DEFINING PRODUCTIVITY IN THE
BC PUBLIC SERVICE
WORK ENVIRONMENT SURVEY
SPECIAL TOPICS
MAY 2008
CONTACT INFORMATION

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EXECUTIVE SUMMARY

In the BC Public Service Corporate Human Resources Plan, one of the goals to being the best public service employer in Canada relies on changing the work environment and culture of the BC Public Service to achieve stronger engagement, greater innovation, enhanced productivity and improved health (Province of British Columbia, 2007/2008 – 2009/10). Most of the components of this goal are measured reliably using self-reported data from the annual BC Public Service Employee Work Environment Survey (WES). Not surprisingly, the one exception lies with productivity.

Productivity in the public sector is difficult, if not impossible to measure directly since external outputs are often intangible in the absence of financial returns. The diversity of service outputs across BC Public Service organizations poses a greater challenge. As a result, BC Stats decided to ask employees directly about their opinions of productivity to gain a better understanding of the behaviors, attitudes and experiences that could be influencing productivity.

In April 2007, a random sample of employees who completed WES was invited to participate in an additional survey about productivity. The survey drew 1136 responses from employees across the BC Public Service. Employees were asked questions on whether they experienced any changes in productivity over the past year and factors that contribute to their productivity. BC Stats analyzed their perceptions and linked responses to other employee data files. The results led to some interesting conclusions about the nature of their productivity and how it related to absenteeism, engagement and experiences in their work environment.

Forty-four percent of employees believed their productivity increased over the course of the year. Despite this result, there appears to be no common definition of what productivity means to employees. Some employees viewed their increased productivity to working smarter and faster; in other words, becoming more efficient and effective with completing their day-to-day tasks. Other employees equated their increased productivity to working harder. To them this meant doing more by putting more resources and hours into the completion of their day-to-day tasks. These perceptions were more common in some situations than others. For example, perceptions of working harder were more common among employees who work in the social sector, while perceptions of working faster were more common for employees who work in the economic sector. Moreover, when it came to working harder, reflections of past increases in productivity relied on having more work and less staff as well as working longer hours, while future increases in productivity relied on the opposite situation—having less work and more staff.

Specific behaviors and attitudes play a role in employees’ assessments and perceptions of productivity. Employees who reported decreased productivity had higher rates of absenteeism and were more likely to be disengaged and unhappily dedicated. Analysis also demonstrated that perceptions of working faster, harder and smarter vary when employees’ engagement, work-related stress and experiences with innovation are taken into account. Disengaged employees described their productivity as working harder, while engaged employees viewed their productivity as working faster. More employees who reported having manageable work-related stress attributed their increased productivity to working faster and smarter, while employees with unmanageable work-related stress attributed their increased productivity to working harder. Likewise, employees who were encouraged to be innovative attributed their increased productivity to working faster and smarter, while those who were not encouraged to be innovative attributed their increased productivity to working faster and harder.
Results suggest that when employees describe increases of productivity per se, it does not necessarily translate into more work produced during regular work hours by working faster or smarter. It may mean employees are working harder; yet working harder may not be the best response for the employee or the organization. The more pronounced work-related stress among those operating under this view could be leading to greater disengagement, burn-out and potentially absenteeism in the long run. Their approach may be also hindering their ability to find other innovative ways to increase productivity and better manage their work-related stress, which could be feeding into their engagement and further perpetuating the cycle of working harder. Focusing solely on workplace initiatives around working smarter and faster may not be enough for employees who read their productivity as working harder. Addressing their perceptions and/or situations may be required before any positive changes in productivity can occur.

The results also provide insight on how productivity could be increased among employees in the BC Public sector in general. Employees’ descriptions provided a wide variety of suggestions for enhancing productivity. The number one factor attributed to past productivity was an increase in on-the-job experience. In the future, employees believed their productivity will improve if there is an increase in staffing and/or resources. More suggestions for improving productivity in general focused on adjusting the pace of working harder by reducing workloads. Suggestions for working faster focused on improvements made on employees’ physical environment and work processes, while suggestions for working smarter focused on strengthening leadership and management skills as well as increasing employees’ knowledge and skills.

The findings in this report are exploratory in nature and help to illuminate some of the potential drivers of productivity and the ways employee productivity could grow in the BC Public Service. Although developing a public sector model of productivity is beyond the scope of the data available, present findings provide a tentative, but informative step towards the fruition of such a model in future.
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1.0 INTRODUCTION

The primary objective of any organization is to achieve service outcomes as productively as possible. When employees are productive, in other words—employees are efficiently and/or effectively producing results or providing services, then organizational outcomes are being achieved in a successful, if not competitive manner.

A review of academic research supports the growing evidence that healthy work environments contribute to the health and wellbeing of employees, which translates into increased productivity and improved organizational performance (Grawitch, Gottschalk & Munz, 2006). Research conducted by the Gallup Organization does a fairly good job in defining productivity for the private sector as the efficient application of work and creativity, which they quantified as higher sales and revenue (Harder, Schmidt & Keyes, 2002).

Most signs of a healthy workplace in the BC Public Service are measured reliably using self-reported data from the annual BC Public Service Employee Work Environment Survey (WES). Not surprisingly, the one exception lies with productivity. Productivity in the public sector is difficult, if not impossible to measure directly since external outputs are often intangible. The diversity of service outputs across BC Public Service organizations poses a greater challenge.

