

Chapter 33

Coordinating the Use of Lean Across Ministries and Certain Other Agencies

1.0 MAIN POINTS

The Government is seeking to use Lean as a systematic way to improve service delivery and create a culture of continuous improvement. Government ministries and certain agencies have used Lean since 2010, whereas school divisions and certain post-secondary institutions started using Lean in 2013. In this chapter, we refer to use of Lean across ministries and these agencies as the Lean initiative.

Coordinating the Lean initiative across ministries and agencies is a complex task. Lack of effective coordination increases the risk that the use of Lean may not achieve intended results.

This chapter reports that, for the 12-month period ended August 31, 2015, the coordination processes over the use of Lean as a continuous improvement process across government ministries (other than the Ministry of Health) and certain agencies were effective, except for the following.

Although those responsible for the Lean initiative planned for, tracked, and monitored certain aspects of the use of Lean, they did not identify or gather sufficient information to enable them to assess the overall success of the use of Lean. That is, at August 2015, sufficient information is not available to know whether the Lean initiative is providing better service, creating a culture of continuous improvement, or demonstrating a return on investment. Setting targets for key measures related to the use of Lean, and gathering supporting information is key to enable assessment of the overall success of the use of Lean.

This information would also enable regular reporting to ministries and agencies using Lean, as well as to the public, on the costs of Lean, and on the achievement of the Government's overall goals for its use. Without effective reporting, those using Lean, and the public, will not know whether the use of Lean is achieving success.

We make six recommendations to assist in improving processes to coordinate the use of Lean.

2.0 INTRODUCTION

Lean is a continuous improvement process that involves analyzing processes to identify areas for improvement, carrying out activities intended to achieve those improvements, and monitoring the impact of changes. Many sectors (e.g., manufacturing, health care) have used Lean in seeking to improve their processes.¹

¹ www.mckinsey.com/insights/public_sector/applying_lean_production_to_the_public_sector (14 September 2015).

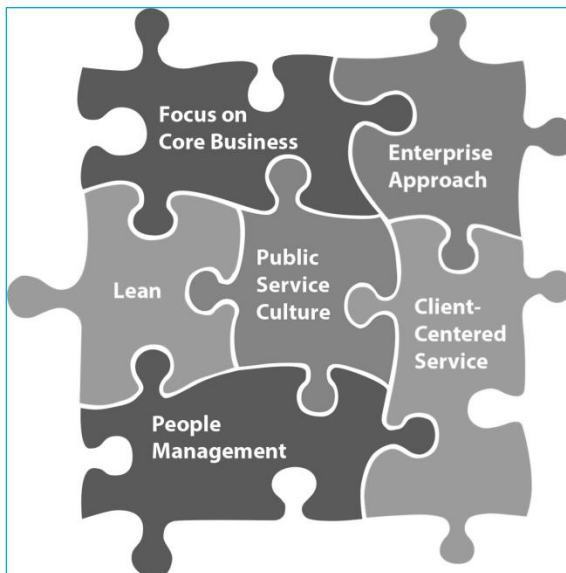


Lean involves the following key features:

- › Planning and risk assessment
- › Mapping activities to identify how to streamline processes and make improvements
- › Selecting specific work processes and streamlining them to achieve improvements and reduce waste
- › Redesigning workplaces to make them safer, more organized, and more efficient
- › Setting targets and monitoring the impact of changes (for example, through the use of visual systems that outline changes)²

Since 2010, the Government has committed to working towards a larger Renewal Initiative in the public service (i.e., ministries and agencies). It has stated that the Renewal Initiative will help it address challenges and help ensure a “high-performing organization.”³ To achieve renewal, the Government has broken down the process into six components, of which Lean is one (see **Figure 1**).⁴

Figure 1 – Components of Saskatchewan Public Service Renewal Initiative



Source: *ThinkLean* Website, www.thinklean.gov.sk.ca/toplinks/pdfs/Renewal-and-Lean.pdf (23 September 2015).

In our *2014 Report – Volume 2*, we reported on Health Quality Council’s coordination of the use of Lean in the health sector.⁵ This chapter reports on the coordination of Lean in ministries other than the Ministry of Health (ministries), and in other agencies including agencies in the education and advanced education sectors (agencies and sector agencies). See **Exhibit 5.2** for a listing of the ministries, agencies, and sector agencies.

² Adapted from Lean literature, including selected references at **Section 6.0**.

³ www.thinklean.gov.sk.ca/toplinks/lean-and-renewal/index.html (15 September 2015).

⁴ *Ibid.*

⁵ https://auditor.sk.ca/pub/publications/public_reports/2014/Volume_2/2014v2_34_Health%20Quality%20Council-LEAN.pdf (17 September 2015).

2.1 Background

As shown in **Figure 2**, the Government has expanded its use of Lean across the Government over the last ten years. The Government states that it uses Lean:

- › As a systematic way to improve systems and processes, streamline its work, and improve service delivery to the public⁶
- › As one way to create a culture within the Government that continuously seeks to improve service delivery⁷

Figure 2—Evolution of the Government of Saskatchewan’s Use of Lean

In 2006, the Five Hills Regional Health Authority adopted the use of Lean. In 2008, the Ministry of Health conducted pilot projects in other regional health authorities (RHAs) and in 2009, adopted Lean for use in all RHAs and the Ministry of Health (Health).

Since 2010, the Government has adopted Lean for use in government ministries, Saskatchewan Liquor and Gaming Authority, Water Security Agency, and Saskatchewan Crop Insurance Corporation. In 2012-13, the Government expanded the use of Lean to selected school divisions and certain post-secondary institutions, and, in 2013-14, to all school divisions.⁸

In 2012, Cabinet appointed a Minister Responsible for the Lean Initiative through Order in Council 285/2012. Since 2013, Cabinet has appointed a Deputy Minister to lead this initiative within ministries, agencies, and sector agencies. The Government expects deputy ministers (of ministries) and senior management of agencies and sector agencies to deploy Lean within their respective ministries, agencies, and sector agencies as a central component of the Public Service Renewal Initiative.^{9,10}

Since 2014, a committee of deputy ministers (the Citizen First Committee) oversees the use of Lean in ministries, agencies, and sector agencies.

Source: Provincial Auditor Saskatchewan based on Government Lean information.

Cabinet has appointed a Minister Responsible for the Lean Initiative and a Deputy Minister Responsible for the Lean Initiative. The “Corporate Projects Group” (Projects Group), reporting to the Deputy Minister Responsible for Lean, is responsible for monitoring and reporting of Lean activities and results.

The Projects Group received 2015-16 funding of \$925,000 through the Ministry of Education.¹¹ The Projects Group allocates 2.25 of its five full-time equivalent (FTE) positions to Lean-related activities.

The Government has undertaken a widespread implementation of Lean. Nineteen ministries and agencies use Lean, along with the following sector agencies: four post-secondary institutions in the advanced education sector, and 28 school divisions in the education sector. We surveyed these ministries, agencies, and sector agencies. Their responses indicate that at July 2015, at least 13 FTE positions within the ministries, agencies, and sector agencies were responsible for Lean-related activities at a cost of about \$1.4 million in 2014-15.¹²

⁶ <http://thinklean.gov.sk.ca/toplinks/faqs/index.html> (14 September 2015).

⁷ Ibid.

⁸ *ThinkLean. Saskatchewan’s LEAN Journey*. Undated. Source: Lean Office.

⁹ Ibid.

¹⁰ <http://docs.legassembly.sk.ca/legdocs/Legislative%20Committees/CCA/Debates/140428Debates-CCA.pdf> (14 September 2015).

¹¹ <http://docs.legassembly.sk.ca/legdocs/Legislative%20Committees/CCA/Debates/150331Debates-CCA.pdf> (14 September 2015).

