td>
<td>275</td>
<td></td>
</tr>
<tr>
<td>Housing energy [Power / Heating]</td>
<td>58</td>
<td>101</td>
<td>101</td>
<td>46</td>
<td></td>
</tr>
<tr>
<td>Household contents and services [Household operations + Appliances + Furnishings]</td>
<td>64</td>
<td>117</td>
<td>117</td>
<td>33</td>
<td></td>
</tr>
<tr>
<td>Health [Medical]</td>
<td>29</td>
<td>17</td>
<td>17</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>Transport</td>
<td>177</td>
<td>176</td>
<td>76</td>
<td>121</td>
<td></td>
</tr>
<tr>
<td>Communication [Phone + Internet]</td>
<td>34</td>
<td>50</td>
<td>50</td>
<td>29</td>
<td></td>
</tr>
<tr>
<td>Recreation and culture [Activities / Recreation + Holiday]</td>
<td>162</td>
<td>148</td>
<td>148</td>
<td>78</td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>32</td>
<td>43</td>
<td>43</td>
<td>37</td>
<td></td>
</tr>
<tr>
<td>Miscellaneous goods and services [Insurances + Life Insurance]</td>
<td>125</td>
<td>68</td>
<td>68</td>
<td>64</td>
<td></td>
</tr>
<tr>
<td>Other expenditure [Saving + Exceptional Emergency]</td>
<td>183</td>
<td>163</td>
<td>163</td>
<td>66*</td>
<td>*Exceptional emergencies ($56) and non-mortgage interest ($10)</td>
</tr>
<tr>
<td>[Childcare]</td>
<td></td>
<td>228</td>
<td>140</td>
<td>31*</td>
<td>*Ten hours at $7 less government subsidy.</td>
</tr>
<tr>
<td>Weekly total (expenditure)</td>
<td>1245</td>
<td>1880</td>
<td>1503</td>
<td>1038</td>
<td></td>
</tr>
<tr>
<td>Annual total (expenditure)</td>
<td>64,722</td>
<td>97,760</td>
<td>78,156</td>
<td>53,976</td>
<td></td>
</tr>
<tr>
<td>Total Gross Income (1.5 incomes)</td>
<td>73,800</td>
<td>124,456</td>
<td>96,866</td>
<td>57,432</td>
<td></td>
</tr>
<tr>
<td>Hourly rate for fulltime worker</td>
<td>23.65</td>
<td>38.89</td>
<td>31.05</td>
<td>18.41</td>
<td>$18.40 is rate determined as Living Wage rate.</td>
</tr>
</tbody>
</table>

FG: Focus Groups used by King and Waldegrave.
Food Cost Survey: Otago University.

Descriptors in first column are those used in HES, with those in [ ] used in focus groups.
4 Assumptions used in the LW Report.
This section will review some of the assumptions made by the authors, beginning with household composition. Where appropriate, alternatives will be proposed. Treasury’s executive summary from their analysis of the proposed LW is reproduced here. This is followed by observations on the specific assumptions used in the LW Report.

4.1 Composition of Household: Two adults, one works 40 hours, the other 20 hours.
According to the authors, the Living Wage should be [solely] based on two adults and two dependents because it is the minimum sized household required for population replacement, and for simplicity and clarity. However, only 12% of low income households fit this description. The majority of low income households have no children, and only 15% have two or more dependents.

Other jurisdictions either set one rate that is the weighted average of different household compositions, or publish all the individual rates. New York City has individual rates for each occupation. London uses a weighted average of household types.

The report offers no justification why the secondary earner should work 20 hours, or indeed why the total number of hours should be 60. Part-time can be considered between one to under thirty hours. In Canada 70 hours total is assumed (two by 35 hour fulltime).

The LW Report does not take over-time earnings and rates into account. On average, overtime accounts for a little over two percent of a fulltime employee’s income in New Zealand.4

Figure 1 Distribution of Families earning below the Minimum Wage.5

---

4.2 Treasury Analysis

The group who earn a wage between $13.75 and $18.40 is diverse...

- Almost all teenagers and the majority of people in their twenties earn below $18.40.
- 63 percent of households earning below $18.40 are single adults without dependants.
- About 30 percent of households with dependants earn below $18.40.

... And those who would benefit most are the families that do not receive supplementary assistance that abates.

- Families that receive means-tested income payments would benefit less the more those payments are abated.
- Families without dependants would see the biggest increase in incomes in their hands.

Figure 2 Total additional income from a Living Wage, and how that is distributed between the earner and government.

A Living Wage is therefore not well targeted at low income families with children...

- In 2012 benefits were the main income source for 44% of households with the bottom 20% of household incomes. A Living Wage would not improve the living standards of those without employment.
- Sole parents are overrepresented in the $13.75-$15.00 wage bracket, but would benefit least from a Living Wage in terms of lifting household income because of steep abatement rates.

And is likely to have negative economic impacts on employment and inflation.

- Negative employment effects are likely to be felt strongest by those with weak labour market attachment, such as teenagers and young adults.

The Living Wage figure of $18.40 is a relative measure and not based on a calculation of need.

- A number of calculations are made in the Living Wage report, each resulting in different figures. The $18.40 figure, however, is only a relative measure.

Adoption of the Living Wage as a minimum wage would have greater impact on some industries...

- Over 70 percent of the Accommodation and Food Services industry earn below $18.40.
- Adoption of the Living Wage would be likely to put some industries, such as Retail Trade, at a disadvantage compared to overseas competitors.

... And we do not think increasing the minimum wage to this extent would lead to higher average wages.

- The minimum wage has grown much faster than average wages over the last decade, and this has not led New Zealand becoming a higher wage economy.
4.3 A common pool of resources and the earned market income of the adults.

The HES includes all expenditure and income for a household for those aged fifteen and older. This would include older children’s expenditure (such as entertainment and cell phone charges) that they may cover from part-jobs. In 2012 the average income of 15-19 year olds was $125 (gross)\(^6\), though obviously the figure for 15-18 year olds will be lower. However, while the expenditure of 15 – 18 year olds (from the HES) are included in the LW calculation, the additional income from these part-time jobs is not included. The expenditure would not have occurred if not for this income.

In other words, the LW Report authors assume that while all expenditure incurred by anyone in the household is covered by the parents’ income, dependents’ income, which is directly paying for this discretionary expenditure, is not accounted for in the LW calculation. This is at odds with the instructions given to the focus group, that all income, from whatever source, should be included.

4.4 Expenditure and Government Assistance associated with Dependents

Assumptions

There are different assumptions about dependents used in the Report, confusingly three different assumptions are used in the final $18.40 calculation.

In the focus groups:\(^7\)

- The dependents are a teenager and one is aged under ten. Both children are attending school.

In the calculations for overall Living Wage ($18.40)

1. Childcare costs: One child is pre-school (aged 3 or 4).
2. Working for Families tax credits: Eldest child is aged 15 or under, other is 12 or under.
3. Direct food costs: Mean of possible children combinations based on ages used in the Food Cost Study, plus two adults. For example
   - Two Adults and two 1 year olds
   - Two Adults + one 10 year old + one 1 year old
   - Two Adults + two adolescents

Assumptions (1) and (2) are compatible with each other, but (3) is not.

If the assumptions for childcare are used:

- Direct food costs are over-estimated (as younger children eat less).
- Working for Families Tax Credit unchanged.

If the assumptions for direct food costs are used:

- Childcare costs are over-estimated (as presumably two sixteen year olds are not at pre-school education).
- Working for Families Tax Credit under-estimated (as parents obtain additional assistance for older children).

---


\(^7\) King and Waldegrave. Appendix 2 Focus group checklist and guidelines.
The report uses the assumptions that provide the higher estimation for each expenditure category, and there may be justification but the authors do not state it in the LW Report. **If assumptions are stated they should be consistently applied.**

### 4.4.1 Childcare: Costs and Hours.

The assumptions about childcare and costs are inconsistently applied through the Report. The focus groups were advised that the children were at school, but then proposed up to 50 hours for childcare. The authors then revised this figure to 30, with 20 hours being fully subsidised by the Government, and 10 hours partially subsidised (at a rate of $3.91 per hour). Apart from reducing costs the authors do not substantiate why this number of hours was chosen.

