Migration Analysis

How has the state of employee engagement changed from 2007 to 2008?

SEPTEMBER 25, 2008
Executive Summary

Employee engagement is a key driver of productivity, retention and client satisfaction in government. The more engaged an employee is, the more likely they are to stay and be productive, and the more likely their clients are to be satisfied. BC Stats has been tracking the levels of engagement of BC Public Servants since 2006 through the Work Environment Survey.

Between 2007 and 2008, there were notable increases in the level of engagement of BC public servants. The overall engagement score increased from 63 (out of 100) to 66, meaning that, on average, employees are engaged. On the other key metric, engagement state, the engaged quadrant gained 2,846 employees.

While these are substantial improvements for the public service, this report identifies how much of these improvements are due to real changes in engagement and what effect various changes in the BC Public service population have on these improvements. This report explores the effects of changes in responses for continuing employees (i.e., those who responded in both survey years), the effects of new and departing employees, and the effects of single-year respondents (i.e., selective response by employees).

Key findings

Very little of the reported improvement is due to improved levels of engagement for continuing employees

- Only 11% of the gain in engaged employees can be attributed to changes in the responses of those who responded to both the 2007 and 2008 cycles.

There are substantial effects due to the replacement of departing disengaged employees with new engaged employees

- New employees tended to be much more engaged than departing employees. Fifty percent of the gain in engaged employees was due to an influx of relatively engaged new employees combined with the departure of relatively disengaged employees.

Single-year respondents contributed to the increase in engaged employees

- Single-year respondents had a considerable impact on the population. Of all employees eligible to complete the survey in both years, some chose to respond only in one year. There were 2,006 employees who responded only in 2007, and 4033 who responded only in 2008. Those who responded only in 2008 tended to be slightly more engaged than those who responded only in 2007. This resulted in a net gain of 1,127 engaged employees (40% of total gain in engaged employees).
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3.0 **SUMMARY** .................................................................................................................................... 11
1.0 INTRODUCTION

Employee engagement is a key driver of productivity, retention and client satisfaction in government. The more engaged an employee is, the more likely they are to stay and be productive, and the more likely their clients are to be satisfied. BC Stats has been tracking the levels of engagement of BC Public Servants since 2006 through the annual Work Environment Survey.

Between 2007 and 2008, there were notable increases in the level of engagement of BC Public Servants. While this is a positive step for the BC Public Service, it is important to unpack the causes of this increase to determine whether the level of improvement is sustainable in the coming years.

1.1 Measuring engagement

Employee engagement can be viewed in two ways:

1. The overall average engagement score presents an aggregate measure of engagement based on the three key characteristics: job satisfaction, organizational satisfaction and commitment. These three characteristics are based on specific questions on the Work Environment Survey. This measure is reported on a scale of 0 to 100.

2. Engagement states represent a method of categorizing employees in four groups based on their commitment and overall satisfaction (combined job and organization satisfaction). The engagement state groups are:
   - Disengaged: not satisfied, not committed
   - Happily detached: satisfied but not committed
   - Unhappily dedicated: not satisfied but committed
   - Engaged: committed and satisfied.

1.2 BC Public Service results

In both ways of viewing engagement, the BC Public Service improved from 2007 to 2008. The overall engagement score increased from 63 to 66 (out of 100 points), meaning that on average, employees in the BC public service are relatively engaged. Also the proportion of employees in the engaged group increased from 54% in 2007 to 58% in 2008.

While these are substantial improvements for the public service, this report identifies how much of these improvements are due to real changes in engagement and what effect various changes in the BC Public Service population have on these measures. The goal of this analysis is to provide decision-makers with the appropriate context for interpreting the survey results and to help guide future initiatives.
1.3 Research objectives
This analysis explores engagement through the lens of population, sample and respondent-level changes occurring between the 2007 and 2008 Work Environment Survey cycles.

Four research questions guided the comparisons of engagement in the survey population from 2007 to 2008:

1. What is the net change in engagement since 2007?
2. What are the effects of changes in response for continuing respondents? (i.e., those who responded to both the 2007 and 2008 surveys?)
3. What are the effects of the differences between responses from new employees in 2008 and those who departed from the BC Public Service by 2008?
4. What are the effects of changes in the respondent sample (i.e. those who could have responded in both years, but chose to only respond in one year)?