As a result, BC Stats decided to ask employees directly about their opinions of productivity to gain a better understanding of the behaviors, attitudes and experiences that could be influencing productivity. In April 2007, a random sample of 2000 employees who completed WES was invited to participate in an additional survey about productivity. The survey drew 1136 responses from employees across the BC Public Service.

Employees were asked questions on whether they experienced any changes in productivity over the past year and factors that contribute to their productivity. BC Stats analyzed their perceptions and linked responses to other employee data files. The results led to some interesting conclusions about the nature of their productivity and how it related to absenteeism, engagement and experiences in their work environment. The results also provide insight on how productivity could be increased in the public sector.

The key findings are presented in this report according to five questions exploring different topics about productivity.

1) What does it mean to be productive in the public service?
2) What behaviors, attitudes and experiences influence productivity?
3) What are the top three factors that have increased productivity in the past?
4) What are the top three factors that could increase productivity in the future?
5) What improvements could be made to enhance productivity overall?

The findings in this report are exploratory in nature and help to illuminate some of the potential drivers of productivity. Although developing a public sector model of productivity is beyond the scope of the data available, present findings provide a tentative, but informative step towards the development of such a model in future.
2.0 KEY FINDINGS

2.1 What does it mean to be productive in the public service?

Over 1100 employees were asked whether their level of productivity during regular work hours increased, decreased or stayed the same over the past 12 months (Figure 1). The majority of employees believed their productivity either increased or stayed the same, although reports of positive changes were slightly more common than reports of no changes (44% and 42%, respectively). Fewer employees (14%) believed their productivity decreased over the past year.

Employees further commented on factors affecting their productivity over the past 12 months. A content analysis of these factors revealed no common definition of productivity exists among employees.

Employees described their productivity in one of three ways. Two out of every three employees saw productivity as working smarter and faster; in other words, doing more with less effort by becoming more efficient and effective in their day-to-day work. The remaining one-third of employees saw productivity as working harder. To these employees “working harder” meant putting in more effort, time and resources into their day-to-day work.

This difference in perceptions means employees are taking opposing factors into consideration when assessing their own level of productivity. For example, when employees say they are more productive, their assessment could be based on their perception of either completing more tasks during their regular work hours or working longer hours to complete the tasks. Each of the three perceptions will be discussed using the most representative comments from employees.

No common definition of productivity exists; to employees, productivity means working faster, smarter or harder.

Working Faster

Two out of every five employees provided comments on improving personal efficiencies in order to work faster. To employees, efficiencies meant either improving workplace procedures or gaining knowledge/experience on task execution. For example, this category included

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1 Caution is advised in the interpretation of the “stayed the same” response category as one can’t infer whether this level is a positive (i.e., working at maximum capacity) or negative (i.e., no improvement).
employees who attributed their increased productivity to streamlining of processes/procedures, improvements to tools or equipment, or more on-the-job experiences.

<table>
<thead>
<tr>
<th>In the words of employees...</th>
<th>In the words of employees...</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Increased familiarity with my job.</td>
<td>• Was a new position, am now more familiar with the position and the requirements.</td>
</tr>
<tr>
<td>• Time management, reviewing processes to streamline and eliminate redundancies.</td>
<td>• Greater proficiency with job duties.</td>
</tr>
<tr>
<td>• Working at home 3 days/week Away from office noise and interruptions. Ability to actually concentrate.</td>
<td>• The tools and my ability to use them have increased.</td>
</tr>
<tr>
<td>• I have worked faster, more multi-tasking.</td>
<td>• Removing some duplication of paper work.</td>
</tr>
<tr>
<td>• Better time management.</td>
<td>• I have a much better understanding of my job and have built some efficiencies for myself.</td>
</tr>
</tbody>
</table>

**Working Smarter**

One in three employees provided comments about enhancing the overall effectiveness of the work they do in order to work smarter. To employees this meant having more opportunities to effectively use their skills to do the job well, either by improving the quality of results or value in services provided. For example, this category included comments pertaining to a better understanding of ones role in the organization, attending communication or other professional development courses, feeling empowered or more accountable for the work involved.

<table>
<thead>
<tr>
<th>In the words of employees ...</th>
<th>In the words of employees ...</th>
</tr>
</thead>
<tbody>
<tr>
<td>• A good work ethic.</td>
<td>• More responsibility.</td>
</tr>
<tr>
<td>• Clarity of mandate and improved direction from senior managers.</td>
<td>• Self-motivation and manager and colleague recognition.</td>
</tr>
<tr>
<td>• Empowered to make decisions.</td>
<td>• Working on projects that are interesting, challenging.</td>
</tr>
<tr>
<td>• Always striving for excellence. I am the factor to my own increased level of productivity.</td>
<td>• Better alignment of our work products and work unit within a different branch.</td>
</tr>
<tr>
<td>• More focused business plan. As a whole a number of related agencies seem surer of where they are going and that leads to productive working relationships.</td>
<td>• Working on projects that are interesting, challenging; feedback that is positive on results.</td>
</tr>
</tbody>
</table>

**Working Harder**

Almost two out of every five employees tied productivity to the volume of work causing them to work harder. Thirty percent of employees focused on the amount of resources invested to meet their workload demands. In this situation, productivity was a function of the number of staff available to help get the job done. Eight percent of employees further interpreted productivity as the amount of hours they worked. In this case, most felt productivity meant working longer hours.

