
Review of Saskatoon Transit Resources and Scheduling

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Limitations and Responsibilities

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Our work was limited to the specific procedures and analysis described herein and was based on the information made available through December 7, 2016. Our findings are based on the information provided and the data collected during this engagement.

Note that certain information within this report has remained in camera in accordance with Sections 16(1)(c), 16(1)(d), 17(1)(d) and (17)(1)(f) of The Local Authority Freedom of Information and Protection of Privacy Act.

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Executive summary

Transit Services (“Saskatoon Transit” or “Transit”) of the City of Saskatoon (“the City”) is focused on providing Conventional and Access Transit services to citizens. The Saskatoon Transit team consists of a diverse range of employees including operators, dispatchers, customer service staff, maintenance staff, administration and management. Saskatoon Transit has experienced challenges in recent years providing transit services in an efficient and effective manner, and in 2015 a new leadership team was put in place with an objective of moving past the issues experienced and rebuilding relationships with employees, customers and the City of Saskatoon itself. This review was conducted to examine Saskatoon Transit’s resource management, including the scheduling of operators and spareboards, and to identify improvements with respect to how to efficiently utilize current technology and/or enhance current processes to realize efficiencies in operating costs.

The City spent approximately \$38.5 million in 2015 for Conventional Transit Services, of which approximately 43% related to remuneration of operators and an additional 2% related to operator overtime costs. Our review of resources, particularly resource planning and scheduling, has direct relation to that 45% of the Saskatoon Transit operating spend. From 2013 through 2015, the following trends exist:

Operator costs ↑ 4% Total transit costs ↑ 5% Costs per service hour ↑ 5% Costs per rider ↑ 14% Ridership ↓ 7%

Saskatoon Transit has made progress in the form of development of a 5-year strategic plan and in developing performance measures to improve its ability to self-assess the efficiency and effectiveness of services provided and to make improvements. Saskatoon Transit is making efforts to further integrate technology into its operations in an attempt to enhance the customer experience and introduce further efficiencies internally.

Internal Audit (“IA”) has presented 8 findings and provided 10 recommendations, summarized in Section 4 e). Of these findings, 3 are designated as high-risk/impact, 4 are designated as moderate-risk/impact, and 1 is designated as low-risk/impact. We have also provided comments with respect to the municipalities against which we compared Saskatoon Transit, which directly support the findings and relate to the key themes of utilization of technology, resource management, and route planning.

To further support and provide context, IA has also conducted ratio analysis for certain measures tied to resource scheduling and operational efficiency and effectiveness, and provided comments with respect to comparable municipalities, which are outlined in Appendix A and B. In general, IA had the following observations:

- Cost per rider – Saskatoon Transit’s cost per rider was below that of comparable municipalities, which is driven by higher ridership figures;
- Cost per service hour – Saskatoon Transit’s cost per service hour was within the range of comparable municipalities; and
- Ridership per service hour – Saskatoon Transit’s ridership per service hour was higher than that of comparable municipalities.

Overall, while positive indicators exist in certain measures, there is significant opportunity for Saskatoon Transit to improve its efficiency and effectiveness with respect to resource management. IA noted that there is significant opportunity to increase the utilization of available, paid-for technology and eliminate manual processes in place in order to positively impact Saskatoon Transit’s ability to rely more heavily on data-based decision making. The utilization of these functionalities is directly tied to the ability of Saskatoon Transit to more accurately measure the condition of its current resource scheduling process and make measurable improvements over time.

1 Background and description of process

a) Background and objectives

One of the key strategic goals for the City focuses on “Moving Around”, which is aimed at providing effective mobility options for the citizens of Saskatoon. Saskatoon Transit plays a key role in enabling effective mobility options. Currently, there are two types of transit services used: Conventional Transit and Access Transit. Conventional Transit is a fixed route service and Access Transit provides service to those who are unable to use regular transit with safety and dignity. The 2015 operating spend for Conventional Transit was approximately \$38.5 million, which increased by 3% from 2014. Saskatoon Transit provided approximately 373,000 bus service hours in 2015.

In accordance with the 5-year internal audit plan approved in 2015, IA was directed by the City’s Standing Policy Committee on Finance (“SPCF”) to perform a review of efficiency and effectiveness of resources at Saskatoon Transit.

b) Project purpose

The purpose of the review is to examine the efficiency and effectiveness of resources at Saskatoon Transit and to identify improvements with respect to how to efficiently utilise current technology and/or enhance current processes to minimize operating costs. The scope of our work was limited to resource costs of Conventional Transit. The review consisted of conducting interviews with key personnel and reviewing program information including costs, performance metrics, management activities and staff resources, as well as, operational processes (i.e., dispatch, route planning, operator planning and the route assigning process). The review includes a comparison to other municipalities in order to enable commentary on operational strategies and costs (i.e., route planning, service hours, service level and ridership) and to identify opportunities for improvement.

c) Scope and approach

This review has focused on only Conventional Transit operations, more specifically the dispatching, route planning and resource planning. Our evaluation excluded maintenance and shop, safety, fleet and the operator hiring process, and Access Transit services were not part of the review. Saskatoon Transit’s operating expense for 2015 of approximately \$38.5 million includes remuneration of administrative and management staff, facility costs, transit fleet maintenance and operators’ remuneration. The project includes both an internal process review and assessment of Saskatoon Transit’s resources as well as a comparison of Saskatoon Transit’s resource management and scheduling with other municipalities and financial and performance ratio analysis.

We examined available information relating to route planning, route introduction and expansion, operator assignments and dispatching. We performed walkthroughs of key operational activities to understand and evaluate the current process and we performed analysis and conducted interviews and discussions with key management and front-line staff to understand and evaluate the resource scheduling process and the extent to which it supports strategic goals and objectives.

Our review encompassed the following items:

- Reviewed existing structure, processes, policies and procedures that guide allocation of resources and decision making at Saskatoon Transit.
- Reviewed key financial and operational indicators to understand transit operations and resource allocation implications of current practices.
- Provided recommendations with respect to structure, process, policy and procedures aimed at improving workflows and decision making.
- Reviewed challenges raised by frontline staff and/or provided to us by Saskatoon Transit in an attempt to validate and/or identify the root cause.

This report *does not* represent a comprehensive review Saskatoon Transit's technology or systems, system design, system function and outputs. Rather, the review focused on those system components with a direct or major indirect influence on resource management and allocation decisions.

d) Methodology

The review was conducted utilizing a three step process.

Step 1: Planning and scoping: this included initial consultation and discussion with key management and staff from Saskatoon Transit. IA also requested certain relevant data related to the operations of Saskatoon Transit. Activities also included research and review of relevant resource scheduling processes and best practices, review and analysis of information provided by Saskatoon Transit; and scheduling of site visits.

Step 2: On-site visits and analysis of Saskatoon Transit resource scheduling process: on-site visits and interviews were conducted at Saskatoon Transit. The on-site visits enabled in-person interviews with key management personnel and frontline staff across Saskatoon Transit and job-shadowing of Transit personnel. The on-site fieldwork also included analysis of financial and performance metrics. Upon completion of site visits, we conducted comparisons to other similar sized municipalities. The purpose of the comparisons was to enable further identification of both good practices and gaps in Saskatoon Transit's resource management. After the completion of the on-site fieldwork and analysis, we provided management with a summary of findings and recommendations.

Step 3: Synthesis, report writing, and follow up interviews as required: during this step we addressed any outstanding items and assembled our reporting.

e) Limitations of review

Data provided to conduct the review was sourced primarily from two areas of Saskatoon Transit – Business Administration and Route Planning. It is important to note that there was a lack of availability of certain key data, which impacts Saskatoon Transit's ability to properly evaluate its resource management. Saskatoon Transit has invested approximately \$3.5 million in the Trapeze system over the last decade, which has certain key functionalities that are being underutilized. These functionalities are essential to the measurement of areas of operation that are directly tied to resource scheduling, allocation and utilization. The utilization of these functionalities is directly tied to the ability of Saskatoon Transit to more accurately measure the condition of its current resource scheduling process and make measurable improvements over time.

2 Positive themes identified during review

Our approach to each project includes not only obtaining an understanding of the in-scope areas and identifying opportunities for improvement, but also identifying strengths and positive themes. During our review of Saskatoon Transit's resource management and scheduling process, we identified the following positive themes:

1. Saskatoon Transit has launched real time transit tracking through a third party developer, Transit App and Google Transit. Riders can now see the location of their bus in real time and see how many minutes until the next bus arrives. Implementing the App is intended to improve the overall experience of bus riders. In addition, a regular customer service representative or dispatcher may not be able to process all phone calls received. Thus, the App helps to communicate with riders and provides a time reference through GPS on a real time basis.
2. Integration of technology to help route and resource planning, dispatching services, employee time-keeping and yard management. Saskatoon Transit contracted Trapeze to conduct a review of its IT environment and the potential impact of Trapeze modules on Saskatoon Transit's structures, processes, systems and outcomes related to resource planning and allocation decisions. The review has enabled Saskatoon Transit to understand gaps and efficiency points within their IT system. Transit is continuing to fully implement key components of the Trapeze system.
3. Development of performance measures and the creation of a 5-year plan for Saskatoon Transit. Over the past year, Saskatoon Transit has been working on a customer focused 5-year strategic plan (2016 to 2020). The plan has a specific focus on mobility throughout the City and is in alignment with the Saskatoon Growth Plan. The 5-year plan provides Saskatoon Transit with the crucial direction needed to continue to improve its services, including resource scheduling and allocation.
4. Operational teams structured under the unified leadership of the Director of Transit. This enables a common decision-making platform with consolidated budget oversight and brings together the transit service components of the program.
5. Standardized training requirements and programs for Operators are in place including classroom time and job shadowing.