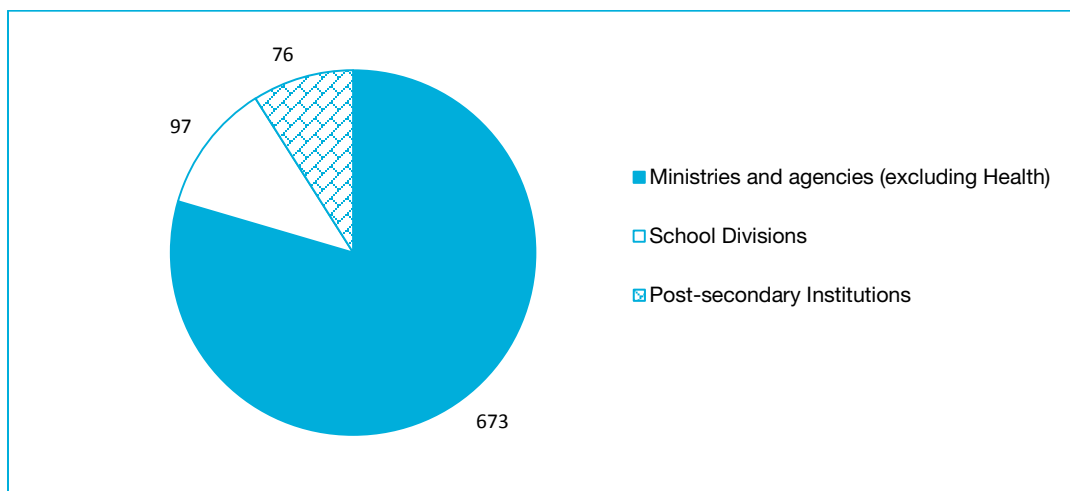
¹² See **Exhibit 5.1** for a description of the survey and response rates.



In 2014-15, about 520 individuals from these ministries, agencies, and sector agencies participated in Lean training (e.g., Lean Leader Training and Foundational Lean Training) for a total of 649 working days at a cost of \$297,500.¹³ Also, responses to our survey indicate that, during 2014-15, the ministries, agencies, and sector agencies listed in **Exhibit 5.2** paid about \$577,000 for consulting services to facilitate Lean events.¹⁴

From 2010 to June 2015, the ministries, agencies, and sector agencies held a cumulative total of 846 Lean events (see **Figure 3**). Responses to our survey indicated that in 2014-15, 1,615 employees participated in Lean events for a total of 5,000 days of employee time spent on Lean events. Each of these events required the commitment of a team of employees for a specific amount of time depending on their role in the project. The costs associated with these events are not readily available.

Figure 3—Breakdown of Lean Events from 2010 to June 2015



Source: Projects Group records.

Coordinating Lean across the ministries, agencies, and sector agencies is a complex task. Poor coordination could result in a lack of clarity on intended results, uneven implementation, not realizing efficiencies, services not improving, and inefficient use of public resources. Lack of effective coordination increases the risk that the use of Lean may not result in a sustained culture of continuous improvement – one of the Government’s purposes for its use.

3.0 AUDIT OBJECTIVE, SCOPE, CRITERIA, AND CONCLUSION

The objective of this audit was to assess the effectiveness of coordination processes over the use of Lean as a continuous improvement process across government ministries (other than the Ministry of Health) and certain agencies for the 12-month period ended August 31, 2015. **Exhibit 5.2** provides a listing of those ministries, agencies, and sector agencies. We did not include the Ministry of Health because the Projects Group is not responsible for coordinating Lean in the health sector.

¹³ Based on Projects Group records.

¹⁴ Lean events are specific types of Lean activities. For names and descriptions of Lean events, see <http://thinklean.gov.sk.ca/toplinks/faqs/index.html> (29 September 2015).

To conduct this audit, we followed the standards for assurance engagements published in the *CPA Canada Handbook – Assurance*. To evaluate the Projects Group’s processes, we used criteria based on our related work, reviews of literature including reports of other auditors, and consultations with management. Management agreed with the criteria (see **Figure 4**). **Section 6.0** includes key sources for these criteria.

We examined planning documents, risk assessments, minutes, reports, correspondence, and other relevant documentation at the Projects Group. We interviewed management at the Projects Group as well as at selected ministries, agencies, and sector agencies.

We also surveyed Lean deployment champions and Lean leaders at 52 government ministries, agencies, and sector agencies involved in the Lean initiative.¹⁵ We aligned the survey questions with our criteria in **Figure 4**. See **Exhibit 5.1** for details regarding the survey and its response rate. In analyzing the survey responses, we considered that we had surveyed only Lean deployment champions and Lean leaders. Given their role, we expected their agreement with the statements. For statements they did not strongly agree or agree with (i.e., rating either 1, 2, or 3), we attempted in our analysis to determine the reasons for respondents not expressing agreement.

Figure 4—Audit Criteria

- 1. Lead deployment of Lean**
 - 1.1 Assign roles and responsibilities
 - 1.2 Communicate clear purpose for use of Lean at the strategic level (i.e., mission)
 - 1.3 Set timelines for activities and expected results
 - 1.4 Develop risk management framework for use of Lean
 - 1.5 Set clear reporting requirements (nature, extent, timing of information)
- 2. Develop a strategy for use of Lean**
 - 2.1 Identify intended results over short, mid and long term (consistent with overall purpose)
 - 2.2 Develop action plans (e.g., to coordinate Lean, support ministries and agencies, and mitigate risks)
 - 2.3 Engage key stakeholders in planning
 - 2.4 Communicate strategy to all stakeholders (e.g., ministries, agencies, staff, public and other identified stakeholders)
- 3. Support the use of Lean activities in ministries and additional agencies**
 - 3.1 Provide tools and direction on use (e.g., activities, training)
 - 3.2 Supervise use to identify best practices and challenges
 - 3.3 Provide timely feedback
 - 3.4 Actively manage setbacks
- 4. Monitor and report results achieved**
 - 4.1 Monitor the quality of data and information used for reporting
 - 4.2 Monitor progress in achieving intended results and overall purpose
 - 4.3 Report on progress (internally, publicly)

We concluded that, for the 12-month period ended August 31, 2015, the coordination processes over the use of Lean as a continuous improvement process across government ministries (other than the Ministry of Health) and certain other agencies were effective, except that the following are needed:

- **Measures and targets, and supporting information, to allow assessment of the overall success of the use of Lean**
- **Periodic reports to ministries and agencies using Lean, as well as to the public, on the costs of Lean and the results achieved through the use of Lean**

¹⁵ See **Figure 6** for descriptions of these positions.



- › **Lean training that meets assessed needs**
- › **Regular assessments of the quality and timeliness of feedback on Lean plans and events**

4.0 KEY FINDINGS AND RECOMMENDATIONS

4.1 Overall Purpose Clear

4.1.1 Roles and Responsibilities Assigned

We expected that the Projects Group would work with ministries, agencies, and sector agencies to assign and clearly communicate roles and responsibilities for the use of Lean.

The Government's approach to Lean has certain centralized elements (i.e., the Minister and Deputy Minister Responsible for the Lean Initiative, the use of the Projects Group) as well as decentralized elements (e.g., responsibility for permanent heads of ministries and agencies—deputy ministers and presidents—to lead their own use of Lean).

We examined terms of reference, plans, reports, and communications. We found that roles and responsibilities were clear (see **Figures 5 and 6**). The Citizen First Committee set terms of reference for its involvement in Lean. The Lean deployment champions and Lean leaders also had terms of reference. The Projects Group created a document that outlined each party's roles and responsibilities relating to Lean and shared this document with each party (**Figure 6**).