<table>
<thead>
<tr>
<th>In the words of employees ...</th>
<th>Amount of hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount of staff</td>
<td>Amount of hours</td>
</tr>
<tr>
<td>• Extreme workload.</td>
<td>• Longer work hours.</td>
</tr>
<tr>
<td>• Less resources available to do the critical work has meant, in the short term, a volunteering of</td>
<td>• Staying longer than 4:30 or starting earlier than 8:30.</td>
</tr>
</tbody>
</table>
Perceptions of working faster, smarter or harder are more common in some situations than others. For example, perceptions are influenced by whether one is reflecting on factors that affected productivity in the past or factors that could enhance productivity in the future. When perceptions are compared in this manner, an interesting trend emerges, particularly when it comes to perceptions of working harder (Figure 2).

**Figure 2. Past productivity was attributed to more work and less staff, while future productivity relied on the opposite—less work and more staff.**

Factors related to working faster and smarter are important to employees regardless of whether they are reflecting on past behaviors or future actions. Specific themes of working harder however, appear to be affected by employees’ frame of reference. Among those reflecting on past behavior, they attributed their increased productivity to working harder due to more work and less staff to handle it. For those focusing on future actions, they believed their productivity could be increased if they were facing the opposite situation—if they had less work and more staff.

These conflicting themes may be explained by the motivating force driving perceptions of working harder. Working harder could be a reaction to handling workload demands, and such
reaction could be interfering with their ability to adopt more proactive behaviors of productivity, either by working smarter or faster.

Employee perceptions of productivity were also analyzed according to the types of public service sector they belonged to.² Results found perceptions of working faster, smarter or harder were more common in some public sectors than others (See Table 1).

Table 1. One in two employees from the economic sector viewed productivity as working faster, while almost one in two employees from the social sector viewed productivity as working harder.

<table>
<thead>
<tr>
<th>Perceptions of Productivity</th>
<th>Type of Public Service Sector</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Economic</td>
</tr>
<tr>
<td>Working faster</td>
<td>51%</td>
</tr>
<tr>
<td>Working smarter</td>
<td>29%</td>
</tr>
<tr>
<td>Working harder</td>
<td>38%</td>
</tr>
<tr>
<td>Total number of employees</td>
<td>80</td>
</tr>
</tbody>
</table>

N.B. Themes in this figure do not sum to 100% because employee comments could be coded with more than one of the above themes, and employees are the primary unit of analysis.

More employees from economic and resource sectors viewed productivity as working faster. Alternatively, more employees from the social sector saw productivity as working harder. The greatest diversity in opinions came from the service sector where employees were equally likely to report on all three perceptions of productivity.

2.2 What behaviors, attitudes and experiences influence productivity?

Specific behaviors and attitudes play a role in employees’ assessments and perceptions of productivity. Analysis revealed significant productivity trends with employee absenteeism and engagement. Analysis also demonstrated that perceptions of working faster, harder and smarter vary when experiences of work-related stress and innovation are taken into account.

Absence

Employee assessments of productivity were paired with the total hours they were absent or unable to work due to short-term illness and injury (STIIP) during the 2007 calendar year.³ Analysis found absenteeism fluctuated widely across reported productivity levels.


³ Only regular full-time employees who had not departed or retired from the BC government in 2007 were included in the analysis.
Employees, who reported positive changes in productivity, took significantly less time off from work.\textsuperscript{4} Employees who reported decreased productivity accumulated an average of 22 more hours of time off work than those who reported increased productivity (Figure 3).

\textbf{Figure 3. Employees who reported positive changes in productivity had lower rates of absenteeism.}

Of particular note is the timing of employees' productivity data in relation to the total hours they were absent from work. Employees' assessments of productivity occurred earlier in 2007 (April), yet these assessments influenced the amount of hours they were absent or unable to work for the entire year. Assessments of productivity clearly play a role in the amount of time employees are absent from work.

Not being absent from work however, does not automatically imply one is more productive or working at full capacity. To investigate a sign of “presenteeism” we turn to employee engagement.

\textbf{Employee Engagement}

Engagement is measured in the \textit{BC Public Service Work Environment Survey} as satisfaction with one's job and government organization as well as commitment to the BC Public Service overall (BC Stats, 2007). Employee scores on these questions were grouped according to four different types of engagement.\textsuperscript{5} Employees who formed the engaged group had high levels of satisfaction and commitment, while those who belonged to the disengaged group had low levels of satisfaction and commitment. Employees who made up the happily detached group had high levels of satisfaction, but low levels of commitment. Employees within the unhappily dedicated group had high levels of commitment, but low levels of satisfaction.

Employees' assessments of productivity were analyzed by their type of engagement. Analysis found engaged employees were the most likely to report a positive change in productivity over the past year. Fifty-two percent of engaged employees reported increased productivity compared 32\% of disengaged employees (Figure 4).\textsuperscript{6} Fewer engaged employees (9\%) reported decreased productivity, while almost one in four disengaged employees reported decreased productivity. Trends among employees who were unhappily dedicated or happily detached were not as clear. Assessments of productivity from the unhappily dedicated group resembled the

\textsuperscript{4} Analysis based on a one-way ANOVA test of mean differences, which included a Post Hoc Tukey HSD test of interactions, $p < 0.21$.