3 Summary of work performed

This section outlines findings related to processes and practices in resource allocation decisions and is divided into themes and specific processes within Saskatoon Transit. We performed the procedures outlined below to enable the development of the findings and recommendations outlined below and in the table on pages 16 to 20. Also included below are our observations of good practices from relevant comparable municipalities that support the recommendations made. Regina and Windsor participated in the comparison voluntarily and provided insights as to their operations and practices – comments related to other municipalities are from publicly available information. Regina and Windsor were selected as the primary points of comparison as, within the group of ten municipalities that are in the same population category as Saskatoon in the Canadian Urban Transit Association's (CUTA) reporting, Regina and Windsor are the most comparable in terms of number of transit employees and number of buses in service. Saskatoon Transit agreed that the selected municipalities would be appropriate for comparison purposes. Note that at the beginning of each bullet point below, there is a reference to the findings and recommendations in the table on pages 16 to 20 to which the points are most relevant.

a) Understanding and evaluation of investment in and utilisation of Trapeze and related technology

The Trapeze system is fundamental to the operations of Saskatoon Transit, and has particular relevance to resource scheduling. See observation 1a in the table on page 16 for the related risks and recommendations. As part of their current suite of Trapeze applications, Transit has at their disposal the following primary modules and related functionalities:

- “OPS”: used for operators, mechanics, transit staff, yard personnel and dispatchers. Ops assists in the tracking of employees for the assignment of shifts and further integrates the bidding process, dispatching, timekeeping, workforce management, yard management and payroll related functions.
- “FX” : a planning and scheduling software for fixed route transit systems. FX utilizes scheduling algorithms, comprehensive costing capabilities, and demand forecasting.
- “NOVUS”: assists Transit in the management of booking trips, general administration, vehicle and driver management, real-time and batch scheduling, real-time dispatching, mapping and street management, reporting results and billing management. It is designed to assist in ensuring the accuracy of scheduling, appropriate utilization of fleet, setting driver speeds based on area familiarity and updating daily schedules based on automated vehicle location (AVL) data.
- “COM”: a component of Trapeze’s customer information suite used to assist Saskatoon Transit in capturing, tracking and following up on customer and employee requests, compliments, complaints, lost and found requests and other inquiries. Output from this module helps provide management with information to improve public service.
- “Transit Master” is a product which provides options for dashboards, communication between COM center and operator and more accuracy in identifying bus location and “Blockbuster” is a relatively new tool that will replace Transit’s current run-cutting tool. It will reconfigure “blocks” of runs to better utilize the location of buses and schedules of operators.
- Approximately \$3.5 million has been invested in the Trapeze system over the last decade (Conventional Transit only). Throughout the course of our review, it was noted that utilisation of existing functionalities of Trapeze would a) result in the measurement of more meaningful and

accurate financial and operating data that could help in decision making and b) allow for significant opportunity for monitoring of performance throughout the year. We observed low awareness amongst Saskatoon Transit staff of the available modules of the system to-date, however understand they are in the process of identifying super users. Over the course of the past year, Saskatoon Transit has invested effort in improving the utilization of several aspects of Trapeze including reviews of hardware, Farebox, COM, OPS, Transit Master, and Blockbuster. Transit also recently conducted a hardware review and increased communications with operators to ensure Trapeze's intelligent transportation system functionality is being appropriately utilized. Transit is also considering investing in additional Trapeze products including automatic passenger counters and updated fareboxes to more accurately monitor ridership and rider behaviours on any given route or stop.

- While Saskatoon Transit currently has some capabilities in place with respect to computer aided dispatch (CAD) and automatic vehicle locator (AVL) systems, there are currently interface issues being experienced which are impacting Saskatoon Transit's ability to fully benefit from the technology in place (also refer to comments on Observation 3 on next page for further commentary). Increased utilisation of the existing technology will improve the response to vehicle delays, road closures, collisions and breakdowns.
 - Regina and Windsor both utilize CAD/AVL dispatch technology as well. Windsor is implementing CAD/AVL and upgrading Farebox with smart card capabilities and mobile ticketing. The technology enables both municipalities to monitor their buses in real time and provide timely information to citizens. Further, the technology will help them obtain appropriate ridership data to make their service better. Regina utilizes the technology to provide real time data as well as historical aggregation of data that is highly useful in responding to citizen complaints, resolving legal claims, and studying route optimization.

b) Detailed end-to-end walkthrough of dispatch process and interviews with dispatch personnel

Performing this detailed walkthrough was critical to our ability to understand and evaluate the resource scheduling process and to enabling comments thereon. IA spent a morning with the dispatch team to observe the daily process from start to finish and performed further follow-up inquiries and analysis subsequent to the walkthrough. We observed the following items relevant to the review as a result of this process:

- Observation 1b (page 16) – We noted that there were instances where operators were being scheduled manually and also that there was manual tracking of hours worked for all operators. Manual processes currently in place require significant human input and intervention, which increases the opportunity for processing errors to occur and prevents the benefits to be gained from automation from being realized. Increased utilization of Trapeze capabilities by the dispatch team will reduce the manual processing currently taking place and assist in the reduction of errors and communication issues between dispatchers and operators.
- Observation 1c (page 16) – We noted that incidents on the roadway network such as accidents, congestions and detours are reviewed by the supervisor, often requiring the supervisor to perform a visit to that location to confirm the issue and subsequently take action. This creates additional delays and negatively impacts service capabilities. Trapeze has a satellite-based program capable of tracking bus locations and positions, however this program was not being fully utilized in the dispatch and supervisory process. Although physical presence by dispatchers and supervisors will certainly not be avoided entirely even if the capabilities of Trapeze are fully utilised, there will be a capability for improved decision-making regarding both the deployment of individuals on-site and the determination of the number of individuals required on-site (i.e. situations where multiple dispatchers respond to a situation when only one may be needed).

- Observation 2 (page 17) – We noted that no formal review has been performed with respect to dispatcher utilisation, performance measurement and documentation of roles and responsibilities. Saskatoon Transit has budgeted for 6 FTEs within dispatch. Three dispatchers work 10 hour shifts 4 days per week and three dispatchers work 8 hour shifts 5 days per week. Current responsibilities include operator scheduling, assigning work to spareboards, and reacting to the dynamic nature of shift schedules. There was low clarity on responsibility and accountability for performance and issues management.
 - Regina currently operates with five dispatch staff and Windsor with two dispatch staff plus the assistance of supervisors. Saskatoon is currently operating with six dispatch staff. In terms of the ratio of dispatch FTE's to operators, Regina and Saskatoon are comparable (approximately 1 dispatch FTE per 35 operators) however Windsor has approximately 1 dispatch FTE per 60 operators.
 - Competency-based dispatch performance management and formalized policies (standard operating procedures) around the operational structure of dispatch with well-defined roles and responsibilities, performance targets, staff utilization targets and the required technical knowledge (skills matrix/candidate profile) for dispatchers, could result in a more efficient and effective dispatch unit.

c) Review of route planning process and related documents

The route planning process is the foundation which underlies all of Saskatoon Transit's operating activities and in many ways defines the resource scheduling process and the manner in which Saskatoon Transit operates. Decisions made regarding route planning fundamentally impact every aspect of Saskatoon Transit. During our on-site fieldwork we worked to understand and evaluate the process by which route planning is undertaken and the significant impact it has on evaluating operational and financial elements of Saskatoon Transit. We observed the following items relevant to the review as a result of this process:

- Observation 3 (page 18) – We noted that route expansions and adjustments were not based heavily on ridership data, but rather on factors such as City bylaws and the opinion of various public advocacy groups. More fundamentally, Saskatoon Transit is unable to determine ridership based on route and stops as there is not a reliable tracking system in place that captures such crucial ridership data. It was noted that the current system (Farebox) is not generating reliable data, which creates difficulty in determining high and low ridership routes and therefore renders strategic decision making based on this data difficult. Manual ridership counts were being employed as a substitute. Note that anytime Farebox interfaces with a CAD/AVL system, the fidelity of ridership data is off by approximately 15% to 20%. This issue is not isolated to Saskatoon Transit but rather any authority using Farebox and a CAD/AVL system. While Farebox has a ridership count tracker built into it with GPS capability, in order to synchronize data with Trapeze modules, the Farebox tracker is turned off and the Trapeze tracker is engaged. The communication between the two systems causes ridership data loss. Smart terminals on board the bus can assist in processing on-board payments and through the usage of smart cards, track ridership data by bus, route and stop. Regina and Windsor track ridership based on stops and neighbourhood through the usage of smart card technology.
- Windsor has had success working collaboratively with Land Development to determine the optimal use of transit service. In addition, Regina and Windsor have developed a standard and criteria to introduce new routes, including an established minimum density target before

introducing new service into new neighbourhoods. Our understanding is that Saskatoon Transit has significant opportunity for being collaboratively involved in neighbourhood development, and in terms of having clear criteria and standards for introducing new routes (i.e. based on density thresholds).

