EDMONTON PUBLIC SCHOOLS **Recommendation Report**

DATE:	March 18, 2014
TO:	Board of Trustees
FROM:	Darrel Robertson, Superintendent of Schools
SUBJECT:	Edmonton Student Transportation Authority Feasibility Study
ORIGINATOR:	David Fraser, Executive Director, Corporate Services
RESOURCE STAFF:	Geoff Holmes, Elizabeth Kukotello, Lorne Parker, Christopher Wright
REFERENCE:	February 12, 2013 Board Report – Motion re Joint Transportation Plan Feasibility

ISSUE

The following motion was approved at the February 12, 2013 board meeting: *That Edmonton Public Schools carry out a feasibility study in conjunction with Edmonton Catholic Schools on a joint transportation plan that would improve efficiency, reduce ride times and reduce costs for both districts. This study should be completed by January 31, 2014.*

RECOMMENDATION

That the Edmonton Public School Board and Edmonton Catholic School District enter into an Agreement in Principle and initiate Phase I of detailed design and implementation, as referenced in the Feasibility Study (Attachment I).

BACKGROUND

Prior to the motion, both jurisdictions were engaged in ongoing discussions regarding the feasibility of a collaborative transportation service delivery model and had piloted a joint initiative in two areas of the City. Following the formal Board directive, a more detailed investigation examining the feasibility of a combined service delivery model began. The Feasibility Study involved a peer review of the Ontario consortia model, including discussions with the Ministry, consortia executives, and school jurisdiction officials. Deloitte was contracted to provide consulting services to the Edmonton Student Transportation Authority (ESTA) Steering Committee.

As Alberta Education investigates the proposed 'Results Based Budgeting' approach to certain components of transportation funding, it is *anticipated* that the ESTA model will be examined as a potential service delivery model for other urban centres.

RELATED FACTS

In summary, the findings of the Feasibility Study indicate that a collaborative service delivery model is feasible. Key concepts outlined in the Feasibility Study include:

- The consortium model will deliver a consistent or improved level of service, on average, while presenting the potential for a series of efficiencies. In certain instances, efficiencies are related to broader discussion points that will be addressed through subsequent negotiations.
- Establishing the consortium as a separate legal entity is critical to maintaining the perception of equity in service delivery and decision making by both boards. In response to

potential concerns relating to a perceived imbalance in decision making and authority based on the differing size of the jurisdictions, it should be noted that the proposed governance structure is premised on equal representation by both jurisdictions on the Board of Directors which, in turn, directs ESTA administration.

- Efficiencies gained through collaborative service delivery will be directed into service improvements and minimizing future increases to bus pass fees.
- A number of opportunities exist for advocacy with Alberta Education, including a commitment to provide funding incentives related to the establishment of the consortium model.
- In order to maximize the ability of both boards to support independent programming and student accommodation decisions with transportation services, the proposed financial model involves a responsive cost-share model. Given that each board will face unique demands, bus pas fees for each jurisdiction may differ.
- While a number of potential initial efficiencies are identified, the potential for future efficiencies will be more accurately determined after the consortium is operational. The focus for the first 12 to 24 months will be on operationalizing a consistent, effective service delivery model.
- Communication with stakeholders is critical throughout the design and implementation phases of the consortium.

The transition plan for staff members from both jurisdictions will be an area of focus. In collaboration with Human Resources and key stakeholders, items such as current collective agreements, pension and benefit plans, and transition of employment will be discussed.

OPTIONS

The following options are selected for consideration as they are deemed the most admissible:

1. Approve recommendation and direct Administration to initiate Phase I of detailed design and implementation, as referenced in the Feasibility Study.
2. Not approve recommendation and continue with the current service delivery model.

CONSIDERATIONS & ANALYSIS

Independently, both jurisdictions combine for total approximate annual expenditures of $55 million. Approximately one-third of the total transportation costs are recovered by both boards through the collection of bus pass fees, with the initial two-thirds of costs covered by provincial grants. As transportation demands increase due to planned urban growth and the need for student accommodation planning, it is anticipated that the consortia model will represent a degree of insulation against the continued gap between funding and total transportation costs. Through economies of scale and a reinvestment of efficiencies, a transportation consortium will be well positioned to respond to current challenges associated with the existing transportation delivery model, specifically:

- unfunded requests for transportation support programming diversity and school designations;
- driver shortages experienced by contract carriers;
- supervision requirements on buses for students with unique transportation needs;
- in-house route design of special needs and Early Years curb service busing; and
- additional support related to dispatch and operational customer support.

Funds required for detailed design and subsequent start-up costs will be proportioned between the boards, with the Edmonton Public School Board portion being drawn from existing Student Transportation surplus reserves.

NEXT STEPS

To be determined.

ATTACHMENTS & APPENDICES

ATTACHMENT I Edmonton Student Transportation Authority Feasibility Study

CW:gm

ATTACHMENT 1

Edmonton Student Transportation

Edmonton Public School Board & Edmonton Catholic School District Consortia Model Feasibility Study

January 2014

Steering Committee Members

Edmonton Catholic School District

Boris Radyo
Assistant Superintendent, Educational Planning

Debbie Hunter
Manager, Transportation Services

Edmonton Public School Board

Dr. Lorne Parker
Managing Director, Planning, Student Transportation, Property Management, Programs, and Archives

Chris Wright
Manager, Student Transportation

Table of contents

Executive Summary

The Edmonton Public School Board (the "EPSB") and the Edmonton Catholic School District (the "ECSD") are currently investigating the possibility of forming a joint student transportation consortium to provide common administration and delivery of transportation services to students within their respective jurisdictions. As planned urban growth and the dynamics around district requirements and student placement outpace existing services delivery models, the EPSB and ECSD (the "Boards") are seeking operational efficiencies to ensure the delivery of transportation services within budget allowances.

There is a strong precedent to suggest that either significant financial savings or operational improvements are achievable through the adoption of the consortium model. Currently, the Boards cooperate in the contracting and routing of transportation carriers for special needs students and some yellow bussing and are considering expanding this relationship. The Boards have cooperated as effectively as possible within the current service delivery model, and any additional opportunities for collaboration will be limited unless a consortium model, in which the Boards come together and corral resources in order to better manage service demands and budgets, is adopted. Exploring the formation of a joint consortium is a natural extension of the significant cooperation that already exists between the Boards and will serve as a model for other Alberta boards to emulate.

Acting on separate motions from each of the Boards in February 2013 granting them permission to explore the feasibility of the consortium model, the Boards have engaged Deloitte to study the applicability of a consortium and to assist with the development of a feasibility report. The purpose of the report is to evaluate the feasibility of establishing a student transportation consortium between the two Boards, and determine both the associated costs and benefits of an Edmonton consortium.

A two pronged process was used to determine the feasibility of establishing a consortium in Edmonton. First, a workshop was conducted in which participants developed a framework for the proposed consortium. In developing a framework for the consortium the team identified areas of strength and weakness. The workshop revealed there were no significant and unresolvable differences of opinion on the structure or operational functions of the proposed consortium. Second, the team conducted a qualitative and quantitative cost-benefit analysis that showed the long term cost savings achievable through routing efficiencies under the consortium model. The results of these two processes form the basis for determining that not only is a consortium feasible in Edmonton but that the model will allow Edmonton to achieve operational and financial benefits.

Subsequently, the Boards conducted a peer review exercise of established Ontario consortia, with the purpose of identifying any additional issues these consortia experienced while they were being implemented, along with any lessons learned or items they would do differently. The major findings from this exercise include:

- Communication is critical throughout the preparation and implementation phases;
- Future challenges and opportunities for disagreement related to the intent or direction of the Consortium are diminished through a strong relationship built on trust and transparency; and
- Create a legal framework and governance model for the consortium that is as simple and transparent as possible.

The study is composed of an initial analysis of the current operations, a detailed framework for a consortium, a summary of the peer review findings, a cost-benefit analysis of both quantitative and qualitative benefits and costs, an assessment of implementation risks and a high level analysis of the next steps of implementation.

Current operations

The key performance indicators for the existing Boards are summarized in the Table 1 below:

Table 1: 2012-2013 key performance indicators of the ECSD and EPSB

Indicator	ECSD	EPSB
Cost per transported student	$1,095	$1,178
Cost per enrolled student	$497	$398
Cost per kilometre	$4.10	$4.81
Average Capacity	66.9%	44.5%
Percentage of double runs	8.6%	8.0%
Average ride time	27 min	24 min
Percentage of students with ride times in excess of ride time policy	7.7%	0.3%

Consortium framework

. The key features of the proposed consortium framework include:

- The Consortium is governed by a six member Board of Directors (three from each school board) which includes Board administration, and school representatives;
- The Consortium will be a separate legal entity and have an independent office location;
- The Consortium will have 24-28 FTE employees; and
- The Consortium will operate with one set of policies, which will be harmonized from the current policies of each of the Boards.

One of the key objectives of developing the Consortium framework was to identify issues and determine if establishing a consortium would be feasible. The three key issues that were identified that will require ongoing analysis were cost sharing, user fees and human resources. In terms of cost sharing, the Boards acknowledged that a cost sharing formula that accurately represents the actual costs incurred by the Consortium is a determinate of success. In the Boards' opinion, a cost sharing formula that allocates direct transportation costs based on both student count and passenger seat kilometres achieves this. From a human resources perspective, collective bargaining representation, transfer of benefits and pay equalization were seen to be issues to be aware of moving forward. In considering user fees, the process by which user fees are set and how "equitable" rates are determined remains to be finalized. In addition to these issues, the timing of costs and cost savings, and stakeholder communications were also identified as potential pressure points. However, none of the issues were seen to be "deal breakers" that would prevent a consortia model from effectively working, and therefore it can be concluded that a consortia model is feasible for the two Edmonton Boards.

The benefits associated with a consortium greatly exceed the costs. In reviewing routing efficiencies alone, the Boards were able to determine that integrating routing between the two boards would result in potential cost savings of $2.5 to $2.7 million on an annual basis (based on a sample route analysis of 80% of fixed route yellow busses). Operational economies of scale would generate additional savings. From a cost perspective, implementation would require investments in software, legal and consultant fees, and setting up a functional office. For the purposes of the study these were conservatively assumed to be in the range of $2.35 million. Therefore, the initial investment would be paid back within the first year of integrating routes or two to three years after the initial investment. In addition, there are several qualitative benefits of establishing a consortium such as limited liability, simplified processes for students, parents, schools, and carriers, and environmental benefits that should be considered. Furthermore, cost savings from routing efficiencies can be reinvested into the system for items such as further reducing ride times and increasing safety programs. Finally, another benefit, although not directly associated with a consortia model, is that the implementation of the process will provide an opportunity for the Boards to review their current operations and make improvements where they are deemed necessary.

In the event that the Boards approve establishing a consortium, it is expected that the implementation period be comprised of three phases, and will be complete for the beginning of the 2015/2016 school year. The first phase from February 2014 to January 2015 will be to finalize the consortium structure, and develop all of the required agreements. In addition, the Boards will start developing the organization's policies, practices, and contracts, and selecting routing software. This will be followed by Phase 2 from January 2015 to May 2015, which will include the operationalizing of the consortium with staff either being transferred or seconded to the organization. This phase will also include completion of the integrated routing and a new procurement of carriers. The final phase, which represents full integration, will begin in June of 2015.

Background

According to Section 51(1)a of the *School Act*, each school board is mandated to "provide for the transportation of a student to and from the site of the school in which the board has enrolled the student if the student resides 2.4kms or more from the school." As such, Alberta Education provides funding to school boards to bus Kindergarten to Grade 12 students.

The jurisdiction of the ECSD and EPSB include a combined 290 schools. The number of students enrolled in both jurisdictions totals 123,907. Of those students, the Boards are responsible for transporting almost 44,000, kindergarten, elementary, junior high, senior high, special needs and early education students per day using yellow buses and public transportation. In so doing, the ECSD spent roughly $17 million in 2012-2013 to transport 15,824 students, which is about 5.2% of its annual budget. The EPSB spent approximately $33 million dollars in 2012-2013 to transport 27,664 students, which is approximately 4.1% of its annual educational budget.

There is a strong precedent to suggest that either significant financial savings or operational improvements are achievable through the adoption of the consortium model. The Boards are aware that student transportation consortia models have been successfully implemented in other jurisdictions in Canada, such as Ontario, and would like to benefit from the experience of these jurisdictions, leveraging past successes as much as possible, while at the same time tailoring the model to ensure it meets the unique needs and requirements of the Boards, transportation carriers, students and parents.

The Boards have cooperated as effectively as possible within the current service delivery model, and any additional opportunities for collaboration will be limited unless a consortium model, in which the Boards come together and corral resources in order to better manage service demands and budgets, is adopted.

Exploring the formation of a joint consortium is a natural extension of the significant cooperation that already exists between the Boards and will serve as a model for other Alberta boards to emulate. Acting on separate motions from each of the Boards in February 2013 granting them permission to explore the feasibility of the consortia model the Boards have engaged Deloitte to assist with the development of a feasibility report. The purpose of the report is to evaluate the feasibility of establishing a student transportation consortium between the two Boards, and determine both the associated costs and benefits of an Edmonton consortium.

Methodology

A two pronged process was used to determine the feasibility of establishing a consortium in Edmonton. First, a workshop was conducted in which participants developed a framework for the proposed consortium. The Transportation Manager and select staff of each of the boards participated in the workshop that was facilitated by Deloitte. In walking through and constructing a framework for the consortium the team identified areas of strength and weakness of the proposed framework. Detailed aspects of consortium management (including governance, organizational design and financial management), policies and practices (including eligibility and safety), routing and technology (including software and base maps) and contracting (including contracting processes and contract clauses) were reviewed to identify areas of agreement and challenge. Should the workshop have revealed that there were significant and unresolvable differences of opinion on the structure or operational functions of the proposed consortium, the feasibility of implementing the model would have been questioned. To supplement these results, the Boards also conducted a peer review exercise of established consortia in Ontario. This exercise consisted of visiting four established consortia in Ontario, along with several conference phone conversations with Ontario consortia management and school jurisdiction

administrators. The purpose of the exercise was to identify additional issues these consortia experienced while they were being implemented, along with any lessons learned or items they would do differently.

Second, the team conducted a qualitative and quantitative cost-benefit analysis. Should this analysis have revealed there were significant costs to implementation with little long term cost saving opportunities or benefits, the feasibility of establishing a consortium would have been questioned. The results of these two processes form the basis for understanding the feasibility of a consortium model in Edmonton and the results are presented hereunder.