\textsuperscript{5} For more details on the formation of these groups see Appendix B.

\textsuperscript{6} Based on a Chi Square Test of Response Trends $p<.001$. Test only based on those who reported a change in productivity over a 12 month span. Those who responded with “Stayed the same” were omitted from Figure 4 because no significant engagement trends emerged from this group.
disengaged group, while assessments of productivity from the happily detached trailed the engaged group of employees.

**Figure 4. Engaged employees were more likely to report increased productivity over the past year.**

![Graph showing percentage reporting increases and decreases in productivity across different employee groups.](image)

Engagement not only relates to positive changes in productivity, but also relates to how employees perceive their productivity (Figure 5). Analysis found disengaged employees read their productivity differently than engaged employees. More disengaged employees perceived their productivity as working harder, while more engaged employees perceived their productivity as working faster (43% versus 41%, respectively).

**Figure 5. More disengaged employees saw productivity as working harder, while more engaged employees saw productivity as working faster.**

![Bar chart showing percentage of engaged and disengaged employees working faster, harder, or smarter.](image)

More disengaged employees viewed productivity as a means of increasing the amount of effort, resources and time expended towards getting the work done. On the other hand, engaged employees attributed their productivity as getting more done during regular work hours due to the streamlining of processes/procedures, improvements to tools and equipment, and/or more on-the-job experiences. Such results imply that addressing these perceptions and/or situations may be needed among disengaged employees before any positive change can occur.
Work-related Stress

Working harder may not have the same payoffs as working faster and smarter. When ratings for work-related stress from the BC Public Service Work Environment Survey were analyzed alongside perceptions of productivity, distinct patterns appeared.\(^7\)

More employees who reported having manageable work-related stress attributed their increased productivity to working faster and smarter (54% and 40%, respectively). These perceptions were not as common among those who reported having unmanageable work-related stress. Over two in three employees with unmanageable work-related stress attributed their increased productivity to working harder. To them working harder meant producing more due to more work and less staff as well as working longer hours (Figure 6).

Figure 6. Perceptions of working harder were more pronounced among employees who believed their workload-related stress was unmanageable.

An increase in productivity should relate to less work-related stress, yet the results show this to be the case only among those who are perceiving productivity as working faster and smarter. Results imply that employee perceptions of working harder could be a warning sign. The more pronounced work-related stress found among those operating under this view could be contributing to greater disengagement, burn-out and potentially absenteeism in the long run.

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\(^7\) Perceptions of work-related stress were measured by the 2007 BC Public Service Work Environment Survey using a five point agreement scale anchored with “5 = Strongly Agree” on one end and “1 = Strongly Disagree” on the other. The survey question was: “My work-related stress is manageable.” Comments from employees who reported “5” and “4” were combined to form the “Manageable work-related stress” group. Comments from employees who reported “1” and “2” were combined to form the ‘Unmanageable work-related stress” group.
Innovation

Employee experiences with innovation were analyzed alongside perceptions of productivity (Figure 7). Analysis revealed that finding innovative ways to improve efficiencies and effectiveness is an integral part of working faster and smarter. More employees who were encouraged to be innovative in their work attributed their increased productivity to working faster and smarter (52% and 37%, respectively). Employees who were not encouraged to be innovative attributed their increased productivity to working faster and working harder due to more work and less staff (45% and 40%). Attributing increased productivity to working longer hours was more prevalent in this group as well.

Figure 7. Working faster and smarter was more common among those who felt encouraged to be innovative in their work.

The three perceptions of productivity offer important insight when it comes to understanding what productivity means in the public sector and how varying expressions of productivity are related to experiences with work-related stress and innovation. When employees describe increases in productivity per se, it does not necessarily translate into more work produced during regular work hours by working faster or smarter. It may mean employees are working harder by putting in more effort and time to produce the work. The amplification of work-related stress for this group suggests their approach to increasing productivity may not be sustainable in the long run. Their approach may be also limiting their ability to find other innovative ways to increase productivity and better manage their work-related stress, which could be feeding into their engagement and absenteeism, which in turns, reinforces the cycle of working harder.

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8 Perceptions of innovation were measured by the 2007 BC Public Service Work Environment Survey using a five point agreement scale anchored with “5 = Strongly Agree” on one end and “1 = Strongly Disagree” on the other. The survey question was: “I am encouraged to be innovative in my work”. Employees who reported “5” and “4” were combined to form the “Innovation encouraged” group and employees who reported “1” and “2” were combined to form the “Innovation not encouraged” group.
2.3 What has increased productivity in the past?

This section delves into the factors that have helped the 44% of employees increase their level of productivity over the past twelve months. A wide variety of experiences led to the identification of 24 factors that boosted their productivity.

The top three factors cited by employees were an increase in job experience, an increase in workload, and the emergence of more exciting and challenging work. All three faces of productivity fed differently into each of these factors. On the job experience relates to working faster. Increases in workload relates to working harder, while working smarter plays into more exciting and challenging work.