This report answers the above questions by examining changes in engagement state rather than overall scores per se. Categorizing employees into one of the four groups allows us to map the migration patterns between groups more easily.

1.4 Analysis methods
This analysis used the complete 2007 and 2008 response databases from the Work Environment Survey. BC Stats administers the Work Environment Survey to BC Public Service employees annually by web and mail survey modes. The survey responses are collected under the Statistics Act, which guarantees respondent confidentiality.

When BC Stats administers each survey, all employees are given a unique and confidential identification number to allow for tracking during data collection and for analysis. This analysis uses this ID number to track employees between the 2007 and 2008 surveys.

For more details on the analysis methods, please contact BC Stats at (250) 387-9488.
2.0 MOVEMENT ACROSS STATES OF ENGAGEMENT

One key metric that can be derived from the Work Environment Survey is the proportion of respondents who fall within one of four different engagement states. This measure builds from the key questions of organizational satisfaction, job satisfaction, and commitment.

Respondents' satisfaction scores can be plotted with their commitment scores and categorized according to one of four engagement states using the matrix below (Figure 1). In this matrix, job satisfaction and organization satisfaction were combined into a single scale called ‘Satisfaction’. Preference to stay and satisfaction of work as a BC Public Service employee were combined into a single scale called ‘Commitment’. For both scales, an average score of 60 points (out of 100) was used to classify the groups.

**FIGURE 1: ENGAGEMENT STATES MATRIX.**

<table>
<thead>
<tr>
<th>SATISFACTION</th>
<th>COMMITMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>60 points or more</strong></td>
<td><strong>Less than 60 points</strong></td>
</tr>
<tr>
<td><strong>HAPPILY DETACHED</strong></td>
<td><strong>ENGAGED</strong></td>
</tr>
<tr>
<td>High satisfaction</td>
<td>High satisfaction</td>
</tr>
<tr>
<td>Low commitment</td>
<td>High commitment</td>
</tr>
<tr>
<td><strong>DISENGAGED</strong></td>
<td><strong>UNHAPPILY DEDICATED</strong></td>
</tr>
<tr>
<td>Low satisfaction</td>
<td>Low satisfaction</td>
</tr>
<tr>
<td>Low commitment</td>
<td>High commitment</td>
</tr>
</tbody>
</table>

These engagement states were developed to give decision-makers a better picture of what forms engagement can take. At the highest level (the upper right quadrant) there are the *engaged* employees, who are satisfied with their job and organization and committed to their work as a BC Public Service employee. At the other end of the spectrum (the lower left quadrant) the *dissengaged* employees are not satisfied with their job and not committed to their work as a BC Public Service employee.

The two other categories are particularly interesting. The *unhappily dedicated* are those employees who are not satisfied with their job or organization, but remain committed to the work as a BC Public Service employee. The *happily detached* are satisfied with their job and organization, but are not committed to their work as a BC Public Service employee.
### 2.1 Tracking overall movement

Figures 2 and 3 show the distribution of engagement states for both 2007 and 2008. There was a gain in absolute terms in all states, and the most striking gain, in both relative and absolute terms, was the gain of 2,846 in the engaged category, which increased the proportion of engaged employees to almost 58% of the population. While there was a gain of 239 employees in the disengaged category, this category declined by 4 percentage points in relative terms.

#### FIGURE 2: SIZE OF ENGAGEMENT GROUPS IN 2007.

<table>
<thead>
<tr>
<th>SATISFACTION</th>
<th>COMMITMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>60 points or more</td>
<td></td>
</tr>
<tr>
<td>HAPPILY DETACHED</td>
<td>ENGAGED</td>
</tr>
<tr>
<td>1,321 employees</td>
<td>8,793 employees</td>
</tr>
<tr>
<td>8% of total</td>
<td>54% of total</td>
</tr>
<tr>
<td>Less than 60 points</td>
<td></td>
</tr>
<tr>
<td>DISENGAGED</td>
<td>UNHAPPILY DEDICATED</td>
</tr>
<tr>
<td>4,469 employees</td>
<td>1,838 employees</td>
</tr>
<tr>
<td>27% of total</td>
<td>11% of total</td>
</tr>
</tbody>
</table>