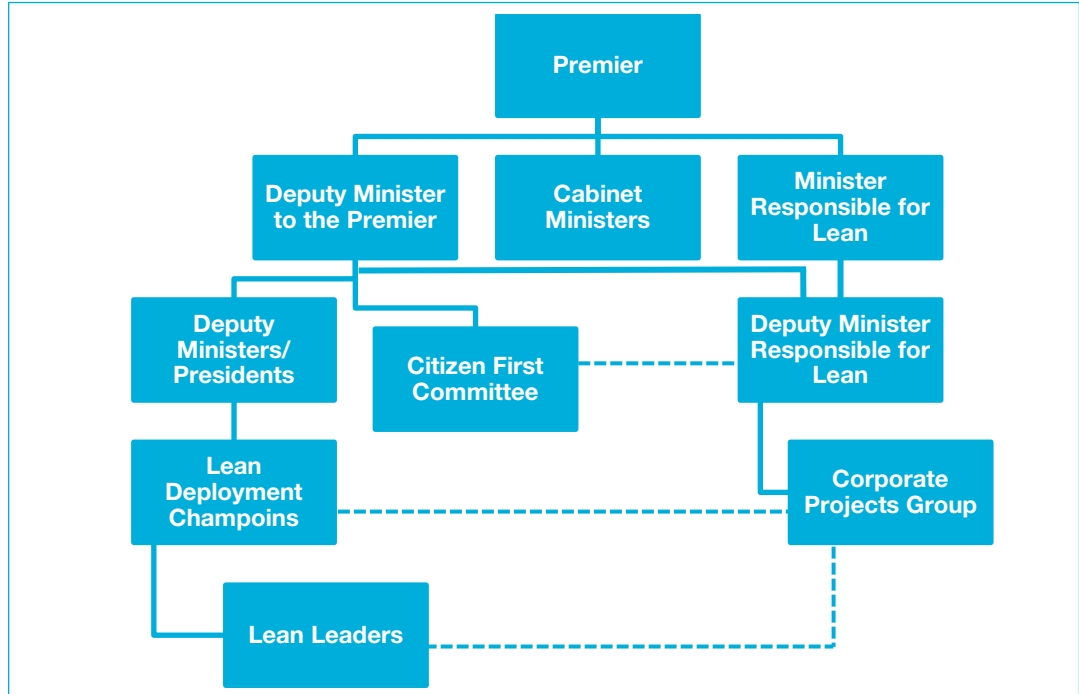
The Projects Group is responsible for managing and coordinating the use of Lean across ministries and agencies. For post-secondary institutions and school divisions, the Projects Group worked with the ministries of Education and Advanced Education, who carried out management and coordination in their sectors.

The Projects Group is responsible to provide advice to the Citizen First Committee, the Deputy Minister to the Premier, and the Deputy Minister and Minister Responsible for Lean (see **Figure 5**). The Citizen First Committee is responsible for monitoring and reporting to the Deputy Minister to the Premier on the results and progress of the use of Lean. The Committee is also responsible for coordination between Lean and other renewal efforts in government.¹⁶

Deputy ministers (of ministries) and presidents (or equivalent) of the agencies are responsible for leading Lean within their respective ministries and agencies. Senior management within the sector agencies are similarly responsible. Ministries, agencies, and sector agencies assign a Lean "leader" and Lean "deployment champion" the responsibility to support and promote the use of Lean in their respective organizations.

¹⁶ See **Figure 1** for other components of renewal.

Figure 5—Lean Responsibility Chart



Source: Adapted from Projects Group records. See Figure 6 for roles and responsibilities.

Figure 6—Roles and Responsibilities related to Lean

Roles & Responsibilities	
Premier	<ul style="list-style-type: none"> › Endorses Lean as the service improvement and efficiency tool for government › Supports and champions Lean in executive government and the Health, Education and Advanced Education sectors
Ministers	<ul style="list-style-type: none"> › Responsible for driving Lean within their ministries as well as the Health, Education and Advanced Education sectors › Represent government's voice on Lean within the ministry
Minister Responsible for Lean	<ul style="list-style-type: none"> › Spokesperson and champion for the Lean initiative in the House, Cabinet and the public › Represents government's voice on Lean within ministries; the Health, Education and Advanced Education sectors; and the public
Deputy Minister to the Premier	<ul style="list-style-type: none"> › Member of the Citizen First Committee › Responsible for the administration and strategic direction of Lean › Provides direction to Deputy Ministers and monitors performance › Supports and reports progress to the Premier
Deputy Minister Responsible for Lean	<ul style="list-style-type: none"> › Co-chair of the Citizen First Committee › Responsible for the Corporate Projects Group › Supports the Lean initiative in executive government and the Health, Education and Advanced Education sectors › Reports to the Deputy Minister to the Premier and the Minister Responsible for Lean
Citizen First Committee	<ul style="list-style-type: none"> › Oversees the Lean initiative within ministries and the Health, Education and Advanced Education sectors › Provides advice and guidance to the Deputy Minister to the Premier, the Deputy Minister Responsible for Lean and Deputy Ministers › Co-chaired by two Deputy Ministers, one of whom is the Deputy Minister Responsible for Lean. Reports to the Deputy Minister to the Premier
Corporate Projects Group	<ul style="list-style-type: none"> › Manages the Lean initiative. Advises the Citizen First Committee, the Deputy Minister to the Premier, and the Deputy Minister and Minister Responsible for Lean › Reports to the Deputy Minister Responsible for Lean and the Citizen First Committee

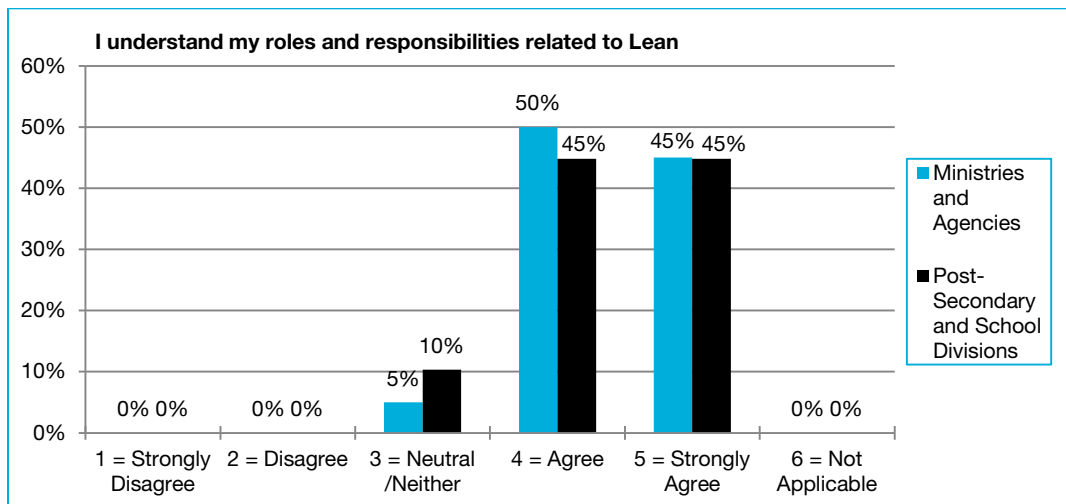


Roles & Responsibilities	
Deputy Ministers/Presidents	<ul style="list-style-type: none"> › Responsible for driving and leading Lean within their ministries, agencies, and sector agencies › Report to the Deputy Minister to the Premier and their respective ministers
Lean Deployment Champions	<ul style="list-style-type: none"> › Executive champions of Lean › Report to their Deputy Minister/President
Lean Leaders	<ul style="list-style-type: none"> › Subject matter experts who facilitate various Lean projects › Report to their Lean Deployment Champion

Source: Adapted from Projects Group records.

As shown in **Figure 7**, nearly all of the Lean deployment champions and Lean leaders at ministries and agencies, and at sector agencies (post-secondary institutions and school divisions) indicated in their survey response that they understood their roles and responsibilities related to Lean.

Figure 7 – Survey Responses



Source: Compiled from Provincial Auditor of Saskatchewan Survey Results (September 2015).

4.1.2 Clear Purpose Communicated for the Use of Lean

We expected the Projects Group to communicate clearly the purpose for the use of Lean at the strategic level (i.e., mission) to make all ministries, agencies, sector agencies, employees, and the public aware of the reasons for using Lean throughout government.