- Winnipeg Transit has developed standards for new route development and coverage including the introduction of new routes or extended routes when a new development has at least 600 housing units, when most of the housing units in the new development are located more than 800 m from existing transit service, and when at least 200 of the housing units in the new development are occupied.
- The “Transit-Supportive Guidelines” published by the Ministry of Transportation of Ontario in 2012 are “a distillation of transit-friendly land use planning, urban design and operational practices, drawing from experiences in Ontario, elsewhere in North America and abroad. Their aim is to assist urban planners, transit planners, developers and others, working in communities of all sizes, in creating an environment that is supportive of transit and developing services and programs to increase transit ridership”. One of the items the publication highlights is demand-responsive and flexible transit services. Demand-responsive transit serves areas where conventional transit cannot be efficiently provided and flexible transit is a variation where a main route or series of stops is designated, however deviations are permitted to respond to customers’ specific requests. Demand-responsive and flexible transit may be more efficient alternatives where low population densities exist or where trip-making is low during certain times.
- Observation 4 (page 19) – We noted that there was no frequent and/or formal monitoring of the transit network to assess its efficiency and effectiveness. This includes determining the revenue-to-cost ratio of each route, which is hampered by the fundamental lack of accurate data noted on the previous page.
 - Regina and Windsor have found success in performing transit network efficiency assessments annually. Regina regularly reviews its transit network and aims for 90% efficiency, and has recently conducted ridership level assessment based on stops, and created efficiency by eliminating stops where ridership level is low. Windsor performs revenue-to-cost ratio assessments for each route twice a year, and determines which routes are performing better than others. If the ratio drops below 30%, Windsor attempts to boost ridership through marketing efforts or changing the frequency of the run. There is currently no formal assessment of the Saskatoon Transit network’s efficiency and effectiveness.
- Observation 6 (page 19) – We noted that there is limited tracking and monitoring of service hours. As part of route planning, Saskatoon Transit annually determines total service hours required for the year. The service hours are the primary driver of the number of operators required for a given year. During the year, Saskatoon Transit creates additional and temporary services as required. However, these additional and/or temporary services are not factored in when initially determining the actual service hours required for a year (or for the upcoming year). Comparing planned service hours to actual service hours is key to Saskatoon Transit’s ability to determine gaps in service levels and calculate an accurate cost per service hour.
- Observation 8 (page 20) – We noted that trip delays are large contributing factors to overtime costs. While Trapeze has the ability to track on-time/late and missed trips, the system is not being effectively utilized.

d) Understanding and evaluation of operator remuneration (including overtime), transit operating costs, and spareboard rules

The spareboard rules have a significant impact on Saskatoon Transit's resource management process and the ability of Saskatoon Transit to efficiently utilize its operator resources, as they affect the scheduling of all operators utilized by Saskatoon Transit and add complexity to the dispatch process due to the level of detail with respect to how and when operators are scheduled. The spareboard is a pool of qualified operators who cover short-term absences and meet unexpected service requirements. All spareboard operators who make themselves available for work are guaranteed 8 hours pay per day, including Sunday premiums and holiday premiums at time and one half. Any work after the guaranteed hours is considered overtime and paid overtime. Operators are assigned work based on seniority. During the route sign up process, operators can choose to have a fixed route and spareboard days.

- As outlined in Appendix A and B, IA performed analysis on certain relevant ratios to understand metrics in place at Saskatoon Transit and to report on relevant trends, both in consideration of Saskatoon Transit trends in recent years and also in comparison to similar municipalities' transit operations.
- In addition to this, IA performed a comparative analysis of the spareboard rules in 3 comparable municipalities to those currently in place at Saskatoon Transit. There were 14 specific elements of the spareboard rules that were examined and they were categorized in terms of the extent to which changes in the spareboard rules might have the ability to either significantly (2 areas identified), moderately (3 areas identified), or minimally (6 areas identified) impact the efficiency of Saskatoon Transit's resource utilization. There were also 3 areas identified where there was not considered to be any impact.
- In light of the comparative analysis that IA has performed on the spareboard rules, we have recommended that Saskatoon Transit consider the items we have highlighted and perform further internal analysis. Review of the spareboard rules should be a continuous process in order to seek out efficiencies at Saskatoon Transit.
- Windsor Transit has found success by enabling their temporary (full time) operators to work at 75% for 240 days to allow more permanent full time operators to take time off. This practice has allowed them to run close to 100% capacity, and better utilize their operators. In terms of the process of assigning routes to operators, there are five major sign-ups annually, which occur approximately every 10 weeks. Approximately every 2 weeks in between the major sign-ups, there are "2 week" signups in which the spareboard operators sign their pieces of work. For regular operators, operators signing for regular runs perform their work on the 5 days in a 7 day period that Windsor Transit designates and take off the 2 days that Windsor Transit designates. In the case of an emergency, Windsor Transit may refuse such days off in which case they must pay each operator required to work on either day at 1.5x.
- IA noted that during the busiest season of the year (all else being equal) the labour supply in place at Saskatoon Transit is sufficient to operate effectively. However, inefficiencies can arise during the slowest seasons (spring/summer), as service hours are significantly reduced but available labour hours remain the same, as the employment status of operators is full-time permanent. IA understands that Saskatoon Transit currently combats this by arranging scheduled vacation during the summer, however can encounter challenges due to over-scheduling of vacation and the incurrence of overtime during these slow periods. When this occurs, Saskatoon Transit actually ends up incurring overtime during its slowest periods of the year due to non-availability of operators due to vacation. Saskatoon Transit is

aware of the anomaly and has focused its efforts to address it in 2016 by being more strategic with its scheduling of vacations in the summer and fall. Saskatoon Transit indicated to IA that its overtime costs are down 37% from June 2015 to June 2016, 45% from July 2015 to July 2016, 76% from August 2015 to August 2016, and 51% from September 2015 to September 2016.

- Regina has found success with their spareboard utilization by ensuring operators either choose to be on a spareboard list or sign-up for a fixed route but not a mix of both. This practice has allowed Regina to better plan their spareboard utilization. In terms of the current process at Saskatoon Transit for assigning routes to operators, sign-up occurs 3 times per year. All available work is posted and sign-up is based on seniority.

e) Understanding and evaluation of 5-year plan

Saskatoon Transit has developed a 5-year plan which covers the years 2016 to 2020 and serves to reflect where Saskatoon Transit is today (the starting point of their transition), to focus resources on prioritized challenges and expectations, to communicate and support engagement among staff and customers, and to promote accountability, transparency and a culture of continuous improvement. With the plan, Saskatoon Transit has developed several financial and quality related measures; however, performance targets and methods to appropriately extract data for analysis of overall performance have not yet been established and a heavily data-based decision making process is not yet being utilized. Saskatoon Transit will continue to develop and measure target metrics as the fidelity of their data is improved. See observation 5 in the table on page 19 and related risks and recommendations.

- Regina and Windsor measure and monitor performance and have established financial and operational targets. Both municipalities use data for decision making.
 - For instance, Regina aligns their service measures to MBNCanada and key service measures for Regina Transit include ridership (passengers per bus hour) and route efficiency (target of 90%) – both of which are possible to target based on tracking of ridership and passenger by bus stops, time, and neighbourhood. Windsor targets financial metrics such as maintenance expense as a % of total direct operating expenses and fuel expense as a % of total direct operating expenses, as well as cost efficiency metrics such as maintenance expense per vehicle hour and fuel expense per vehicle hour. Windsor also performs revenue-to-cost ratio assessments for each route twice a year, and determines which routes are performing better than others. If the ratio drops below 30%, Windsor attempts to boost ridership through marketing efforts or changing the frequency of the run.

4 Observations, risks and recommendations

a) Rating objectives

- Assists City Administration and SPCF in assessing and reviewing results;
- Provides the basis for prioritizing follow-up;
- Facilitates comparison across business units;
- Facilitates issues-tracking system usage; and
- Provides a measure of transparency in the rating criteria.

