Background

Pay & Benefits is a tough driver to improve. Despite its importance, this driver has received the lowest scores in every WES cycle since 2008. In the most recent cycle of WES, items reflecting the pay-side of this driver are lower than ever, averaging from 43 to 47 points.¹ Over the years there has been a general mindset that improvements are hard to achieve since this driver is driven by dollars beyond a work unit’s control since it is tied to fiscal constraints and provisions outlined in public sector collective agreements. With such a mindset, it makes sense for organizations and work units to bypass this driver’s result when developing their local improvement strategies.

A recent study from PayScale suggests this mindset may do more harm than good.² They found that one of the top predictors of respondent engagement was not compensation in itself, but the company’s ability to communicate clearly about compensation. According to their research, when people are evaluating their pay against the market rate, their assessments are often not accurate. The evidence is so strong that they concluded that pay is not a number but an emotional measure reflecting how valued respondents feel by their employer, and they recommended that transparent and frank conversations with respondents about their compensation could potentially be a no-cost way to improve engagement.

This analysis takes a few preliminary steps into this unchartered territory by exploring the link between respondents’ impressions about their pay and a variety of circumstances. Having a better understanding of how awareness and information can shape impressions on this driver could help make advances to this driver in ways not seen in the BC Public Service before.

¹ It should be noted that 10% could not answer the item about competitive pay.
Research Questions

The research questions focus on the two items measuring the pay-side of the Pay & Benefits driver (although occasionally include the single item reflecting impressions of benefits).3 For most of the analysis in this summary, the items include the following.

I am fairly paid for the work I do. (Fair Pay)
My pay is competitive with similar jobs in the region. (Competitive Pay)
My benefits meet my and my family’s needs well. (Benefits)

Various related types of administrative information and WES results from the 2015 cycle were analyzed to answer a set of five research questions:

1. What is the connection between perceptions of pay and how respondents feel valued?
2. How much of a difference do perceptions in Stress & Workload make on perceptions of pay?
3. What is the relationship between perceived and actual pay?
4. What kinds of an effect, if any, do temporary market adjustments (TMAs) or salary compression have on perceptions of pay?
5. What is the relationship between perceptions of pay and work unit composition? Do work units with more homogeneous groups of respondents (classification-wise) have more positive impressions of their pay?

The key findings from these research questions will be discussed in turn.

Key Findings

1. What is the connection between perceptions of pay and how respondents feel valued?

In 2015 WES, a new item was included: “Overall, I feel valued as a BC Public Service respondent.” The Pay & Benefits driver items were most highly correlated with this item than with any other WES items.4

<table>
<thead>
<tr>
<th>Item</th>
<th>Fair Pay</th>
<th>Competitive Pay</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fair Pay</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Competitive Pay</td>
<td>0.81</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Benefits</td>
<td>0.58</td>
<td>0.57</td>
<td>1</td>
</tr>
<tr>
<td>Feel Valued</td>
<td>0.45</td>
<td>0.43</td>
<td>0.42</td>
</tr>
<tr>
<td>All other WES items</td>
<td>&lt; 0.40</td>
<td>&lt; 0.40</td>
<td>&lt; 0.40</td>
</tr>
</tbody>
</table>

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3 See the companion document that focusses exclusively on the benefits-side of the driver.
4 A bivariate correlation is used to test a relationship between two variables. Correlation coefficients range from -1 to +1, where -1 represents a perfect negative relationship, and +1 represents a perfect positive relationship. For surveys, a correlation coefficient is usually given an absolute value ranging from 0 to 1, and the closer the value is to 1, the more the answers to the two variables or questions match, or the stronger the relationship between the two variables. Correlations from 0.80 through 0.99 are interpreted as very strong; correlations from 0.60 through 0.79 are interpreted as strong; correlations from 0.40 through 0.59 are interpreted as moderately strong; and, correlations from 0.20 through 0.39 are interpreted as weak.
In WES, scores can range from as low as 0 points to as high as 100 points. The higher the score is, the more favourable the response. The correlations between feeling valued and perceptions on all Pay & Benefits scores indicate that more valued one feels the more positive their impressions will be about their pay. Analysis next quantified the differences this item had the highest correlation with—Fair Pay.

*The more respondents feel valued, the more they believe their pay is fair (and vice versa).*

Respondents who did not feel valued at all as a BC Public Service respondent (i.e., provided scores of 0) also reported that they believed they were not paid fairly. Their scores averaged at 19 points out of 100 on this item. Respondents who reported a score of 25 in feeling valued also reported scores averaging 30 points on the fairness of their pay, and so on. The other Pay & Benefits driver items showed a similar trend when paired alongside feeling valued.

2. How much of a difference do perceptions in Stress & Workload make on perceptions of pay?

The *BC Public Service Respondent Engagement Model* has long known of the effect the Stress & Workload driver has on the Pay & Benefits driver. That is, as work-related stresses and workloads are more manageable, respondents generally agreed more that they are fairly and competitively paid and that their benefits meet their needs well. For each 12.5 points increase in a respondent’s Stress & Workload driver score, there was an average six point increase in respondent’s pay and benefits items and driver scores. The chart illustrates this effect using Fair Pay.

