



LEADING WORKPLACE STRATEGIES

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2015 *Work Environment Survey* (WES) Cycle

Background

Leading Workplace Strategies (LWS) is a coordinated corporate approach to support and promote mobile and flexible workstyles by integrating technology, culture and space. The BC Public Service began piloting LWS across several ministries in the fall of 2011. Today, many employees' work is defined less by where they are and more by what they do. For the BC Public Service, the tangible benefits involve reduced real estate and environmental footprints. Equally important is the desire to improve employees' experiences by creating options that better suit personal work styles and strengths. This analysis focuses on understanding the impact that LWS is having on employees' workplace experiences and engagement.

Research Questions

This analysis explored a number of different *Work Environment Survey* (WES) measures to identify any differences in response patterns of LWS employees. These measures included overall Engagement, all driver scores (with a particular focus on Tools & Workspace), and a selection of individual question items considered relevant to work environment changes that could potentially result from a transition to LWS (e.g., workload/work stress, work-life balance, commitment to work unit). WES results from the 2015 and 2013 cycles, along with information from the Real Property Division (RPD) identifying LWS work units, were analyzed to answer a set of four research questions:¹

1. What is the profile of WES respondents in LWS environments compared to non-LWS WES respondents?
2. Do WES respondents in LWS environments report higher scores compared to non-LWS WES respondents?
3. Do specific characteristics factor into how LWS and Non-LWS respondents score on the Tools & Workspace driver?
4. Do WES scores improve post-LWS implementation?

Following are the key findings from these research questions.

¹ RPD provided a list of branches/work units that had been transitioned to LWS with corresponding dates. Using this information, employees within these work units were identified in the WES data file.

Key Findings

1. What is the profile of WES respondents in LWS environments compared to Non-LWS WES respondents?

Using information provided by RPD, and applying this to the list of 25,009 employees invited to participate in WES, a total of 1,875 employees were identified as working in an LWS environment by the time WES 2015 was conducted in October 2015. Of those, 1,672 LWS employees in nine ministries completed the survey.² The following table profiles the key demographics of WES respondents in LWS environments versus those who were not in LWS environments.

There are differences in the demographic composition of LWS vs. Non-LWS WES respondents.

Characteristic	Sub-groups	LWS Respondents	Non-LWS Respondents
Gender	Female	64%	62%
	Male	37%	39%
Age Group	Less than 35 years	15%	17%*
	35-44 years	24%	25%
	45-54 years	38%*	34%
	55 years or more	23%	24%
Status	Excluded	46%*	22%
	Included	54%	78%*
Job Classification Group	Admin & Operations	13%	28%*
	Management	37%*	17%
	Senior Admin & Professionals	50%	54%*
Service Years	Less than 3	12%	15%*
	3 to <10	39%*	36%
	10 to <20	21%	23%
	20 or more	28%	26%
Total Count		1,672	19,755

There were some small, but statistically significant, differences in the composition of LWS respondents in terms of age group (more in the 45-54 age cohort) and years of service.

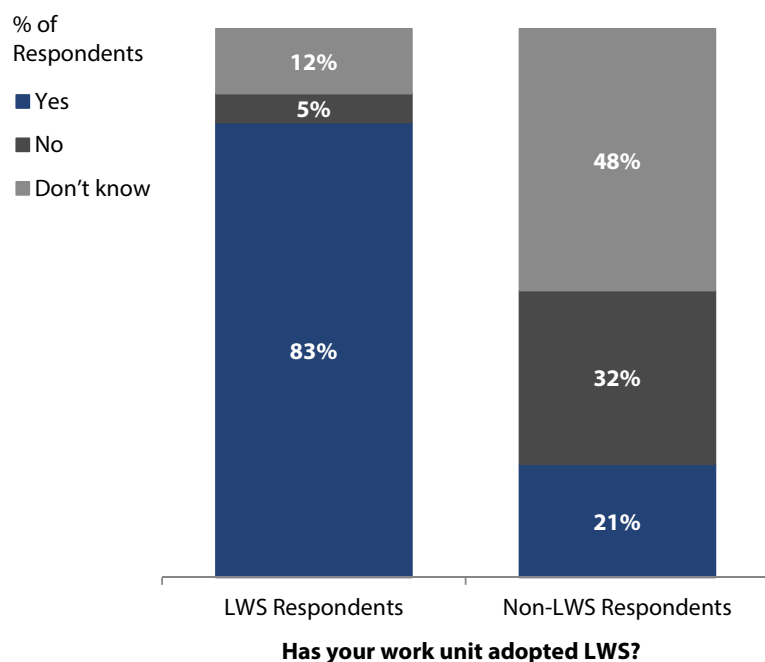
A more pronounced difference in composition existed in union status, with a substantially higher proportion of LWS respondents being excluded from the union. Even when comparisons exclude the BCPSA (as almost all employees are excluded and they comprise 19% of LWS respondents), the proportion of excluded respondents in LWS compared to non-LWS is still significantly higher (33% to 22%).