We have risk rated each of our findings in terms of severity of impact and likelihood, on a scale of High (H), Medium (M), and Low (L). The heat map below provides guidance for our ratings.

b) Impact rating definition

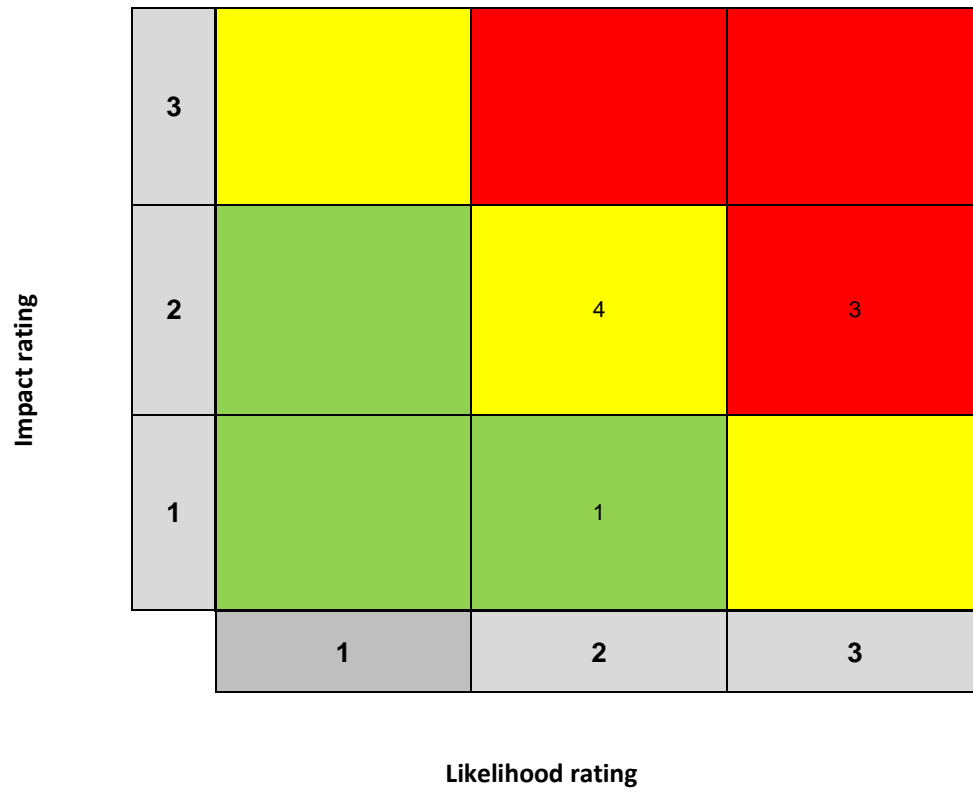
Individual observations	Impact	Overall report
Significant finding. High risk of significant impact (e.g., fraud, serious financial/operational/reputational risk, serious safety issues).	3	Process or internal review area requires improvement. One or more "red" individual findings indicate that immediate attention is required.
Less severe finding. Moderate risk and requires process change/improvement to reduce the likelihood of a significant finding in the future.	2	Moderate issues identified during the analysis. In order to make meaningful improvements the recommendation requires implementation.
Low risk item. Value added process improvement or enhancement.	1	No significant issues identified during the stated analysis. The recommendation provides Administration with the opportunity to effect positive change.

c) Likelihood rating definition

Likelihood Scale	Likelihood*	Possibility
3	Highly likely, systematic or ongoing	>=60%
2	Possible or occasional	>25% and <60%
1	Rare or unlikely	<=25%

*Likelihood relates to potential for observation to contribute to potential program failure in the area the finding pertains to.


d) Summary of risk ratings and heat map



- Total findings: 8
- 3 High risk/impact
- 4 Medium risk/impact
- 1 Low risk/impact

e) Table of findings, risks and recommendations

	Category	Description of Detailed Findings	Risks and Impact	Risk Ranking	Recommendations and applicable good practices	Management Response
1	Dispatch, technology usage and training	<p>a. Significant investment in Trapeze with low utilisation of full functionality and low awareness amongst relevant users.</p> <p>b. Manual scheduling of operators and manual tracking of hours worked.</p> <p>c. Limited utilisation of Trapeze functionality for tracking bus locations and positions by dispatch and supervisory function.</p>	<p>Limited use of all of the available technology will negatively impact efficiency and effectiveness.</p> <p>Staff and the dispatch team should be fully aware of the functionality, usability and information processing capability of the Trapeze modules in place which include FX, Ops and Novus.</p> <p>Manual processes currently in place require significant human input and intervention, which increases the opportunity for processing errors to occur and prevents the benefits to be gained from automation from being realized.</p>		<p>With respect to maximizing the investment in Trapeze and utilization existing functionality in Saskatoon Transit's technology to drive operational improvements in efficiency and effectiveness, IA recommends that Saskatoon Transit:</p> <ul style="list-style-type: none"> - Establish a long-range technology implementation plan for existing Trapeze modules which outlines short-term prioritized projects for each module with longer-term planning in a way that maximizes benefit across the entire authority (including employee training on Trapeze modules). The implementation plan should also consider broad based risk factors and financial/operational implications. - Appoint in-house Trapeze champions to assist the Transit staff become well oriented with the system, particularly with respect to currently available but underutilised modules. These individuals will be the "go-to-person" for Trapeze related training and questions and serve as the liaison with the system provider. - Develop a policy/user manual for Trapeze to assist in training and succession planning. <p>This recommendation is ultimately intended to result in the dispatch team fully utilizing Trapeze capabilities and reduce manual processing currently taking place. The full utilization of Trapeze capabilities by the dispatch team will increase efficiencies by assisting in the reduction of errors and avoiding communication issues between dispatchers and operators. Increased utilization by the dispatch team will improve response to vehicle delays, road closures, collisions and breakdowns.</p> <p>Although physical presence by dispatchers and supervisors will certainly not be avoided entirely even if the capabilities of Trapeze are fully utilised, there will be a capability for improved decision-making regarding both the deployment of individuals on-site and the determination of the number of individuals required on-site (i.e. situations where multiple dispatchers respond to a situation when only one may be needed). Expected benefits of improved utilization of this functionality are:</p> <ul style="list-style-type: none"> - Improved management capabilities for dispatchers and extends the number of transit buses that can be handled by each dispatcher; - Transmission of real-time information such as schedule adherence feedback to dispatch, customer service information, and operator data helps to maximize on-time performance, service reliability, and protects transit connections/user experience; and - Provides the ability for operators to quickly inform dispatch about an onboard emergency and for dispatch to immediately know the vehicle location to send assistance. 	<p>Response Agreed</p>

	Category	Description of Detailed Findings	Risks and Impact	Risk Ranking	Recommendations and applicable good practices	Management Response
2	Dispatch, technology usage and training	<p>There are insufficient formalized rules in place which address the mandate of the dispatch unit, including its structure and its accountability for daily tasks performed.</p> <p>There is limited formal review in place of dispatcher utilization, tangible performance measurement and/or documentation of roles and responsibilities of the dispatch team.</p>	<p>Limited definition and documentation of roles and responsibilities, accountability for daily tasks, performance measurement and issues management, and team structure will negatively impact the performance of the dispatch unit, which can have a significant impact on the operating effectiveness and efficiency of Saskatoon Transit.</p>		<p>IA recommends that a formal review of the dispatch process be conducted to determine dispatch workload and capacity, as well as, opportunities for efficiencies with the utilization of current software in place as outlined in #1 immediately above.</p> <p>The review should seek to conclude on competency based dispatch performance. The review should seek to formalize policies (standard operating procedures) around the operational structure of dispatch with well-defined roles and responsibilities, performance targets, staff utilization targets and the required technical knowledge (skills matrix/candidate profile) for dispatchers.</p>	<p><u>Response</u></p> <p>Agreed</p>

	Category	Description of Detailed Findings	Risks and Impact	Risk Ranking	Recommendations and applicable good practices	Management Response
3	Route planning	There is currently very limited usage of ridership-based planning and limited ability to determine accurate ridership figures based on specific routes and stops.	Lack of factual, accurate data could result in higher than required service being provided to low ridership areas and neighbourhoods and vice versa, which negatively impacts resource scheduling, resource utilization and operator costs.		<p>IA recommends improved coordination and synchronization between Planning and Development and Saskatoon Transit. Creating transit-supportive communities relies on the continued effective coordination of Planning and Development and Saskatoon Transit so they are mutually supportive. When Saskatoon Transit and Planning and Development make decisions in isolation, it can lead to patterns of development that are difficult and inefficient to serve by Saskatoon Transit.</p> <p>IA recommends that Saskatoon Transit, in conjunction with Planning and Development, develop a standard or criteria to consider when exploring expansion and adjustment of transit services. Some of the criteria and factors could include:</p> <ul style="list-style-type: none"> ➤ Population and demographic trends; ➤ Future land use and travel patterns; ➤ Ridership forecast based on neighborhood and stops; ➤ Parking management practices; and ➤ Impact of new transit service or bus routes on communities and neighborhoods. <p>IA recommends that Saskatoon Transit finalize the establishment of service level guidelines which describe items such as neighborhood density, stop locations and passenger loads.</p> <p>IA recommends that formal ridership data be tracked by route and stop. For the purpose of transit service/route planning, tracking performance at the individual route level is essential to enable transit planners to make informed decisions concerning the level of transit service.</p> <p>The tracking of this data would allow for formal consideration of alternatives such as flexible transit services. Demand-responsive and flexible transit may be more efficient alternatives where low population densities exist, or where ridership is low during certain times.</p>	<p><u>Response</u></p> <p>Agreed</p>