Interestingly, 50 hours is exactly the number of hours that the government will provide hourly childcare subsidies for low income earners. This could indicate that rather than choosing a number based on need, it is based on the maximum number of hours that they can get government assistance.

The Report states hourly fees of around $7 are common (p. 9) but do not offer any data to justify this claim. An internet search for this review quickly found rates of under $5.00 for childcare. However, a more rigorous approach would be needed to justify an average figure.

A survey of childcare centres could provide reliable information on both the average costs, and the number of hours used by low income households.

### 4.5 Assumptions on Necessities.

From the LW Report’s Focus Group Checklist and Guidelines (Appendix 2 in the LW Report) we can deduce what the authors decided were necessities. While some items may have general community support (food, shelter), others could be considered contentious:

- Feeding and caring for pets.
- Landlines plus toll calls. Many people find they can rely solely on a cell phone, and therefore do not need a landline.
- All rooms warm when people are at home during winter. To be energy efficient, rooms should only be heated when they are being used.
- Cell phone call costs. Many people find they can rely on either landline or cell phone.
- Household has a car of its own.
- Four household members participate in at least one activity per week in the local area. What are these activities? Can these activities be free (a walk in local park). London and Irish Living wages are detailed as to those activities that incur monetary costs (such as cinema outings), including frequency.
- Annual holiday for one week away from home for all family members. What are the criteria?
- Lawn mower. Some rental housing includes a lawn mowing service.
- TV, music system. What size?
- There are no significant costs associated with recurring sickness or disability. This would seem to exclude the purchasing of prescription glasses and hearing aids. While State assistance is available for glasses for under 16 year olds in low to middle income families, in the U.K.

---

8 High Five Early Education Centre, Wellington. Fee Schedule. [http://www.high-five.co.nz/texts/view/feeschedule](http://www.high-five.co.nz/texts/view/feeschedule)

9 Identification of these items is based on what other jurisdictions have included or excluded from their calculations, and do not necessarily reflect this author’s individual views.

assistance is available to all low income persons.\textsuperscript{11} However, in the LW calculation, these costs are included (under Health).

- After school childcare.

In addition, we can also deduce what items were included in the LW calculations by default by comparing the higher level HES expenditure categories used in the LW Report with the lower level items that are part of that HES category classification list.\textsuperscript{12} For example, (HES code 07) Transport includes (07.03) Passenger Transport Services which itself includes (07.03.04) International Air Travel. The total expenditure of (07.03) is used in the LW Report, hence it must include the figure for 07.03.04. International Air Travel. Similarly, (11.04) Insurance includes (11.04.02) dwelling insurance.

Table 2 lists some of these default items.

The HES classification schema has over 2700 items, so only items that may have a major impact on the LW were included in table 2. The table illustrates that many items that may not be considered “necessities” by the community at large could have been included in the LW calculation. It is also worth noting that most of these items are not used in the Living Wage budgets for other jurisdictions.

An important consideration not taken into account by King and Waldegrave was that for all households with two adults and two dependents, $24.20 per week was returned by way of sales, trade-ins and refunds. It must be noted that this figure has a high sampling error.

\subsection*{4.5.1 Comparison to Other Jurisdictions.}

Other jurisdictions use detailed itemised budgets in their calculations.

Canada uses a “Market Basket Measure”\textsuperscript{13}, developed by Federal, Provincial and territorial government officials. Examples are “boy’s jeans, 3 annually” and “women’s summer slacks, 1 annually”.

London’s LW calculation\textsuperscript{14} includes for example “Primary [child], main clothing, Shirt, F&F [brand], Asda [store], £6 [quantity in pack] 1 [number], 52 [life span] 0.12 [weekly cost] Smart shirt Military Style Shirt [comments].”

\begin{thebibliography}{9}
\bibitem{11} National Health Service, U.K. \url{http://www.nhs.uk/NHSEngland/Healthcosts/Pages/Eyecarecosts.aspx}
\bibitem{14} Centre for Research in Social Policy, Loughborough University. Budgets for London LW based on these lists. \url{http://www.lboro.ac.uk/research/crsp/mis/results/}
\end{thebibliography}
Table 2 Items used in Living Wage Calculation that may have issues concerning community support as a necessity, double counting, or inconsistency with assumptions.

<table>
<thead>
<tr>
<th>HES Classification</th>
<th>Subgroup</th>
<th>Items (or Class)</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. Transport</td>
<td>7.1 Purchase of vehicles</td>
<td>New Cars ($13.70*)</td>
</tr>
<tr>
<td></td>
<td>7.3 Passenger transport services</td>
<td>Long distance train / bus fares, Taxis, Domestic air transport ($2.60*), International air transport ($15.30), Other International travel costs ($4.60*)</td>
</tr>
<tr>
<td>8. Communication</td>
<td>8.3 Telecommunication services</td>
<td>Telecommunications and subscription TV package deals</td>
</tr>
<tr>
<td>9. Recreation and Culture</td>
<td>9.2 Major recreational and cultural equipment</td>
<td>Hang gliders</td>
</tr>
<tr>
<td></td>
<td>9.3 Other recreational equipment and supplies</td>
<td>Electronic video game systems, Electronic and video games, Fireworks, Pets and pet-related products ($7.20), Equipment for pets and domestic livestock</td>
</tr>
<tr>
<td></td>
<td>9.4 Recreational and cultural services</td>
<td>Games of chance ($6.00), Veterinary and other services for pets and domestic livestock ($2.80*), Subscriptions and donations to political parties, Dog licence fees, Subscriptions to subscriber television</td>
</tr>
<tr>
<td></td>
<td>9.7 Packaged Holidays</td>
<td>Overseas packaged holidays</td>
</tr>
<tr>
<td>10. Education^</td>
<td>Early childhood education</td>
<td>Payments to educational childcare providers ($4.50*)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NOTE: This expenditure category is therefore counted twice in the LW Report: again as “childcare” at $31.</td>
</tr>
<tr>
<td>11. Miscellaneous goods and services</td>
<td>11.1 Personal care</td>
<td>Ear and body piercing, Body massages, spas, saunas (non-medical)</td>
</tr>
<tr>
<td></td>
<td>11.3 Personal effects</td>
<td>Jewellery and watches ($2.50)</td>
</tr>
<tr>
<td></td>
<td>11.4 Insurance</td>
<td>Dwelling insurance ($4.40), Health insurance ($9.70), Combinations of insurance [Most descriptions include for some sort of dwelling component] ($15.00), Other Insurance [including mortgage insurance, pet insurance, overseas travel insurance] ($3.20*)</td>
</tr>
</tbody>
</table>

Notes: Numbers in columns 1 and 2 refer to HES codes. Dollar values are average weekly expenditure for all households HES 2013. They are not directly comparable to the Report’s dataset, but tend to be lower than comparable figures. Balanced against this is that it is for all incomes, not just deciles 1 – 5. (*) next to a figure means it has a sample error up to 49%. The reason for using this dataset was that went further down the HES expenditure classification hierarchy. Health Insurance was included as it is assumed that the basic necessities of health are provided by the State in the New Zealand context. Other health costs (visits to doctor, medicines) are in Health category. ^Childcare: In this table because double counting of this category
4.6 Assumption that the Household starts from nothing.

King and Waldegrave assume that purchasing of major items, such as appliances, furniture, car, and the like, should be based on the income they have when the household includes two children. It is likely that many of these items were purchased prior to them starting a family; they are sunk costs. Of course there will be costs with the addition of a new child, such as extra furniture, linen, cutlery and other associated costs.

5 Critique of Method.

5.1 Focus Groups

We are informed that there were five focus groups (three in Wellington, two in Auckland) with an average of eight participants in each, and were from low and middle income households. We are not told further demographic information: ages, ethnicity, how long had they had low incomes, or education. What experience did the participants have to make reasonable estimates about the costs of running a household, for example being the primary bill payer? Even this can be problematic as some households may divide the bill paying responsibilities depending on category (e.g. food, power bill). Did the participants belong to a political movement or party (such as ACT)? The reader needs to have an understanding of the context in which participants are making comments.