<table>
<thead>
<tr>
<th>Top Three Past Productivity Boosters</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. On-the-job experience</td>
</tr>
<tr>
<td>2. An increase in workload</td>
</tr>
<tr>
<td>3. More exciting and challenging work</td>
</tr>
</tbody>
</table>

One in five employees indicated more on-the-job experience increased their levels of productivity (i.e., working faster) over the past 12 months. Take the following employee experience for example,

“Better understanding of my job roles and responsibilities, increased knowledge of the applications I work with, increased knowledge of the business. These are all attributed to spending more time at the job and my own thirst for knowledge and understanding.”

Nearly half (46%) of employees who have less than three years of experience working in the BC Public Service cited on-the-job experience as a factor in increasing their productivity. This factor was more common among employees from the resource and economic service sectors as well; 28% to 36% of employees from these sectors felt on-the-job experience increased their productivity.

One in five employees believed increases to their workload increased their levels of productivity (i.e., working harder) over the past 12 months. For employees often this meant,

“The main reason productivity has risen is that my workload has tripled - I'm not necessarily more efficient, but definitely producing more;” and “there are not enough resources - individuals are having to maintain an incredibly high pace on an on-going basis with no valleys - just peak after peak with real danger of staff burn out.”

Approximately one in ten employees attributed their increased level of productivity to having more exciting and challenging work. For them an improved job fit with skills/interests or work environment increased their engagement to the work involved. This factor is highlighted in the following two comments made by employees.

“I have a new job (3 months ago) and feel totally VALUED and that my opinions mean something. This organization cares about me and my opinions and encourages me to promote this;” and “Newer challenges. I will admit to having started to become a little less interested in my previous position (without having realized it at the time).”

2.4 What could help increase productivity in the future?

This section explores the factors employees believe will increase their level of productivity in future. Comments were provided by all employees regardless of their perceived change in productivity. A wide variety of opinions led to the identification of 32 factors that could boost future productivity.
The top three factors involved perceptions of working harder, and these perceptions were similar across all public service sectors. According to employees, their future productivity would increase if there were more staff and resources, a reduction in workload and better work-personal life balance. This trend reinforces earlier results that suggest employees who are handling their workloads by working harder may not be more productive in the long run.

One in five employees suggested that their productivity would increase if they had access to additional staff or resources. This factor was common among all employees regardless of their self-reported level of productivity. Comments under this theme were similar to the following two experiences:

“Hire more staff. This would reduce the variety of work tasks and allow me to focus on the important tasks;” and “We are currently down a staff member which has meant a higher workload for everyone, creating more work anxiety and stress due to looming deadlines and expectations. Therefore, equal distribution of work load and more resources allocated to the hiring of more staff would alleviate a lot of workplace angst.”

Along the same vein, 17% of employees believed a reduction of workload would increase their productivity. For these employees, this meant doing less work and/or multi-tasking and having more time to be better organized and to do the work properly.

“Having time to do things right the first time instead of always being in a rush to get things done – proactive instead of reactive;” and “I find I lose productivity when I have too many tasks in front of me, such that I find I spend too much time prioritizing what needs to be done instead of just getting things done.”

Fifteen percent suggested factors that would provide a better balance of work and personal life, including a better allocation of work in the work unit as well as a more balanced workload throughout the year.

“Promotion of work/life balance. I’d likely be happier if I wasn’t worried about not answering my email on the weekend or when I’m absent;” and “I always work as hard as I can to do the best job I can do regardless of where I work. Factors that decrease productivity are probably things like not taking coffee and lunch breaks in order to rejuvenate oneself. Having a gym in our building would help energy levels due to convenience factor and lack of travel time needed.”

A reduction of workload and a better work-personal life balance was not as common among employees who believed their productivity increased. Just 2% to 6% of employees who increased their productivity noted these factors. On the other hand, both factors were more pronounced among those who did not report a positive change in productivity. One in four employees who reported no change or a decrease in productivity believed a reduced workload and better work-personal life balance would make a positive difference to their present levels of productivity.

**Top Three Future Productivity Boosters**

1. More staff and resources
2. A reduction in workload
3. Better work-personal life balance
2.5 What improvements could enhance productivity overall?

Employees shared a wealth of suggestions on how to improve productivity. The thirty-two factors that were identified in comments were reorganized and grouped according to six chief areas for improvement (Figure 8). Each area will be highlighted using the most representative suggestions from employees.

Figure 8. One in three employees suggested a factor related to a change in workload as the means of increasing productivity.

<table>
<thead>
<tr>
<th>Area</th>
<th>Percentage of Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change Workloads</td>
<td>33%</td>
</tr>
<tr>
<td>Improve Physical Environment &amp; Work Processes</td>
<td>28%</td>
</tr>
<tr>
<td>Strengthen Leadership &amp; Management</td>
<td>21%</td>
</tr>
<tr>
<td>Enhance Knowledge &amp; Skills</td>
<td>13%</td>
</tr>
<tr>
<td>Change Personal Perspective</td>
<td>11%</td>
</tr>
<tr>
<td>Increase Financial &amp; Professional Opportunities</td>
<td>8%</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>10%</td>
</tr>
</tbody>
</table>

N.B: Themes in this figure do not sum to 100% because an employee’s comment could be coded with more than one of the above themes, and the employee is the primary unit of analysis.