When the Government expanded the use of Lean in June 2010, it stated the objectives for the use of Lean were to focus on improving processes and procedures, streamlining delivery, and providing better services.¹⁷ The Government has also stated that it uses Lean to create a culture of continuous improvement.

The Projects Group reinforced these objectives in its communications. It did this in several ways. Through the public *ThinkLean* website that it maintains, the Projects Group states that Lean is an “approach that identifies and eliminates unnecessary steps, streamlines processes for employees and ultimately improves the value for clients and customers.”¹⁸ The website also describes how the Government has introduced Lean to

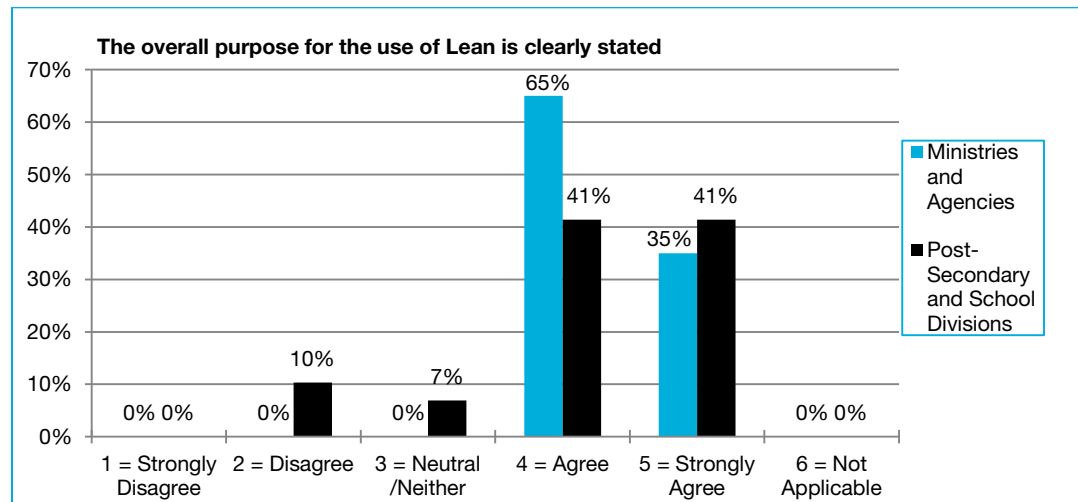
¹⁷ www.saskatchewan.ca/government/news-and-media/2010/june/22/government-expands-lean-initiative-to-improve-services (14 September 2015).

¹⁸ www.thinklean.gov.sk.ca/toplinks/what-is-lean/index.html (9 September 2015).

create a culture of continuous improvement. In addition, we observed the Deputy Minister to the Premier clearly communicated to deputy ministers the importance and purpose of Lean for the ministries and the agencies for which they are responsible.

The Projects Group addressed how it would communicate the purpose of Lean in its communications plan. We observed that the communications plan identified key messages, audiences, and strategies for Lean communications. The Citizen First Committee approved this plan. The Projects Group shared the plan with Lean deployment champions and Lean leaders. The Projects Group also communicated the purpose of Lean to new staff at ministries during orientation. We found the orientation materials appropriately conveyed the purpose of Lean.

Figure 8—Survey Responses



Source: Compiled from Provincial Auditor of Saskatchewan Survey Results (September 2015).

As shown in **Figure 8**, all Lean deployment champions and Lean leaders at ministries and agencies agreed, in their response to our survey, that the purpose of Lean is clearly stated. This was consistent with our interviews with Lean leaders and Lean deployment champions. Although, 17% of Lean deployment champion and Lean leader survey respondents at sector agencies (these were school divisions) did not agree that the overall purpose for the use of Lean was clearly stated, we observed specific communication from the Ministry of Education to school divisions that reinforced the overall purpose for the use of Lean. As noted in **Figure 2**, implementation of Lean within all school divisions has been more recent.

4.1.3 Key Stakeholders Involved in Planning

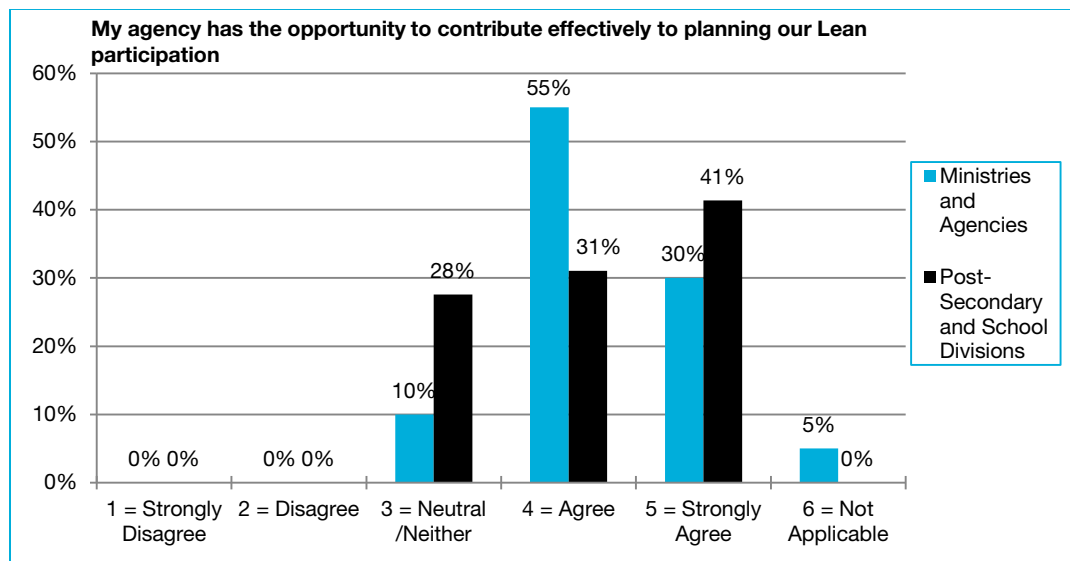
We expected that the Projects Group would include key stakeholders (e.g., ministries and agencies, the Citizens First Committee) in planning. Including key stakeholders in planning would help the Projects Group determine the activities it needed to perform to coordinate the use of Lean effectively.

As part of its planning, the Projects Group engaged key stakeholders. We found it did this by providing its annual work plan to the Citizens First Committee for review and approval. Also, the Projects Group included Lean deployment champions in the development of its risk assessment framework (see **Section 4.2.5**). Engaging Lean



deployment champions in this process helped the Projects Group determine the activities it needed to perform to coordinate the use of Lean effectively.

Figure 9—Survey Responses



Source: Compiled from Provincial Auditor of Saskatchewan Survey Results (September 2015).

As shown in **Figure 9**, and consistent with our interviews of ministry, agency, and sector agency staff, the majority of Lean deployment champions and Lean leaders at ministries and agencies felt they had the opportunity to contribute effectively to planning their Lean participation. We noted that 10% of Lean deployment champions and Lean leaders of ministries and agencies and over one quarter of sector agencies did not agree with the statement, suggesting they did not feel sufficiently engaged. As noted in **Exhibit 5.1**, given survey respondents were Lean deployment champions and Lean leaders, we expected they would be more likely to agree with the statement.

Lack of engagement increases the risk that individuals may not participate in a meaningful way in Lean, and impede the use of Lean as a continuous improvement methodology. The Projects Group, with its consultant, identified that staff engagement was a continuing issue requiring attention. As described in **Section 4.2.5**, we observed that the Projects Group's risk management framework recognized the need for an engagement strategy and planned one.

4.2 Strategy Requires Measures, Targets, and Complete Reporting Requirements

4.2.1 Measures and Targets Needed for Intended Results

We expected the Projects Group would set performance measures and related targets to enable it to determine whether the use of Lean was meeting the stated purpose of its use and related priority areas. The Projects Group would identify results that ministries, agencies, and sector agencies intended to achieve through the use of Lean. The results would be consistent with the overall purpose for Lean across Government.