An alternative use of the focus groups would have been to discuss what a necessity is, and decide which specific items should be included in a low income budget.

5.2 Expenditure and Government Assistance associated with Dependents Calculations

As noted in section 4.4 above, the assumptions relating to dependents were variable, depending on the expenditure and government assistance categories.

5.2.1 Working for Families Tax Credits

The Report provides details for Family tax credit and in-work tax credit (table 14, p. 34). This is the basic amounts based on the eldest child being aged 15 years or under and all other children being aged 12 years or under. However, the Report fails to mention additional assistance is provided in the following conditions:15

- Add $10 to the “FTC” amount for each child (other than the eldest) aged 13, 14 or 15.
- Add $9 to the “FTC” amount if eldest child is 16, 17 or 18.
- Add $27 to the “FTC” amount for any other child aged 16, 17 or 18.

Therefore, if there is a 17 and eighteen year old, then there would be an additional $35 a week, or $1820 a year. Of course it is important to recognise there would be extra food costs for older children, but these have been accounted for in the calculations for the LW rate.

5.2.2 Food, Education and Childcare Costs.

When calculating the average cost for food, education and childcare for various family compositions, all relevant variable costs and government subsidies should be applied. This means:

- Only include childcare costs when child is preschool.

---

- Include additional Working for Family Tax Credit when applicable (see section 5.2.1 above). Report includes only base tax credits in calculations.
- School donations are tax deductible. Parents can claim 33% of the donation back from Inland Revenue.

The Report assumes that there is always one pre-schooler in the household, and therefore has $31 of childcare costs. However, if this is the assumption, then calculated food costs must exclude any combination where both are not pre-schoolers, for example an adolescent and a ten year old. The Report fails to do this, and therefore over-states the mean cost of food, as older dependents have significantly higher food costs, up to $84 compared to $30 for a one year old.

Using multiple assumptions leads to the need for complex calculations, which have not been used in the LW Report. This is a possible reason that other jurisdictions have calculated a variety of Living Wage rates, depending on specific household circumstances.

**Table 3 King and Waldegrave Food and Childcare Costs**

<table>
<thead>
<tr>
<th>King and Waldegrave Calculation</th>
<th>Mean of Food (depending on household composition) + Childcare + Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Costs of Food and Childcare and Education</td>
<td>$294 pw</td>
</tr>
</tbody>
</table>

**Table 4 Alternative Food and Childcare Costs**

<table>
<thead>
<tr>
<th>Alternative Calculation: Average Costs for 2 Children of any age.</th>
<th>Mean of Food (depending on household composition) + average cost of Childcare over 18 years + average cost of Education over 18 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Costs of Food and Education</td>
<td>$263 pw</td>
</tr>
</tbody>
</table>

Reason for removing Childcare expenditure: HES Education category includes “Childcare” – it has already been accounted for.
Extra Working for Families Tax Credit for older dependents would decrease the total cost by under $2 pw but has not been included in the above calculation.

An adolescent child has costs of about $96pw (food $84, education $12) while a 3 or 4 year old about $65pw (food $34, childcare $31).

As can be seen above, the LW Report overstates the average cost by at least $31 for these items alone. The alternative calculation more accurately reflects the true average costs for a two adult and two child household, assuming the HES figures are reliable.

Another alternative approach that mitigates the uncertainty with the HES, is to total all relevant expenditure for years one to eighteen, multiple by two (number of children) and divide by 18 years:

- Food costs (depending on age)
- Number of years using childcare x cost per week
- Number of years at primary school x (school donation + activity fees)
- Number of years at intermediate school x (school donation + activity fees)
- Number of years at secondary school x (school donation + activity fees)

Many of these figures are on school and childcare providers’ websites. School donation costs would need to be reduced by 33 percent to account for tax refunds.
There are three important points here:

1. Assumptions should be consistently applied in all calculations in a report.
2. Changing the assumptions will change the result.
3. Changing the data sources will change the result.

5.3 Food Costs: Specials.
From the original food study\(^{16}\), costs are based on “shelf prices only are used (not specials or coupon prices)”. This is at odds with New Zealanders’ shopping patterns, where deep discounts are expected. A ten percent overall discount on a shop (which is not unreasonable) would drop weekly costs by at least $23.

5.4 Size of House.
The Report argues that a three bedroom house is most appropriate, based on the ages and sexes of the children. The Canadian National Occupancy Standard, as stated in the Report, uses the following formula:

1. there should be no more than two people per bedroom
2. parents or couples share a bedroom
3. children under five years, either of the same or of the opposite sex, may reasonably share a bedroom
4. children under 18 years of the same sex may reasonably share a bedroom
5. a child aged 5-17 years should not share a bedroom with one under five of the opposite sex
6. Single adults 18 years and over and any unpaired children require a separate bedroom.

The British standard permits two children under 10 years to share a bedroom, irrespective of gender. American states tend to ignore gender for all age groups.\(^ {17}\)

To be internally consistent (as with the food costs, other expenditures), the weighted average of two and three bedroom houses should be used.

5.5 Savings
The Report states that savings would be limited to the two percent KiwiSaver deduction (p. 9.). However, in a footnote to table 3 (p. 11) the authors state that $56 per week is allocated for Exceptional emergencies. This is double counting of expenses. For example, if the household needed to go to a funeral, then this has already been accounted for in the Miscellaneous Goods and Services category on a weekly basis. Another example would be replacing furnishings – it has already been accounted for. Other jurisdictions may include an allowance for emergencies, however they do not include the costs for these in the underlying standard living cost budgets. Effectively, the $56 per week is savings.

If households need a specific reserve for these exceptional emergencies on the basis that by definition, occurs in rare occasions, then the fact that contributors to KiwiSaver can draw on both their and employer contributions in significant financial hardship. This fund grows at five percent of gross income per year (2 percent from employee, 3 percent from employer).

---


Significant financial hardship\(^{18}\) includes if you're:

- unable to meet minimum living expenses
- unable to meet mortgage repayments on the home you live in, resulting in your mortgage provider enforcing the mortgage on your property
- modifying your home to meet special needs because of you or a dependent family member having a disability
- paying for medical treatment if you or a dependent family member:
  - becomes ill
  - has an injury, or
  - requires palliative care
  - suffering from a serious illness
  - Incurring funeral costs if a dependent family member dies.

5.6 Method: General Observations
The authors used specific assumptions to calculate some expenditure categories (such as rent, childcare, food costs), but relied on the mean of deciles 1 – 5 HES expenditure for others. While this method is quick, it makes the assumptions that

- All HES subgroups and lower groups only include items that the authors claim to be capturing.
- That just because on average a household purchases an item, it is necessary. For instance, while households may replace their TV set on average every six years, it may not be necessary to.

Using the HES averages would seem to be a very crude proxy for estimating what the basic costs for a household are.

6 Data Reliability: Household Economic Survey (HES).
The LW Report relies heavily on the HES, so it is appropriate to critique the statistical reliability of the dataset used by the authors. More details on the HES are in this paper’s appendices.

The following observations are based on using the NZ.Stat\(^{19}\) website of Statistics New Zealand. This site enables a user to extract personalised tables from a wide variety of datasets. The particular dataset of interest is the Household Economic Survey (HES), which is the same dataset from which King and Waldegrave extracted their data. It is possible to select tables based on, for example, expenditure by household income group (figure 2 below) or Household expenditure for group and subgroup by household composition and number of dependent children. Unfortunately, the site does not provide the option to view Household expenditure for group and subgroup by the target household composition by income deciles. King and Waldegrave purchased a special data run from Statistics New Zealand for their dataset.

---

\(^{18}\) Significant financial hardship. KiwiSaver.


©Brian Scott 2014 March.
A Review into the Basis for a Living Wage Rate in New Zealand. (With additional material).
Expenses categories (column one, figure 1) are listed by groups (such as food, Alcoholic beverages, tobacco and illicit drugs), and within each group are subgroups (such as Fruit and vegetables, restaurant meals and ready to eat meals in the Food group).