Change Workloads – Approximately one-third of all employees suggested factors related to this area regardless of their perceived productivity level.

<table>
<thead>
<tr>
<th>In the words of employees ...</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Balance the workload throughout the entire year.</td>
<td></td>
</tr>
<tr>
<td>• Budgetary support to cover increasing administrative and corporate participation.</td>
<td></td>
</tr>
<tr>
<td>• Less managers, more staff.</td>
<td></td>
</tr>
<tr>
<td>• Having a bit more responsibility so I can use all of my skills. (I feel a bit over-qualified!)</td>
<td></td>
</tr>
<tr>
<td>• Delegating work to others.</td>
<td>More time!</td>
</tr>
<tr>
<td>• Less workload so a person can do a better job.</td>
<td>Less workload so a person can do a better job.</td>
</tr>
<tr>
<td>• Time to complete my work to the best of my ability.</td>
<td>Time to complete my work to the best of my ability.</td>
</tr>
<tr>
<td>• Taking lunch breaks and coffee breaks. Sometimes too busy to notice that it’s time to take a break and become less productive as a result.</td>
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</tr>
<tr>
<td>• More effective, timely and targeted services to refer clients to.</td>
<td>More effective, timely and targeted services to refer clients to.</td>
</tr>
</tbody>
</table>

Improve Physical Environment & Work Processes – Employees who reported no change in productivity over the past year were more likely to suggest a factor relating to this area than those who reported increased productivity (34% and 24%, respectively).
In the words of employees ...

- Reduce redundancies.
- Simplify. In my position there are too many forms/ assessments relating to the same issues.
- Utilizing technology to automate certain manual pieces of my job. So much time is spent doing basic tasks that the complex work does not receive the attention or time that it requires.
- Better established policies and procedures. Streamlining (simplification) of processes.

- Access to additional technology tools.
- Better computer service.
- Better computer systems.
- Better physical facilities.
- Ability to work from home on occasion.
- A calmer quieter work environment, more desk space so I don't feel so crowded in my work place.
- Fewer interruptions.

Strengthen Leadership & Management – One in five employees suggested changes to leadership and management actions as a means to increasing productivity. More employees who reported decreased levels of productivity suggested a factor related to this area than employees who reported increased levels (29% and 17%, respectively).

In the words of employees ...

- Being involved in decision making and having responses to questions and information.
- Better managers/supervisors who can mentor employees effectively.
- Clear direction from Senior Management about where the organization is going.
- More timely decision making. Not seeking an answer to every conceivable question.
- Specific direction on expected reporting of outcomes for projects.
- Clearer roles and responsibilities.

- Better detailed job description and clarification of some procedures.
- Clear communication of expectations and a better understanding on the part of management as to what I am responsible for.
- Less change that results in having to redo work more warning on upcoming changes to avoid having to redo work.
- Continued support of supervisor.
- Positive and constructive feedback and less focus on policies to solve everything.

Enhance Knowledge & Skills – Employees who reported increased productivity were more likely to cite a factor related to enhancing knowledge and skills. This area was more relevant among employees who reported positive changes in productivity compared to those who reported negative or no changes in productivity (17%, 4% and 6%, respectively).

In the words of employees ...

- A mentorship program.
- Know more about other areas of the job that I am just learning.
- More experience.
- My productivity will increase once I am settled in a position and my role and responsibilities are clearly defined.

- Experience and knowledge in my new position (I'm on a learning curve).
- Being able to participate in courses being offered through PSA to upgrade my computer skills.
- Further training.
- More training in what our office procedures are.
- Improved developmental training opportunities.
Change Personal Perspective – One in ten employees suggested a factor relating to this theme. Employees believed their productivity could benefit from making personal changes to their attitudes and focusing on self-improvements.

<table>
<thead>
<tr>
<th>In the words of employees ...</th>
<th>In the words of employees ...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enjoying my work more, which would require my work to be more interesting and challenging, and less repetitive.</td>
<td>More efficient use of time and e-mail.</td>
</tr>
<tr>
<td>Exposure to other aspects of work, which I have not had a chance to be involved in.</td>
<td>Prioritizing workload - high level. What can fall off the table?</td>
</tr>
<tr>
<td>Trust staff more, and make them accountable if they screw up, not accountable for every little activity.</td>
<td>It would not matter; to me it is about integrity.</td>
</tr>
<tr>
<td></td>
<td>Having real consequences to failure to meet deadlines, or performance issues.</td>
</tr>
</tbody>
</table>

Increase Financial & Professional Incentives – Eight percent of employees believed financial and professional-career incentives would increase their productivity.