In its annual work plan, the Projects Group identified the following three priorities (i.e., expected results) for the use of Lean:

- › Sustain Lean implementation for 2015-16 and beyond
- › Demonstrate a return on investment in Lean
- › Use Lean strategically to support core business

The Projects Group included measures in its annual work plan for the results that ministries, agencies, and sector agencies are to achieve through the use of Lean. These included:

- › Outcome measures such as annual and cumulative cost savings, productivity gains, and cost avoidance from the use of Lean
- › Activity and output measures such as the percentage of Lean events that focused on external clients, the percentage of events that engaged external clients (e.g., citizens), status of events, and the number of continuous improvement events by year

These measures provide information on certain aspects of Lean use. For example, measures such as the number of events, and whether these produced gains (e.g., cost savings) over time, are used to inform the Projects Group whether Lean implementation was being sustained. The Projects Group assessed whether the ministries, agencies, and sector agencies were using Lean strategically to support core businesses.

The measures are consistent with the purpose and certain of the stated priorities for Lean. However, the measures do not provide a basis to measure whether the use of Lean is providing better service and creating a culture of continuous improvement (the Government's stated purpose of Lean). Also, the measures do not provide information on whether the use of Lean is delivering results in demonstrating a return on investment in Lean (one of the Projects Group's expected results for the use of Lean).

Performance measures are tools to help understand, manage, and improve what organizations do; they guide what information to gather to determine how well they are doing, if they are meeting their goals, and to identify where changes are necessary. They help organizations determine what constitutes success and what success looks like.

1. We recommend that those responsible for the Lean initiative set measures to enable assessment of its overall success.

Also, other than a target for percentage of events that focused on external clients (i.e., 70%), we found the work plan did not include targets.

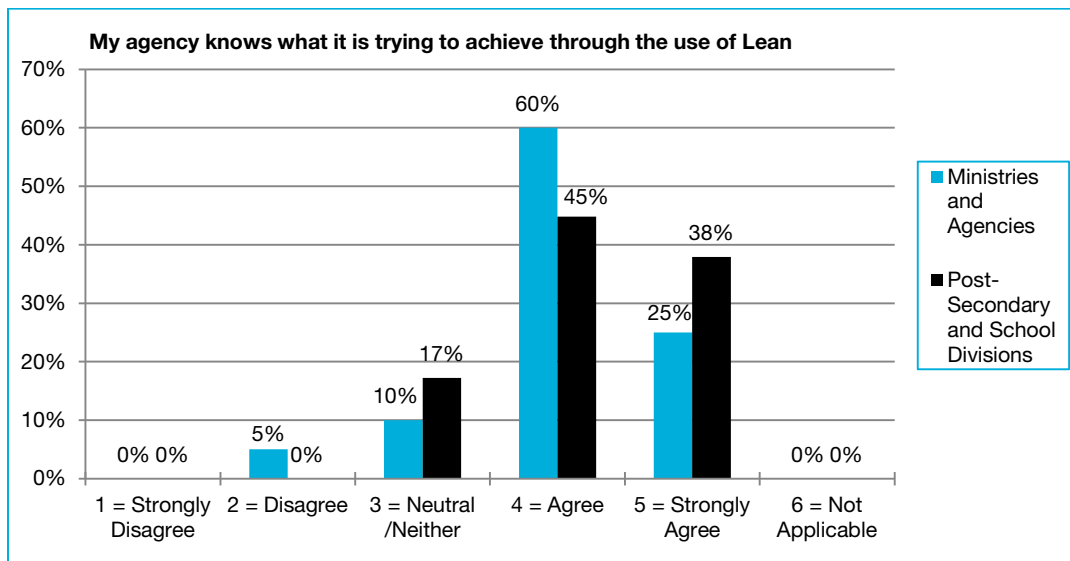
Performance targets are tools that help you set out what you are trying to achieve as compared to where you are now. Use of performance targets helps organizations determine the amount of improvement needed, and in turn the amount of effort and resources necessary.



2. We recommend that those responsible for the Lean initiative set targets for key measures related to the use of Lean.

In our interviews with ministries, agencies, and sector agencies, a recurring message was that focusing on reporting of cost savings, productivity gains, and cost avoidance did not capture other improvements they felt they had achieved through the use of Lean (e.g., qualitative improvements in service, such as reduction of time to process applications).

Figure 10—Survey Responses



Source: Compiled from Provincial Auditor of Saskatchewan Survey Results (September 2015).

As shown in **Figure 10**, the majority of Lean deployment champions and Lean leaders at ministries, agencies, and sector agencies, in their response to our survey, indicated that their agency knows what it is trying to achieve through the use of Lean. We note that 15% of Lean deployment champions and Lean leaders of ministries and agencies and 17% of post-secondary institutions and school divisions did not agree. This is consistent with our interviews that suggested that there was room for improvement in selection of measures to gauge success.

4.2.2 Action Plans Developed

We expected that the Projects Group would develop action plans to coordinate the use of Lean and that these plans would support ministries, agencies, and sector agencies in using Lean, and mitigate risks resulting from its use.

We found the Projects Group outlined planned actions for the use of Lean in its annual work plan. The annual work plan included actions where the Projects Group provides support to ministries, agencies, and sector agencies (e.g., procure consultant support for training, facilitate events). The annual work plan also included actions to mitigate risks identified in the annual risk assessment (e.g., amend communications strategy).

Ministries and agencies first completed Lean plans for 2015-16. Separate ministry and agency Lean plans documented specific planned Lean events at each Ministry, agency and sector agency. We found that the majority of Ministry and agency Lean plans included planned actions, rationales for event selection, and timelines for completion. The plans included events that related to the ministry or agency core business, were external client focused, and showed consideration of planned participants in events (some included external clients). These considerations aligned with the Projects Group's annual work plan and with risks set out in the Projects Group's risk assessment.

However, we noted some inconsistencies in the quality of the Lean plans. For example, we found not all plans included details on events (e.g., timing, participants) or communications strategies. We observed the Projects Group worked with ministries and agencies to improve the consistency of the plans by providing feedback on specific areas for improvement in the plans.

4.2.3 Reporting Timely but Missing Some Key Aspects

We expected the Projects Group would set timelines for the completion of key activities (such as annual Lean Plans, quarterly reporting, meetings) and set out what results it sought to achieve through these activities (e.g., sustain Lean implementation).

We expected that the Projects Group would set reporting requirements for Lean activities and events for ministries, agencies, and sector agencies. These requirements would clearly set out the nature, extent, and timing of reports required.

In its annual work plan, the Projects Group set out actions to support the achievement of each priority, assigned these actions, and identified timelines for completion. For example, the annual work plan assigned the completion of Lean activities to:

- › The Projects Group (e.g., prepare risk assessment, continue to develop and support relationships with other jurisdictions)
- › Deputy ministers (e.g., continue to monitor progress at wall walks)¹⁹
- › Lean deployment champions and Lean leaders at ministries, agencies, and sector agencies (e.g., update and complete implementation of continuous improvement plans)

Each ministry, agency, and sector agency chooses the business processes and Lean events on which it plans to focus in the year. They are to do this every year. We found that the Projects Group directed ministries and agencies to prepare and submit their separate Lean plans to the Projects Group. The ministries and agencies did this. The ministries of Education and Advanced Education included planned events for sector agencies (i.e., school divisions and post-secondary institutions).

We found the Projects Group used its annual work plan to set out reporting requirements for ministries, agencies, and sector agencies, as well as for itself. The Projects Group directed each ministry, agency, and sector agency to submit quarterly

¹⁹ The Projects Group displayed the annual work plan actions and results of activities on its office walls as a visual tool (these are also known as "visibility walls"). During quarterly meetings with the Lean leaders, Lean deployment champions and deputy ministers, the Projects Group used the visual displays to convey activities and progress.



reports on the status of their planned events (e.g., in progress, implemented). The Projects Group developed a standardized format for this reporting.