	Category	Description of Detailed Findings	Risks and Impact	Risk Rank	Recommendations and applicable good practices	Management Response
4	Monitoring/ measurement of efficiency/ effectiveness	Lack of formal monitoring of efficiency and effectiveness of transit network on a periodic basis	Limited periodic monitoring and assessment of transit network could lead to inefficient assignment of resources.		IA recommends that periodic review of ridership, usage, and on-time performance of the transit networks be conducted to assess their efficiency and effectiveness. At-least annually, Saskatoon Transit should determine the revenue-to-cost ratio of each route as well as ridership based on stops, neighborhood and time of day. This would enable Saskatoon Transit to be able to identify inefficient and costly routes and respond by either reducing the number of services where ridership is low or attempting to boost ridership through marketing and identifying potential route segmentation and frequency changes.	<u>Response</u> Agreed
5	Monitoring/ measurement of performance	Lack of performance targets and methods to appropriately extract data for analysis of overall performance have not yet been established.	Reduced availability of information for strategic decision making limits the ability of the 5 year plan to cause meaningful change to resource scheduling.		<p>IA recommends that Saskatoon Transit establish methods to collect information required to assess performance and analyse whether progress is being made on the 5 year plan). Performance targets should be developed in alignment with Municipality Benchmarking Network Canada (MBNCanada) and Canadian Urban Transit Association (CUTA). Performance measures and targets typically are operational and financial measures. Saskatoon Transit may also want to consider developing additional performance measures such as:</p> <ul style="list-style-type: none"> - Maximum vehicle ridership loads, wait times and transfer wait times; - Ridership per revenue vehicle hours; - Revenue-to-cost ratio; - Maintenance expense to total vehicle hours; - Revenue vehicle hours per capita. <p>Performance monitoring would enable Saskatoon Transit to determine whether they are meeting their financial and operational targets as well as ridership and quality of service targets. Performance reporting allows Saskatoon Transit to improve service efficiency, availability of resources, and convenience to customers.</p> <p>It is also essential for Saskatoon Transit to know the quality of service being provided as perceived by riders in order to further develop strategies to attract and retain ridership. Without a systematic approach to monitoring performance, Saskatoon Transit will not accurately and effectively be able to measure whether they are meeting the above goals.</p>	<u>Response</u> Agreed
6	Monitoring and measurement of service hours and related measures	Limited tracking and monitoring of service hours	Negatively impacts Saskatoon Transit's ability to determine the efficiency of service delivery.		IA recommends that Saskatoon Transit utilize Trapeze to track and monitor service hours and determine the true cost of service per hour. More comprehensive data collection and analysis would enable Saskatoon Transit to better understand the cost and level of service being provided to citizens, thereby ensuring adequate funds are in place to effectively achieve the desired level of service.	<u>Response</u> Agreed

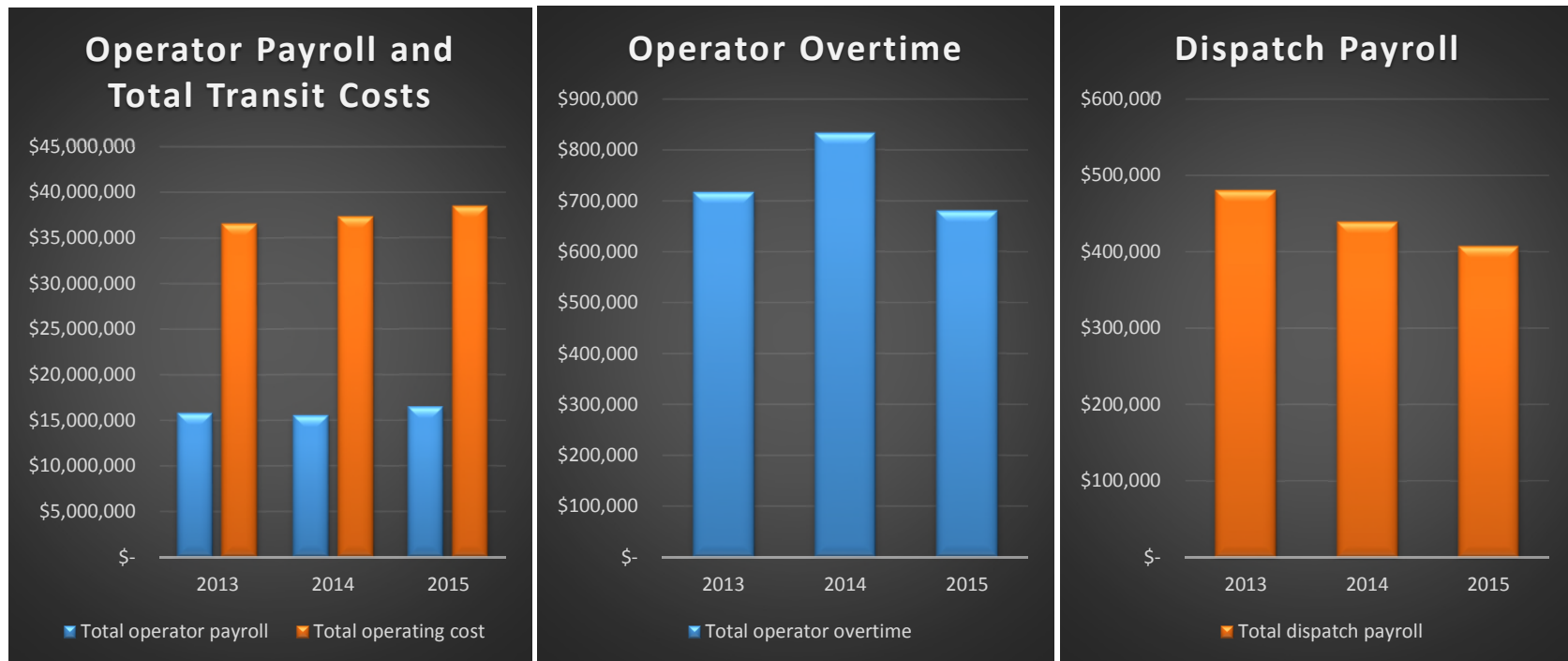
	Category	Description of Detailed Findings	Risks and Impact	Risk Ranking	Recommendations and applicable good practices	Management Response
7	Monitoring and measurement of utilization of operators and use of spareboards	Consideration of good practices in place regarding operator utilization and spareboards	Negatively impacts Saskatoon Transit's ability to deliver efficient services.		<p>IA recommends that Saskatoon Transit work to implement changes that could positively impact the efficiency of its operations. In particular, the following areas of the spareboard rules warrant detailed review and analysis by Saskatoon Transit:</p> <ul style="list-style-type: none"> • Definition of spareboards; • Overtime; • Guaranteed hours; • Additional work; and • Extent of hours required. 	<p>Response Agreed</p>
8	Monitoring and measurement of service hours and related measures	Utilization of on-time performance data to make strategic decisions	Negatively impacts Transit's ability to determine the efficiency of service delivery		<p>IA notes that Saskatoon Transit has the ability to monitor on-time trip performance, however, historically the data has gone untracked. As a result, the data set (containing multiple years of data) does not exist to be able to make strategic decisions which could improve efficiency of service delivery. IA recommends Saskatoon Transit begin tracking and monitoring on-time performance using Trapeze with the intention of identifying the root cause of on-time and/or late trips. The data should be used to plan a course of action and presented in part with strategic decisions made to improve efficiency within their service delivery model.</p>	<p>Response Agreed</p>

Appendix A - Financial and performance analysis

Saskatoon Transit's operating spend has increased from 2013 to 2015, as outlined below. The overall operating spend includes remuneration, maintenance of buses, fuel, infrastructure and administration. Across Canada, operating costs, particularly operator salaries, have been increasing in recent years. Unions across the country have been negotiating wage increases for their members, as evidenced by negotiations in Winnipeg and Hamilton. The charts below indicate that both total operator payroll costs and total operating costs have increased at Saskatoon Transit from 2013 to 2015, while total payroll costs for dispatchers have slightly decreased over that same 3-year period. Total overtime for operators fluctuated over the 3-year period, but the difference remains within a percentage point of total operator payroll costs.