There are two major types of errors associated with surveys: sampling errors and non-sampling errors. These are described below. To be clear, Statistics New Zealand takes great care to minimise these errors (which are not the same as “mistakes”), and the comments below are not a reflection on the professionalism with which they conduct surveys and produce statistics.

6.1 Sampling Errors

“Some errors (e.g. those resulting from the use of sampling) are random and their magnitude measurable. This sample error is the expected difference you get from survey results compared to surveying the whole survey population. Statistics New Zealand calculates the sample errors to provide users of such statistics with information on the magnitude of these errors”.\(^{20}\) These are the figures in the above screen shot. The higher the sample error, the more unreliable the figure.

Statistics NZ states that for figures with (*) “care should be taken when interpreting these expenditure estimates, as there will be less statistical reliability than those with sampling errors less than 21 percent”\(^{21}\). An (s) represent data that is suppressed either for confidentiality reasons, sampling errors are higher than 50%, or less than five households contributed to the figure.

As we know the sample errors for the all couples with two dependent children (from the Stat.nz site), and we know that this has been further divided into income deciles, we can deduce that the sample errors for the King and Waldegrave data set must be larger. Of the nine categories (or “groups” as Statistics NZ describes them) that use HES data that are used in calculating the Living Wage (table 3 in the Report), five have been marked with an (*): “care should be taken when interpreting these expenditure estimates”. Of those without an overall caution for the group, many of the subgroups have such a caution. These cautions were not disclosed in the Report.

\(^{21}\) Statistics NZ.
6.2 Non-sampling errors

Response rate: High non-response rates can undermine the reliability of the statistics due to potential sampling bias, that is one cannot be sure that there is some difference in between those who respond and those who do not.

Selection Bias is not accounted for in the HES. Participants are required to participate by statute, with no payment, and may resent this and may not be appropriately accurate. In fact, there are incentives for participants to over or estimate expenditure. If participants perceive that the HES will be used to set government subsidies then low income earners (who receive a higher percentage of their income from government transfers) would be expected to over-estimate basic expenses so that future benefits are increased, while those in higher incomes may under-estimate to reduce their tax burden.

Consider a practical example: Is a teenager asking for an allowance from their parents more or less likely to over or under estimate what they need, compared to the parents’ opinion?

Over the entire HES, the effects of the two competing incentives may balance out, however the HES data for the LW Report uses only the lower income deciles.

Declared preferences may not be the same as actual behaviour. For example, studies have indicated doctors significantly over-report how often they wash their hands.\(^{22}\) In the HES this could manifest itself by participants over-inflating how much they pay in school donations, while under-reporting how much they spend on tobacco and alcoholic beverages. This, and the next survey bias, may be due to social desirability on the participants’ behalf.

The fact that the participants are being observed may change actual behaviour. Participants may indeed pay more in school donations, and decrease use of tobacco. So while the data collected is a true reflection of the participants spending habits, it is not a true reflection of the target population.

These non-sample errors are graphically demonstrated in the LW Report itself: the respondents over-estimated total expenses by 81% on the average of the HES deciles 1-5 average ($97,219 compared to $53,719, excluding food and childcare as these figures are assessed in a different manner). And this assumes that the HES has no significant non-sampling errors itself, so the errors could be larger.

6.3 Numbers of Households per Income Decile

While the Report states that the number of target households surveyed was “302, or about 30 households per income decile” (p.19): this is a meaningless number. There may be 5 respondents in decile 1, and 40 in decile 8: we do not know. The fewer number in a decile reduces the statistical reliability of the data provided. It is apparent that certain figures have been suppressed by Statistics New Zealand due to uncertainty about reliability, as shown on the Report’s tables by dashes. In other cases it is highly likely, based on using Statistics NZ table builders, that most of the data has a caution about use of figures due to high sampling error percentages. These cautions are not stated in the LW Report.

6.4 Expenditure on Education Group

Education costs is a particular concern. The Report (table 6, p. 22) shows average weekly education expenditure for deciles 1 to 5 are $76.27, ---, ---, $22.22 and $12.05 respectively (the dashes show “data suppressed by Statistics New Zealand due to uncertainty about reliability”\(^{23}\)). These figures do not appear credible: the higher income decile spend a significantly less amount ($627) on education

\(^{23}\) King and Waldegrave Report, p. 22 footnote.
than decile 1 households, which supposedly spend $3966 per year. There is likely to be non-sampling errors, which Statistics NZ cannot correct for.

As has been noted above, school donations are tax deductible, and while the refunds may be accounted for in the HES, it is coded to categories not used in the LW Report.

Tertiary education expenditure has not been included as one would then have to factor in study allowances, which are not included in the original Report either. Collecting reliable data on education expenditure for adults would also be difficult, but should be included if possible.

6.5 Categories and Subcategories Used in LW Report.

A casual reading would indicate that only the subcategories listed in Figure 3 (p. 20) of the LW Report are transferred to figure 4 (p. 21). However, analysis would indicate two additional subcategories are included: 9.2 Major recreational and cultural equipment and 9.7 Package holidays.

7 Relationship of Living Wage Rate to Productivity, Staff Morale and Poverty.

There is no discussion in the LW Report that connects the Living Wage rate they have calculated (that is $18.40 per hour) to relative increases in productivity or staff morale. Many questions remain unanswered:

- If wages go up 30 percent will this lead to a 30 percent increase in benefits for the organisation?
- While morale may increase (who wouldn’t be happier if given a no strings pay rise?) will this translate to a more productive workforce?
- Will productivity (if any) increases be sustained over time?
- Why is $18.40 the magic number in relation to productivity and morale, and not $15, or $35?

The authors of the LW Report were tasked with identifying a rate that, subjectively, would enable a household’s income to provide for the basic necessities.

If, and there is considerable debate in the literature, there is a relationship between a Living Wage rate and productivity or staff morale, then the assumptions, method of calculation and the environment (including economic, social, legal) should be approximately similar to New Zealand’s to draw the conclusion that implementing a Living Wage here would produce equivalent results. As can be seen in Appendix A, other jurisdictions have significantly different situations and methods of working out the rate.

While there may be an effect on poverty, both Treasury and the Auckland Council literature review (see Appendix B for summary) state that it is an inefficient solution. Importantly, while those still employed have an increase in income, there is some evidence that suggests some loss of employment and overtime opportunities.
7.1 Impact on the Economy, and other Firms and Employees.

There may be negative impacts on other organisations. A low income worker doing the same job at another organisation may actually reduce productivity.

According to Equity Theory\(^{24}\), a person will compare their rewards in relation to personal input with others rewards in relation to others inputs. For instance, a low income employee will compare herself to other low income workers, either in the organisation or not. If the employee perceives there is inequity the employee will attempt to eliminate the inequity by:

- Decreasing their inputs (productivity)
- Changing the rewards (pay rise)
- Change the situation by leaving the job.

From an employee’s point of view (who works at the organisation that did not give a pay rise) he perceives that he is now obtaining less reward (income) for the equivalent inputs (work) than an employee doing the same job at the firm that did give a pay rise. He takes into account that the pay rise was not given on the basis of productivity: the pay rise was not dependent on employees working

---

\(^{24}\) Adams, J. S. *Towards an understanding of inequity*. Journal of Abnormal and Social Psychology, vol 67. 1963. This theory is widely used in management.
more productively. To redress the inequity he will, according to Equity Theory, reduce his productivity, ask for a pay rise, or leave.

From the employers point of view (at the organisation that did not give the pay rise), the response to the above is to increase the number of employees to make up for lost productivity, or give a pay rise to her employees. Either response will increase the firm’s costs with no overall increase in outputs for the firm. To recover these costs, the firm may increase its prices.

Normally employees will compare themselves to others in the same firm, however, given the publicity that the Living Wage has had, especially in Wellington, all low income employees will compare themselves to the rate paid to Wellington Council employees. The economic cost to firms is equivalent to actually paying the LW, without gaining any increase in overall output. The Treasury analysis estimates that prices could rise up to 1.3 percent if all firms paid the LW of $18.40.25

7.2 Limitations of Living Wage Research
Many of the papers produced in support or against the Living Wage are produced by authors with strong views. While their conclusions may not be inaccurate, they may be highly misleading. This is illustrated in the boxes below. These observations are not to taken as referring to any statements in the LW Report.