We found that the quarterly report format specified inclusion of activity measures (e.g., percentage of annual Lean events that were external client focused), and outcome measures (i.e., cost savings, productivity gains, and cost avoidance). As noted earlier, certain of the information collected by the Projects Group informed it whether Lean implementation was being sustained, and whether ministries, agencies, and sector agencies were using Lean strategically to support their core business. However, we did not find that the required reporting gathered information on the costs of implementing and using Lean, to permit demonstration of return on investment in Lean.

The report format also specified limited qualitative reporting, although only from a positive perspective (i.e., reporting the “most significant improvement” from events). Starting in 2015-16, the Projects Group also required ministries, agencies, and sector agencies to develop stories that demonstrated the benefits and outcomes, from a citizen perspective, of specific Lean events. These stories provided the Projects Group with information about specific improvements in service delivery.

Information on specific improvements does not constitute information to permit evaluation whether Lean is succeeding overall, or to identify areas for concern and attention. Such information is needed to permit assessment and reporting on whether Lean is achieving its intended purpose.

3. We recommend that those responsible for the Lean initiative gather information to assess the overall success of the use of Lean.

4.2.4 Strategy Communicated to Stakeholders

We expected the Projects Group to communicate the strategy for use of Lean to stakeholders. These stakeholders include ministries, agencies, sector agencies, staff, public, and other identified stakeholders.

We found the Projects Group regularly updated its communication plan. The communication plan outlined communication objectives, key messages, participants, audiences, and actions. The plan described the Projects Group’s planned use of its website, *ThinkLean* and included actions to update this website. Other actions in the plan included meeting with Lean deployment champions and Lean leaders, updating the Projects Group’s web portal,²⁰ and modifying quarterly reporting. We observed the Projects Group carried out these actions described in the plan and tracked the status of the actions in the plan.

The Projects Group used its website to communicate the strategy for the use of Lean to stakeholders within ministries, agencies, and sector agencies, and to the public. We found the Projects Group specified in planning instructions to ministries and agencies that they consider how they would communicate the use of Lean at their ministries,

²⁰ The Projects Group uses a common web portal (i.e., point of access to resources that individuals can access using a web browser) to share information on training, standards, reporting, and Lean activities.

agencies, and sector agencies, and include a brief description of this strategy in their separate Lean plans.

4.2.5 Risk Management Framework for Use of Lean Implemented

We expected that the Projects Group would develop a rigorous approach for identifying and mitigating risks related to coordinating the use of Lean.

In 2015, the Projects Group developed a risk management framework to help address issues that could occur in the deployment of Lean, such as lack of engagement in Lean or the need for additional tools. The Projects Group engaged the Lean deployment champions from ministries and agencies to review the Projects Group's risk assessment and participate in the identification and evaluation of risks. Through its consultation, the Projects Group finalized and communicated its risk management framework to ministries and agencies.

We found that the risk management framework identified risks by category, assessed the likelihood and impact of each identified risk, and evaluated the risks. We also found that the Projects Group developed action plans for all significant risks identified (e.g., for a strategy to engage employees in Lean). The action plans identified the required activities to mitigate each risk, as well as who was to perform these activities and by when.

For example, in its risk analysis, the Projects Group identified risks related to communications on Lean. It determined the need for a revitalized Lean communication approach. As a result, the Projects Group revised its web portal to improve communication between Lean leaders, Lean deployment champions, and the Projects Group.

We found the Projects Group incorporated risk mitigation actions into its annual work plan. We further found that the Projects Group monitored and reported quarterly on the work plan to the Citizen First Committee, Lean deployment champions, and Lean leaders.

4.3 Improved Supports to Ministries, Agencies, and Sector Agencies Required

4.3.1 Need to Deliver Training to Meet Needs

We expected that the Projects Group would support the use of Lean activities across ministries, agencies, and sector agencies by providing tools and directions on Lean activities and providing training.

We found the Projects Group arranged training for ministry, agency, and sector agency staff based on their roles and needs. The Projects Group coordinated training dates and locations and gave this information to ministries, agencies, and sector agencies. Ministries, agencies, and sector agencies determined who attended training.



The Projects Group managed the work of an external consultant hired to provide certain training, including “Lean instructor training,” “Lean management training,” and “Lean leader training.” The contract with this consultant ended in June 2015. The Projects Group also provided training directly (e.g., Lean orientation for staff and new deputy ministers, training for staff on how to complete visibility walls).

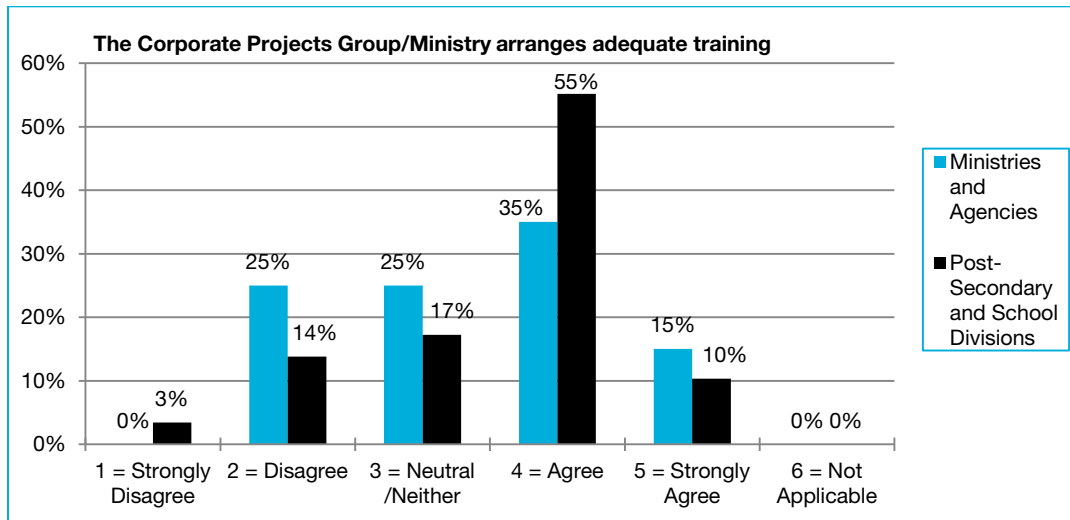
The Projects Group provided guidance on factors for ministries, agencies, and sector agencies to consider when deciding on their Lean events. For example, the Projects Group advised ministries, agencies, and sector agencies to consider if the event related to their core business, was external client focused, and whether involvement of external clients in the event was possible.

To assist ministries, agencies, and sector agencies in planning and reporting on Lean events, the Projects Group created templates with guidance for completing plans and reports. These templates supported consistent reporting. We found ministries, agencies, and sector agencies consistently used these templates when submitting plans and reports to the Projects Group.

The Projects Group hosted quarterly meetings for deployment champions and leaders to discuss the use of Lean in their agencies. The Projects Group used these meetings to discuss other Lean-related areas such as training, challenges encountered, and reporting requirements. Ministries and agencies told us that they found these meetings useful. Also, the Projects Group administered the common web portal to share information on training, standards, reporting, and Lean activities.

As shown in **Figure 11**, Lean deployment champions and Lean leaders at ministries, agencies, and sector agencies, in response to our survey, expressed mixed views on the adequacy of the training that the Projects Group arranged. In survey comments and in our interviews, certain ministries, agencies, and sector agencies indicated their desire for changes to training. For example, several expressed the need for more advanced Lean training or for additional training in specific areas (e.g., use of measurement tools).

Figure 11 – Survey Responses



Source: Compiled from Provincial Auditor of Saskatchewan Survey Results (September 2015).

We observed that the Projects Group periodically assessed Lean training needs in ministries and agencies. In addition, the Ministry of Education assessed training needs in

school divisions. By August 2015, the Corporate Projects Group had not yet made changes to training based on the assessments. Ensuring that ministries, agencies, and sector agencies have access to the Lean training they require increases the likelihood that they will use Lean effectively.