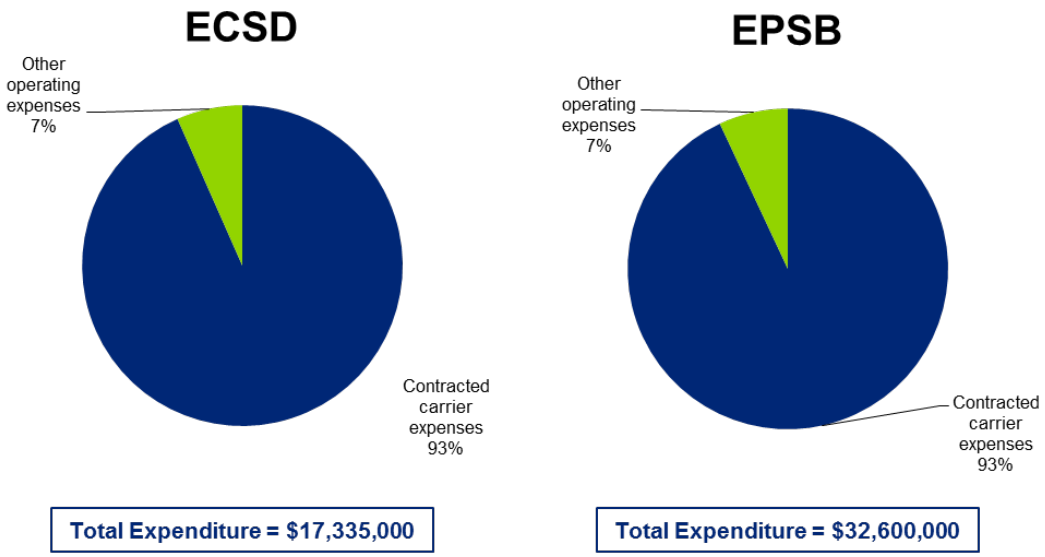
Current operations

In order to set the context for the feasibility assessment, this section outlines the existing transportation system in Edmonton. The section outlines financial and operational key performance and cost indicators, current policies and practices, routing performance indications and contracting practices.

Financial and Operational

In 2012-2013 the two Edmonton Boards transported a combined total of 19,488 students on yellow buses, 8,824, and 10,664, for the ECSD, and EPSB respectively. In addition, the Boards purchase subsidized public transportation passes for approximately 24,000 students combined on a monthly basis. In 2012-2013, the ECSD had a budgeted total expenditure of $17,335,000 to provide transportation services to these students, while the EPSB budgeted $32,600,000. Of the total expenditures, direct transportation costs, i.e. third-party carrier costs, accounted for 93% of the total transportation costs within both Boards, as illustrated in Figure 1. Direct transportation costs include the costs associated with fixed routes, noon-time kindergarten, special needs, early education ("EE"), public transportation, and parent provided transportation.

Figure 1: 2012-2013 distribution of transportation expenditure by Board



Other operating expenses represent the planning and administrative costs associated with managing a student transportation system, and include items such as staff salaries and benefits, training, supplies, safety programs, and software licenses. Of these expenses, staff salaries and benefits represents approximately three quarters of the costs.

When assessing the operations of a student transportation system, two of the key metrics that are consistently used are cost per student transported, and cost per kilometre travelled. While these metrics provide an insight into the efficiency of the system, they are only statistical indicators, and as a result, need to be considered in context of legislative requirements, geography involved costs and transportation policies to fully interpret these metrics.

Cost per student

Total cost per transported student is a metric used to measure the efficiency of the transportation system. For example, boards that succeed in routing as many students as possible, on as few routes as possible will have a low cost per student. Based on the 2012-2013 budget information provided by the Boards, the ECSD has a total cost per transported student of $1,095, while the EPSB has a total cost per student of $1,178. Total costs include both the direct cost that is charged by the third-party carriers, as well as the other operating expenses such as staff salaries, that are required for the management of the system.

Figure 2 below provides comparable cost per transported student for selected Canadian jurisdictions.

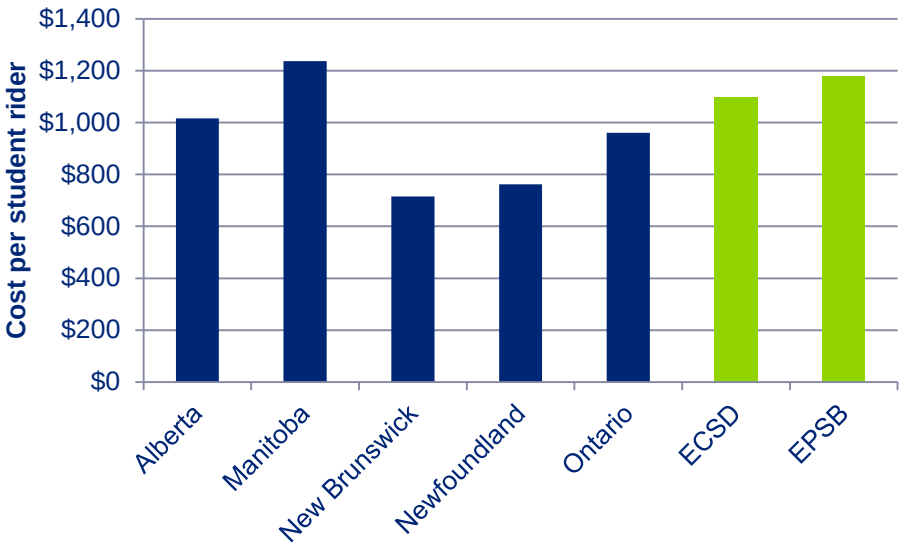


Figure 2: Average cost per transported student by province

Figure 2 shows that the cost per transported student for the ECSD and EPSB are higher than those of many of the other jurisdictions, including the remainder of Alberta. However, as mentioned above, these values need to be interpreted in context and not just as comparatives.

For instance, the Province of Alberta's education system includes a school of choice concept, where parents and students have the option of choosing to attend a school other than the one for which they are designated. Although it is not mandatory that transportation be provided to students attending an alternative school, both the EPSB and ECSD do provide busing to a number of alternative programs. The EPSB provides transportation to almost all of its alternative programs, albeit not from everywhere in the City, and the ECSD provides busing to all second language programs. Due to the increased costs of providing these services, it is understandable that the cost per transported student is somewhat higher for both Boards than in other jurisdictions, and that the EPSB, who provides more busing to alternative programs, has a higher cost per transported student than the ECSD.

Another factor that is contributing to the higher cost per transported student is the transportation of early education students. Both of the Boards provide curbside transportation to early education children, which is not typical across other jurisdictions. Curbside pickup requires substantially more time, as individual stops are required for each student, and therefore, in order to keep within ride time policies, additional buses are required. Referring to Table 2 below it is quite evident that providing early education services raises the transportation cost per transported student, as it accounted for 7.6%, and 12.4% of the 2012-2013 total direct costs for yellow buses listed below for the ECSD and EPSB, while only making up 3.2% and 6.1% of the number of students transported, respectively.

Table 2: 2012-2013 direct expenditure by student type

Direct Expenditure	ECSD			EPSB		
	Direct cost	# of transported students	Cost per transported student	Direct cost	# of transported students	Cost per transported student
Fixed routes	$7,500,000	7,380	$1,016	$7,975,000	7,167	$1,113
Kindergarten (noon hour)	$900,000	989	$910	$1,560,000	1,134	$1,376
Early education	$835,000	280	$2,982	$2,300,000	650	$3,538
Special needs	$1,750,000	175	$10,000	$6,700,000	1,713	$3,911
Public Transportation	$4,450,000	7,000	$636	$10,950,000	17,000	$644

Another metric that is important in this context is cost per enrolled student. Due to the provincial funding model, where funding is tied to total number of enrolled students, the cost per enrolled student is another measure of efficiency and has an impact on the rate of yellow and public transportation bus passes. As a result, the cost per enrolled student metric captures the movement of the funding gap. In the 2012-2013 school year, the cost per enrolled student was $497 and $398 for the ECSD, and EPSB respectively.

Cost per kilometre

In 2012-2013, yellow buses transported ECSD students 9,526 kilometres per day, while yellow buses transporting EPSB students travel 8,637 kilometres per day. Based on a 192 day school year, these values equate to 1,828,992 kilometres, and 1,658,304 kilometres per year. These values are for “loaded” kilometres travelled and do not include “deadhead” distances, and are for fixed route service only, i.e. they do not include noon-time, special needs or early education curbside busing. Using the costs shown in Table 2, the ECSD has a cost per kilometre of $4.10, and the EPSB has a cost per kilometre of $4.81.

Although there is a small difference between the two Boards, the values need to be considered in context with specific board program distribution and student accommodation. For instance, the ECSD has less schools, and therefore on average has to transport students a greater distance, which drives down the total cost per kilometre. Therefore, it is understandable that the ECSD has a lower cost per kilometre travelled. That being said, this is cancelled out partially by the fact that EPSB transports students to a significant number of alternative programs, while the only alternative programs the ECSD transports students to are second language programs. Alternative programs are typically regional programs, which require the Boards to transport students a greater distance.

System management

Figure 1 illustrated that roughly 93% of each Board’s total expenditures are direct costs. Therefore, the remaining 7% are associated with the management and administration of the system, such as planning routes, coordinating with carriers, and developing safety programs. In order to complete these tasks, the Boards each have dedicated transportation departments. The ECSD’s and EPSB’s transportation departments employ 10.6 full time equivalent (“FTE”) employees and 14 FTE employees, respectively. When considering the total number of students transported noted in Table 2, this works out to approximately 832 students per employee for the ECSD, and 761 students per employee for the EPSB. Although these numbers are fairly comparable, one possible explanation for the difference is that the EPSB has a much larger number of special needs students that require a customized transportation solution thereby accounting for the higher FTE count.

The current organization charts for the ECSD and EPSB departments are provided in Figure 3 and Figure 4, respectively.

Figure 3: Current EPSB organizational chart

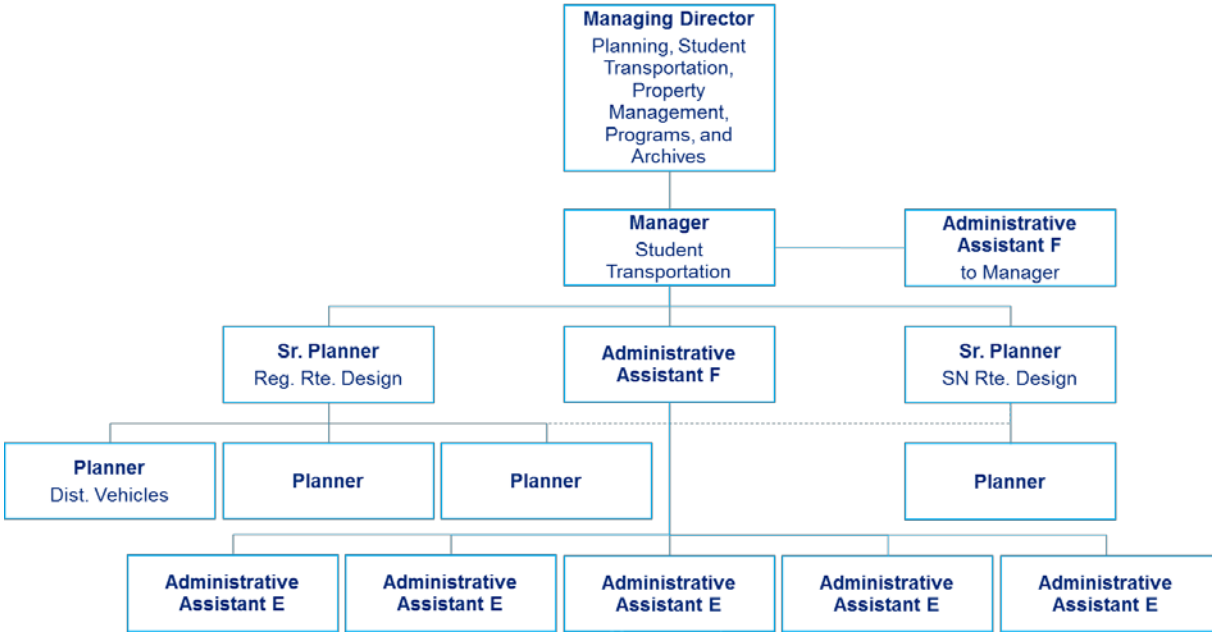
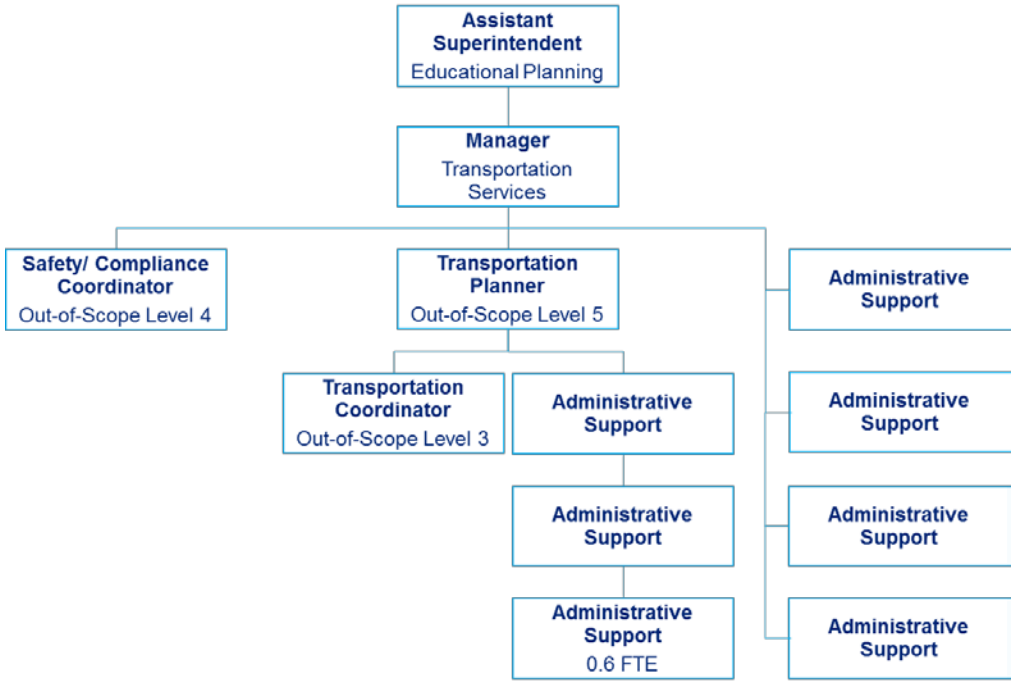


Figure 4: Current ECSD organizational chart



Policies and practices

Each of the Boards have a manual that outlines the policies and practices that transportation department staff are to follow when developing and administering the transportation system. The EPSB has published a *Transportation Service Delivery Handbook*, while the ECSD has published a *Transportation Information and Procedures for Secretaries (TIPS) Manual.* For the most part the manuals cover policies and practices regarding roles and responsibilities, eligibility, operating guidelines, emergency procedures, and special needs.

Routing

Board provided capacity utilization, asset utilization and ride time metrics are presented below.