Important highlights are as follows:

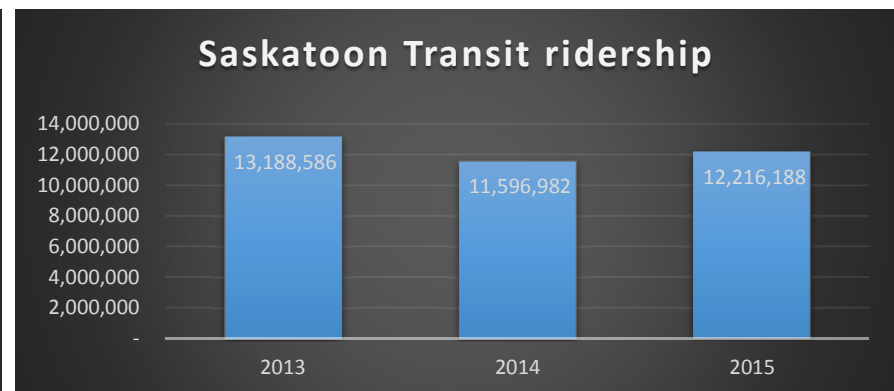
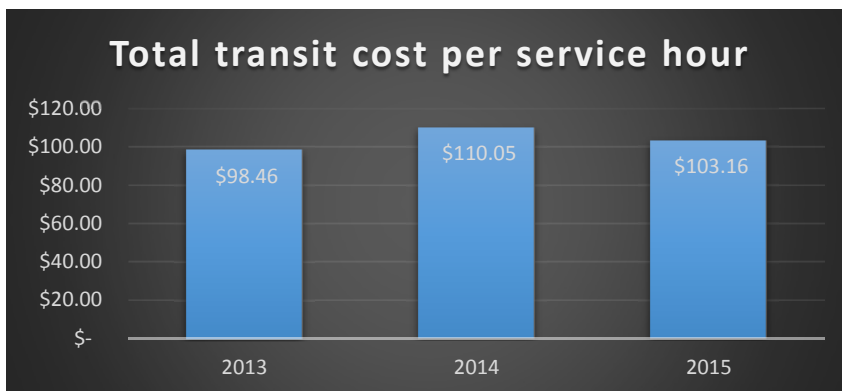
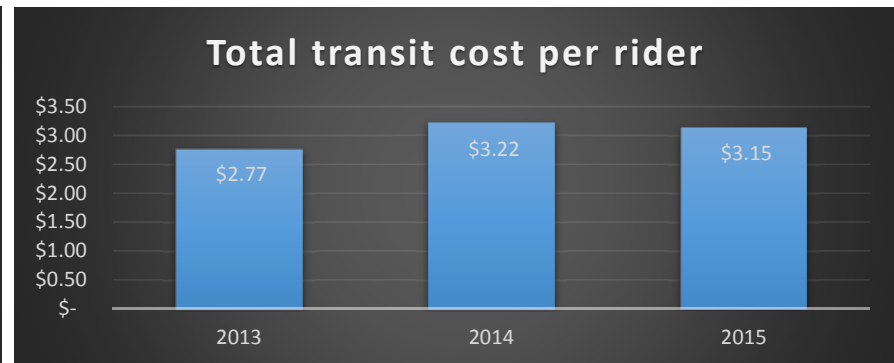
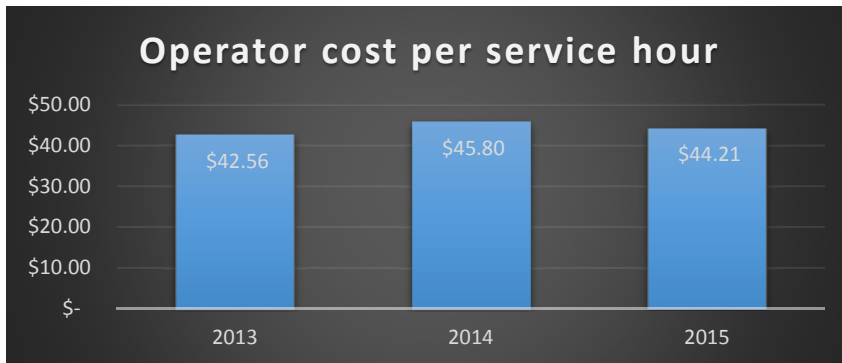
- Total operator remuneration has increased 4% over the 3-year period;
- Total transit operating costs have increased 5% over the 3-year period; and
- Operator overtime represents approximately 2% of total transit costs.



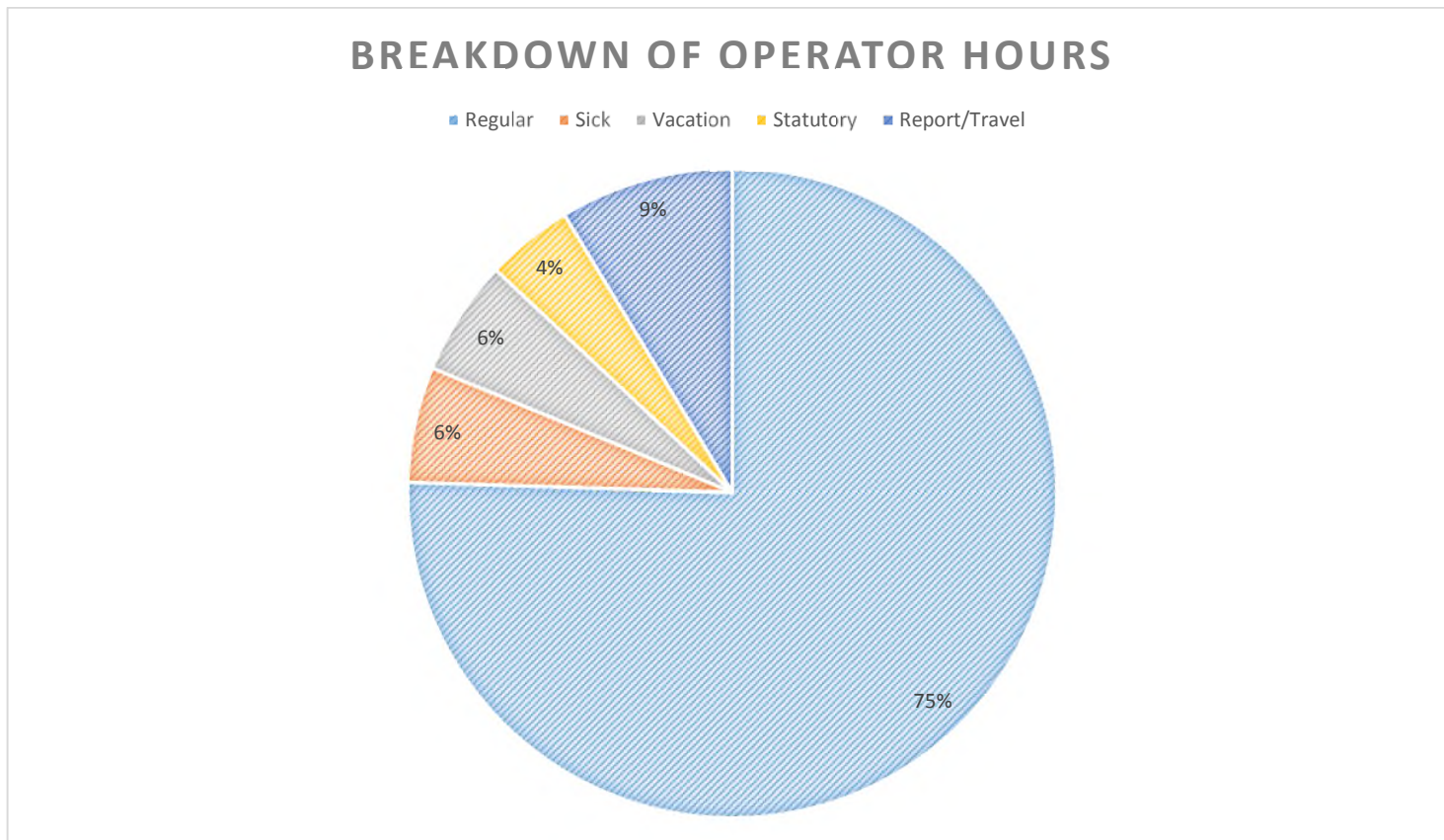
There are two methods to determine ridership levels: formula-based and electronic ridership. Formula-based ridership is determining ridership based on sales, and electronic ridership is determining it based on information provided by the Farebox Intelligent Transit System. Saskatoon Transit currently determines ridership levels using both methods. For our analysis, we utilized the formula-based ridership figures, which are also reported annually to the Canadian Urban Transit Association (CUTA).

In 2014, ridership levels decreased due to the labor disruption. The labor disruption also resulted in decreased service hours. The reduction in service hours in 2014 had an impact on determining the cost per service hour. Since service hours are the denominator, a reduction in service hours while maintaining the same level of operating costs resulted in higher service costs per hour.

As noted in the previous section, operator costs have been increasing across Canada in recent years. As seen in Table 2 below, Saskatoon Transit experienced a relatively lower increase of 5% per service hour when comparing 2015 to 2013. However, as a result of ridership decreasing from 2013 to 2015 by 7%, the cost per rider has increased by almost 14% when comparing 2015 to 2013. When assessing these two factors together, the observation is that while cost per service hour has not increased by a significant margin, the same number of service hours are servicing a lower level of ridership on average.



In considering operator remuneration (and remuneration in general in terms of any type of scenario where utilization is relevant to the output being provided, whether a service or a good) the amount of time available for productive hours is a crucial consideration. To put it in the context of Saskatoon Transit, in order to be able to provide 400,000 service hours in a given year, more than 400,000 of available operator hours are going to be needed as operator time is not 100% utilized. In general, operators have approximately 70% to 75% of their available time available to actually operate the bus. The other hours that are not spent actually operating a vehicle consist of the following: sick hours (entitled to 1.25 days per month or 120 hours and increases to 144 hours after 10 years of service), vacation hours (minimum of 3 weeks of 120 hours and increases to 4, 5 or 6 weeks depending on years of service), statutory holidays (88 hours or 11 days per year) and report/travel/guarantee time (approximately 180 hours per year). Other variables that can impact the range of utilization include the “sick bank” (disability) and WCB usage, which vary from month to month.



Appendix B - Performance relative to comparable cities

The main source of information for the comparative analysis in the following tables is CUTA reporting for the periods from 2013 to 2015.