A significantly higher proportion of LWS respondents also fell within the Management job classification group.

* Proportion is significantly higher than other group proportion based on Chi Square tests, with $p < 0.05$.

² Among these LWS respondents, the ministry breakdown was as follows: TICS (29%); BCPSA (19%); FLNR (16%); EDUC (14%); SDSI (9%); FIN (5%); MIT (4%); NGD (2%); TRAN (2%).

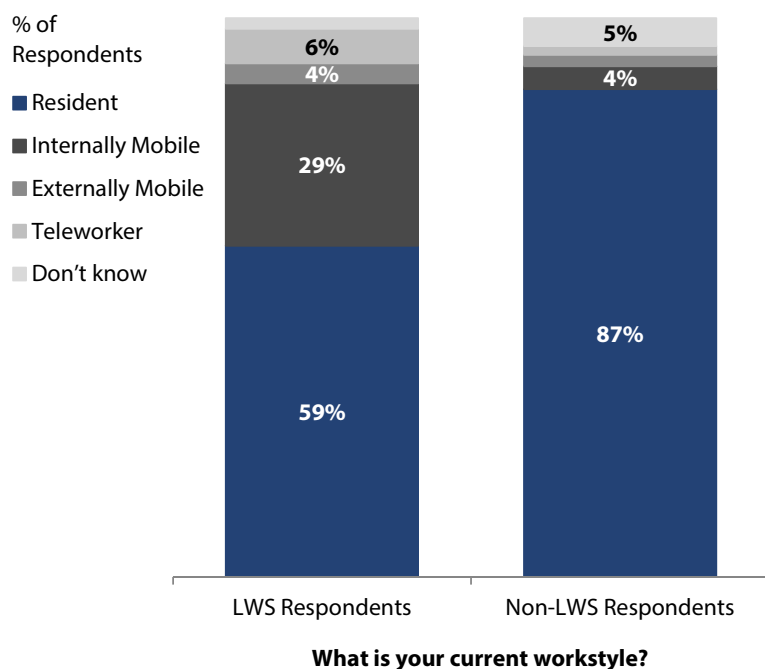
The majority of Non-LWS respondents did not correctly identify as not being in a LWS environment.



Although the group of LWS employees identified for the purpose of this analysis was based on data provided by RPD, WES 2015 also asked respondents whether their work unit had adopted LWS.

While the large majority of LWS respondents correctly identified that their work unit had adopted LWS, almost half of Non-LWS respondents did not know if it had been adopted or not. This may highlight an opportunity to raise awareness and understanding of LWS across the broader public service or point to the need to improve the definition in future surveys.

Whether in a LWS workplace or not, the majority of WES respondents identify as being "Resident" workers.



Respondents were also asked to identify their current workstyle from a list of four options. The majority of both LWS and Non-LWS respondents indicated they were resident (i.e., assigned to a designated cubicle or office space). Three in ten LWS respondents self-identified as Internally Mobile. In other words, they may have had flexibility in choosing space(s) within the office that best suit their work needs, and may (or may not, depending on the work unit) have had some teleworking opportunities as well. Very few LWS respondents indicated they were largely mobile workers (either Externally Mobile or Teleworker).

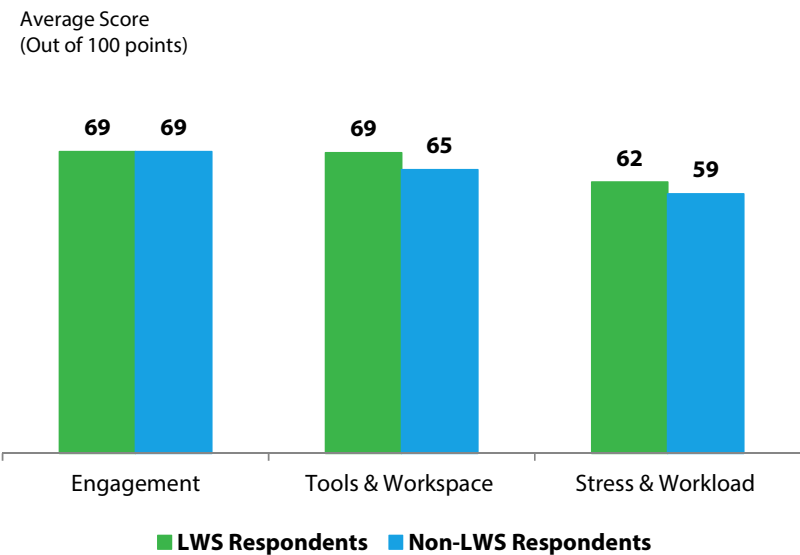
2. Do WES respondents in LWS environments report higher scores compared to non-LWS respondents?