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5 Average score differences were statistically significant based on one-way Analysis of Variance (ANOVA), $p < 0.001$. All post hoc tests (Scheffe) were also statistically significant with $p < 0.001$.

6 Average score differences were statistically significant based on on-way ANOVA, $p < 0.001$. Most post hoc tests (Scheffe) were also statistically significant with $p < 0.001$. 

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3. What is the relationship between perceived and actual pay?

With the data provided, BC Stats correlated respondents’ hourly pay rate with their responses to the two pay items. Results found no association between perceived and actual pay. Further, when hourly pay rate was regressed on Fair Pay, only 1.9% of the variation in responses could be explained by hourly pay rate. Even less variation (1.0%) was explained in responses to Competitive Pay by hourly pay rate. Together, these tests implied that the relationship between perceived and actual pay is in fact emotionally-based. The pair charts shows the differences and spread of scores across groups of respondents with varying hourly rates.

There is no clear relationship between perceived and actual pay.

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7 Not all respondents work 100% full-time. Hourly pay rate is not affected by hours worked, so is a more consistent measure than annual pay rate. The bivariate correlation between hourly rate and Fair Pay is 0.136, while that between hourly rate and Competitive Pay is 0.099.

8 Linear regression of Fair Pay had an adjusted $R^2$ value of 0.019, while Competitive Pay had an adjusted $R^2$ value of 0.010.
The above chart shows the extent of the variation of scores within each group. For example, respondents earning over $44.99 per hour have a corresponding score on Fair Pay of 54 points out of 100, on average. The majority within this group provided scores that fell as low as 20 points and as high as 88 points. When the spread of this group is compared to the spread of those earning less, one sees there are more differences in opinions within each group than between groups.

Analysis drilled down further by comparing scores only from the 2,750 respondents earning more than $44.99 an hour. The 85 respondents making more than $99.99 per hour reported the highest scores (81 points). The 249 respondents earning from $85.00 to $99.99 per hour trailed behind with scores averaging between 70 to 72 points. The rest fluctuated in a non-linear way between 46 and 68 points. Despite the positive trending seen in the extreme upper ends of hourly rates, no association was found. This is likely due to the size and wide diversity of opinions about their pay existing within each and every group.

Respondents at their maximum classification step reported less favourable perceptions about their pay than those not in their maximum step.

BC Stats determined whether respondents were at their maximum step in pay, and how that might have affected their responses to the pay items. Approximately 57% of respondents appeared to be earning pay at their maximum classification step, and they reported lower pay scores than other respondents on both items measuring perceptions of pay.⁹

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⁹ Respondents at their maximum step had statistically significantly lower pay scores than other respondents based on Independent t-test mean comparisons, p < 0.001.
4. What kinds of an effect, if any, do temporary market adjustments (TMAs) or salary compression have on perceptions of pay?

Temporary market adjustments do not appear to have a positive effect on scores per se.

Based on data provided, 16% of the 2015 WES population received a temporary market adjustment (TMA) to their pay in the year leading up to the survey.\(^{10}\) Average scores on the two pay items were lower for respondents who received a TMA compared to those who did not receive a TMA. Specifically, respondents who received a TMA reported scores that were five points lower on the topic of their pay being fair. The gap is larger when they assessed whether their pay is competitive with similar jobs in the regions.

Most respondents’ salary is well below their supervisors.

BC Stats also compared each respondent’s pay with that of their supervisors.\(^{11}\) Dividing the respondent’s pay by that of their supervisor provided the percentage of the supervisor’s pay that is earned by the respondent. This was usually less than 100%, and in fact, was less than 100% for the majority of respondents (92%).

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\(^{10}\) Respondents receiving TMAs generally tend to be in enforcement and corrections classifications such as Correctional Services or Deputy Sheriffs, scientific classifications such as designated Licensed Science Officers and higher level Biologists, information systems classifications, or classifications such as Policy Analysts, Planning Officers, Education Officers, Tax Audit Financial Officers, etc.

\(^{11}\) Pay refers to the annual rate at full-time, as well as any additional pay (e.g., AMA, ISO, SPP, etc.). It should be noted that either the respondent’s pay or, more often, the supervisor’s pay was unknown for 6% of respondents.
Respondents whose salary was closer to their supervisors reported more favourable scores.

<table>
<thead>
<tr>
<th>Average Score (Out of 100 points)</th>
<th>Fair Pay</th>
<th>Competitive Pay</th>
</tr>
</thead>
<tbody>
<tr>
<td>No salary compression</td>
<td>47</td>
<td>43</td>
</tr>
<tr>
<td>Salary compression</td>
<td>60</td>
<td>53</td>
</tr>
</tbody>
</table>

Respondents who are paid more than their supervisor (i.e., have salary compression) provided higher scores with regard to being fairly paid (by 13 points) and being competitively paid (by 11 points). The nearly 2% of respondents who are paid more than their supervisor were comprised of two groups: respondents in typically high paying classifications (i.e., Crown/Legal Counsel, LSOs, nurses, veterinarians, pharmacists, Licensed Psychologists, and Salaried Physicians), and respondents in classifications not generally expected to be paid more than their supervisor. Respondents were further broken out by these various groups and pay scores were again analyzed. The differences seen overall appeared to be driven largely by the Crown/Legal Counsel group, which had pay scores of 77 and 72 points, much higher than any other group.12

5. What is the relationship between perceptions of pay and work unit composition? Do work units with more homogeneous groups of respondents (classification-wise) have more positive impressions of their pay?