4. We recommend that those responsible for the Lean initiative deliver Lean training to meet assessed needs.

4.3.2 Best Practices and Challenges Identified

We expected that, as part of supporting Lean activities, the Projects Group would identify best practices and challenges encountered at ministries, agencies, and sector agencies and share these with Lean deployment champions and Lean leaders.

We found the Projects Group implemented processes to track and communicate best practices and challenges that ministries, agencies, and sector agencies faced related to Lean. It did this by:

- › Requiring each ministry and agency to complete an annual Lean plan (that also encompassed sector agencies)
- › Engaging Lean deployment champions in the risk management process
- › Arranging forums for sharing lessons learned (i.e., regular meetings with deputy ministers, champions, and leaders)
- › Sharing lessons learned on the web portal
- › Reviewing participant evaluations of Lean training (e.g., training provided by the external consultant)

4.3.3 Need to Assess Feedback Provided

We expected that the Projects Group would provide feedback to ministries, agencies, and sector agencies to assist them in aligning their activities with the overall purpose of Lean.

The Projects Group provided timely written and verbal feedback to leaders and champions at ministries, agencies, and sector agencies during its reviews of their annual Lean plans and quarterly reports. We observed that much of the Projects Group's feedback to agencies, primarily provided through email, related to improving standardized reporting on Lean results. For example, the Projects Group requested certain ministries and agencies to provide information that was missing from their reports or to adjust reports to ensure consistency. We found the ministries and agencies provided revised reports when requested.

The Projects Group prepared written summaries of the results of the quarterly reports and presented the summaries to deputy ministers, champions, and leaders during

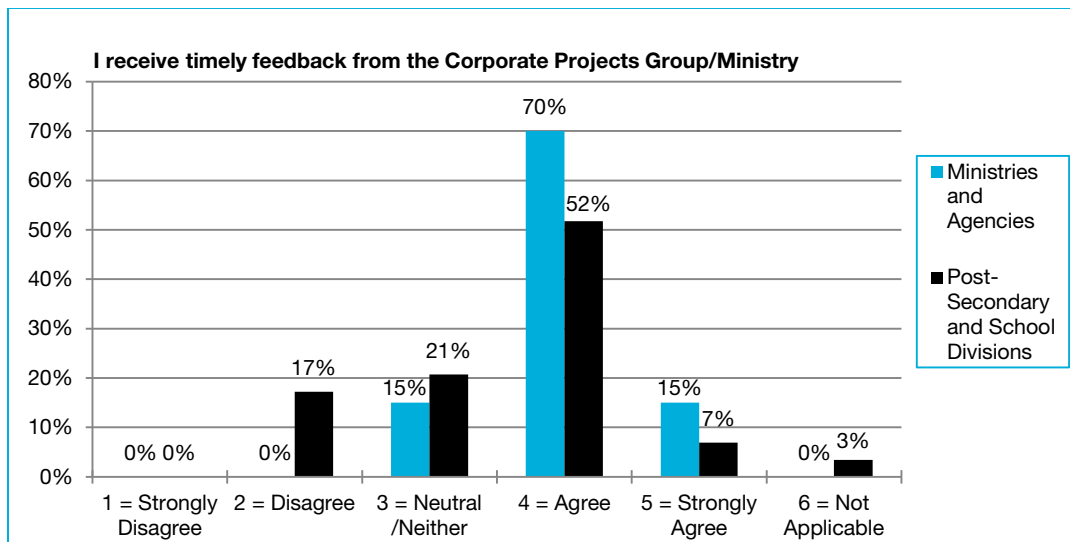


quarterly wall walks. This provided feedback to each ministry and agency on how it was performing as compared to other ministries and agencies.

As shown in **Figure 12**, a majority of Lean deployment champions and Lean leaders at ministries and agencies, in response to our survey, said they received timely feedback from the Projects Group. This was consistent with our interviews. A smaller majority of Lean deployment champions and Lean leaders at sector agencies, (i.e., post-secondary institutions and school divisions), said they received timely feedback from their related ministry; 38 per cent of them did not agree. This suggests that the lead ministries in the sectors (i.e., Advanced Education and Education) could improve their feedback to agencies within their sectors. Without timely, useful feedback, there is increased risk that Lean plans and events will not align with overall Lean priorities.

5. We recommend that those responsible for the Lean initiative regularly assess the timeliness and quality of feedback provided on Lean plans and events.

Figure 12—Survey Responses



Source: Compiled from Provincial Auditor of Saskatchewan Survey Results (September 2015).

4.3.4 Setbacks Actively Managed

We expected that the Projects Group would take steps to actively manage setbacks as they occurred.

The Projects Group identified setbacks in implementation and use of Lean in ministries, agencies, and sector agencies (e.g., inconsistent quality in measurement and reporting, and fewer than desired external client-focused events). We found that the Projects Group actively managed these setbacks. For example, the Projects Group modified its quarterly reporting tools to capture specific measurement information. The Projects Group further provided guidance for the completion of these reports through its web portal. The Projects Group also encouraged ministries, agencies, and sector agencies to

complete and report on events that were external client-focused and that included client involvement.

As noted earlier, the Projects Group established forums for Lean leaders and champions to meet and share experiences. This provided an effective opportunity for ministries and agencies to learn from others' experiences with Lean. As well, implementing a risk management framework also assisted the Projects Group to proactively mitigate risks and better manage setbacks.

4.4 Improved Monitoring and Reporting Required

4.4.1 Progress Monitored in Limited Areas

We expected that the Projects Group would routinely monitor progress in achieving intended results and the overall purpose of Lean. It would do this, for example, by actively monitoring activities and results achieved through Lean events at ministries, agencies, and sector agencies, and monitoring outcomes achieved. We expected that the Projects Group would monitor the quality of data and information used for reporting of Lean events (e.g., by providing instructions, templates, and standards).

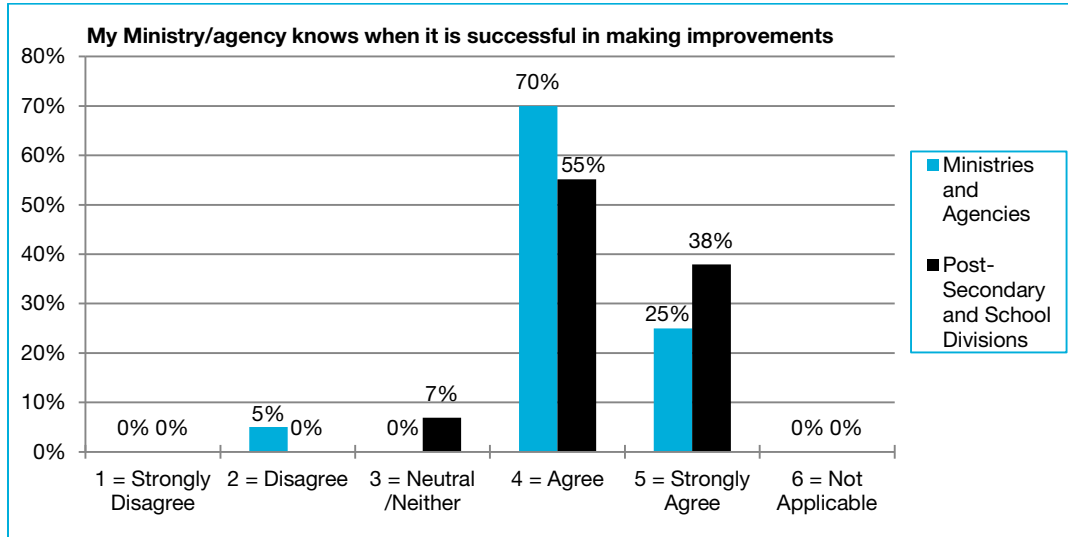
As noted earlier, ministries, agencies, and sector agencies tracked events and certain results on an annual and cumulative basis. The Projects Group obtained this information through the quarterly reporting process. The Projects Group summarized the quarterly reporting, and used the results to report and discuss certain results (i.e., during wall walks with ministries and agencies). Also as noted earlier, the Projects Group provided guidance and templates to ministries, agencies, and sector agencies to promote data quality (**Section 4.3.1**).