To examine the differences in WES scores between LWS and Non-LWS respondents, the large difference in size between the two groups was recognized (shown in the profile table), as well as some significant differences in group composition. To control for this and ensure a more valid comparison of results, a stratified random sample of Non-LWS respondents was selected for analysis.³

Once this sample was selected, WES scores were compared for overall Engagement, for all driver scores and for selected individual question items.

Respondents in LWS environments reported significantly higher scores on the Tools & Workspace and Stress & Workload drivers.

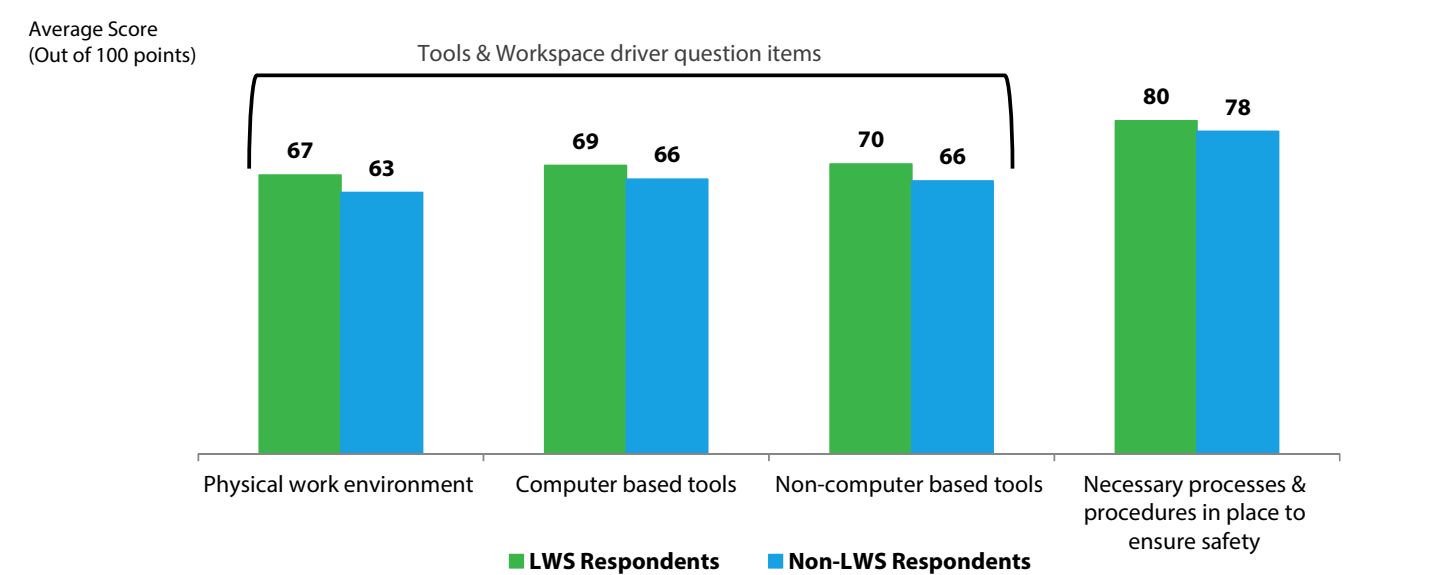
The comparison of mean scores between LWS and the stratified random sample of Non-LWS respondents revealed no significant difference in overall Engagement. However, the analysis did reveal a modest, but statistically significant difference in scores between LWS and Non-LWS respondents on both the Tools & Workspace driver as well as the Stress & Workload driver.⁴



³ A stratified random sample of Non-LWS respondents was selected to mirror the composition of LWS respondents based on strata created using ministry, age group, and union status. Because the large majority of employees in both Education and the BC Public Service Agency had transitioned to LWS, these ministries were excluded from this portion of analysis, as we could not have created a balanced Non-LWS sample of respondents from these ministries.