#### FIGURE 3: SIZE OF ENGAGEMENT GROUPS IN 2008.

<table>
<thead>
<tr>
<th>SATISFACTION</th>
<th>COMMITMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>60 points or more</td>
<td></td>
</tr>
<tr>
<td>HAPPILY DETACHED</td>
<td>ENGAGED</td>
</tr>
<tr>
<td>1,564 (+243)</td>
<td>11,639 (+2,846)</td>
</tr>
<tr>
<td>8% (+0 ppts)</td>
<td>58% (+4 ppts)</td>
</tr>
<tr>
<td>Less than 60 points</td>
<td></td>
</tr>
<tr>
<td>DISENGAGED</td>
<td>UNHAPPILY DEDICATED</td>
</tr>
<tr>
<td>4,708 (+239)</td>
<td>2,156 (+318)</td>
</tr>
<tr>
<td>23% (-4 ppts)</td>
<td>11% (+0 ppts)</td>
</tr>
</tbody>
</table>
2.2 Focusing on the engaged group

The previous section revealed a net increase of 2,846 in the number of engaged respondents between the 2007 and 2008 cycles of the Work Environment Survey. The question becomes, where did these 2,846 engaged people come from? Figure 4 shows the net movements that resulted in this gain.

FIGURE 4: NET MOVEMENT BETWEEN 2007 AND 2008 CYCLES.

The majority of the net increase from 2007 to 2008 comes from changes to the employee population (i.e. employees entering or leaving the BC Public Service) and from single-year respondents (i.e., eligible employees who only responded to one of the two surveys). Only 11% of the net movements to the engaged state were the result of changes in satisfaction or commitment scores for continuing respondents (i.e., employees who answered both surveys).

The figure above only shows net movements. It is also important to note that there are counter-movements away from the engaged category. These movements will be further explored in the following sections that address the effects of the three factors:

- FACtor 1 | The effect of changes in response for continuing respondents
- FACtor 2 | The effect of changes due to new and departing respondents
- FACtor 3 | The effect of changes due to single-year respondents
2.3 Understanding the movement

**FACTOR 1 | CONTINUING RESPONDENTS**

Overall, there were 12,621 employees who responded to both surveys. In this report, these employees are called ‘continuing respondents’. Tracking how the engagement states changed at the individual level between the two surveys is an important indicator of change.

Table 1 and Figure 5 show how continuing employees shifted groups between the two surveys. For example, there were a total of 3,202 continuing respondents who started in the disengaged group in 2007. In 2008, 1,771 of these employees remained disengaged while 746 of these employees shifted into the engaged group. In Table 1, the yellow cells show the number of employees who stayed in the same state between 2007 and 2008.

**TABLE 1. COMPARING ENGAGEMENT STATES BETWEEN 2007 AND 2008.**

<table>
<thead>
<tr>
<th>FROM ENGAGED STATE IN 2007</th>
<th>TO ENGAGEMENT STATE IN 2008</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disengaged</td>
<td>Disengaged</td>
<td>Happily detached</td>
</tr>
<tr>
<td>1,771</td>
<td>55%</td>
<td>313</td>
</tr>
<tr>
<td>Happily detached</td>
<td>217</td>
<td>184</td>
</tr>
<tr>
<td>Unhappily dedicated</td>
<td>267</td>
<td>73</td>
</tr>
<tr>
<td>Engaged</td>
<td>611</td>
<td>355</td>
</tr>
</tbody>
</table>

Note: the percentages sum to 100% across the rows.

**FIGURE 5. MOVEMENTS OF CONTINUING RESPONDERS.**
For those at the extremes (disengaged and engaged), the vast majority of respondents remained in the same state in 2008 that they were in 2007. Over half of continuing employees who were disengaged in 2007 remained disengaged in 2008. Similarly, 78% of continuing employees who were engaged in 2007 continued to be engaged in 2008. On a positive note, 23% of disengaged employees in 2007 became engaged in 2008. However, 9% of those who were engaged in 2007 became disengaged in 2008.