We found the Projects Group tracked the planned actions set out in its annual work plan and provided this information to the Citizen First Committee. We observed the Citizen First Committee reviewed this information at its meetings. Leaders and champions also reviewed this information at committee meetings.

However, as discussed in **Section 4.2.3**, the information gathered did not position the Projects Group to determine or report whether the use of Lean was achieving its stated purpose (see **Recommendation 3**). As shown in **Figure 13**, nearly all Lean deployment champions and Lean leaders, in their response to our survey, felt they knew when they were successful in making improvements. We note that staff acknowledged the value of having a common way across government of assessing and making program improvements.



Figure 13—Survey Responses



Source: Compiled from Provincial Auditor of Saskatchewan Survey Results (September 2015).

4.4.2 Improved Reporting Needed on Results Achieved

We expected the Projects Group would regularly report on progress achieved through use of Lean (e.g., in terms of creating a culture of continuous improvement and in improving the delivery of public services). We expected it would make these reports available to its stakeholders, and to the public.

We found that the Projects Group prepared summaries of quarterly reports that described annual and cumulative cost savings, cost avoidance, and productivity gains (i.e., for ministries, agencies, post-secondary institutions, and school divisions). We found the Projects Group provided these summaries to ministries and agencies (although not to sector agencies).

The Projects Group also used quarterly wall walks for reporting. It carried out this reporting for ministry and agency Lean deployment champions, leaders, the Citizen First Committee, deputy ministers, and the Minister Responsible for Lean. It also reported on the progress of planned activities on a quarterly basis to Lean leaders, champions, and the Citizen First Committee.

The Projects Group published limited information on whether the use of Lean was achieving its stated purpose in ministries, agencies, and sector agencies. While the *ThinkLean* website provides the public with information on what Lean is and “success stories,” it does not provide a complete picture on results achieved through its use.

The Projects Group did not effectively report on whether the use of Lean was achieving the Government’s stated purpose: improving service delivery and achieving a culture of improvement. The Projects Group did not track the cost of using Lean in ministries, agencies, and sector agencies to assist in assessing the benefits gained. Without reporting on results achieved through the use of Lean, the public will not be aware of progress and challenges in the use of Lean as a continuous improvement process, and will not be able to assess the benefits achieved for the investment made.

6. We recommend that those responsible for the Lean Initiative periodically report to ministries and agencies using Lean, as well as to the public, on the costs of Lean, and on the achievement of the Government's overall goals for its use.

5.0 EXHIBITS

5.1 Survey Response Rate and Analysis Methodology

We surveyed Lean deployment champions and Lean leaders at 52 government ministries, agencies, and sector agencies involved in the Lean initiative. For a series of statements aligned with the audit criteria set out in **Figure 4**, we asked them to assess their level of agreement using the following rating scale:

1. Strongly disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly agree
6. Not applicable

The following table summarizes the survey response rate.

	Number of Surveys Distributed	Number of Surveys Completed	Response Rate	Percentage – Respondent Equivalency
Ministries and Agencies	20	20	100%	5 % represents one respondent
Post-Secondary Institutions and School Divisions (sector agencies)	32	29	91%	3.5 % represents one respondent
Total	52	49	94%	

Source: Compiled from Provincial Auditor of Saskatchewan Survey Results (September 2015).

In analyzing the survey responses, we were alert that we had surveyed only Lean deployment champions and Lean leaders. Given their role and involvement in Lean, we expected they would agree with statements they found applicable. For statements they did not strongly agree or agree with (i.e., rating either 1, 2, or 3), we attempted, in our analysis, to determine the reasons for respondents not expressing agreement.



5.2 Ministries, Agencies, and Sector Agencies Using Lean Included in the Scope of our Audit

Ministries	
Advanced Education	Government Relations
Agriculture	Highways and Infrastructure
Central Services	Justice ²¹
Economy	Labour Relations and Workplace Safety
Education	Parks, Culture and Sport
Environment	Public Service Commission
Executive Council	Social Services
Finance	
Agencies	
Saskatchewan Liquor and Gaming Authority	SaskBuilds
Saskatchewan Crop Insurance Corporation	Water Security Agency
Post-Secondary Institutions (sector agencies)	
Cumberland College	North West College
Northlands College	Saskatchewan Polytechnic
School Divisions (sector agencies)	
Chinook School Division No. 211	North East School Division No. 200
Christ the Teacher Roman Catholic Separate School Division No. 212	Northern Lights School Division No. 113
Conseil des écoles fransaskoises No. 310	Northwest School Division No. 203
Creighton School Division No. 111	Prairie South School Division No. 210
Englefeld Protestant Separate School Division No. 132	Prairie Spirit School Division No. 206
Good Spirit School Division No. 204	Prairie Valley School Division No. 208
Holy Family Roman Catholic Separate School Division No. 140	Prince Albert Roman Catholic Separate School Division No. 6
Holy Trinity Roman Catholic Separate School Division No. 22	Regina Roman Catholic Separate School Division No. 81
Horizon School Division No. 205	Regina School Division No. 4
Ile-a-la Crosse School Division No. 112	Saskatchewan Rivers School Division No. 119
Light of Christ Roman Catholic Separate School Division No. 16	Saskatoon School Division No. 13
Living Sky School Division No. 202	South East Cornerstone School Division No. 209
Lloydminster Roman Catholic Separate School Division No. 89	St. Paul's Roman Catholic Separate School Division No. 20
Lloydminster Public School Division No. 99	Sun West School Division No. 207

Source: Projects Group records.

²¹ The Ministry of Justice prepares a separate Lean plan for Corrections and Policing, and has assigned Lean deployment champions and Lean leaders specifically for this area. Therefore, we surveyed Corrections and Policing's Lean deployment champions and Lean leaders in addition to those for the Ministry of Justice.

6.0 SELECTED REFERENCES

- CCAF-FCVI. (2014). *Practice Guide to Auditing Efficiency*. <http://guides.ccaf-fcvi.com/efficiency.aspx/> (21 June 2014).
- Conference Board of Canada. (2014). “Lean” in Canadian Health Care: Doing Less While Achieving More. www.conferenceboard.ca/e-library/abstract.aspx?did=6267 (9 June 2014).
- National Audit Office. (2012). *Improving the Criminal Justice System – Lessons from Local Change Projects*. www.nao.org.uk/report/improving-the-criminal-justice-system-lessons-from-local-change-projects/ (29 May 2014).
- National Audit Office. (2011). *Pacesetter: HMRC’s Programme to Improve Business Operations*. www.nao.org.uk/report/pacesetter-hmrcs-programme-to-improve-business-operations/ (19 June 2014).
- Northern Ireland Audit Office. (2012). *Review of the Efficiency Delivery Programme*. http://www.niauditoffice.gov.uk/a-to-z.htm/review_of_the_efficiency_delivery_programme (19 June 2014).
- Marchildon, G. (2013). *Implementing Lean Health Reforms in Saskatchewan. Health Reform Observer. Vol 1:1*. <http://digitalcommons.mcmaster.ca/cgi/viewcontent.cgi?article=1001&context=hro-ors> (19 June 2014).
- Provincial Auditor of Saskatchewan. (2014). *2014 Report – Volume 2, Chapter 34, Health Quality Council – Coordinating the Use of Lean Across the Health Sector*. Regina: Author.
- Radnor, Z. Advanced Institute of Management Research. (2010). *Review of Business Process Improvement Methodologies in Public Services*. www.york.ac.uk/admin/po/processreview/AIM%20Review%20of%20Business%20Process%20Improvement%20Methodologies%20in%20Public%20Service.pdf (4 June 2014).