Table 1

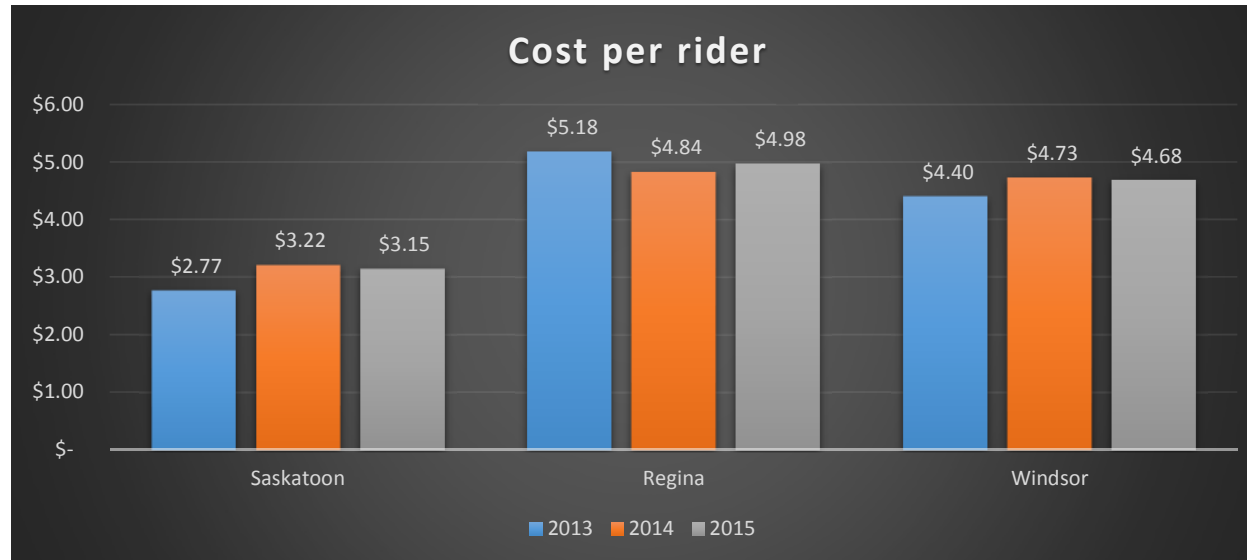


Table 1 above presents a trend indicating comparable rider cost achieved and reveals that Saskatoon Transit has a lower cost per rider than Regina and Windsor. This is due to the high ridership experienced in Saskatoon; the ridership levels in Regina and Windsor are approximately half of Saskatoon's. Note that in any given year, the ridership levels vary depending on how cities promote their transit service, as well as their ability to provide effective transit experience to citizens. In terms of the trends in cost per rider, Saskatoon increased by 14% from 2013 to 2015 compared to an increase of 6% for Windsor and a decrease of 4% for Regina. As noted earlier, 2014 costs for Saskatoon Transit were higher due to the labor disruption, which in turn contributed to lower ridership in that year. If the ridership level in 2014 had been to the same level as in 2013 or 2015, there would have been a reduction in cost per rider. As noted earlier, reduction in ridership can have a significant impact on service cost per hour.

As noted earlier in the report, Regina and Windsor were selected as the primary points of comparison as, within the group of ten municipalities that are in the same population category as Saskatoon in CUTA's reporting, Regina and Windsor are the most comparable in terms of number of transit employees and number of buses in service. When extended to the broader group of municipalities within Saskatoon's population range, Saskatoon Transit continues to be above average in terms of various measures of cost effectiveness and cost efficiency.

Table 2.

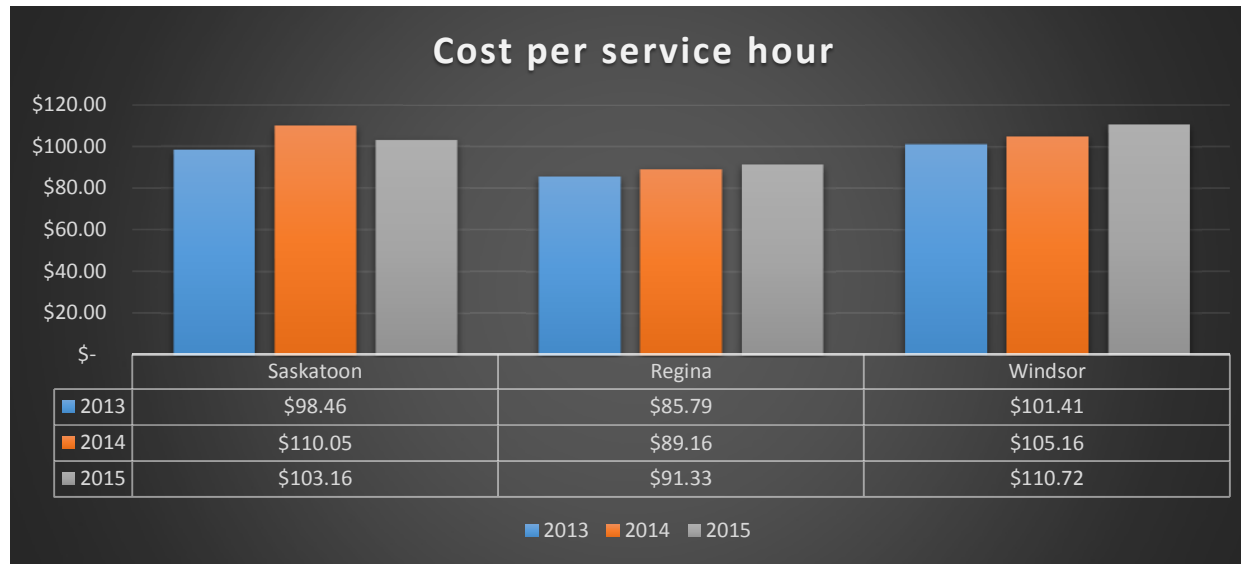


Table 2 above illustrates a trend on total spending per hour of transit service time. The analysis reveals that Saskatoon Transit’s cost per service hour in 2015 was higher than Regina by 13% and lower than Windsor by 7% in 2015. As noted earlier, 2014 costs for Saskatoon Transit were higher due to the labor disruption resulting in a reduction of service hours. In terms of trends, Saskatoon has increased by 5% from 2013 to 2015 while Regina and Windsor have increased by 6% and 9%, respectively.

As noted on the previous page, Regina and Windsor were selected as the primary points of comparison as, within the group of ten municipalities that are in the same population category as Saskatoon in CUTA’s reporting, Regina and Windsor are the most comparable in terms of number of transit employees and number of buses in service. When extended to the broader group of municipalities within Saskatoon’s population range, Saskatoon Transit continues to be above average in terms of various measures of cost effectiveness and cost efficiency.

Table 3

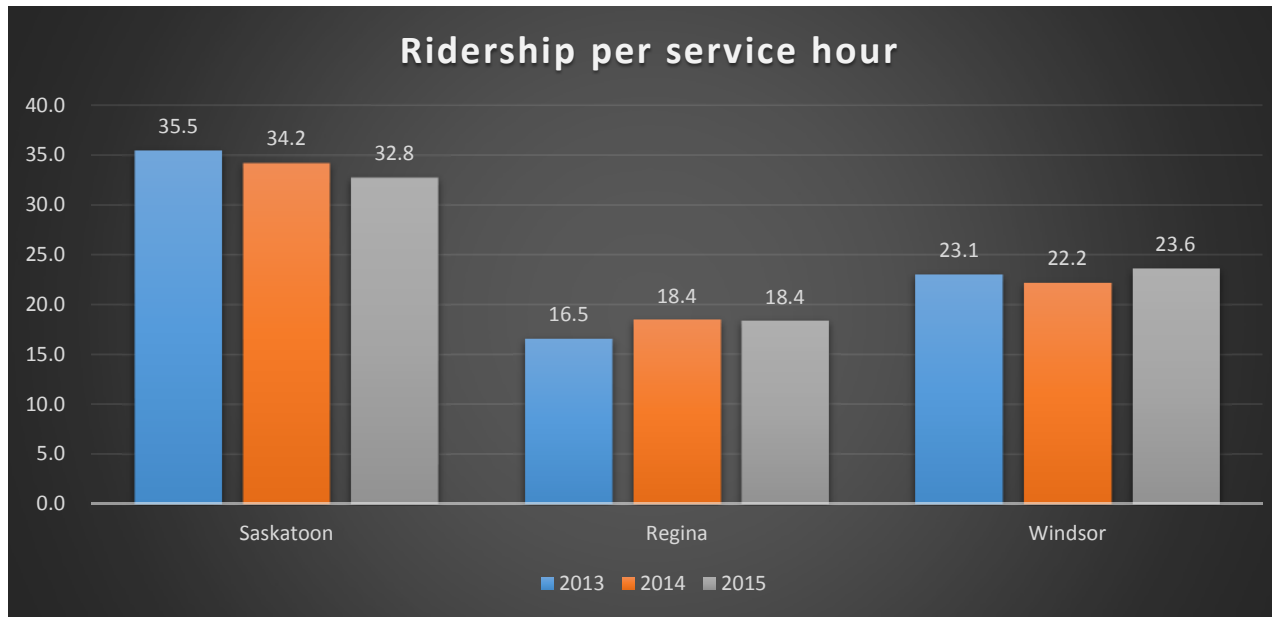


Table 3 above illustrates that while Saskatoon Transit has higher ridership per service hour than Regina or Windsor, while Regina has seen a 12% increase in ridership per service hour over the 2013 to 2015 period, Saskatoon has seen an 8% decrease over this same period.