Conclusions may be “lost in translation”. A study may find that “savings from reduced turnover was 16 percent of the cost of the wage increase”, but be quoted as “X study found that there was a 16 percent savings in wage costs due to reduced turnover” or “X study found that turnover costs reduced by 16 percent”, but turnover costs as a proportion of the total wage bill are relatively small.

A common statistic used is the impact of the pay increase for low income employees on the full wage bill of the organisation. It may be reported that though the low income employees received a 30 percent pay rise, the total wage bill only went up one percent. This is similar to a shopper being asked to ignore that bread has risen from $3 to $4 on a $100 shop, as their total bill has only risen one percent.

For the illustrations keep in mind that while the Council’s objective may be to reduce poverty, the manager is likely to be incentivised (by a bonus) to keep costs under control.

Illustrations based on USA laws, as this is where most LW studies have been conducted.

25 Treasury Report: Analysis of the Proposed $18.40 Living Wage. Based on MBIE calculations. Calculation does not take into account other options that firms could utilise to minimise impact.
Illustration 2.

Council manager responsible for the cleaning of multiple council buildings pays her cleaners $14 per hour. The LW is introduced by the council at $18.40. She is under budgetary constraints so decides to outsource the cleaning. She creates multiple contracts with private contractors that have a value under the minimum required for LW to be paid to the contractors’ cleaners. Contractor pays cleaners $14 per hour. There is a small relative cost to council for monitoring contracts.

One interpretation (for a LW) is:
- Living Wage rose from $14 to $18.40
- There was no increase in unemployment in the community
- Total cost to council increased only slightly

However, there was no actual increase in the cleaners’ average income!

Alternative interpretation (against a LW) is:
- Implementing the LW had no impact on poverty.

Illustration 3.

Council implements LW for cleaners, and requires that cleaners are to be council employees. To pay for increased costs, the council cuts other services, such as cutting grass berms.

One interpretation (for a LW) is:
- Actual wages of cleaners increased.
- Council costs did not rise.
- Number of cleaners employed did not change.

However, the number of employees cutting grass was reduced to zero, and their income is below the LW.

Alternative interpretation (Against a LW) is:
- LW increases unemployment.
8 Conclusion

The main assumptions used by the authors of the LW Report, such as two adults and two dependents, childcare costs and number of hours and income sources, are debatable and may not reflect community opinion. The assumptions for dependents are inconsistently applied to different expenditure categories. It is doubtful that many items that are effectively deemed necessities (cost of pets, international air travel, games of chance) would have broad community support. These items are not used in the LW budgets for other jurisdictions. Some expenditure items are inconsistent with the household renting (dwelling insurance).

Some expenses, such as funeral expenses and childcare, are effectively counted twice. Though other jurisdictions may include an emergency saving fund, the underlying costs (e.g. funeral) are not in the detailed expenditure budgets.

A deeper analysis indicates that some expenditure used in the LW report is inconsistent with the assumption that the household is renting.

The dataset used (Household Expenditure Survey) has significant limitations because of sampling and non-sampling errors, that undermine the reliability of using the figures. This is recognised by Statistics NZ, which has flagged the unreliability of the data.

The authors were asked to provide an empirical basis for a LW in New Zealand. They were not asked to provide evidence that this rate would have any impact on productivity or staff morale. There may be negative outcomes for the economy as a whole, and for other companies and employees. The effects on household income may be reduced by the partner reducing his or her hours.

Given that

- The assumptions and method used in the NZ LW Report are materially different to those used in research on the LW in other countries
- There are regulatory, economic, government assistance, and social differences between NZ and other countries and
- The underlying data used in the New Zealand study is unreliable

Then it would be unsafe to assume that the conclusions from overseas research can be applied to estimate impacts of the living wage rate, as calculated by King and Waldegrave, on productivity, staff morale, or poverty, in a New Zealand context.
9 Appendix

9.1 A: Living Wage in other Jurisdictions

Various organisations around the world promote a Living Wage. The following information was based on information gained from relevant websites that link from Living Wage Aotearoa New Zealand’s website and internet searches.

Though one organisation may calculate the overall LW rate, they may depend on the research of other organisations for food, rent or living costs, for example. The methods and data used by these supporting organisations may not always be readily available.

It is important to note that other jurisdictions have different social, legal and economic environments to New Zealand. For instance, in New Zealand there is the Local Government Act 2002 which stipulates that councils must operate efficiently and effectively on behalf of households and businesses. There may also be differences in anti-discrimination laws.

Currency figures are in original currency.

9.1.1 London

The LW is calculated by

1. Basic Living Costs: Estimating a “low cost but acceptable” specified budget for a selection of households, then calculates the wage required to meet these budgets. £7.45
2. Income distribution. 60% of the median income for London (weighted for 11 household types) £7.90.
3. Find mean of above two figures, and add 15% emergency buffer.

Currently the figure is £8.80 per hour.

It is doubtful that a New Zealand local government has the authority in New Zealand to include the income distribution part of the calculation.

9.1.1.1 City of London Corporation.

Due to historical factors, the Corporation has charitable functions in addition to normal local government functions. Expenditure on salaries are met from both tax-based funds and the city’s endowment fund. LW applies to all directly employed staff, but not necessarily contractors.

City of London Corporation states on its website:27

“Because of our statutory duty as a local authority is to achieve best value and other legal requirements we cannot have a blanket policy to pay LLW in all circumstances. This issue only applies to contract workers; all directly employed staff are paid the LLW or more.”

Why don't you take all cleaning and such in-house and do away with contracts?

Organisations like the City of London Corporation are under strong best-value pressure and use contract firms who are expert in their sector to deliver some key support services, such as cleaning.”

---

9.1.2 United States
Researching Living Wage rates in the USA is problematic as each jurisdiction, from town, city, county, and state can choose how the LW is calculated, who it applies to, and what conditions there are on council contractors.

Typical conditions, and how businesses and council management may avoid paying the LW include:

Table 5 Living Wage Some Conditions that Apply in US

<table>
<thead>
<tr>
<th>Condition</th>
<th>Strategy to avoid paying LW</th>
</tr>
</thead>
<tbody>
<tr>
<td>LW only paid when contract value is above certain amount</td>
<td>Split contracts into several that come under the certain value</td>
</tr>
<tr>
<td>Business has certain number of employees</td>
<td>Restructure business into several smaller ones</td>
</tr>
<tr>
<td>Business has a high turnover</td>
<td>Restructure business into several smaller ones</td>
</tr>
<tr>
<td>Contracts apply only to longer term contracts</td>
<td>Reduce the contract term. (e.g. 4 x 3 month contracts rather than annual contract)</td>
</tr>
<tr>
<td>Applies only to workers involved directly with the contracted work</td>
<td>Reallocate higher paid workers to contract work, and lower paid to non-contract work.</td>
</tr>
<tr>
<td>Applies only to Full-time staff</td>
<td>Employ part-time staff instead. Employ staff on short-time contracts.</td>
</tr>
<tr>
<td>Applies to New Contracts</td>
<td>Roll-over existing contracts.</td>
</tr>
</tbody>
</table>

This may explain why research that shows costs for an organisation, especially a city council, may not shift significantly upwards as few employees actually are affected, and contractors utilise exemptions.

One site\(^{28}\) calculates Living Wage for eight household types, ranging from one adult to two adults and three dependents. No single overall rate. Rate does not allow for recreation, entertainment, savings, or debt repayment.\(^{29}\) This site can be followed from link on The Living Wage Campaign in Aotearoa New Zealand website.

In New York, New York\(^{30}\), Living Wage rates are decided for each type of job, such as kitchen worker ($9.60) and word processor ($20.02). There are sometimes thresholds for firms paying the rate, such as contractors receiving City-assisted tax abatements over one million US dollars.\(^{31}\)

9.1.3 Canada\(^{32}\)
Only one city and about 36 other organisations, mainly social advocacy groups and labour unions, but also SAP, who one suspects have very few low income workers.

Single rate for two adults and two dependents (4 and 7 year olds).