Capacity utilization

One of the key indicators of a transportation system's effectiveness and efficiency is bus capacity utilization, which measures the number of students that ride a bus compared to the available capacity. As per the above, it is critical to review these metrics in the context of where and how they are created. The average capacity utilization across the ECSD system was 66.9% in 2012-2013. The EPSB average capacity utilization was 44.5%. One of the key contributors to the difference in capacity is that the EPSB transports many more students to alternative programs. As previously mentioned, routes for alternative programs are longer, and therefore take more time to complete. In order to keep routes within the maximum ride time policy, the number of students on each route is necessarily kept low.

Asset Utilization

Asset utilization is the metric used to describe how many runs per day, on average, a bus is able to complete. When looking at the two boards, only 8.6% of the ECSD buses, and 8.0% of the EPSB buses completed double runs, and no buses completed triple runs in 2012-2013. These values are lower compared to other rates throughout the country. For instance, looking specifically at the four consortia visited during the peer review process, depending on the metric the consortium used, the number of buses performing multiple runs averaged between 40%-50%, or on average, buses completed 3.5-3.6 runs per day.

The primary constraints to using a bus multiple times are the density of the population, distance travelled, and travel time, and in the case of Edmonton the contracted time of a bus (i.e. the contract with the bus carriers includes a time limit for the morning and afternoon sessions.) Edmonton has one of the lowest urban densities of major Canadian cities, resulting in long routes that take a long time to complete making it difficult to complete double runs within an acceptable timeframe. In addition, the large number of students transported to regional alternative programs increases route lengths and times, further minimizing the potential to complete double and triple runs. Although population density and distances from homes to schools are fixed, time constraints can be managed and mitigated by the strategic management of bell times. However, in the current system, setting bell times is the responsibility of the schools. Although schools are asked to coordinate with the transportation departments, issues such as supervision of students have, to date, prevented the transportation departments from making any headway on this issue. Currently, 85% of the schools within both Boards start between 8:26-8:45, and 62% of school end between 3:11-3:30, requiring greater than 90% of the buses to run single routes. Figure 5 and Figure 6 below graphically illustrate the distribution of school start and dismissal times for both of the Boards.

Figure 5: 2012-2013 ECSD and EPSB school start times

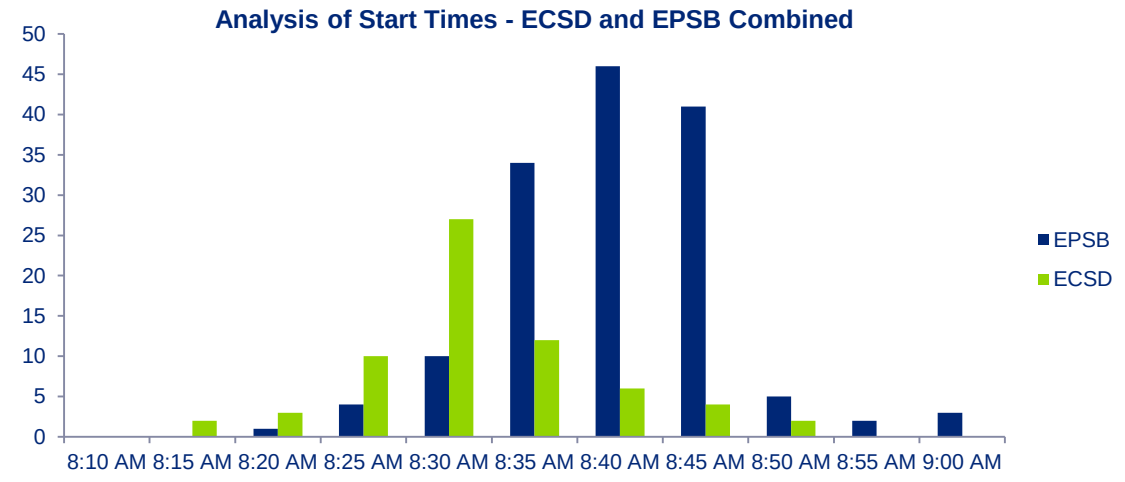
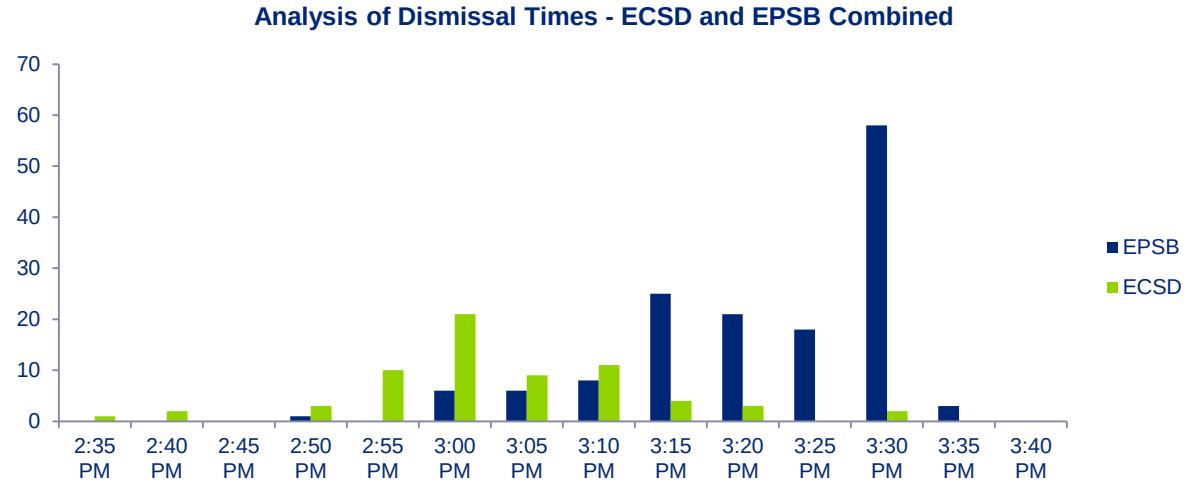
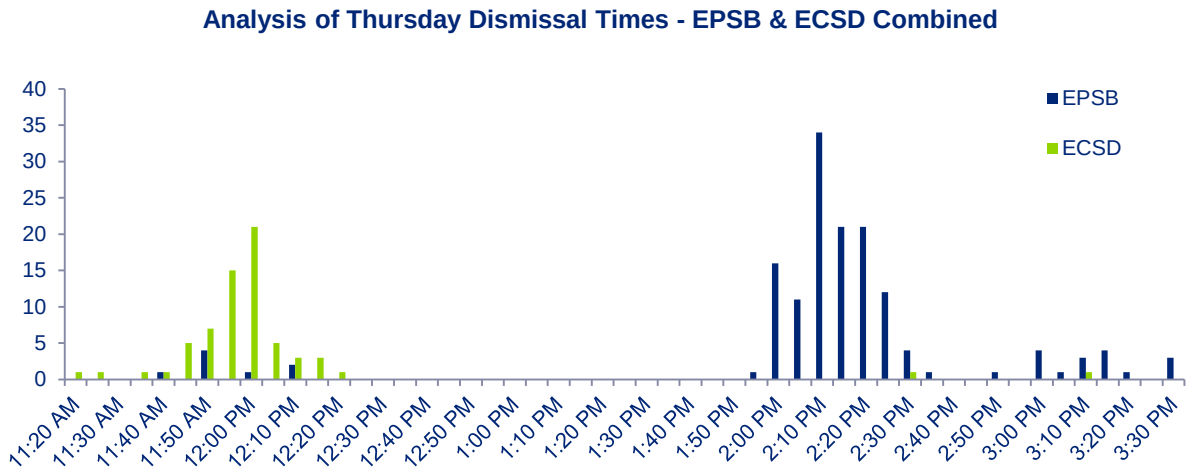


Figure 6: 2012-2013 ECSD and EPSB school dismissal times



Adding to the difficulty in asset utilization, several schools in both the Boards currently have early dismissals on Thursdays. Similar to the standard dismissal times a large percentage of the dismissal times fall within the same 30 minutes, making it close to impossible to design double routes. Figure 7 displays the distribution of early Thursday dismissal times.

Figure 7: 2012-2013 ECSD and EPSB early Thursday dismissal times



Ride Times

The two systems' effectiveness and efficiency metric associated with ride times are (1) average ride times, and (2) percentage of students with ride times exceeding maximum ride policies. The current one-way ride times for both boards are displayed in Table 3 below.

Table 3: 2012-2013 Average ride times

	EPSB	ECSD
Average ride times	• Fixed route: 24 minutes • Alternative program: 31 minutes • Early education: 38 minutes • Special needs: 41 minutes	• Fixed route: 27 minutes • Alternative program: 35.5 minutes • Early education: 22 minutes • Special needs: 31 minutes

As previously mentioned, the fewer number of schools in the ECSD result in longer distances to be travelled, which can lead to longer ride times. Looking at percentage of routes exceeding ride time policies, only 0.3% of students have routes that exceed their maximum ride time limits of 60, 80, or 90 minutes (varies based on service type), compared to 7.7% that exceed 60 minutes for ECSD.

Contracts

Both of the Boards have standard contracts in place for all carriers which outline legal, safety and other non-monetary terms. For the most part the contract includes the standard clauses that would be considered best practice in the industry. The EPSB's current contracts were procured in 2010 using a Request for Proposal (RFP) process, and are currently in the fourth of a four year contract term, and the Board has three, one year options that it may exercise. The ECSD's current contracts were also procured using an RFP process, however, they are currently in the eighth year of a ten year contract that was subsequently signed with carriers following the expiration of the contracts agreed to through the RFP process.

Proposed consortia model

The scope of this consortia analysis is to identify and evaluate opportunities for increased collaboration across a range of management and operational functions. Four key categories where Boards might collaborate include:

- Shared service delivery – the actual sharing of buses and bus routes with the aim of reducing the aggregate number of buses required.
- Shared support services – the sharing of positions and functions that support the delivery of transportation services, such as accounting services, but that don't directly impact service delivery.
- Shared infrastructure – the sharing of physical infrastructure, such as routing software, and office space.
- Shared management services – the sharing of management oversight, including senior management, in order to better optimize operations.

Through a workshop process a framework for the proposed consortium was developed which highlighted the areas with general consensus and the areas where reaching an agreement on the proposed path forward could be challenging. The framework is presented below in the following sections:

- Consortium management: includes governance, organization structure, management, and financial management;
- Policies and practices: includes identification of EPSB's, and ECSD's, and the Consortium's proposed policies;
- Routing and technology: includes routing software, communication portals, digital map and student database, and planning and routing; and
- Contracting: includes contract structure, carrier payment formula, contract procurement, and contract management.

Governance

Governance refers to the way in which an organization is directed and controlled. Establishing administrative structures and processes that facilitate, monitor, measure and improve effective business management are primary responsibilities of an organization's governing body. Three key principles for an effective governance structure are: accountability, transparency, and the recognition of stakeholders. In order to respect these three principles, it is important that the governance body of the organization be independent of the team responsible for the day-to-day operations of the organization. All of the governance related items discussed in this section should be formalized in the consortium agreement and by-laws between the Boards.

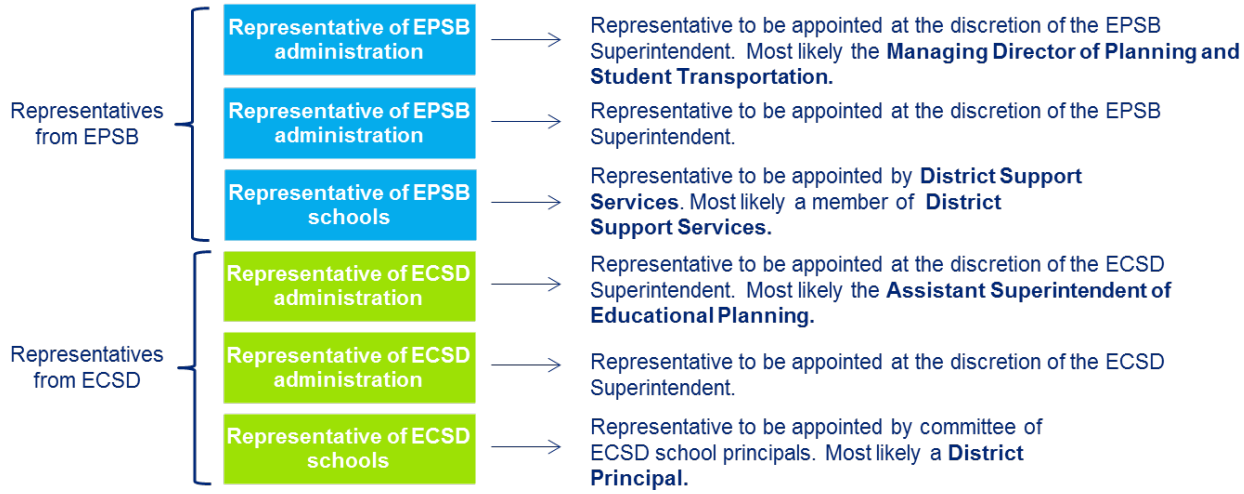
Structure of the Board of Directors

The Board of Directors, which is charged with oversight responsibilities for the Consortium, should have equal representation from each school board in terms of membership. Equal representation promotes fairness and equal participation in decision making and ensures the rights of each board are considered equally.

The proposed Board of Directors will be comprised of six members (three from each of the Boards). A board of six directors is ideal as it makes the board large enough to allow for sufficient representation of the various stakeholders and flexibility to reach quorum, while still being small enough to emphasize the

weight of each director's opinion and allow the board to communicate and coordinate itself efficiently. The proposed structure and members for the Board of Directors for ESTA is illustrated in Figure 8 below.

Figure 8: Proposed ESTA Board of Directors



The Board of Directors noted above represents two key stakeholders in student transportation in Edmonton, school board administration, and school administration. Much like in a private corporation, it is important that the Board of Directors be independent of the day-to-day management of the Consortium in order for them to fulfill their oversight role objectively and in the best interest of the Consortium.

Role of the Board of Directors

An effective governance structure calls for a clear distinction between the roles and responsibilities delegated to Consortium governance and Consortium management. This allocation of roles and responsibilities should reflect a separation between oversight and the day-to-day activities of Consortium management.

More specifically, the oversight roles and responsibilities of the Board of Directors will include:

- Review and approval of the Consortium administrative and operating budgets on an annual basis;
- Appointment or termination of the Consortium's General Manager, along with the evaluation of the General Manager's performance;
- Providing governance related communication between the Consortium and the Boards, including the Board's trustees (all day-to-day communication between the Consortium and the Boards will be the responsibility of the Consortium's staff);
- Approving and publishing an annual report on the performance of the Consortium;
- Review and approval of the strategic direction of the Consortium; and
- Advocating on behalf of the Consortium to the Province of Alberta's Ministry of Education regarding issues associated with student transportation.

In contrast, the Consortium's management will be responsible for the day-to-day operations of the Consortium such as, operations, staffing, policy implementation, budget development, contracting, etc.

The separation of roles and responsibilities between the Board of Directors and the Consortium's Management needs to be reflected in both the documentation and in practice. As previously mentioned, the independence of the Board of Directors allows them to fulfill their role objectively, in the best interest of the Consortium and its stakeholders.