⁴ Score differences are statistically significant based on an independent t-test comparison of means ($p < 0.05$).

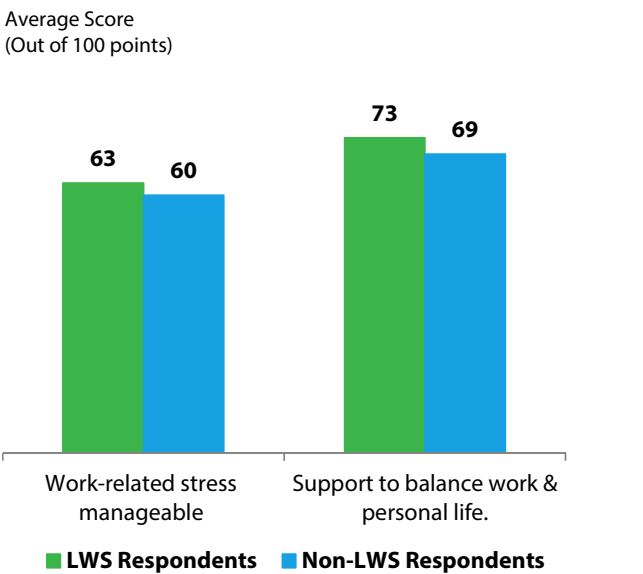
Respondents in LWS environments had significantly higher scores on all three question items included in the Tools & Workspace driver score, compared to their Non-LWS counterparts.



There was a modest, but statistically significant difference in scores between LWS and Non-LWS respondents on each of the three question items that comprise the Tools & Workspace driver.⁵ There was also a small difference in scores regarding respondents’ perceptions of safety at work.

Respondents in LWS environments also reported higher scores on work-related stress being manageable and having support of work-life balance.⁶

LWS respondents reported higher scores on manageability of work-related stress, which is one of the two question items forming the Stress & Workload driver.⁷ Scores were also higher for support of work-life balance. Although this would need to be confirmed through further analysis, these score differences may be linked to the increased work location/schedule flexibility that can accompany a LWS transition.



⁵ Score differences are statistically significant based on an independent t-test comparison of means ($p < 0.05$).
⁶ Score differences are statistically significant based on an independent t-test comparison of means ($p < 0.05$).
⁷ A statistically significant difference was not noted for the other question that forms the Stress & Workload driver, which is “My workload is manageable.”

3. Do specific characteristics factor into how LWS and Non-LWS respondents score on the Tools & Workspace driver?

Given that the most significant differences in scores between LWS and Non-LWS respondents were on the Tools & Workspace driver, further analysis was completed to determine if specific demographic or work-related employee characteristics had a particular influence on score differences for this driver. The following table outlines Tools & Workspace average scores by various sub-groups for LWS and Non-LWS respondents.

Characteristic	Sub-groups	LWS Respondents	Non-LWS Respondents	Difference (LWS - Non-LWS)
Gender				
	Female	68*	65	3
	Male	69*	64	5
Age Group				
	Less than 35 years	69	64	5
	35-44 years	69*	63	6
	45-54 years	69	66	3
	55 years or more	69	67	2
Status				
	Excluded	71	69	2
	Included	68*	63	5
Job Classification Group				
	Admin & Operations	70	68	2
	Management	70	69	1
	Senior Admin & Professionals	67*	61	6
Service Years				
	Less than 3	67	68	-1
	3 to <10	67*	62	5
	10 to <20	70*	63	7
	20 or more	70	67	3
Workstyle				
	Resident	66	65	1
	Internally/externally mobile/teleworker ⁸	73	72	1
Total Count		990	901	

*Driver score differences are statistically significant (t-tests) with $p < 0.05$. It should be noted that statistical differences are determined not only by the difference in average score but are also dependent on the size of the sub-groups being compared.

⁸ Categories collapsed due to small sub-sample sizes.

Some sub-groups of LWS respondents reported more positive experiences than their Non-LWS counterparts.