The employees in the two other states (happily detached and unhappily dedicated) showed a different pattern. They were more likely to shift to another state than stay in their original state. Only 19% of happily detached respondents remained in that state in 2008, while 51% moved to engaged and 22% became disengaged.

For unhappily dedicated employees, 26% stayed unhappily dedicated, while 43% became engaged and 26% became disengaged. From 2007 to 2008, the movement of continuing employees away from these states (unhappily dedicated and happily detached) had a positive net impact.

Given this pattern, unhappily dedicated and happily detached employees are key target groups. Initiatives that focus on these groups are likely to result in significant gains in terms of increasing the number of engaged employees.

QUESTIONS FOR FURTHER ANALYSIS
The change of engagement state points to areas for further analysis:

1. What made those who responded in both years change engagement state?
   a. Do those who change states show particular traits?
   b. What is the effect of movement between organizations or positions within government on continuing employees?

2. Were the changes due to shifts in satisfaction or commitment?
FACTOR 2 | NEW AND DEPARTING RESPONDENTS

This section examines the impact of new employees and departing employees. It provides the responses of those who were considered in the BC Public Service population for only one year of the survey. This does not include those who were in the public sector for both years but only completed the survey in one year. For analysis of this group, please see the explanation under Factor 3.

Departing employees are defined as those employees who were in the population in 2007 but not in 2008 (e.g., employees who retired, voluntarily or involuntarily departed after 2007). New employees were in the population in 2008 but not in 2007 (e.g., new hires since 2007). Table 2 and Figure 6 shows the engagement states for both new and departing employees.

TABLE 2. NET EFFECT OF NEW AND DEPARTING EMPLOYEES.

<table>
<thead>
<tr>
<th>ENGAGEMENT STATE IN 2008</th>
<th>Disengaged</th>
<th>Happily detached</th>
<th>Unhappily dedicated</th>
<th>Engaged</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>New employees</td>
<td>593</td>
<td>279</td>
<td>294</td>
<td>2,247</td>
<td>3,413</td>
</tr>
<tr>
<td></td>
<td>17%</td>
<td>8%</td>
<td>9%</td>
<td>66%</td>
<td>100%</td>
</tr>
<tr>
<td>Departing employees</td>
<td>600</td>
<td>159</td>
<td>203</td>
<td>832</td>
<td>1,794</td>
</tr>
<tr>
<td></td>
<td>33%</td>
<td>9%</td>
<td>11%</td>
<td>46%</td>
<td>100%</td>
</tr>
<tr>
<td>NET CHANGE</td>
<td>-7</td>
<td>+120</td>
<td>+91</td>
<td>+1,415</td>
<td></td>
</tr>
</tbody>
</table>

FIGURE 6. MOVEMENTS OF NEW AND DEPARTING RESPONDERS.
Between 2007 and 2008, differences between new employees and departing employees accounted for a net increase of 1,415 engaged employees, and a net decrease of 7 disengaged employees.

This change cannot simply be attributed to the larger proportion of new employees compared to departing employees. There is a substantial difference between the two groups in terms of their states.

A third of departing employees were disengaged in their 2007 responses, compared to only 17% of new employees who joined the BC Public Service between the two surveys. New employees were much more likely (66%) to be engaged than departing employees. However, 46% of departing employees were engaged during the 2007 survey cycle.

QUESTIONS FOR FURTHER ANALYSIS
1. Why are 17% of new employees disengaged?
2. Are there differences between those who resigned as opposed to those who retired?

FACTOR 3 | SINGLE-YEAR RESPONDENTS
This section explores the impact of changes in the respondent sample between survey years on the distribution of engagement states.

Some employees were eligible to respond to the survey in both years, but chose only to respond to one of the surveys. In this report, these employees are called ‘single-year responders’ and are distributed as follows:
- 2,006 eligible employees responded in 2007 only
- 4,033 eligible employees responded in 2008 only

This response pattern resulted in a net increase of 2,027 responses in 2008. Respondents may have decided to not respond for a variety of reasons, some of which could be a reflection of their engagement at the time of the survey (e.g., forgot, lack of time, confidentiality concerns, doubts impact).¹ Table 3 and Figure 7 shows the engagement states and movements of single-year responders.