The Board of Directors will meet a minimum of four times a year, on a quarterly basis, with the allowance for additional meetings as required, such as during a year that a new Request for Proposal ("RFP") will be issued. It should be noted that during the first year or two, when the Consortium is starting up, more

frequent Board of Directors meetings will most likely be required. In order to ensure all stakeholders are fairly represented at each meeting, in order to constitute a quorum, attendance is required by at least one representative from each of the Boards, and one representative from each of the stakeholder groups (board administration, board governance, and school administration).

Board of Directors decision making policy

Ideally, all governing decisions and approvals made by the Board of Directors should require consensus amongst the members. As the success of the Consortium is dependent on the commitment to the Consortium by all stakeholders, decisions based on the Board of Directors consensus would indicate that this is indeed the case. That being said, in order for the Board of Directors to govern effectively, the decision making process is also required to be efficient. Therefore, in the event that consensus amongst the Board of Directors cannot be reached, a vote requiring the quorum majority should prevail.

In addition, as there is an even number of Directors on the Board, a dispute resolution procedure at the Board of Directors level should be specified in the Consortium agreement. Ideally, the process should include intermediate dispute resolution steps prior to the issue being escalated to binding arbitration.

Consortium and organizational structure

An optimized consortium and organizational structure can promote effective communication and coordination which will enable operations to run more efficiently. The roles and responsibilities within the organization should be well defined. This will lead to operational efficiencies by ensuring tasks are not being duplicated and issues raised can be addressed effectively by consortium management. Ideally, the organization is divided functionally (by department and/or area); all core business functions are identified; and there is an appropriate allocation of general management and operational responsibility.

Form of legal entity

The Consortium's legal status should reflect careful consideration of issues related to, among others, liability; corporate continuity; staff planning; contracting and management. It is proposed that the Consortium will be incorporated as a separate legal entity. Incorporating as a separate legal entity:

- Ensures the Consortium remains independent in terms of managing its daily operations;
- Ensures that the structure and mandate of the Consortium remain consistent despite potential changes at either of the Boards (i.e. changes in trustees, Board members, etc.); and
- Provides contractual benefits to the Consortium i.e. as a separate legal entity, the Consortium can enter into binding legal contracts with third parties, including bus carriers, for all services purchased, and as such is limiting liability to the Consortium and in turn limiting liability to the Boards.

Consortium site

The Consortium's office will be located in a separate location than that of the two Boards. Independence of this type from the Boards is an effective way of ensuring that the structure and mandate of the Consortium remains consistent despite the potential changes at the Board level.

In terms of the specific location, the Consortium's office will ideally be a low cost, centrally located space. It is important that the space be centrally located for several reasons:

- The Consortium will most likely initially be purchasing services, such as IT support, from the two Boards, and therefore it would be more efficient to be located within a relatively close proximity to the board offices of the two Boards;
- In order to increase the probability of retaining the current transportation departments' staff working at each of the Boards, minimizing the alterations required to the commute of staff would make the Consortium more attractive; and
- A centralized location minimizes the travel required to conduct facility and route audits of carriers, which would increase efficiency.

Organization of entity

The organizational structure should reflect clear lines of reporting and the organization should be divided functionally (by department and/or area). This structure allows for increased specialization and encourages ownership of assigned tasks, thus increasing effectiveness and helping to create an appropriate system by which issues can be escalated to Consortium management. It should also provide for professional development and an opportunity for promotion.

Leading the proposed organization is the Management Team. The Management Team, through the General Manager will report directly to the Board of Directors and, provide leadership and strategic direction to Consortium, and its staff and will have overall responsibility for the performance of the Consortium. The Management Team will consist of two to four individuals, and include a General Manager who will be the figure head/public face of the Consortium, liaising between the school boards, Board of Directors, media, and public on issues regarding student transportation.

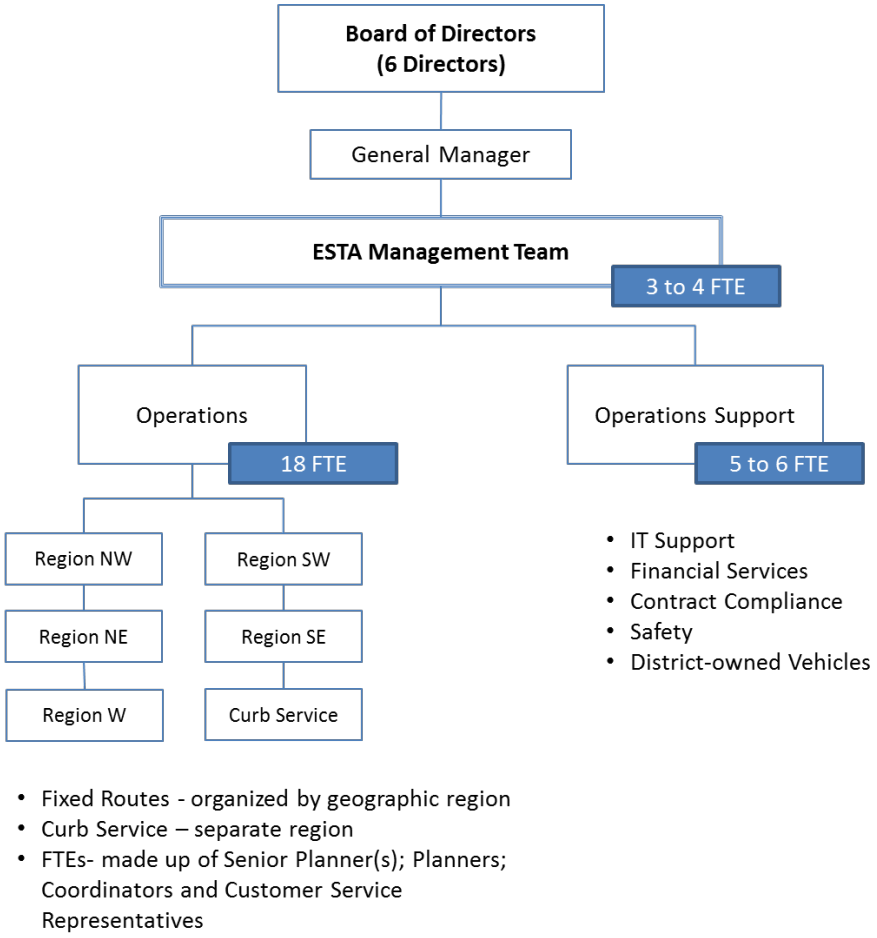
The remainder of the organization will be divided into two functional, the Operations group, and the Operations Support group.

The operations group will include both transportation planning staff, and customer service staff. Transportation planning staff will provide service to five distinct regions of the City, and curbside transportation, and be responsible for the design, implementation, and administration of student transportation. The customer service representatives will field calls and respond to concerns from schools, parents, students, and carriers. Similar to the transportation planning staff, the customer service representatives will be designated to specific regions to ensure they are well versed in the region and its schools, and its routing strategies.

The Operations Support group will include staff responsible for a variety of support functions, including: (a) IT Support, which will be responsible for maintenance of the Consortium's Information Technology (IT) system and supporting all of the Consortium's technology platforms, (b) Financial Support, which will be responsible for the day-to-day financial management of the Consortium, and (c) Safety & Compliance Support, which will be responsible for the coordination of safety and accessibility programs, conducting carrier compliance, facility and route audits, and conducting route risk assessments.

The proposed Consortium will initially require 24-28 full-time equivalent ("FTE") employees. The organizational structure is illustrated in Figure 9 below.

Figure 9: Potential ESTA organizational chart



Although the complete organizational structure has not been determined, the following two characteristics will be apparent in the final structure:

- The structure will have multiple employee levels, most notably for the transportation planning staff. A multi-level structure is beneficial in that it fosters employee development, of both technical and supervisory skills through on-the-job learning, structures employee career planning, facilitates Consortium succession planning, and allows for multi-tiered pay levels.

- The transportation planning staff and customer service representatives will be included in the same functional group. The benefit of this structure is that the transportation staff, who have hands-on knowledge of the specific regions (i.e. roads, stop locations, dangerous crosswalks, etc.), and the routing strategy, will work directly with customer service representative who will be communicating directly with carriers, and parents, which should improve efficiency in terms of time, and improve carrier's, student's and parent's satisfaction.

Human resources

The importance and complexity of human resource issues should not be underestimated. These issues should be carefully reviewed by human resources personnel at each of the Boards as well as by their respective legal counsel.

As previously mentioned, the Consortium will require 28 FTE employees. Currently the EPSB, and ECSD, respectively have 14 FTE employees and 10.6 FTE employees within their student transportation departments, for a total of 24.6 FTE employees. As a separate legal entity the Consortium will need to

either hire its own employees or enter into secondment agreements with the Boards, or a combination of the two.

In the event that the Consortium decides to employ its own workers, the following items need to be considered:

- **Pay equity issues:** Employees are currently employed by two distinct organizations and therefore their compensation is based on differing payment strategies and scales. The Boards have acknowledged that there are discrepancies in compensation for comparable roles between the two Boards. However, the discrepancies are not substantial, and the required funding to equalize compensation will be nominal compared to the overall transportation budget.

- **Benefits:** The Consortium will need to select an employee benefits program in which its employees can enrol. In order to encourage the current transportation department employees to accept transfers to the Consortium, the benefits program will need to be comparable to those of the Boards.

- **Transfer of pension rights:** The employees of the two Boards currently both enrol in the same pension program, and in both cases, the programs are defined benefits programs. Therefore, similar to the financial compensation, additional funding will be required to top up plans for those employees coming from the Board with the lesser plan. The fact that the Boards currently use the same provider simplifies this significantly, and the issue of topping up plans is an issue that can be easily overcome.

- **Successor union issues:** Currently, only the administrative staff from each of the Boards are members of collective bargaining units. In the event that a Consortium is established, and employees are transferred to the Consortium there are three potential outcomes:

    a) Unions do not retain employees: In this scenario the administrative staff would no longer be represented by their current collective bargaining units. From the point of view of a union, they are likely to follow the employees, and therefore the probability that this scenario occurs is small.

    b) Both unions retain employees: The ECSD employees are currently represented by an ECSD specific union, making it unclear as to whether employees of the Consortium would be able to maintain their membership in the ECSD union. An offshoot to this scenario is where the new employees of the Consortium organize and apply for certification as a union.

    c) One of the existing unions represents employees from both boards (i.e. employees of the Consortium): As discussed above, the ECSD employees are represented by an ECSD specific bargaining unit. Therefore, the current union that represents the EPSB's administrative staff would maintain the EPSB employees and absorb the ECSD employees.

The other alternative is that the Consortium could enter into secondment agreements with the Boards, where staff working for the Consortium would remain employees of the Boards. However, arranging to second employees also has significant implications. Similar to transferring the employees from the Boards to the consortium, the issue of pay equity needs to be resolved. In addition, there needs to be an agreement in place between the Consortium and the Boards to deal with issues such as which board will be responsible for staffing vacant positions. By seconding employees, the Consortium does not achieve the same level of independence from the Boards, as staff may be jeopardized by Board decisions. This will also make the establishment of a consortium culture more challenging.

There is an alternative in which the Consortium initially seconds employees from the Boards, and once the Consortium is fully established and operating, begins transferring employees to the Consortium, either all at once or gradually. This alternative will be discussed in more detail in the section of the report on implementation challenges.

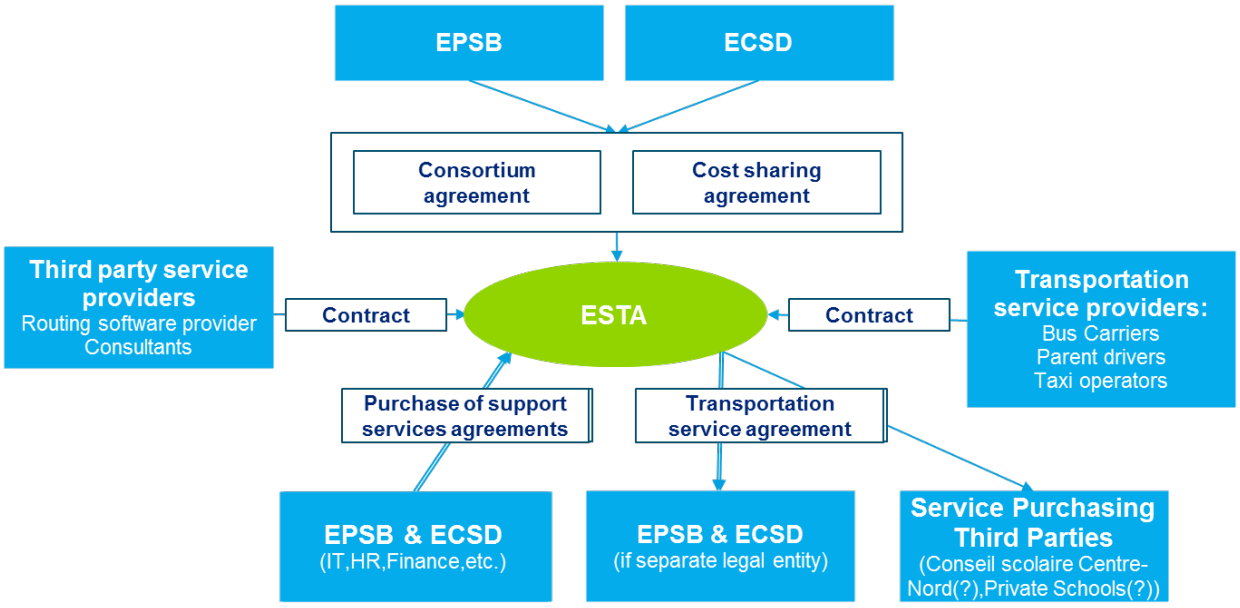
Several outstanding issues remain regarding human resources. The next step involves a detailed discussion with human resources personnel, legal counsel, employees and collective bargaining units. That being said, these issues are neither unique to the Edmonton school Boards, several jurisdictions have successfully implemented a consortium from similar starting points, nor are these issues substantial in the sense that they do not detract from the feasibility of establishing a student transportation consortium. These issues are only highlighted here as substantial issues that will need to be worked through.

Management

Consortium Management focuses on the operational aspects of the organization. This includes ensuring accountability of staff, focusing on continual improvement through operational planning, and risk management by having appropriate contracts and agreements in place to clearly define business relationships.

A consortium should define its business relationships in a clear and comprehensive manner, with each of the Consortium's relationships contractually defined. Figure 10 is a sample of the types of relationships into which a potential Edmonton consortium will enter and the types of contracts that would be used to document them.

Figure 10: Potential consortium relationships



Consortium agreement

A consortium agreement that is signed by both Boards is required to ensure that all parties agree on the terms of the Consortium and, more specifically, to key elements of its structure and operations. This agreement will contain, at a minimum, the following clauses:

- **The purpose and structure of the Consortium**: the consortium agreement will clearly outline the Boards' rationale for creating the Consortium as well as its fundamental purpose as an organization - to deliver safe, cost effective, efficient, responsive, integrated school transportation in the Edmonton area to its member boards.