Looking at the results in more detail, the analysis reveals that:

- Both male and female LWS respondents scored significantly higher than their Non-LWS gender counterparts, suggesting there is no gender bias in why scores were higher for LWS vs. Non-LWS respondents.
- A notable and statistically significant difference exists between the scores of 35-44 years of age in LWS versus those in that age cohort who were not in LWS. Scores were more favorable for those who worked in the LWS environment. There was less of a gap between the scores of LWS and Non-LWS respondents who were 45 years of age or over, with scores still slightly higher among those in LWS.
- There was also a notable and significant difference in scores of included employees within LWS environments versus those in Non-LWS environments. Scores between excluded employees in the two environments were not significantly different. This suggests that a transition to LWS provides a more positive effect on this driver among included employees than excluded employees.
- Similarly, LWS respondents in Senior Admin & Professional job classifications reported significantly higher scores than Non-LWS respondents in that job classification. Meanwhile, there was little difference in scores when comparing LWS vs. Non-LWS respondents in the Admin & Operations and Management job classification groups.
- Looking at service years, LWS respondents in the middle of their career (e.g., three to 20 years) had significantly higher scores than their service year equivalents in Non-LWS environments. LWS and Non-LWS respondent scores at the extremes of service years (less than three or twenty years or more) were very similar.
- Workstyle did not produce a significant score difference when comparing LWS and Non-LWS respondents who were either resident or had some level of mobility (internally mobile, externally mobile or teleworker).

4. Do WES scores improve post-LWS implementation?

Another component of understanding the impact of LWS on WES scores is to review whether the transition to a LWS environment produced any improvement in scores over time. To accomplish this, respondents were identified who:

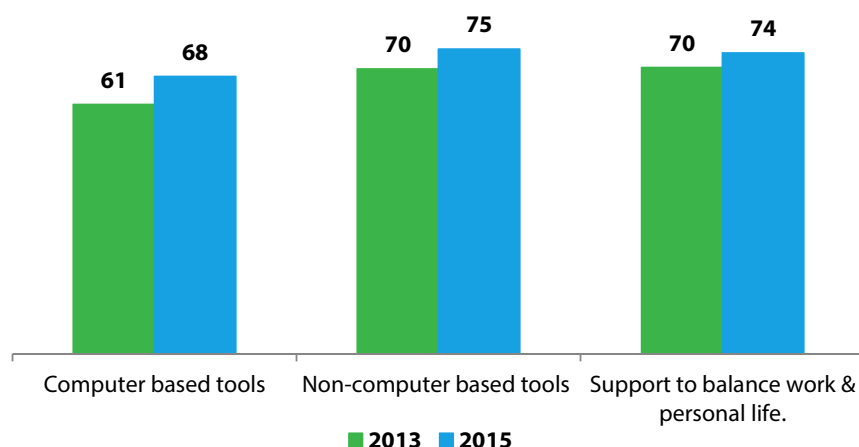
- Were in a work unit/branch that transitioned to LWS between September 2013 and September 2015 (the two WES cycles);
- Had held the same position, in the same ministry, during that time frame, and;
- Had responded to both WES 2013 and WES 2015.

Using these criteria, 216 respondents were identified, for whom a series of paired t-tests were run to compare their scores over the two WES cycles on Engagement, the Stress & Workload driver, and a selection of specific relevant questions.⁹

⁹ We were unable to compare Tools & Workspace driver results between the two time periods as an additional question was added to the calculation of this driver score in the WES 2015. However, we were able to compare results for the two individual questions related to computer and non-computer based tools that made up the 2013 Workplace Tools driver, which also form part of the 2015 Tools & Workspace driver.

Those who transitioned to a LWS environment reported a substantial increase in scores for computer based tools, and notable increases in scores for non-computer based tools and support for work-life balance.¹⁰

Average Score
(Out of 100 points)



The analysis did not reveal a significant change in score between WES periods for overall Engagement or the Stress & Workload driver.

There were statistically significant increases in the scores for two of the specific question items that form the Tools & Workspace driver score, as well as for the question item related to support of work-life balance.

Conclusions

Recognizing that so many drivers influence an employee's engagement, it is not surprising to determine from this analysis that a transition to a LWS environment does not appear to ultimately produce higher overall engagement scores.

It could, however, be reasonably expected that scores related to the physical workspace as well as the supporting computer and non-computer based tools would be positively impacted by being in a LWS workspace, and the analysis has shown this to be the case. Both in comparison to Non-LWS respondents, and in measuring results over time after a LWS transition, analysis demonstrates a positive impact on the Tools & Workspace driver overall, as well as on specific question items for work-related stress and work-life balance support. Further analysis of the latter two items could be considered to determine whether flexibility to telework factors into these score differences as well.

It would also appear from the results that some sub-groups of employees (e.g., less than 45 years of age, included employees) may experience a more positive shift in their Tools & Workspace scores from being in a LWS environment (when comparing scores of corresponding sub-groups in Non-LWS environments).

¹⁰ Score differences are statistically significant based on paired t-test comparison of means ($p < 0.05$).