---

\(^{28}\) The Living Wage Calculator. Developed by Dr Amy K. Glasmeier at Department of Urban Studies at MIT
http://livingwage.mit.edu/

\(^{29}\) Self Sufficiency Standard Project of the Centre for Women’s Welfare.
http://www.selfsufficiencystandard.org/


\(^{32}\) Working for a living wage: making paid work meet basic family needs in Vancouver and Victoria. 2008

©Brian Scott 2014 March.
A Review into the Basis for a Living Wage Rate in New Zealand. (With additional material).
Transport is calculated using mixture of cost of a used car plus defined public transport tickets (two zone monthly ticket).

This living wage calculation does not cover:

- Credit card, loan, or other debt/interest payments;
- Savings for retirement;
- Owning a home;
- Savings for children’s future education;
- Anything beyond minimal recreation, entertainment, or holiday costs;
- Costs of caring for a disabled, seriously ill, or elderly family member;
- Much of a cushion for emergencies or tough times.
9.3 B: A Literature Review on the Effects of Living Wage Policies. Executive Summary

Tim Maloney, Auckland University of Technology with Amanda Gilbertson Research, Investigations and Monitoring Unit, Auckland Council.

Summary of Key Results. (Table 1, p. vi).

<table>
<thead>
<tr>
<th>Topic</th>
<th>For Living Wage</th>
<th>Against Living Wage</th>
<th>In sum</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Poverty</strong></td>
<td><em>“a necessary and important step in the reduction of poverty” (Living Wage Aotearoa)</em></td>
<td>Not ‘target efficient’ – large proportions of minimum-wage workers don’t live in poor households, and large proportions of poor households don’t contain working members.</td>
<td>Although inefficient, the living wage does have some effect on poverty.</td>
</tr>
<tr>
<td>Neumark, Adams and their co-authors have consistently found empirical evidence of anti-poverty effects from US living wage laws. They found that a 30% wage increase under a broader living wage policy that applies to city government contractors and employers receiving some form of business assistance would be expected to reduce the poverty rate by 3.9%.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Employer costs / profitability</strong></td>
<td>Higher wages associated with living wages may have relatively small effects on employer costs (30% increase in wage = 1-2% increase in total costs for average firm) because of:</td>
<td>These costs are likely to be to be larger for firms that have higher proportions of low-wage workers, more labour-intensive production processes and experience smaller beneficial effects from increased productivity, lower worker turnover and absenteeism, and smaller improvements in the quality of job applicants.</td>
<td>The living wage has a relatively small cost impact on many firms, but would have a much larger impact on businesses with high proportions of low-wage workers.</td>
</tr>
<tr>
<td>Small proportion of workers earning below the living wage;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Labour costs make up a fraction of total production costs;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increased productivity (little evidence);</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reduced worker turnover (strong evidence);</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reduced absenteeism (little evidence);</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>More experienced and skilled pool of job applicants (strong evidence);</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive impact on employer reputation.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

| Jobs and hours of work | When comparing employment levels before and after the enactment of living wage ordinances in the US, some (not all) researchers found that employment levels did not decline after employers started paying the mandated living wage (Brenner 2005; Reich et al. 2005). | Neumark, Adams and their co-authors provide some empirical evidence of reductions in employment levels or aggregate hours of work. Loss of hours of work was experienced in some case studies from London. | Evidence is limited and inconsistent, but in balance points to some reduction in hours of employment and the opportunity for overtime. |
| Employer location decisions | What little research there is found no significant differences in the number of firms in cities with and without living wage ordinances. However, this doesn’t necessarily indicate that living wages are unimportant for the location decisions of specific groups of firms. | Living wage laws could lead existing employers to leave a city or deter other employers from relocating to that same metropolitan area (little evidence). | There is insufficient evidence to be able to identify whether the living wage affects employer location decisions. |
| Labour substitution | There is strong evidence that paying a Living Wage results in a more experienced and skilled pool of job applicants, to the advantage of the employer. | Literature from both the UK (Wills and Linneker, 2012) and the US (Fairris and Bujanda, 2007; Reich et al., 2005) shows that new hires (following the implementation of a living wage policy) were better educated, had higher wages in previous jobs, and were more likely to be male. NZ Literature suggests an increased minimum wage may result in reduced employment for youth and Maori (Pacheco 2011), The Living Wage may result in fewer job opportunities for the most disadvantaged workers in the community (e.g. young workers, low-skill workers). |

<table>
<thead>
<tr>
<th>Topic</th>
<th>For Living Wage</th>
<th>Against Living Wage</th>
<th>In sum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health and wellbeing</td>
<td>An association has been found between living wage employment and psychological wellbeing in London (Wills &amp; Linneker 2012). 65% of surveyed workers in living wage workplaces reported experiencing some benefits in terms of their work, finances and family.</td>
<td>No association has been found between living wage employment and self-rated health in London. 35% of surveyed workers in living wage workplaces reported experiencing no benefits in terms of their work, finance and family. Relatively few living wage workers in Los Angeles and at San Francisco International Airport reported improvements in quality of life (Reich et al., 2003, Fairris et al., 2005: 82-3).</td>
<td>There is some association between Living Wage employment and improvements in work, finances and family life, quality of life and psychological wellbeing. However, studies in both the UK and the US have found that significant proportions of affected workers do not report these benefits.</td>
</tr>
</tbody>
</table>
9.4  C: Living Wage: Calculations for Cost / Benefit

Assuming objective is to make sure that 2 adult, 2 dependent households have a reasonable living wage.

9.4.1  Example 1


<table>
<thead>
<tr>
<th>Wages per week</th>
<th>Both on $14.10</th>
<th>FT $18.40</th>
<th>PT $14.10</th>
<th>Increase / Decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wages per year</td>
<td>$43,992</td>
<td>$52,936</td>
<td>$8,944</td>
<td></td>
</tr>
<tr>
<td>Income Tax</td>
<td>-$6,488</td>
<td>-$8,204</td>
<td>-$1,716</td>
<td></td>
</tr>
<tr>
<td>KiwiSaver</td>
<td>-$880</td>
<td>-$1,059</td>
<td>-$179</td>
<td></td>
</tr>
<tr>
<td>WFT tax credits</td>
<td>$9,620</td>
<td>$7,748</td>
<td>-$1,872</td>
<td></td>
</tr>
<tr>
<td>Accommodation Supplement</td>
<td>$2,428</td>
<td>$192</td>
<td>-$2,236</td>
<td></td>
</tr>
<tr>
<td>Total income per year (inc transfers)</td>
<td>$48,672</td>
<td>$51,613</td>
<td>$2,941</td>
<td></td>
</tr>
<tr>
<td>Net Income per week (inc transfers)</td>
<td>$936</td>
<td>$993</td>
<td>$57</td>
<td></td>
</tr>
</tbody>
</table>

Council will pay extra $8944 (NOT including additional 3% KiwiSaver employer contribution).
Household will gain by $2941 per year or $57 per week (pay more tax, get less in accommodation and working for families).
Central Government claims back $5824.

**Effective pay increase is 5.6 percent from household point of view.**

Cost to Ratepayers per dollar of employee benefit is $8944 / 2941 = $3.0.

Or **RETURN ON INVESTMENT TO ACHIEVE OBJECTIVE** is **0.31** ( $1 cost produces 33 cents benefit).

Alternative Objective: To increase productivity and staff morale.
Council has paid at least 30 percent more.
Employee’s household has received 5.6 percent more.
Employee’s personal income has increased 29%.

9.4.2  Example 2

Only 6% of households are 2 adults, 2 dependents. Council has 450 employees likely to be affected by Living Wage policy.
Therefore, only 27 Council employees actually would need, according to LW assumptions, a pay rise to $18.40.
Using Council papers, cost is $750,000 for 450 employees, average cost is $1667.
Cost to bring 27 employees up to $18.40 is 27 * $1667 = 44982 per year.