- **Responsibilities delegated to the Consortium**: the consortium agreement will define the responsibilities delegated to the Consortium by the Boards, in order to help ensure clarity in operations and separate the functions of the Consortium from those of the Boards.

  The responsibilities of the proposed consortium will include:

- Managing and administering all home to school transportation, noon-time busing, and special needs transportation. Charter transportation for extracurricular activities will not be administered by the Consortium;
- Planning, designing and maintaining busing routes for all forms of student transportation noted above;
- Communicating information regarding student transportation (routes, events, bus schedules, etc.) with parents, schools, and carriers;
- Collecting and maintaining up-to-date and accurate student information from the Boards;
- Acting as point of contact with the public (parents, students, officials, media, etc.) regarding student transportation;
- Procuring and entering into contracts with bus carriers for the provision of busing services with the best interest of the Boards;
- Developing a service delivery model that results in a high quality of service;
- Collecting revenue through the sale of bus passes to students;
- Demonstrating financial responsibility and stewardship on behalf of the Boards; and
- Providing a high level of customer service to the Boards, schools, parents and students.

- **Governance structure:** the consortium agreement will document the Consortium's governance structure in order to help with the development of processes that facilitate, monitor, measure and improve effective business management within the Consortium.

  (Please refer to the previous section for information on the proposed governance structure.)

- **Availability of student information:** the consortium agreement will document the requirement on part of the two Boards to maintain an accurate and up-to-date student database and provide this information to the Consortium on a regular basis.

- Other clauses outlining the term of the agreement; conditions for termination; School Board-level dispute resolution processes; confidentiality and the treatment of information; and the maintenance of adequate insurance coverage by both the School Boards and the Consortium.

Cost sharing agreement

A documented and fair methodology for cost sharing should be made available to ensure equity between the Boards and to ensure accountability over costs and adequate operational cash flow for the financial obligations of the Consortium. The cost sharing agreement needs to account for both direct and administrative consortium costs.

Direct costs are the costs directly associated with providing home to school transportation, more specifically, the fees paid to third party transportation carriers. In the current system, each of the Boards develops and manages its own system, and therefore, each of the Boards has a clear understanding of the direct costs associated with their respective students. However, one of the key benefits of a consortium is the routing efficiencies that can be achieved by integrating students from both Boards on one bus, and therefore, in a consortia model, it is necessary to establish a fair and transparent methodology to determine each of the Boards' respective direct costs.

The methodology used to allocate direct costs needs to be (a) responsive to Board decision-making, (b) transparent, and (c) easily governed and administered. Although there are numerous different methodologies for allocating direct costs, the following three are generally considered.

- **Allocation based on student count (weighted or unweighted):** Using this methodology, costs are allocated based on the number of students each Board has on the school bus.

- **Allocation based on passenger seat kilometres:** Using this methodology, costs are allocated based on the distance travelled by all students on a route.

- **Hybrid of student count and passenger seat kilometres.** This methodology utilizes both total student count and passenger seat kilometres to allocate costs.

Based on a scenario analysis, the Boards concluded that the hybrid methodology would be the most accurate reflection of the actual costs to be borne by each of the Boards, as it takes more factors that impact the operation of a bus into account than either of the other two formulas. It was found that the formula was (a) responsive to Board decision-making, as in the Boards' opinion it accurately reflects the actual costs of the Boards regardless of scenario (e.g. number of students changing, school being moved further away, etc., and (b) transparent and explainable to schools, parents, and students. In terms of easily governed and administered, the one drawback of using this methodology is the difficulty associated with obtaining the information required for it. The Boards are well aware of this and are open to investigating new routing software if *Trapeze Mapnet* cannot be customized to automatically provide this information.

Further exploration of the implications of the cost sharing formula and the availability of supporting technology is required, however, from a feasibility perspective, the Boards have reached a tentative agreement on cost sharing, typically one of the most contentious topics, further confirming the feasibility of the consortia model for Edmonton.

Administrative costs are costs that the Consortium incurs that cannot be directly tied to a specific route or student. For instance, administrative costs typically include the following:

- Employee salaries and benefits;
- Staff training programs;
- Office supplies and furniture;
- Computer hardware and software;
- Development and implementation of safety programs (ex. First Rider Program);
- Utilities and maintenance;
- Communication fees (telephone, internet, etc.);
- Insurance, and,
- Professional fees (ex. Third party auditor)

For the most part, these costs are dependent on the total number of students to which the Consortium provides service. For instance, the number of employees required to develop and manage a transportation system is proportional to the number of students, albeit with some economies of scale. Therefore, it is proposed that all of the administrative costs incurred by the Consortium be allocated based on the total number of students enrolled in each Board.

Other agreements

In addition to the consortium and cost sharing agreements, the Consortium will also be required to enter into transportation service agreements, purchase of service agreements, contracts with bus carriers, and contracts with other third-party service providers.

- **Transportation service agreements:** The Consortium will have formalized transportation service contracts in place with the Boards that specify the transportation services that are to be provided by the Consortium to the Boards. These agreements will outline the scope of services to be provided by the Consortium, the fees associated with the service, the quality or level of service to be provided, and dispute resolution and terms. In addition to the agreements with the Boards, once operational, the Consortium may approach or be approached by other third parties, such as the Conseil Scolaire Centre-Nord, or a private school, to provide student transportation services on a fee for service basis. If this is deemed to be to the benefit of the Consortium and is allowed under the Consortium Agreement that is developed, a transportation service agreement would be required with the third party.

- **Purchase of support service agreements:** The Consortium will have purchase of support services agreements in place between the Consortium and the Boards for any support services that are provided. Support services could include financial services (payment processing), IT support, legal counsel, etc. The agreements will outline the scope of the services to be provided and the manner in which the Boards are to be compensated for these services. Although it is too

early in the process to specifically identify which support services will be required, and which Board will provide them, generally speaking, the Consortium would be looking to purchase services from the Board that would be logistically effective and cost efficient.

- **Third party service agreements:** Similar to the support service agreements with the Boards, the Consortium will have support service agreements in place with all of its third party service providers. Again, the agreements will outline the scope of the services to be provided and the manner in which the providers are to be compensated for these services. Although it is too early in the process to determine all of the required services, independent audit services will definitely be required.

- **Transportation service provider contracts:** The Consortium will be required to have contracts with all carriers, parents, and taxi service providers (if applicable). The contracts will outline appropriate legal, safety and other non-monetary terms. This ensures the contractual relationship between transportation service providers and the Consortium is defined and enforceable. Carrier contracts are discussed in more detail in a further section of this report.

Bus passes (Yellow and ETS)

The establishment of a Consortium in Edmonton does nothing to revise the current funding model used by Alberta Education. As a result, funding will not cover the complete costs of transporting students, and bus pass fees will be required.

Defining eligibility criteria is a policy decision, and not a service delivery decision. Therefore, each Board must continue to have the autonomy to decide which students are eligible for access to transportation services. Given that all provincial transportation funding continues to flow into the member Boards, decision making regarding student access to transportation supports and funding should remain aligned. As a result, in order to make up the deficit between the transportation costs charged by the Consortium, and the funding provided by the province, each Board will set its specific fees for bus passes. Although the Consortium will not be responsible for setting bus pass rates, by providing background costing information to the Boards, the Consortium can assist the Boards in making informed decisions regarding these rates.

Purchasing and procurement policies

The Consortium should have clear procurement policies in place with purchasing thresholds associated with various procurement methods. An effective procurement policy will identify the type of procurement method to be used for a given size, type and complexity of good or service being purchased.

In regards to purchasing policies, the Consortium has two options; either (1) the Consortium can establish its own formal procurement policies, or (2) the Consortium can adopt the policies of one of the Boards. It is recommended that the two Board's policies (*DJ.AR Purchasing and Disposal*, and *Regulation 502: Purchasing,* for the EPSB, and ECSD, respectively) be reviewed for appropriateness in transportation procurement decisions, internal controls and work processes. Particular attention should be paid to the purchasing thresholds associated with initiating a competitive procurement process. For reference, the current purchasing thresholds have been summarized in

Table 4 below. This threshold should be practical to allow for sole sourcing of transportation services when it is warranted by varying circumstances.

Table 4: Current Board's and proposed consortium's purchasing thresholds

Purchasing Threshold	EPSB	ECSD
No restrictions	< $5,000	< $3,000
Obtain a minimum of 3 quotes	< $15,000	< $75,000
Competitive procurement	> $15,000	> $75,000

Once reviewed, the Consortium will develop its own purchasing policies, using the two Boards' policies as a guide. Developing its own policies will allow the Consortium to harmonize each Board's purchasing policies while ensuring that these policies are adapted to the particular needs of the Consortium. In addition, formalizing these policies will ensure standardization in the procurement methods of the Consortium and will also act as an accountability mechanism by providing transparency to the Consortium and the Boards.

Consortium Performance Management

The Consortium will have a documented process by which it assesses its own performance using Key Performance Indicators (KPIs) or other performance measures. Formally monitoring a relevant portfolio of KPIs allows the Consortium to quantify its performance, identify problems within its current service model, and generate realistic business improvement plans. The portfolio of KPIs will be regularly reported to the Board of Directors to ensure the Consortium is accountable for its performance.

Although both of the Boards currently informally monitor a small number of KPIs, the introduction of a formal, comprehensive monitoring program would provide an increased understanding of their own performance. Through consultations with the two Boards, it was determined that the KPIs illustrated in Figure 11 below will be used by the Consortium to monitor its own performance. The selected KPIs are not set in stone and can be interchanged as deemed necessary by the Consortium, and although, many other KPIs exist, it is recommended that the Consortium focus on a portfolio of 10-20 KPIs in order that the administration of the process does not become burdensome to the extent that it is more of a formality, at which point it will lose value.

Figure 11: Proposed KPIs for consortium

Routing KPIs: 1. Average ride times by category 2. Number of routes in excess of ride time policy 3. Utilization	**Financial KPIs:** 4. Cost/transported student 5. Cost/enrolled student 6. Cost/km 7. Cost/bus 8. % Actual vs. Budgeted costs
Customer Service KPIs: 9. Number of calls 10. Number of complaints 11. Average response time for complaints	**Human Resources KPIs:** 12. Annual turnover 13. Average/total absentee days

As previously mentioned, the Boards do not currently monitor the full portfolio of KPIs noted above. However, it is recommended that, to the extent possible, the two Boards immediately begin to track the above portfolio individually, prior to the potential formation of a consortium. These records would then serve as benchmark metrics and can used to measure the success of a future consortium.

Financial Management

Sound financial management ensures the optimal use of public funds and also ensures the integrity and accuracy of financial information. This includes appropriate internal controls and a robust budgeting process that has a clearly defined planning and review calendar that promotes accountability and sound decision making.

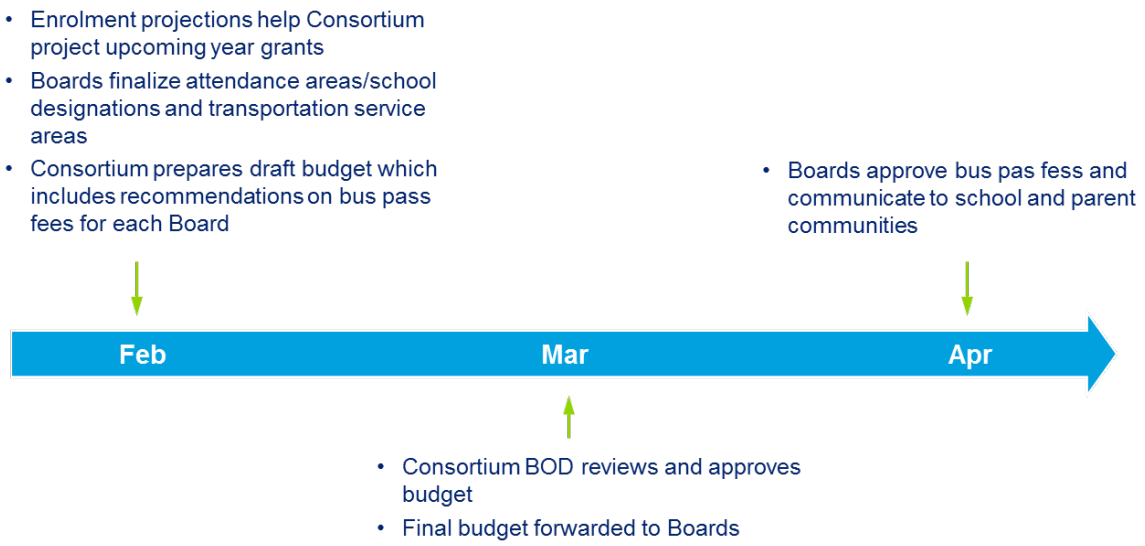
Financial management policies capture roles and responsibilities, authorization levels, and reporting requirements to ensure that a proper internal financial control system is in place for the Consortium. These policies should also clearly define the financial processes of the Consortium in a way that ensures appropriate oversight without impinging on efficiency.

Budgeting process

The Consortium needs to establish a process, in conjunction with the two Boards that provides the appropriate oversight, while at the same time allows the budget to be prepared on a timely basis.

The budget will be prepared, bottom up, by the Consortium, and will include the expected revenues and costs for each type of transportation and administrative cost. The Board of Directors will then be required to review and approve the budget. The Consortium's budgeting process and timeline needs to align with the process of the two Boards in order to ensure that the Boards can include their allocated transportation cost within their own budget. This process is illustrated in Figure 12 below.

Figure 12: Potential consortium budget schedule



In addition to the budget approval process, the Consortium should regularly monitor actual expenses and perform a review of significant variances between actual and budgeted amounts. In order to ensure accountability to both of the Boards, the results of these analyses will be presented to the Board of Directors on a regular basis.

Financial Audit

Since the Consortium will be a separate legal entity, it is critical that the Board of Directors and the Boards have a fair and accurate view of the Consortium's financial performance. Therefore, it is recommended that the Consortium be required to have its financial statements and processes audited by a third-party auditor. Additionally, the auditors should be asked to perform special procedures to determine that the cost sharing methodology has been appropriately implemented and the share of Consortium costs for each Board has been accurately apportioned.

Policies and Practices

The development of clear, concise, and enforceable policies, practices, and procedures are essential elements of an effective and efficient transportation system. Well defined and enforced policies establish the level of service that is to be provided while practices and procedures determine how services will be delivered within the constraints of each policy. The harmonization of polices and consistent application of all policies, procedures, and practices ensures that service will be delivered safely and equitably to each of the Boards.

It is often the case that the content of a specific policy or practice is of secondary importance to its consistent application. Therefore, the Boards are of the opinion that the transportation policies should be harmonized to ensure service is delivered consistency to all students throughout the city. In order to prevent a decrease in the level of service provided by either of the Boards, it has been agreed that, for the most part, the higher level of service policy from either of the Boards will be considered.