<table>
<thead>
<tr>
<th>Table 3. Net Effect of Single Year Responders</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGAGEMENT STATE IN 2008</td>
</tr>
<tr>
<td>Disengaged</td>
</tr>
<tr>
<td>-----------</td>
</tr>
<tr>
<td>Responded in 2007 only</td>
</tr>
<tr>
<td>667</td>
</tr>
<tr>
<td>33%</td>
</tr>
<tr>
<td>Responded in 2008 only</td>
</tr>
<tr>
<td>1,149</td>
</tr>
<tr>
<td>28%</td>
</tr>
<tr>
<td>NET CHANGE</td>
</tr>
<tr>
<td>+482</td>
</tr>
</tbody>
</table>

This net increase included a net gain of 1,127 engaged employees, as well as a net gain of 482 disengaged, 183 happily detached and 235 unhappily dedicated employees.

The net gain was not solely due to the increase in the size of the sample. There were also minor differences between the composition of the 2007 only and 2008 only groups. Overall, the 2008 only group was more likely to be engaged (51% compared to 47% of the 2007 only group) and less likely to be disengaged (28% compared to 33%).

The overall response rates for the surveys were 70% in 2007 and 82% in 2008. As the response rate increases, there will be more consistency in the sample, and so the effect of changes in the sample should have a lesser effect on the overall engagement state.
**3.0 SUMMARY**

Figure 8 summarizes all movements that contributed to changes in engagement states between 2007 and 2008, while Table 4 lists the total net gain in the engaged group.

Based on movements that occurred between 2007 and 2008, the BC Public Service gained 6,167 engaged employees and lost 3,321 engaged employees. This loss in engagement was due to:

- 1,546 employees who were no longer engaged (i.e., moved to another state from 2007 to 2008)
- 943 employees who chose to not complete the 2008 survey
- 832 employees who departed from government or went on leave.

Alternatively, the BC Public Service lost 2,698 disengaged employees, but gained 2,937 disengaged employees. The gain in disengagement was based on:

- 1,195 employees who became disengaged from 2007 to 2008
- 1,149 new responders who decided to complete the survey
- 593 employees who were new hires or returned from a leave of absence.

**FIGURE 8. ALL MOVEMENTS BETWEEN ENGAGEMENT STATES 2007 – 2008.**

- **HAPPIELY DETACHED**
  - 120
  - +279
  - -159
  - 183

- **DISENGAGED**
  - 96
  - +313
  - -217
  - -7

- **ENGAGED**
  - 146
  - +501
  - -355
  - +2,070
  - -943
  - 1,127

- **UNHAPPIELY DEDICATED**
  - 23
  - +603
  - -580
  - 91

- **SATISFACTION**
  - 96
  - +313
  - -217
  - -7

- **COMMITMENT**
  - 482
  - +1,149
  - -667

- **Continuing responders (answered in 2007 and 2008)**
- **New and departing responders (hired since 2007, departed after 2007)**
- **Single-year responders (eligible both years, answered one year)**
The findings demonstrate that the majority of the improvement in the overall engagement scores was related to other factors outside of changes in individual scores. Only a small proportion of the overall improvement in engagement came from continuing respondents whose satisfaction and commitment scores increased since 2007 (11%).

A significant proportion of the overall improvement (40%) came from changes to the sample resulting from a substantial increase in response rate from 2007 to 2008 (70% and 82%, respectively). The largest contribution to the overall improvement in engagement came from changes to the population (50%), where a majority of these changes were the result of new hires.

Although this present study identified how much of the overall improvement from 2007 to 2008 is due to actual changes in employees’ engagement, the findings raise more questions than answers. For example, why are 17% of new hires disengaged? What aspects trigger the change in states among continuing responders? BC Stats will be examining such topics in the upcoming year.
If you have any questions about the information in this report, please contact BC STATS at:
(250) 387-6744