<table>
<thead>
<tr>
<th>In the words of employees ...</th>
<th>In the words of employees ...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased pay.</td>
<td>Compensation Money Proper classification. More Holiday time is also a good motivator.</td>
</tr>
<tr>
<td>More time off.</td>
<td>Have a permanent position instead of being auxiliary.</td>
</tr>
<tr>
<td>Reclassification.</td>
<td>Career development.</td>
</tr>
<tr>
<td>Overtime.</td>
<td>More opportunity to grow.</td>
</tr>
<tr>
<td>Financial rewards for qualitative and quantitative rise in achieving specific targets within the organization (e.g. enactment of performance-based management model).</td>
<td>Advancement.</td>
</tr>
</tbody>
</table>

2.6 Conclusion

The findings from this report showed that 44% of employees believed their productivity increased over the course of the year. Despite this result, there appears to be no common definition of what productivity means to employees. Some employees viewed their productivity to working smarter and faster; in other words, doing more per unit of time by becoming more efficient and effective in their day-to-day tasks. Other employees equated their productivity to working harder. To them this meant doing more per unit of pay by putting more resources and hours into the completion of their day-to-day tasks.

Some perceptions of productivity are more common than others in certain situations. Past increases in productivity relied on working harder due to having more work and less staff and working longer hours, yet future increases in productivity relied on the opposite situation—having less work and more staff. Moreover, working harder is more common among employees who work in the social sector, while perceptions of working faster are more common in employees who work in the economic sector.

Specific behaviors and attitudes play a role in employees’ assessments and perceptions of productivity. Employees who reported decreased productivity had higher rates of absenteeism and were more likely to be disengaged and unhappily dedicated. Analysis also demonstrated that perceptions of working faster, harder and smarter vary when employees’ engagement,
work-related stress and innovation are taken into account. Disengaged employees described their productivity as working harder, while engaged employees viewed their productivity as working faster. More employees who reported having manageable work-related stress attributed their increased productivity to working faster and smarter, while employees with unmanageable work-related stress attributed their increased productivity to working harder. Likewise, employees who were encouraged to be innovative attributed their increased productivity to working faster and smarter, while those who were not encouraged to be innovative attributed their increased productivity to working faster and harder.

When employees describe increases of productivity per se, it does not necessarily translate into more work produced during regular work hours by working faster or smarter. It may mean employees are working harder; yet working harder may not be the best response for the employee or the organization. The more pronounced work-related stress among those operating under this view could be contributing to greater disengagement, burn-out and potentially absenteeism in the long run. Their approach may be also hindering their ability to find other innovative ways to increase productivity and better manage their work-related stress, which could be feeding into their engagement and further perpetuating the cycle of working harder. Focusing solely on workplace initiatives around working smarter and faster may not be enough for employees who read their productivity as working harder. Such trends imply that addressing perceptions and/or situations are needed before any positive changes in productivity can occur.

The results also provide insight on how productivity could be increased among employees in the BC Public sector in general. Employees’ descriptions provided a wide variety of suggestions for enhancing productivity. The number one factor attributed to past productivity was an increase in on-the-job experience. In the future, employees believed their productivity will improve if there is an increase in staffing and/or resources. More suggestions for improving productivity in general focused on adjusting the pace of working harder by reducing workloads. Suggestions for working faster focused on improvements made on employees’ physical environment and work processes, while suggestions for working smarter focused on strengthening leadership and management skills as well as increasing employees’ knowledge and skills.
APPENDIX A—SPECIAL TOPIC SURVEY QUESTIONS

Productivity

This section explores your perceptions about productivity.

8. Overall, has your level of productivity during your regular work hours increased, decreased or stayed the same in the past 12 months?
   - Increased (go to 9)
   - Decreased (go to 11)
   - Stayed the same (go to 11)
   - Don’t Know/No Opinion (skip 11)

9. What factor(s) have helped increase your level of productivity?

10. What factor(s) could help further increase your level of productivity? (skip 11)

11. What factor(s) could help increase your level of productivity?
APPENDIX B—METHODOLOGY

3.0 DATA COLLECTION

3.1 Survey Administration

BC Stats distributed the 2007 BC Public Service Work Environment Survey (WES) to all regular and auxiliary employees who were not on long-term leave and who were directly employed by a BC Government ministry or equivalent (i.e., not agencies, boards or commissions). Ninety-eight percent of in-scope employees received an email invitation to complete the online survey between April 2nd and 20th, 2007. This confidential and voluntary survey asked employees to rate various aspects of their work environment, including their day-to-day work, training and development, physical environment and resources, colleagues, supervisor, executive and organization. Seventy percent of employees who received an email invitation completed the survey on/before the April 20th deadline.

Two thousand respondents were randomly selected to complete a second Special Topics Survey on submission of WES. The second survey was a pilot survey designed to test new special topic questions for future WES cycles and included questions regarding executives, partnerships, productivity and work-life balance. Of the 2000 respondents sampled, 1136 submitted the second survey, for a response rate of 56.8%. This response rate produced an acceptable margin of error. The overall proportion of employees with increased productivity is accurate within ± 2.89 percentage points, 19 times out of 20.

3.2 Confidentiality

Survey responses were coded with a confidential number, which allows BC Stats to attach additional information, such as organization, years of service, gender and occupation. No names or contact information are stored with the responses and only aggregate results are provided in reports. All information collected in the survey is protected by the Statistics Act 1996. Individual responses or information that could identify an individual cannot be disclosed to anyone. Only select members of the BC Stats survey administration team have access to the data. All BC Stats employees are sworn under the Statistics Act.

4.0 DATA ANALYSIS

The analyses of findings were descriptive in nature and consisted of a combination of both qualitative and quantitative analysis.