The Gini coefficient is a “measure of statistical dispersion intended to represent the income distribution of a nation’s residents, and is the most commonly used measure of inequality. If all people have non-negative income (or wealth, as the case may be), the Gini coefficient can theoretically range from 0 (complete equality) to 1 (complete inequality).”13 The Gini coefficient was calculated based on respondents’ hourly pay rate, for the 603 BC Public Service work units. The average Gini coefficient was 0.12, implying a high degree of equality in hourly pay.

As noted earlier, perceptions of fair and competitive pay seem to be emotionally based. Thus, while work units have high equality in actual pay, respondents may not feel that way. The homogeneity of work units was analyzed by looking at the number of distinct classifications and the total number of respondents within each work unit. For example, Work Unit A had 130 respondents during the last survey cycle and nine distinct classifications including

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12 In general, respondents in Crown/Legal Counsel classifications are much more likely to earn more than their supervisor: 22% earn more than their supervisor, while 76% earn less than their supervisor and 1.5% are unknown.

13 Wikipedia, May 2016
Business Leadership, Clerks and Office Assistants at four different levels, and four other job-specific classifications (e.g., Correctional Service R18, Tech Enforcement Officer R21, Child Care Counsellor R24, Machine Operator R13, etc.). Another example is Work Unit B. It contains 64 respondents and four distinct classifications. In each case, the proportion of distinct classifications by number of respondents was relatively small implying a classification-wise homogenous work unit: Work Unit A had a proportion of 0.07 (=9/130) while Work Unit B had a proportion of 0.06 (=4/64). Comparatively, a non-homogeneous work unit such as Work Unit C of 29 respondents but 20 distinct classifications had a high proportion of 0.69 (=20/29).

This homogeneity proportion was calculated for all work units. The average proportion for all work units was 0.25, ranging from 0.02 (homogeneous) to 0.83 (diverse). Work units were then grouped and their average pay scores were compared. The most homogenous work units (proportion of 0.10 or less) had lower pay scores than work units with less homogeneity.14

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14 Work units with a homogeneity proportion of 0.10 or less (*) had statistically significantly lower pay scores than all other work units based on one-way Analysis of Variance post hoc tests (Scheffe) with \( p < 0.001 \). No other main trends emerged.
Conclusion

As respondents’ beliefs about feeling valued as a BC Public Service grew, their views about their pay became more positive. Likewise, as respondents’ work-related stress and workload became more manageable, their views about their pay also became more favourable. The connections these two topics have on pay are stronger than any other variable studied in this analysis. For example, respondents’ perceptions of whether they are paid fairly and competitively were not linked to their actual hourly pay rate. Further, respondents who were at their maximum classification pay step had lower scores with regards to being fairly paid and competitively paid. Although being paid at their highest possible, these respondents could be basing their assessments on something else—lack of additional growth in their existing classification. TMA’s appear to be having the opposite effect. Respondents who received a TMA provided lower scores with regards to fair and competitive pay compared to respondents who do not receive TMA. More analysis should investigate whether the lower pay scores of respondents who receive TMA are typical across the board for all such respondents, or if they vary by classification. In future WES iterations, respondents who disagree that they are being paid fairly or competitively tracked over time to see what kind of events contribute to positive changes. For now, results seem to support the earlier argument that people’s assessments of their pay are emotionally based and influenced by other factors a part from compensation per se.

While it appeared as though the 2% of respondents who earned more than their supervisor generally had higher scores than those who earned less than their supervisor, further analysis showed that it was specifically respondents in Crown/Legal Counsel classifications who had higher pay scores. Thus, this was more likely an effect of the job/classification than of actual salary compression. However, it is known that in at least some BC Public Service organizations, some salaries are internally capped below the actual stated maximum. Further analysis into detailed salary compression by classification and/or into internal salary caps could help shed light on this topic.

A measure of wealth equality, the Gini coefficient, was calculated by work unit and reinforced the finding that actual pay was fairly equal. Further analysis found that work units comprised of very few distinct classifications generally had lower pay scores, possibly another sign of lack of growth opportunities. Focused analysis should be conducted on highly homogeneous work units to duplicate findings and attempt to unearth potential reasons for this result.

A relatively high proportion of respondents were not able to answer the item about Competitive Pay, lending strength to the argument that many respondents might just not be aware of the market value of their job. Communication about pay steps, amounts and comparisons to other public sectors or the private sector would likely assist with respondents’ knowledge and perceptions of being fairly and competitively paid.