The following table outlines the current EPSB, ECSD, and proposed ESTA key policies:

Policy	EPSB	ECSD	Recommended ESTA
Walk distance	• Walk boundaries are based on service maps that are generally consistent with the school's civic neighbourhood boundary. • There is not a measured minimum or maximum walk distance.	• Walk boundaries are based on service maps that are generally consistent with the school's civic neighbourhood boundary. • There is not a measured minimum or maximum walk distance. • Service within walk boundaries exists in some locations	• Walk boundaries that are based on service maps can be adopted provided that maps are reviewed to determine if they are consistent between the Boards, and harmonized where required. • Existing exceptions will be discontinued
Catchment zones	• Catchment zones are based on service maps that are reviewed on an annual basis	• Catchment zones are based on service maps that are reviewed on an annual basis	• Costs associated with Board specific adjustments to catchment zones will be allocated to specific Board based on cost sharing methodology
Alternative programs	• Service is provided to all alternative programs (based on catchment zone – not entire city)	• Service is provided to language programs	• Costs associated with Board specific adjustments to catchment zones will be allocated to specific Board based on cost sharing methodology
Alternative addresses	• Students are able to request a pick-up location that is different from the drop-off location (e.g., pick-up at home, drop-off at grandparents'), but locations must remain the same each day from week to week and both locations must be within the approved transportation service area. • No policy to accommodate dual custody situations	• Students are able to request a pick-up location that is different from the drop-off location (e.g., pick-up at home, drop-off at grandparents'), but locations must remain the same each day from week to week and both locations must be within the approved transportation service area. • Accommodate dual custody situations	• Students will be able to request a pick-up location that is different from the drop-off location (e.g., pick-up at home, drop-off at grandparents'), but locations must remain the same each day from week to week and both locations must be within the approved transportation service area. • Discrepancy in practices related to dual custody will need to be addressed.
Acceptable service levels	*ETS* • K-6: 40min + 0 transfers • 7-9: 60min + 1 transfer • 10-12: 60min + 2 transfers *Fixed-Route Yellow Bus* • Regular: 60min • Alternative: 90min • Noon: 60min *Curb Service*	• No formal policy, but tries to limit ride times above 60min	*ETS* • K-6: 40min + 0 transfers • 7-9: 60min + 1 transfer • 10-12: 60min + 2 transfers *Fixed-Route Yellow Bus* • Regular: 60min • Alternative: 60min • Noon: 60min *Curb Service*

Policy	EPSB	ECSD	Recommended ESTA
	• In-zone: 60min • Out-of-zone: 80min • Multiple zone: No limit		• In-zone: 60min • Out-of-zone: 60min • Multiple zone: 60min
Bell time coordination	• Transportation Department has no control over school hours of operation, or operational days	• Transportation Department has no control over school hours of operation, or operational days	• It is recommended that, once established, the Consortium will work towards an agreement on bell times with the schools and present a recommendation on the savings associated with slight modifications to school hours of operations.
Bus stop locations	• Bus stops are located at ETS stop locations whenever possible. If there is no ETS stop nearby, stops are located on the far side of intersections.	• Bus stops are located at ETS stop locations whenever possible. If there is no ETS stop nearby, stops are located on the far side of intersections.	• The Consortium will need to establish a formal policy that takes into account sight lines, traffic patterns, speed limits, etc. to ensure all bus stops are located as safely as possible.
Walk to stop distance	• The maximum walk to stop distance is 400 metres	• The maximum walk to stop distance is 400 metres	• The maximum walk to stop distance will be 400 metres
Conditional riders	• Conditional riders acceptable under following conditions: o Conditional Rider Application Form is approved o Sufficient space on bus o Access an existing stop on an existing route o Bus routes shall not be designed or altered to accommodate conditional riders • Access to the service is reviewed annually and is guaranteed for the current school year only. • The monthly fee is the same as for eligible riders to programs of choice.	• There is no formal conditional rider policy • Requests for exceptions are reviewed on a case-by-case basis • Approval required by Assistant Superintendent, Educational Planning • Exceptions are documented in an email by the principal so that records are maintained	• Conditional riders will be acceptable under following conditions: o Conditional Rider Application Form is approved o Sufficient space on bus o Access an existing stop on an existing route o Bus routes shall not be designed or altered to accommodate conditional riders • Access to the service will be reviewed annually and is guaranteed for the current school year only. • A monthly fee will be required
Supervised pick-ups/drop-offs	• Parents and guardians are responsible for providing supervision at bus stops to all early education, and kindergarten students.	• Parents and guardians are responsible for providing supervision at bus stops to all early education, kindergarten and grade one students.	• Parents and guardians will be responsible for providing supervision at bus stops to all early education, kindergarten and grade one students.
Public Transportation	• No formal policy beyond, Edmonton Transit (ETS) is the preferred means of student transportation for Edmonton Public Schools' students. • In general, ETS is primarily used for junior and senior high students	• No formal policy beyond, Edmonton Transit (ETS) is the preferred means of student transportation for Edmonton Catholic Schools' students. • In general, ETS is primarily used for junior and senior high students • Currently have a large number of junior and senior high students are accessing yellow bus service	• ETS will be used for junior and senior high students provided it meets acceptable service levels
Video cameras	• The board does not use video cameras on any of its buses	• The board uses digital camera surveillance equipment for regular fixed routes and some kindergarten and special needs transportation (does not include any special needs routes shared with another school board).	• It is recommended that the Consortium will not use video cameras on any of its buses

Routing and Technology

Routing and Technology encompasses the management, administration, and use of technology for the purpose of student transportation management. There is a significant scope of work related to identifying and resolving all of the information technology issues associated with the establishment of the Consortium. Some specifics have been provided below, but detailed solutions will evolve as the Consortium and the Boards' IT departments collaborate throughout the process.

Routing software

Any large and complex transportation organization requires the use of a modern routing system to support effective and efficient route planning. Effective route planning not only ensures that services are delivered within established parameters; it also helps to predict and control operational costs.

The two Boards both utilize the *Trapeze MapNet* software application which is produced by the Trapeze Group. Through discussions with the transportation planning staff of the two Boards, it was determined that *Trapeze MapNet* is sufficiently meeting the current needs of the two Boards. It should be noted that both departments expressed some areas of improvement such as, reporting functionality, and the storage of historical route information as drawbacks to the application, but qualified these comments that none of the applications available will perfectly align with the needs of the Consortium. That being said, due to new consortium requirements such as the cost sharing methodology described above, the Boards plan on investigating new routing software to determine if any alternatives can better meet the needs of the Consortium.

Communication portals

While both of the Boards currently have individual websites, with pages dedicated to student transportation, it is still recommended that the Consortium establish its own independent website. Establishing a unique site ensures a consistent presentation of information and reinforces the Consortium's role as the transportation service provider to each of the Boards.

The website should, at minimum, include the following information:

- Consortium's transportation policies;
- Consortium's announcements, such as transportation application deadlines, service cancellations, etc.;
- Access to transportation forms such as, service applications, conditional riders forms, change of address, etc., and
- Contact information for the Consortium.

The Boards may still choose to continue to display transportation information on their respective websites and parent portals, and provided it is not overly onerous, the Consortium can assist the Boards with this. That being said, in the interest of ensuring a consistent message is communicated, the Board's websites would ideally simply provide a link to the Consortium's website.

In addition, the two departments currently utilize different technologies to communicate directly with parents and students. The EPSB currently uses *SchoolZone* to interact with students, parents and school staff on a regular basis by sharing school news, assignments, attendance and homework via the Internet, including student transportation information. The use of *SchoolZone* extends beyond the transportation department to several other board and school uses. From ECSD's perspective, they utilize the web portal function of *PowerSchool* to communicate directly with parents in general, and more specially, the transportation department utilizes *SchoolConnects*, which is an automated voice calling platform to notify parents of delays or cancellations.

At least initially, the Consortium will continue to utilize the existing programs to communicate with parents and students. Following the implementation period, the Consortium can then determine whether it is in its best interest to continue with the current systems, or implement an independent, direct communication application. The benefit of an independent system is that it ensures that the communicated message is controlled by the Consortium. For instance, many routing applications included web based

communication tools which can provide stakeholders with real time and current information regarding their student's transportation including service or weather delays, the cancellation of transportation, or school closings.

While no decision on this was reached in the workshop and the use of a joint communication portal remains a topic for further investigation, it does not present a challenge to the feasibility of the consortium.

Digital Map and Student Database

An accurate and up to date digital map and student database, along with the processes and procedures to update and maintain the map and database are paramount to the success of any transportation system.

In terms of a digital map, both of the Boards currently operate using a similar digital map provided by the City of Edmonton, and therefore, there are no foreseeable issues with consolidating the two systems.

Moving forward, the process used for the transfer and maintenance of student data needs to be formalized. Best practices would suggest that the Consortium's student database be kept up to date with regular and frequent downloads from the school Boards. The downloading and harmonization of data should be as close to automatic as possible, requiring minimal manual data entry and oversight. In order for this to be possible, a high level of accuracy is required in the collection of student information by the Boards, which in the past has been an issue for both departments. However, as there are no suitable alternatives to relying on Board information, a cooperative effort needs to be made by the schools, Boards, and Consortium to ensure student information is input accurately to facilitate transportation planning.

Planning and Routing

Effective route planning is a key function of any high performing transportation operation. The two boards currently plan and manage the routes for the regular busing program, but the routes for special needs students are planned and managed by the carriers. The EPSB is currently in the process of uploading the routing design for special needs into the responsibilities of the Board, and it is intended that the proposed Consortium would be responsible for the routing of the entire system.

The overall efficiency of the transportation system is limited or constrained by specific policies or historical practices. Some of the key policies that influence routing are illustrated below in Figure 13; the below list is not meant to be inclusive.

Figure 13: Transportation policies that have an influence on routing efficiency

Items that impact routing decisions

- Bell times
- Maximum ride times
- Walk zones
- Stop locations
- Walk to stop distances
- Irregular schedules (early dismissals, PD days)
- Bus transfers
- Choice of school
- Alternate stop
- Vehicle capacity
- Run sharing

Several of these items such as, ride times, walk zones, stop locations, walk to stop distances, choice of school, and alternative stops were all discussed in detail in the previous section. A more in depth discussion of the remainder is provided below:

- The ability to **run share** between the two Boards is one of, if not the, key benefit of establishing a consortium. That being said, run sharing between elementary, junior high, and senior high schools also increases efficiencies. Adopting a one bus/one road philosophy for route planning

will result in a significant reduction in the total number of buses required by the two Boards. Students should, and will, be integrated on bus routes wherever beneficial. The same principle applies to integrating special education students onto fixed route yellow buses where possible given the nature of the student's unique needs and the range of program options available.

- **Bus transfers** refer to students being collected from dispersed locations on several buses and being taken to a transfer point, where they are consolidated onto a smaller number of buses and transported the remaining distance to school. Neither of the Boards currently have a formal transfer policy. It is recommended that when the Consortium is formed and begins to harmonize the two Boards' policies that a formal bus transfer policy be developed. Bus transfers offer an additional tool that can help improve the efficiency and effectiveness of routing solutions.

- In terms of **vehicle capacity**, route planning is dependent on the number of students that can be transported on a single bus. The two Boards have indicated that capacity or utilization constraints are typically a secondary consideration to maximum ride times, i.e. the number of students on a bus is typically governed by the 60 minute maximum ride time, as opposed to the vehicle's capacity. In general, one of the benefits of forming a consortium, and run sharing between the two Boards will be an increased density of students on a given route. This should allow the transportation planners to find a larger number of opportunities to increase vehicle utilization, making the overall system more efficient.

Contracts

The Consortium will have standard contracts in place with all carriers, and parents, which outline appropriate legal, safety and other non-monetary terms. The Boards currently use a very similar contract template, which was developed cooperatively approximately 15 years ago. As a result, developing one standard contract for the Consortium will not require any drastic changes, and therefore should not be contentious with carriers, or negatively affect the feasibility of the Consortium. In general, the more comprehensive requirements from either of the current contracts should be adopted to ensure there are no decreased service levels as a result of the Consortium's formation.

As the current carrier contracts with both of the Boards were procured using a competitive procurement process, the Consortium can focus primarily on the timing of its next procurement. The EPSB's current contracts were procured in 2010, and are currently in the fourth of a four year contract term, and the Board has three, one year options that it may exercise. On the other hand, the ECSD is currently in the eighth year of a ten year contract, but they do have contract termination options at their disposal provided they give the carriers 30 days notice. The Boards should exercise renewal options until such time as a decision on the consortia model is made and joint or separate procurement processes can then be implemented accordingly.

A comprehensive contract management program will be developed by the Consortium. Ideally, the program will be able to build on the contract compliance and annual facility audits that are currently completed by both of the Boards, but will also include a service and safety monitoring component and performance tracking component. In addition, the Consortium will be able to build on the initial GPS implementation steps taken by the two Boards in order to utilize this technology to its full extent.

Summary of Peer Review Exercise

The Boards have conducted a peer review exercise of established consortia in Ontario. The exercise consisted of visiting four established consortia in Ontario, along with several phone conversations with Ontario consortia management and school jurisdiction administrators. The purpose of the exercise was to identify additional issues these consortia experienced during implementation, along with any lessons learned or items they would do differently. The following comments represent a collective summary of concepts and suggestive advice taken from the exercise:

Consortium management

The following points were made by the Ontario consortia regarding governance, structure, and management concepts during implementation:

- Any efforts to only partially combine service delivery between the Boards will most likely not be successful, as only minimal efficiencies can be realized and there will be significant issues related to the administration and governance of the Consortium;
- The creation of a separate legal entity is important in the interest of perceived autonomy and jurisdictional confidence in an un-biased service delivery model; and
- The legal framework and governance model for the Consortium should be as simple and transparent as possible; otherwise, distrust can emerge as a result of stakeholders within each jurisdiction not fully understanding the governance model.

Policies

The following points summarize the findings from the exercise regarding consortium policy setting:

- The Boards, not the Consortium, must continue to have the autonomy to decide which students are eligible for access to transportation services. It is the intent of the Consortium to design and execute a service delivery model, not intervene in jurisdictional decision making. Given that all provincial transportation funding continues to flow into the member Boards, decision making regarding student access to transportation and funding remain aligned; and
- It is beneficial for rider eligibility criteria to be aligned between the Boards; otherwise, there are a number of challenges related to perceived inequities amongst stakeholders and systematic inefficiencies result.

Implementation timing

The following advice was provided by the Ontario consortia in regards to the timing of the implementation:

- Consortium operations should not commence until all agreements and service delivery details are established and agreed upon; and
- The initial year to year and a half of the implementation process should be spent focused on a successful implementation and smooth transition, remaining focused on preparedness and stakeholder support, as opposed to finding efficiencies. Efficiencies should emerge over time, and

a number of opportunities and improvements may not be apparent until the consortium is fully operational.