Appendix C - Comparative analysis of spareboard rules

IA obtained the spareboard rules of three comparable municipalities for purposes of comparing and contrasting Saskatoon Transit's spareboard rules. IA has excluded the use of municipality names in our analysis below, other than when referring to Saskatoon. The analysis has resulted in four categorizations of areas within the spareboard rules, depending on the extent, if any, to which further definition and/or adjustments to Saskatoon Transit's spareboard rules could either have a significant, moderate or low impact on efficiency.

1) Areas where further definition and/or adjustments to the spareboard rules could have a significant impact on efficiency

Overtime: Saskatoon Transit's current practice based on the spareboard rules is that spareboard operators willing to work overtime must sign the daily overtime list. Spareboard operators who refuse overtime after their day has been scheduled will not have their guarantee reduced because of the refusal. Spareboard operators are paid premium rates for any time logged before their scheduled shift begins (i.e. asked to come in early). Spareboard rules of comparative municipalities indicate:

- Spareboard operators will be required to obtain their 8 hours before they receive 2x pay for working between 12 am and 5 am. If an operator obtains their 8 hours part way through the night charter, they will be paid at the appropriate overtime rates for the remaining time;
- If work is required on a day normally designated as a day off, such days will be paid at a premium rate of 1.5x;
- Additional work assignments can be accepted on a voluntary basis and will be paid at 1.5x premium for the time worked.

Guaranteed hours: Saskatoon Transit's current practice based on the spareboard rules is to guarantee 8 hours per day to as many spareboard operators as possible within their timeframes. Per our understanding from management, there is no guaranteed number of days per week assigned to the spareboard operators. Comparable municipalities' spareboard rules:

- Defined guaranteed hours as 40 hours pay to those spareboard operators who do not receive 40 work hours in any 1 week of the 2 week schedule. Premium hours do not count toward an operator's guarantee. If a spareboard operator has more than 2 days off in a week for any reason, their guarantee will be reduced accordingly by 8 hours for each day over the 2 days.
- Guaranteed a minimum of 40 hours of pay to spareboard operators in any five days per week at their basic rate. Operators will be paid a minimum of 8 hours a day, unless absent, at which point the operator will be deducted only the time he/she was absent. Guaranteed 8 hours on a daily basis Monday to Saturday and 7 hours on Sundays and statutory holidays. The guarantee of 8 hours is reduced for each hour the spareboard is not reporting to their duty or if the spareboard books time off, regardless of reason.

2) Areas where further definition and/or adjustments to the spareboard rules could have a moderate impact on efficiency

Defining spareboards: Comparable municipalities had the following in place:

- Defined spareboard operators as those who have signed up as spareboard operators and are assigned work described in an employer prepared two-week schedule of work and those who have not signed up for a two-week schedule but rather are assigned work on a daily basis.
- Policy for as small of a spareboard pool in place as practical, which guarantees a maximum amount of work for spare operators to ensure high utilization.

- Categorization of spareboard operators into day and night shifts, with spareboard rules indicating that spareboard operators consist of a group of operators maintained to do extra work such as filling temporary vacancies caused by illness, operating extra and unplanned work or the operation of charters.

Additional work: Saskatoon Transit's current practice based on the spareboard rules is that any operator assigned less than 7 hours and 31 minutes of work can be provided with additional work so long as the additional work is greater than 30 minutes. The request for additional work can be provided on a 45 minute notice (prior to that piece of work starting) however the spareboard operator has to respond within 15 minutes of being given the notice otherwise their guarantee is forfeited and they are only paid for the hours they worked. Comparable municipalities' spareboard rules state that no regular operator shall be required to do extra work after finishing the day's run if spare-board operators are available and that spareboard operators completing their day's work after 9 pm will not be booked to start the next day's work, a period of 8 hours after.

Extent of hours required: Saskatoon Transit's current practice based on the spareboard rules is that spareboard operators are guaranteed 8 hours of work and pay within a 13 hour window of commitment. Comparable municipalities' spareboard rules state:

- All spare board operators may be required to work a maximum of 8.5 hours per day and work shall be completed within 13 consecutive hours;
- The maximum work day will be 16 hours.

3) Areas where further definition and/or adjustments to the spareboard rules could have a low impact on efficiency

Seniority: Saskatoon Transit may wish to consider the practices of some other jurisdictions. Comparable municipalities' spareboard rules state:

- There is no seniority acquired by an employee during the first year of employment, after which the employee will accumulate seniority within their respective operator class (i.e. spareboard vs. regular vs. part-time etc.);
- Early day runs will be allotted such that the most senior spareboard operators are assigned the earliest finishing time;
- In the event of sickness or other causes of absence, the run will be offered on the basis of seniority to operators who are a part of the signed spareboard assignments.

Filling of temporary vacancies: Saskatoon Transit may wish to consider the practices of some other jurisdictions. A comparable municipality's spareboard rules state that temporary vacancies which cannot be covered by the spareboards will first be offered to the spareboards according to seniority. In the event of a permanent vacancy, which must be posted at the next two-week sign-up, the most senior spareboard operator, who is not already holding a permanent run, will be entitled to hold the vacant run until the next major sign-up.

Filling in absences: Saskatoon Transit may wish to consider the practices of some other jurisdictions. A comparable municipality's spareboard rules state that an attempt to fill an absent shift will be made by contacting service line employees on their days off to fill the shift. If this does not yield a successful outcome, transit management will fill the absent shift with a spareboard operator.

Refusal to sign-up/take on spareboard work: Although Saskatoon Transit's spareboard rules do not explicitly define the process of dealing with refusal of spareboard operators performing the duties assigned to them or signing-up for spareboard shifts entirely, comparative municipalities' spareboard rules state:

- A regular spareboard operator under 8 hours for the day cannot pass work in excess of 30 minutes pay time to any operator over 8 hours unless that spareboard operator can sign for 8 hours including PM reporting and;
- Any spareboard refusing to sign-up on the spareboard schedule will revert to a position on the spareboard to which his/her seniority entitles him/her to.

Uncommunicated absences: Although Saskatoon Transit's spareboard rules do not explicitly define how uncommunicated absences are dealt with, one comparable municipality's spareboard rules state that those operators who fail to advise the dispatcher's office of absence will have their next scheduled day's work filled from the spareboard pool covering that scheduled day's work.

4) Areas where further definition and/or adjustments to the spareboard rules would likely not impact efficiency

Run cancellations or changes: Saskatoon Transit's current practice based on the spareboard rules is that the piece of work assigned to a spareboard operator will not be changed unless the piece of work has been cancelled in part or full. In the event of partial or full cancellation of work, the spareboard operator may be assigned alternative work or standby time. If the operator was not informed of cancellation 45 minutes in advance and no alternative work is available, the spareboard operator will be paid 2 hours of call-in. If on the other hand, the work had already begun and cancellation occurred partially through the piece of work, the spareboard operator will be paid for the original time of work. Spareboard rules of comparable municipalities indicate:

- If at any time management decides to changes any spareboard shift, the spareboard will be given a minimum of 48 hours' notice of such change;
- A spareboard operator will be paid 2 hours of regular pay where he/she has been inadvertently assigned to a regular work assignment already assigned to a regular operator. When work for a spareboard operator is cancelled, dispatch will re-assign the spareboard operator. Dispatch must give 12 hours' notice and the new work assignment must be within 1 hour before or after the start time of the work assignment. If it is not possible to provide 12 hours' notice, the spareboard operator will be automatically assigned to unsigned show-up work.

Rest time: Saskatoon Transit's current practice based on the spareboard rules is that all operators will have a period of 8 consecutive hours of rest in a period of 24 hours or a day. Operator must be available for work even if it is immediately at the expiration of the rest period. IA noted that comparable municipalities had similar rules.

Sign-up process: Saskatoon Transit's current practices with respect to the sign-up process based on the spareboard rules are as follows:

- All runs posted by 5 pm Thursday, a week prior to the scheduled run and a spareboard may be voluntarily signed onto the run, by classification seniority;
- Spareboard operators that work for at least 4 days Monday to Friday may sign on to a run before 12 pm the Friday prior to the scheduled run; and
- It is the spareboard operator's responsibility to see if they have been assigned a run.

In contrast to this, a comparable municipality states that each operator will be entitled to sign up for a run in accordance with their seniority and all spareboard operators must sign by 10 am Friday. Another municipality's rules state that the employer shall post a schedule of all available work for spareboard operators at least 14 days prior to the two-week work schedule. The spareboard operator will indicate on a selection sheet their choices of the work available and the employer will assign the work in accordance with seniority at least 7 days prior to the 2 week work schedule. If a spareboard operator doesn't receive any shifts due to a lack of seniority, he/she will be assigned to the first available signed spare run and to unsigned spare runs thereafter.