Cost to Ratepayers per dollar that achieves objective is $750,000 / $44,982 = $16.66

Or **RETURN ON INVESTMENT TO ACHIEVE OBJECTIVE** is **0.06** ( $1 cost produces 6 cents benefit)

9.4.3  Example 3: 20 year old

20 year old living at home, pays $100 board.
Net income after tax at $14.10 ph is $474 per week.
Net income after tax at $18.40 ph is $613 per week.
Effective pay increase is 29 percent from employee’s point of view.

---

Example 4: Cleaner who owns his house
A cleaner who works for a private company may get paid about $4 less for the same job, (about $129 per week after tax), and may pay more in rates.

Example 5: Dairy Owner
Works 78 hours per week, earning $5.00 per hour. Gets no benefit from this scheme, but rates and service fees increase.
9.5  D: Household Economic Survey

The following is from Statistics New Zealand35, and provides an overview of the survey.

What is the Household Economic Survey?

The Household Economic Survey (HES) provides a comprehensive range of statistics relating to income and expenditure, and personal and household demographics. The survey shows annual income from all sources at both the individual and household levels. An annual rather than a weekly measure of income tends to give a better indication of living standards, since an annual measure gives a longer-term view of income. The emphasis on households within the HES is also useful for assessing living standards because data includes the number of individuals a given income needs to support.

The HES collects information on each household’s sources of income in great detail, and shows the percentage share each source contributes to household income. For example, in 2009/10 the HES showed that income from wages and salaries made up 74 percent of total household income.

The HES provides information about a significant number of demographic variables, or characteristics. For example, the HES shows how many people with specific characteristics, such as sex, ethnicity, labour force status, or age, live in households with a given range of household income.

How is the data collected?

HES data is collected from a sample survey. Sample surveys use a group of the population as representative of the whole population. HES data is collected from households – data on income is available for individuals or households, but expenditure can only be given for households.

The ‘full’ HES runs every three years. In this survey, data is collected through a household demographic questionnaire and a household expenditure questionnaire. Each eligible person is also given an income questionnaire and asked to complete an expenditure diary for two weeks. The household expenditure questionnaire collects information on regular payments such as mortgage, rent, and telephone, and also on big purchases, such as television sets. In the expenditure diary the respondent is asked to record everything they spent money on in the previous two weeks. The last full HES ran in 2009/10 and the next will run in 2012/13.

In the years between the full HES, starting in 2007/8, respondents are given the household demographic questionnaire, the income questionnaire, and a shortened household expenditure questionnaire (income) about certain basic housing costs such as rent, mortgage, and rates payments. This smaller survey is known as HES (Income).

How is the HES used?

Overall, the HES can be used to provide an indication of the overall living standard of New Zealand. The HES is useful for looking at the distribution of income in New Zealand. It also can be used to look at expenditure. Household expenditure is available for individual items or for groups of items.

Surveys collected from households typically provide rich demographic data such as information on ethnicity, qualifications, and household type. This means that household surveys enable comparison between particular demographic groups. At the same time, household information, such as the number of dependent children, offers a greater understanding of people’s economic situation. For example, while an annual income of $60,000 may be considered a reasonably high income for a single person, it would not be so for a household with six dependent children.

What are the common confusions?

The HES collects data in great detail and, in order to reduce the burden on respondents it has a small sample size of approximately 4,700 households. This means that it is only possible to provide data at the national level, except for some large regions.

Due to the relatively small sample size, the HES can only report on what households spend, rather than providing a breakdown on individuals’ spending.

---

It is important to note that data is only comparable if it is taken from the same dataset or series. The HES collects data on both regular and irregular income. This means that HES income data cannot be compared with other surveys that only collect data on regular income (for example, the Labour Cost Index).

9.5.1 ADDITIONAL MATERIAL on HES.

Each expenditure item recorded by a respondent is allocated a unique code from the HES Classification Scheme. For example, “dwelling insurance” is coded as 11.4.02. Collectively, all items coded 11.4.xx (where xx is a variable) are summed to produce a figure for “Insurance” which is coded 11.4. All items coded as 11.xx are then summed to produce a figure for 11 “Miscellaneous Goods and Services.” All subtotals include the values for all items below, including those that have been suppressed by Statistics NZ. Therefore, the total for 11 “Miscellaneous goods and services” will include the cost for all items with 11 as the initial part of the code, e.g. dwelling insurance. Statistics NZ usually only provides the subtotals for the main and secondary categories in the published HES tables as the lower level items tend to have significantly high sampling errors.

An example to illustrate how subcategories may be suppressed, but the category total is a significant amount: expenditure for “Education” (couple with two children, 2013 HES) is $39.60 per week. All subcategories are suppressed (childcare, primary, secondary, and tertiary). In other words, while many items may have small costs, the sum of these may be quite large.

The classification scheme is designed so that items can be precisely described, and level in hierarchy is not necessarily a reflection of the amount. For example 11.5 “Credit services” expenditure is $5.20, while lower level 11.1.01 “Hairdressing and personal grooming services” is $7.60. (Figures from 2010 HES). The following screenshots are from the 2010 HES Classification spread sheet. The items I listed in table 2 above are from the HES Classification Scheme spread sheet.

By using detailed budgets one can avoid including items that were not intended to be captured. Obviously, this may be impractical, so alternative methods may be required to mitigate sampling error issues. Statistics Canada uses such a process (see section 11.1).
10 About the Author

Brian Scott, 50, graduated from Victoria University in 2012 with a Bachelor of Commerce and Administration (1st Class Honours), majoring in Information Systems, after four years of full time study. In addition to the degree, Brian was also awarded a prestigious “Excellence Award” which recognises the achievements of the top five percent of Business School graduates, and made the Dean’s List for high academic achievement in 2011. The BCA (Hon) is a research degree, with a focus on research and critical thinking.

He is not, and has never been, a member of any political party or movement.

brianscotthamilton@gmail.com
11 Additional Material.
I have included some additional material to my original critique in this section, and section 9.5.1 has been added. Apart from updating my biographical details, no other change has been made to this report.

11.1 Responding to Feedback on original version
Since this critique was first published there has been various feedback, the vast majority being positive. Other comments seem to be based on an imaginative interpretation of my critique. I have reviewed my critique, and am confident there are no inaccuracies.

- One aim of the critique was to inform and stimulate community discussion on how King and Waldegrave calculated their living wage rate. It certainly achieved this aim. If community funds are to be used then it is appropriate that the community has accessible information and be allowed to provide submissions before a policy is implemented. It is called democracy. The Director of the Catholic social justice agency Caritas, in a reasoned media release in favour of a living wage, commented that “there is legitimate room for debate about what a living wage means in different circumstances.”

- The main purpose was to review the underlying assumptions, method and data sources. While it is common for reviewers to suggest alternatives (as I have done), it is not the role of the reviewer to do the research itself. When referring to alternative methods or assumptions the aim was to inform readers that other researchers (that may not have been mentioned in the original report) have approached an issue from different angles. King and Waldegrave should have included more alternative approaches and clearly explained why these approaches were not appropriate for New Zealand. It would then be up to the reader to decide if the authors’ arguments were valid. I deliberately used terms such as “debatable” and “may” for this reason. Identifying alternatives does not mean I necessarily agree with them.

- A misconception is that I am referring to a poverty or subsistence wage when referring to basic necessities. I used the same interpretation as in the Living Wage Report. What I questioned is whether particular items would have general community support as being included. For instance, there may be community support for computers, but not for overseas travel, or both, or neither. My point was that we do not know. My personal view (which is not the same as the items I listed in my critique) for each item, like King and Waldegraves, should be irrelevant. One persons “modest” expenditure may be extravagant or restrictive to another.

- I spent time explaining issues with the HES as many readers may not be aware of the errors that can occur in surveys. King and Waldegrave should have acknowledged these issues in their limitations section. Secondly, it is possible that some readers could know of specialised data sources that neither the original authors nor I had knowledge of that could mitigate these effects. I have added section 9.5.1 to further explain the HES. As noted in section 11.2 my observations on using the HES have proved to be correct.