General findings

In addition, the Ontario consortia provided the following general comments/advice regarding establishing a consortium:

- Communication is critical throughout the preparation and implementation phases. The Boards should communicate key messages that clearly outline anticipated timelines, challenges, and benefits to help gain support for the vision. It is critical to be transparent about improvements and challenges, such as potential for bell time adjustments.

- The support of senior administration is critical to gaining acceptance and support of the model among school staff, parents, and consortium employees.

- It is important that both Boards want to see the Consortium be successful, as future challenges and opportunities for disagreement related to the intent or direction of the Consortium can be diminished through a strong relationship built on trust and transparency.

Cost-Benefit Analysis

The objective of the two Boards developing a student transportation consortium is to capture the cost savings that are associated with improved routing efficiencies and operational economies of scale, and use these savings to increase the level of service that is currently offered to the students of Edmonton. Although there are several benefits associated with a consortium model, there are also some costs, mostly related to upfront start-up costs. The following section outlines the estimated benefits and the estimated costs, both quantitative and qualitative of the proposed consortium model. The cost-benefit analysis is based on the consortium framework that was developed in the previous section.

Benefits

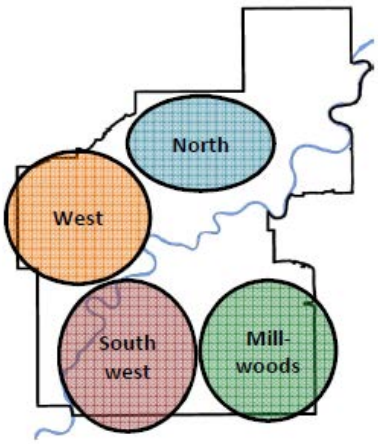
Improved routing efficiencies and operational economies of scale are just some of the benefits that are associated with a consortium model. Each of the benefits is detailed in the following section.

Routing efficiencies

In order to capture the full extent of the benefits of a consortia model it is critical that the students from the two Boards are transported on the same buses. By either utilizing combination routes where the same bus serves multiple schools on a single route, or utilizing tiering where the same bus serves multiple schools on different routes, a Consortium is able to reduce the number of total buses it requires to transport students. Less buses equates to less costs for both of the Boards.

As this is the most significant benefit of the consortia model, a detailed routing analysis was completed on a sample of routes in order to estimate the cost savings. The analysis was completed by transportation planning staff from both of the Boards, and included all of the eligible fixed route yellow bus riders from both of the Boards attending regular, choice or special needs programs in North, West, Southwest and Millwoods regions as shown in Figure 14 below. The analysis does not include curb service (special needs and early education), or noon-time kindergarten busing.

Figure 14: Regions used in routing analysis



In total, the analysis included routing for 81 schools and 5,085 students from the EPSB, and 44 schools and 4,295 students from the ECSD. This represents roughly 80% of the total number of students currently

transported on yellow buses by either of the Boards, and therefore, provides a more than sufficient sample size from which to formulate any conclusions. Based on the actual routes in the current transportation system where the two Boards are segregated, the EPSB uses 149 buses, and the ECSD uses 127 buses to transport the 9,380 students noted above, for a total of 276 buses.

However, by utilizing combination routes, and tiered routing that integrates students from both of the Boards, the total number of buses can be reduced to 210 buses, a 24% or 66 bus reduction. Based on the current average carrier rates, an elimination of 66 buses would equate to direct cost savings in the range of $2.5 to $2.7 million on an annual basis. As this analysis only represented 80% of the transported students, it would be fair to say that savings in excess of these numbers would be possible. A summary of the routing analysis is provided in Appendix A – Routing analysis.

In addition to the immediate efficiencies captured with integrating routes, a Consortium will also increase the flexibility for the Boards to adapt to the changing urban environment in Edmonton. For instance, as the growth in the City continues to be highest in the suburban areas, unless new school construction keeps pace, which is unlikely, the Boards will be required to transport students farther distances to school. As consortium effectively increases with the density of the student population, integration of routes will help minimize the additional costs associated with lower density suburban growth.

In addition to the cost savings associated with the routing efficiencies that have been outlined above, taking buses off the road also has environmental benefits. For example, fewer buses on the road correspond both directly and indirectly to air pollution. Directly in the sense that one less bus on the road results in one less bus worth of engine exhaust being expelled, and indirectly in the sense that reducing the number of buses on the road will also lessen the traffic congestion in the city, which is a major contributor to air pollution.

Reduced ride times

With the formation of a consortium it will be possible to integrate students from the two Boards onto a single bus. As a result, the student density of a particular area will be increased, which will allow buses to pick up an increased number of students within the same time period, with the end result of reducing the amount of time students spend on the bus. Currently, the average ride times for regular fixed route service are 24 minutes, and 27 minutes for the EPSB, and ECSD respectively. Based on the consortium routing exercise that was completed for the purposes of this study, integrating routes would result in reduced ride times and significantly limit the number of excessive ride times.

Risk management

One of the key benefits of an incorporated separate legal entity is the limitation of liability. The shareholders of the corporation, which in the case of the Consortium are the Boards, are protected in the sense that they are not technically responsible for the liabilities or debts of the corporation.

Operational economies of scale

There are numerous benefits and costs savings that can be realized from eliminating the duplication of effort, for example, running single procurement processes, developing safety programs and conducting facility audits. In addition, the Consortium will have increased buying power with carriers, as during a competitive procurement process, each carrier will be trying to secure a contract for a greater portion if its fleet.

Streamlined and simplified processes for school, parents, students and carriers

As outlined in detail above, within the current system, the individual schools each have a considerable role in student transportation, which includes communicating with parents, coordinating route information, and coordinating with carriers. Although the roles are well defined in each of the Boards' policies, students, parents and carriers are required to either contact the school or the Boards, depending on their issue at the time. Under the proposed consortium, some of the school responsibilities will be uploaded to the Consortium (particularly the communication and coordination responsibilities), simplifying the process,

as the Consortium will be the single point of contact for all student transportation issues. In addition, this will also simplify the process for the schools, who will no longer be responsible for transportation related items.

Opportunity to reinvest cost savings into student transportation

Once the cost savings that result from routing efficiencies and operational economies of scale are realized, the Consortium, and subsequently, the Boards will have additional funds at their disposal to redirect towards student transportation. As previously noted, the objective of the two Boards developing a consortium is to capture the cost savings associated with a consortium, and use these savings to increase the level of service that is currently offered. Therefore, it is imperative for the Consortium's success that this process does not result in Alberta Education reducing the amount of funding provided to the Boards.

For the purposes of this study, the following list has been developed to illustrate some potential uses for redirected cost savings:

- Reducing the bus pass rates to make service more affordable;
- Reducing the maximum ride time policy to below 60 minutes to reduce the time an average student spends on the bus;
- Increasing the driver training, and bus safety standards, to increase the level of safety for students using student transportation;
- Increasing the amount of alternative programs, such as language, athletics, and arts programs, where full service yellow buses are provided;
- Introducing late bus runs to allow a greater percentage of students to participate in extracurricular activities;
- Increasing rates paid to carriers with a specific driver premium to attract and retain qualified drivers;
- Investing in technology initiatives to improve Consortium operations and increase level of service provided;
- Introducing bus monitors onto buses to improve student supervision; and
- Creating a spare driver pool that can service the Consortium in a variety of ways.

Positive role model for Alberta

If a consortia model is pursued, the two Boards will be developing the Province of Alberta's first student transportation consortium. Although this model has been previously implemented in other jurisdictions, such as Ontario, it will still require some tailoring to ensure that it meets the unique needs and requirements of the Boards, transportation carriers, students and parents within Alberta. Therefore, the Edmonton consortium will serve as a positive benchmark and role model for other areas of the Province to emulate when trying to improve student transportation services in their respective jurisdictions.

Costs

Although implementing a consortia model will result in many benefits, the benefits do not come without some costs. For instance, the implementation of a consortium will require a significant investment by the Boards in terms of time, staffing, and legal fees. In addition to the upfront costs during implementation there are also quantitative costs associated the continual operation of the Consortium.

Implementation costs

The formation of a consortium in the form of an incorporated separate legal entity will require both a time and financial upfront commitment from each of the Boards. The process could take as long as two to three years, over which time the Boards will be required to fund items such as legal fees, moving costs, consultant costs and transportation routing software upgrades.

Of all of the required implementation costs, new routing software is likely one of the most significant. Although both of the Boards currently use *Trapeze MapNet* in their current operations, based on changes

to the carrier payment formula and the complexity of the cost sharing methodology, the Boards/Consortium will be reviewing their current software, along with several other options to determine which application will best suit the needs of the new consortium. In the event that a new software application is chosen, or additional modules are required for the existing software, there will be costs for the licenses and customization of the software. Depending on the features required by the Consortium, these costs can range from $50,000 - $250,000. If an additional level of program customization is required by the Consortium in order to report on the cost sharing methodology, additional costs should be expected.

Due to the large amount of legal documentation that will be required with the establishment of a consortium, such as the consortium agreement, cost sharing agreement, transportation service agreements, support service agreements, and updated carrier agreements, the associated professional legal costs will also be quite large. In addition, legal counsel will also be required to advise on human resourcing issues, such as collective bargaining issues, transfers of employees, new employment contracts, and potentially secondment agreements. These costs can also vary significantly, however, $500,000 would be a conservative estimate.

As the Consortium will be located in an independent office, and will be an independent entity, there will be costs associated with purchasing equipment for the office. Equipment includes both physical equipment such as desks, chairs and cabinets, and IT equipment such as computers, printers, phones, network equipment, etc. Finally, there will also be costs associated with outfitting the office space to suit the needs of the Consortium, such as the construction of offices and board rooms. These costs, including moving costs are estimated to be $100,000.

In addition to outfitting the office with IT equipment, there will also be implementation costs associated with setting up the IT infrastructure for the Consortium. This will include the implementation of several of the IT platforms that the Consortium will be required to use, such as a website and GPS systems. It is estimated that these costs will be in the range of $300,000 to $500,000.

Throughout the implementation period, students from each of the two Boards will still require transportation to and from school. Therefore, in order to maintain the level of service in the current operations during the transition period, it is most likely that additional resources will be required in order to help facilitate the implementation process. Depending on the complexity of the assistance required, these costs could reach $750,000 - $1 million.

Due to the preliminary stage of consortia model review, specifics on software, office location, insourcing versus outsourcing and HR requirements have not been refined. However, for the purposes of this study, a conservative estimate would put these costs in the range of $1.7M to $2.35M. As the process proceeds, more refined estimates can be made.

Facility costs

It is being proposed that the Consortium's office will be located in a separate location than that of the two Boards, as independence of this type from the Boards is an effective way of ensuring that the structure and mandate of the Consortium remains consistent despite the potential changes at the Board level.

There are potential costs associated with an independent office that are not currently being incurred by either of the transportation departments. These costs include rent, utilities, and potentially costs associated with tenant fit-out. Although these costs are minor in value, they are new additional costs of the transportation system that will be more transparent.

Summary

Table 5 below provides a summary of the quantitative cost-benefit analysis. In order to establish an effective Consortium, the two Boards will be required to make an initial investment in the process. It is proposed that 60% of this investment will be allocated to the EPSB, and 40% to the ECSD based on student enrolment. However, this initial investment will quickly be recouped by the Boards in terms of annual savings once the Consortium is up and running.

Table 5: Summary of cost-benefit analysis

	Costs	Savings
One-time costs and savings		
Implementation Costs	$ 2,350,000	-
Total one-time costs and savings	**$ 2,350,000**	**$ 0**
Annual costs and savings		
Routing efficiencies	-	$ 2,500,000
Total one-time costs and savings	**$ 2,350,000**	**$ 2,500,000**
Net Present Value (10-year discounted @ 5% per annum)		**$ 12,500,000**

In addition, there are qualitative benefits, such as simplified processes for schools, parents, students, and carriers, and limited liability that are not captured in Table 5. As a result, there is very little downside in moving forward with the process and significant and immediate cost savings that can be realized.

Additional opportunities to capture benefits

When forming a consortium, the two Boards are creating an opportunity for all aspects of their student transportation system to be reviewed. Although wholesale changes are not being encouraged, it is recommended that the Boards review all aspects of their service delivery in order to ensure that, once the Consortium has been formed, it meets the needs of the two Boards, and it operates in line with industry best practices.

It is apparent that the two Boards are aware of this opportunity, and intend to take full advantage of it in order to enhance the level of service the Consortium can provide. Although some specific examples have been noted in this section, the list by no means represents the entirety of the level of service benefits that can or will be realized as the Boards develop their consortia model.

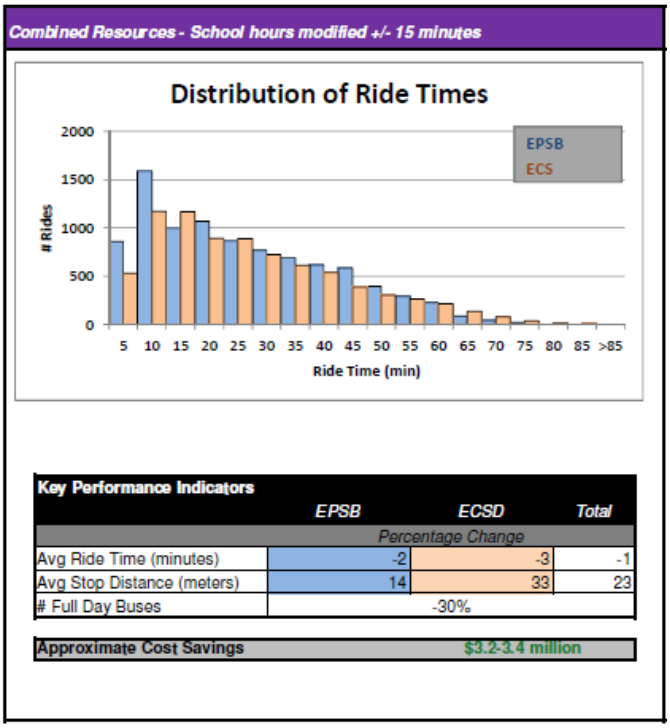
It would be incomplete to detail the benefits associated with the formation of a Consortium and leave out the very real, although indirectly linked, benefits noted below. The implementation of a consortia model, does not directly address all of these challenges. Nor do these issues impact the feasibility of implementing the model. The implementation of a new delivery model does however, provide an ideal opportunity to re-assess old habits and implement changes that align with industry practice.

Bell time optimization

One of the most significant opportunities for cost savings in student transportation stems from bell time optimizations. This is also one of the more contentious issues regarding the level of involvement in transportation from a school perspective. Currently, the two transportation departments have very little input on the hours of operations of each of the schools as the individual schools are responsible for setting their schedule, and hours of operations,. As a result, 85% of the schools within both Boards currently start between 8:26-8:45, and 62% of school end between 3:11-3:30, requiring greater than 90% of the buses to run single routes. In addition, early Thursday dismissal times compound the issue of coordinated bell time. Figure 5, Figure 6, and Figure 7 are provided in a previous section and illustrate the distribution of bell times at both of the Boards.