4.1 Quantitative Analysis

The distribution of responses on close-ended survey questions were tabulated and represented by the proportion of respondents who gave a response. The close-ended productivity question had a three-point scale (Appendix A). The close-ended Work Environment Survey (WES) questions used to explore features were:

- I am encouraged to be innovative in my work.
- My work-related stress is manageable.

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9 In-scope employees who received surveys by post mail were excluded from this study (2%). Employees were considered to be out-of-scope if they: were out of the office for an extended (3 months or more), unknown or indefinite period time; were in government but not directly employed by a ministry or equivalent; or had been laid off; were not a public service employee (i.e., working as a consultant); or were on contract to a private firm.
The WES questions were originally answered on a five-point scale, which ranged from ‘1’ to ‘5’. Scores for ‘1’ and ‘2’ were grouped together to form the ‘Disagree’ category while scores for ‘3’ and ‘4’ were grouped together to form the ‘Agree’ category.

Analysis with employee engagement took a different approach. The profiles of engagement were formed using responses to four questions on engagement from WES. Two questions make up the commitment dimension. Two make up the satisfaction dimension.

<table>
<thead>
<tr>
<th>Commitment Questions</th>
<th>Satisfaction Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1a) I would prefer to stay with the BC Public Service, even if offered a similar job elsewhere.</td>
<td>(2a) I am satisfied with my job.</td>
</tr>
<tr>
<td>(1b) Overall, I am satisfied in my work as a BC Public Service employee.</td>
<td>(2b) I am satisfied with my organization.</td>
</tr>
</tbody>
</table>

The results of the four questions were then used to create engagement profiles, which involved four steps:

1. The responses for each employee were converted from a 1 to 5 scale to a 0 to 100 scale where 1 = 0, 2 = 25, 3 = 50, 4 = 75 and 5 = 100.
2. For each employee, (1a) and (1b) above were averaged into a single Commitment value, as were (2a) and (2b) into a single Satisfaction value.
3. Employees were then binned into the following 4 categories based on a combination of their satisfaction and commitment scores:

<table>
<thead>
<tr>
<th>Category</th>
<th>Commitment Range</th>
<th>Satisfaction Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engaged</td>
<td>60 -100 out of 100</td>
<td>60 -100 out of 100</td>
</tr>
<tr>
<td>Happily Detached</td>
<td>≤ 59 out of 100</td>
<td>≥ 60 out of 100</td>
</tr>
<tr>
<td>Unhappily Dedicated</td>
<td>≥ 60 out of 100</td>
<td>≤ 59 out of 100</td>
</tr>
<tr>
<td>Disengaged</td>
<td>0 - 59 out of 100</td>
<td>0 - 59 out of 100</td>
</tr>
</tbody>
</table>

The above criteria are based on an examination of the original distributions of satisfaction and commitment scores in 2006. To determine the number of categories, scatter plots were generated to identify the clusters of scores existing across these two measures. Bins were defined by the frequency and positioning of scores within the entire distribution of scores. This was done by calculating the distribution and dispersion of scores for each measure using descriptive statistics (e.g., mean, median, standard deviation, skewness, and kurtosis, percentiles etc.). Once the groups were defined, we tested for construct validity using external measures (e.g. quit and STIIP rates). The distinct profiles that emerged from each group reinforced the validity of the groups as developed by this analysis. The criteria are used as a fixed framework for tracking changes over time.
4. The percent of responding employees falling within each category was calculated along with the averages across all categories. The result is the percent of (responding) employees who are deemed to be engaged, moderately engaged, happily detached, etc. Where applicable, Chi Square Analysis tested whether response trends across groups statistically vary beyond chance ($p < .05$). Analysis of Variance statistics (Post-Hoc Tukey tests) were also deployed to determine whether group means or averages are statistically significant from one another and not due to chance ($p < .05$).

4.2 Qualitative Analysis

A thematic content analysis was conducted for all open-ended survey questions to understand respondent experiences. This form of research allows for in-depth understanding of complex situations. Content analysis categorizes (or “codes”) comments of questions into similar themes. Theme categories were developed upon a careful reading of a sample of comment responses for each question. A preliminary list of major themes was refined to create a coding template that consisted of theme codes, definitions and coding decision rules. Using this, the response data for the entire sample was coded into the survey database.

BC Stats coded comments from each question according to major themes and sub-themes, based on the content in the comments. Major themes and sub-themes depended on the question asked and comments received. A respondent’s comment was coded in multiple categories when several distinct concerns were offered within the comment/answer. Theme counts were aggregated and divided by the total number of respondents who commented on each question. It is important to note that themes with lower percentages are as important as those with higher percentages. The absence of a theme does not imply the theme does not exist for a given respondent.

This thematic analysis serves as a descriptive tool that can be used to provide context to the quantitative data. However, care should be taken when generalizing the qualitative results to the entire population of employees in the BC Public Service. The absence of a comment does not imply that a particular theme is irrelevant or not applicable. The thematic analysis represents only those who took the time to provide the information. The analysis of comments serves to assist the interpretation of the quantitative findings and also as a framework for future reference and evaluation development.

In the tables and figures housing the quantitative and qualitative information, any row or category may not add to 100%, due to rounding and the existence of multiple theme categories per respondent comment.
APPENDIX C—REFERENCES