- The Canadian equivalent of New Zealand’s HES is only used to calculate the ratio of food, footwear and clothing to “other” expenditure. This ratio is less volatile than the actual dollar amounts, and is region and year specific. This ratio is averaged over three surveys, and then applied to the total of budgeted food and detailed clothing/footwear budget to calculate the

---

37 See footnote 13.
“other” expenditure. Even this variability is minor as only about 12 percent of the total Canadian expenses is based on this calculation, compared to about 42 percent directly based on the HES figures in New Zealand. Focus groups are used by Statistics Canada to confirm what items should be included as part of the calculation, not the amounts.

- Equity Theory is the basis for wage increases at other organisations and relativity increases within organisations. This has proven to be an accurate prediction: the Tertiary Education Union wants Massey Campus workers to be paid the same as the Warehouse Group’s living wage scheme, and the PSA wants relativity increases for staff earning above $18.40 at Wellington City Council.

- It is instructive that the Warehouse Group have disregarded King and Waldegraves version of a living wage, and have introduced a version with higher pay but also places conditions on employees to qualify for the additional income, such as a 5000 hours qualification period, and completing all required training. The Warehouse CEO made the following comment: “It would be very unfair to our fully trained, longer serving Team Members if we paid the Career Retailer Wage to short term employees, such as Students and Christmas Casuals.”

- Living wage proponents mention that London Mayor Boris Johnson supports a living wage. The following quote from Wills and Linneker (2012) may shine some light on why he says he supports a living wage: “London Citizens [a lobby group] has used its political influence over the Mayor of London (Ken Livingstone from 2004 and Boris Johnson from 2008) to ensure that economists at the Greater London Authority determine the annual living wage level that is subsequently announced and endorsed by the Mayor.”

- To impact on a significant number of low income workers a living wage would need to target industries and organisations with large numbers of such workers: Accommodation and Food, Wholesale and Retail, and Health Care and Social Assistance. A quantitative study in London conducted by pro-living wage researchers Wills and Linneker (2012) found that in these types of organisations “In the pre/post case studies, the additional wage costs added an average 6% to contract costs in the pre living wage period. In the comparative [living wage / non-living wage] case studies, the wage premium would have added an average of 11% to non-living wage contract costs.” This was after workplace improvements, productivity increases, and other indirect benefits. They also noted “The cost of labour recruitment was relatively low and while companies were saving money, these savings were marginal to overall costs.”

- Officials at The Ministry of Business, Innovation and Employment, in an email chain and not a formal evaluation of the living wage, noted that “the data used to calculate the LW has been carefully constructed and the methodology is comprehensive”. Even so, they made the following points:
  - Subjective view of what an ‘...income necessary to provide workers and their families with the basic necessities of life’ For example, the LW allows:
    - The ability to mix with friends

---

38 Talia Shadwell. *Pressure on uni over living wage*. Manawatu Standard Newspaper. 10 May 2013. [http://www.stuff.co.nz/manawatu-standard/8657335/Pressure-on-uni-over-living-wage](http://www.stuff.co.nz/manawatu-standard/8657335/Pressure-on-uni-over-living-wage)


Planning for the future using an insurance policy
Having a computer in the home
Paying for school trips

“...If you increase the hourly rates for a couple working 1.5FTE with 2 dependent children from the minimum wage to the LW of $18.40 this increases their gross (before tax) earnings by 37% from $48k to $54k. However, the households after tax income only increases by 12.5% from $48k to $54k, largely due to abatement of Family Tax Credit and accommodation supplement.

“...It may be more efficient to address this problem through government transfers, especially if the LW causes a reduction in labour demand by firms.”

It is disappointing that Waldegrave selectively omits these comments in his response. Additionally, while one official observed that “the methodology makes reasonable assumptions about costs”, these assumptions do not necessarily match how the living wage was calculated, as detailed in the main part of my critique.

11.2 UPDATE: New rate announced: $18.80. February 2014

King and Waldegrave unilaterally decided that instead of using the original method, but using the most recent data, they have decided to add the increase in average hourly rate (2.1%) to the $18.40 rate. The justification is that a living wage is now a wage in the market (even though less than 0.2 percent of low income workers could be on this rate), and that the 2013 HES is less reliable than the 2010 HES. This is absolutely contrary to the basis of a living wage, which is based on the income necessary to support the household. Waldegrave has defended the latest figure, saying that, if anything, it was on the low side. Does this indicate a big rise next year?

King and Waldegrave also calculate (using the original method) that the rate would be $22.89 per hour. Statistics NZ puts median wage in 2013 at $21.58 per hour. What this means is that a low skilled school leaver should immediately have a wage in the top 50 percent of all workers. This justifies my analysis that King and Waldegraves’ method and data are too unreliable. What method will they use next year? A salient question is if this was the first year that King and Waldegrave had calculated a living wage, would they have proposed the $22.89 figure?

The education category is interesting. From 2010 to 2013 the figures for this category increased from $29.10 to $39.60 for all income deciles (from HES). However, the latest 2014 Living Wage report states that for deciles 1-5 it decreased from $33.84 (backwards calculated from provided inflation and figure in 2013 Living Wage Report) to $13.85 over the same period. Education is the category I said had double counting in the 2013 Report. The Miscellaneous goods and services figure was adjusted down because the decile 1-5 figure seemed relatively high according to the authors. Will they adjust figures up next year if they seem relatively low?

For a Living Wage to get traction in the market it is important that employers have confidence in the calculation. BusinessNZ Chief Executive Phil O’Reilly said “Either the original calculations were flawed, or the campaign is just picking numbers out of thin air.” Raewyn Bleakley, Chief Executive

of Wellington Employers’ Chamber of Commerce, wrote that her organisation encouraged employers to pay as much as they can, (and I fully agree with this) but “surely, if the methodology was sound (as the council has stated), the figure of $22.89 should have been adopted. The fact that it was not is further evidence that the whole approach is flawed and is a totally unacceptable way to set council pay rates.” An editorial in the Dominion Post commented in relation to Wellington City Council paying its staff a living wage that “this does not look like the most prudent way of managing ratepayers’ funds.”

King and Waldegrave mention that the underlying method will be reviewed probably in five years. For Living Wage Aotearoa New Zealand to move forward they need to rethink this method immediately. They also need to engage with businesses and business organisations to identify the best method(s) that is (are) fair to staff and adaptable for the various types of businesses in New Zealand.

Businesses also need to be aware that the potential living wage premium percent may vary in future years, as the following table illustrates. If competitors continue to pay wages close to minimum wage, this could impact on the viability of the business, especially in a highly competitive environment. Importantly, adopting the “official” living wage is equivalent to outsourcing wage negotiations to a union. A living wage is voluntary, and so are the conditions (qualification period, training required) that a business can negotiate with its employees.


<table>
<thead>
<tr>
<th>Year</th>
<th>Minimum Wage</th>
<th>Living Wage</th>
<th>Premium (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>£4.50</td>
<td>£6.40</td>
<td>42.2</td>
</tr>
<tr>
<td>2004</td>
<td>£4.85</td>
<td>£6.50</td>
<td>34.0</td>
</tr>
<tr>
<td>2005</td>
<td>£5.05</td>
<td>£6.70</td>
<td>32.7</td>
</tr>
<tr>
<td>2006</td>
<td>£5.35</td>
<td>£7.05</td>
<td>31.8</td>
</tr>
<tr>
<td>2007</td>
<td>£5.52</td>
<td>£7.20</td>
<td>30.4</td>
</tr>
<tr>
<td>2008</td>
<td>£5.73</td>
<td>£7.45</td>
<td>30.0</td>
</tr>
<tr>
<td>2009</td>
<td>£5.80</td>
<td>£7.60</td>
<td>31.0</td>
</tr>
<tr>
<td>2010</td>
<td>£5.93</td>
<td>£7.85</td>
<td>32.4</td>
</tr>
<tr>
<td>2011</td>
<td>£6.08</td>
<td>£8.30</td>
<td>36.5</td>
</tr>
<tr>
<td>2012</td>
<td>£6.19</td>
<td>£8.55</td>
<td>38.1</td>
</tr>
<tr>
<td>2013</td>
<td>£6.31</td>
<td>£8.80</td>
<td>39.5</td>
</tr>
</tbody>
</table>


©Brian Scott 2014 March.
A Review into the Basis for a Living Wage Rate in New Zealand. (With additional material).