As part of the routing analysis that would completed to determine routing efficiencies, the Boards also did a preliminary analysis on the effect of slightly adjusting morning and afternoon bell times. The analysis showed that allowing for adjustments of plus/minus 15 minutes to the current set bell times at just 34% of the schools, resulted in a 30% reduction in buses, and a cost savings of $700,000 on an annual basis. These results are summarized below in Figure 16. The cost savings of $3.2 - $3.4 million noted in Figure 15 are including the $2.5 to $2.7 million from integrated routing.

Figure 15: Bell time analysis results



In addition to the regular start and dismissal bell time, several schools in both the Boards currently have early dismissals on Thursdays. The wide variety of Thursday dismissal times also has a negative effect on routing efficiency. Beyond the impact on routing, there are also other negative implications. For instance, there is an additional routing scenario for the Boards to analyse and plan which increases the routing workload for the Boards by 25%, makes it more difficult for carriers to recruit drivers, and decreases the overall safety of the system by having drop off times that change day to day.

Public transportation

Neither of the Boards currently have a formal policy beyond regarding the use of public transportation. As a result, the percentage of students who use Edmonton Transit System (ETS) varies between the Boards, and yellow bus service is somewhat arbitrarily provided to junior and senior high school students throughout the city. In general, the EPSB used ETS for all junior and senior high students provided it can do so within acceptable service level limits. The ECSD has a similar policy, but tends to transport a higher percentage of junior high students with yellow buses.

It is expected that a newly established consortium will continue to utilize public transportation in a similar manner immediately following its implementation. However, once established and operating, it is recommended that the Consortium complete a comprehensive costing analysis on providing yellow bus service versus using public transportation. Experience in other jurisdictions has shown that on average, providing yellow bus service is less costly than public transportation.

Contract Structure

Both of the Boards have standard contracts in place for all carriers which outline legal, safety and other non-monetary terms. That being said there are a few notable omissions and a few areas where the requirements could be more onerous, both of which are highlighted below:

- Neither of the Boards' contracts require mandatory EpiPen training, in addition to standard First Aid/CPR training, for all drivers before they operate a vehicle.

- The maximum vehicle age for buses is 15, and 20 years for the EPSB, and ECSD respectively, which are close to, if the not the highest in the country. Best practices would indicate a maximum vehicle age of 12 years. In addition, neither of the contracts stipulate a maximum average vehicle age. A maximum average vehicle age ensures a distribution of the age of buses used, and minimizes the replacement risk in a given year and a newer fleet should decreases the likelihood of breakdowns, which should decrease the amount of delays in the system.

- The current contracts note that carriers are required to provide a spare bus or substitute driver in the event of a mechanical breakdown or driver absence. Although, this clause is technically sufficient, in many cases, when an event such as this occurs, carriers tend to double up runs, causing delays. Ideally, the contract would specify required spare bus and driver ratios to ensure the carriers have buses on hand, and drivers on call at all times. This is preferred over the current standard requirement for spare drivers and vehicles.

- Although contracts include performance expectations for carriers, in terms of pass/fail compliance with contract provisions, it does not include any quantitative performance standards such as acceptable number of delays, average length of delays, number of complaints, etc. In addition, quantitative performance standards should be specified and could include:
  - The number of carrier caused delays (driver did not report, driver started route late, mechanical issues);
  - The average length of carrier caused delays;
  - The number of complaints raised by students, parents, or school administrators;
  - The number of preventable motor vehicle incidents;
  - The number of mechanical breakdowns, and
  - The number of days spare buses are used.

- The ECSD's contract does not define the mechanism to make fuel adjustments to the carrier rates based on fuel price fluctuations. From discussions with the Board, if Alberta Education provides funding for fuel price adjustments, the funds are simply passed through to the carriers. A fuel price escalator and de-escalator clause should be included on contracts.

- The ECSD contract does not specify a dispute resolution process.

- The contract should require operators to lock in costs for the term of the contract.

- The payment structure for carriers should be revised to a fixed and variable payment formula. (This issue will be discussed in more detail in the following section.)

It is recommended that the consortium review the standard contract agreement and in the next round of competitive procurement, issue the revised contract terms.

Carrier payment formula

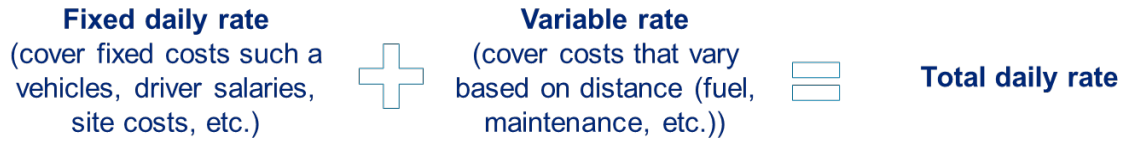
Both Boards currently use a fixed route payment for regular transportation and a fixed student payment for special needs. The main concern with fixed route payments, is that the fees do not accurately reflect the carriers' cost drivers. Carriers incur both fixed costs, such as vehicle acquisitions, driver salaries, insurance, etc., that are independent of the distance travelled, and variable costs, such a fuel and vehicle maintenance, that are relative to distance. As a result, in a fixed cost per route system any changes to a route will affect the carrier's cost to deliver the service, but not their compensation from the Board.

In terms of the current fixed cost per student for special needs students, the formula provides incentive for carriers to transport as many students as possible on a single bus, providing they can do so within the maximum time requirements. With the EPSB's maximum time requirements of 90 minutes for transporting between zones, ride times for special needs students can become quite excessive. Ideally, routing solutions would consider the needs of the student, a 60 minute maximum ride time consistent with other students and where possible, integration onto fixed route busses.

Industry best practices would suggest that a fixed plus variable cost system is optimal when working with third party carriers, as shown in Figure 16 below. With this type of formula, carriers will submit prices for routes that include a daily fixed price to cover the carriers fixed costs such a facility costs, driver wages, vehicle costs, insurance, spare Driver costs, etc., as well as a variable price based on the number of kilometres travelled each day to cover the carrier's variable costs such as maintenance and fuel.

Although, a revised carrier payment formula is not critical to the formation of the consortium, an opportunity exists to make revisions to the formula that are in the best interest of the Boards.

Figure 16: Proposed carrier payment formula



A fixed plus variable formula is beneficial for several reasons:

1) It is proposed that the cost sharing formula for allocating direct carrier costs between the two Boards will be based on a fixed and variable structure. In order for the cost sharing structure to accurately reflect the actual costs incurred by the Consortium, the carrier payment formula should mimic the cost sharing formula.

2) Fixed and variable formulas provide greater flexibility to accommodate route changes. Should an additional stop be added to a route, a simple adjustment to the variable component of the payment formula is all that is required to determine how a carrier's payment will be revised.

3) Although bus service is very rarely cancelled in the city for inclement weather, a fixed and variable formula ensures that in the event of a cancellation, carriers are only compensated for costs incurred, i.e. compensation covers their fixed costs, but as no variable costs are incurred, no variable payments are made.

4) Routes are not capped by a contracted fixed time which will allow the consortium to employ a broader range of routing techniques to potentially get better asset utilization (i.e. the consortium may be able to do triple or quadruple runs if there is no time limit imposed by the contract.)

It should be noted that while a fixed plus variable formula is more difficult to administer manually, the majority of routing software applications, including *Trapeze MapNet* will automate this calculation and tracking.

Streamlined and documented processes

The formation of the Consortium is providing the Boards a clean canvass in which they can review their current processes to ensure that the new policies and procedures that will be adopted by the Consortium are in line with industry best practices and sufficiently meet the needs to the two Boards. For instance, the Consortium should determine if the current transportation eligibility form process in which forms are submitted to schools, and then forwarded to the transportation department, can be streamlined to a process where a form is submitted online directly on the Consortium's website.

Additionally, at each Board, there are currently a number of informal policies and practices in existence. For instance, the ECSD does not have a formal procedure for approving conditional riders, but instead relies on an email from the school principal indicating why conditional service should be granted. By not documenting procedures and practices, different variations of the practices will begin to develop, potentially confusing how they are interpreted, and complicating the tasks of all parties involved. Therefore, along with reviewing the current policies and practices to seek efficiencies in work flow and process, by formally documenting each of the policies and practices, the Consortium can simplify how service is delivered.

Cost of increased level of service

In the preceding section, several benefits that were unrelated to the formation of a Consortium were discussed. Some of these benefits are related to an increased level of service as a result of policies and practice review by the two Boards. The argument has been made that these are real, albeit indirect benefits, that will be associated with the Consortium, and therefore, the costs associated with the increased level of service also need to be considered.

Implementation challenges

A consortia model represents a significant change from the current way transportation services are delivered, and changes are not always embraced by all of the stakeholders. The following section provides an assessment of the challenges that may be associated with the implementation of a consortia model, along with possible mitigation strategies that the Consortium and the Boards can adopt in response to each challenge.

Support from school administration

Within the current student transportation system, the individual schools play a significant role in the delivery and coordination of the service. It is proposed that within the new consortia model, the Consortium will take on the responsibility of some of the transportation tasks currently performed by the schools, which will result in benefits such as (a) reducing the amount of time school administration spend on student transportation, allowing them to focus on other educational issues, and (b) simplified processes for the schools, as well as students, parents, and carriers. However, despite the benefits, the change still represents a transfer of some responsibilities away from the schools and towards the Consortium. For instance, under the current system, ECSD principals are able to make conditional rider requests on behalf of students and parents, whereas following the formation of a consortium, student or parents will have to follow a formal conditional rider application process and deal directly with the Consortium.

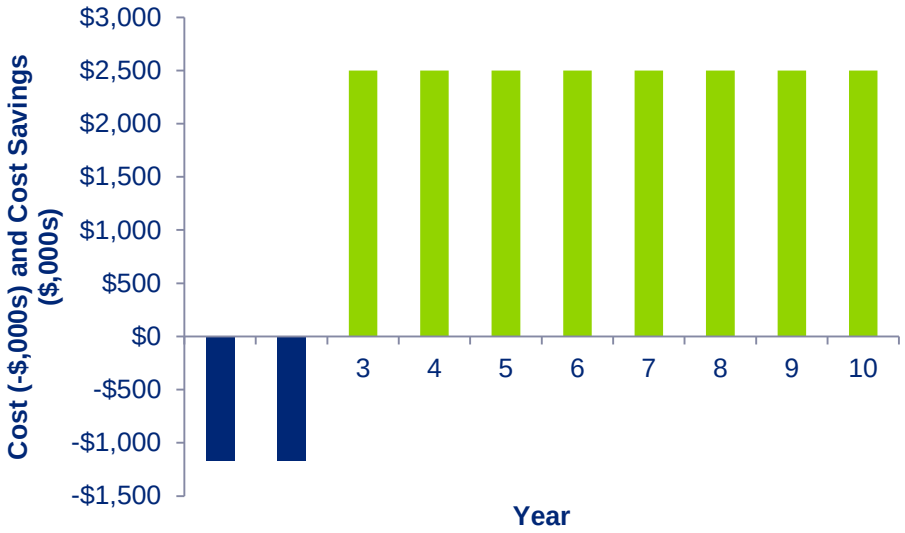
It may turn out to be the case that the school administrators feel that the potential benefits outweigh the associated loss of decision making control. However, the Boards should still be prepared that school administrators may not fully support the consortia model. In order to create greater support from the schools, the Boards have chosen to allocate two of the six Director positions on the Consortium's Board of Directors to be representatives of the schools. As a result, schools will be assured that their concerns will be considered at the Consortium's Board of Director meetings, and that the strategic direction of the Consortium will be aligned with the direction of the schools as much as possible.

Timing of costs and benefits

It is fairly clear that the potential quantitative benefits of establishing a consortium significantly outweigh the quantitative costs. However, one of the key lessons learned from Ontario, is that setting up of a consortium is a long and slow process. It is a process that requires unwavering commitment, time and resources to be invested in order to develop consortium agreements, harmonize policies, establish industry best practice capabilities, and review and revamp standard contracts. Each of these items are required to be completed prior to the Consortium integrating students and benefiting from the potential routing efficiencies.

It is estimated that implementing a consortia model will cost the Boards in the range of $2.35 million in start-up costs. Although these costs will be recouped fairly quickly based on the estimated $2.5 million in annual routing efficiencies, depending on the ease of implementation, the cost savings associated with the routing efficiencies may not be realized until three or four years down the road. Figure 17 below depicts a potential scenario in which benefits associated with the Consortium are not realized until year three of the process.

Figure 17: Timing of potential consortium costs and cost savings



With the commitment of upfront investments from each of the Boards, there will be considerable pressure on the Consortium to deliver benefits as soon as possible. This may have the effect of magnifying a small delay in the implementation to a more serious concern. In addition, stakeholders who disagreed with the establishment of a consortium will be quick to point out that the Consortium has cost the Boards a significant amount of money, and has yet to produce any benefits.

In order to mitigate the negative appearance of this issue, all of the key stakeholders need to be educated on the implementation process. To begin with, by commissioning this feasibility study, both of the Boards will be made aware of the potential implementation costs that are required up front from each of the Boards, and will be able to factor this into to their decision on whether or not to proceed.

In the event that a consortia model is approved, a detailed implementation plan should be developed. Based on this detailed plan, specific cost estimates for implementation costs such as legal fees, software implementation, and tenant fit-out can be developed in greater detail. This plan should again be communicated to the relevant stakeholders to ensure they are fully aware of the extent of upfront costs. In addition, a status report outlining progress and costs should be regularly provided to stakeholders.

Cost sharing

A cost sharing methodology that accurately reflects the costs drivers associated with student transportation is critical to the success of the Consortium. The numerous benefits of a consortium model, such as the routing efficiencies and operational economies of scale, will be quickly pushed aside if there is the appearance that one of the Boards is paying less at the expense of the other Board.

As part of this feasibility and cost/benefit study, a cost sharing scenario analysis was completed. The objective of this analysis was to identify a direct cost allocation model that accurately reflected the actual cost drivers, and costs incurred by the Boards. The analysis tested various formulas for multiple integrated routes, under a variety of scenarios. As a result, the two Boards determined that a cost allocation methodology that accounts for both the total number of students and the total passenger seat kilometres offers the best reflection of their actual costs. The selection of this methodology is evidence to the importance the Boards place on getting cost sharing right the first time, as this hybrid formula will require both a greater investment upfront in terms routing technology and a greater commitment on a regular basis in terms of administrative and audit requirements.

Once the Consortium is established, there is a continuous need to keep on top of the cost sharing issue. For instance, the Consortium's will need to regularly review their systems to ensure costs are being allocated as per the agreed upon formula. Additionally, in order to alleviate concerns even more, the

Consortium should hire a third-party auditor to review the Consortium's processes and systems to ensure costs are being allocated as per the agreed upon formula, essentially a cost sharing audit.

Human resource issues

The staff for the proposed Consortium will, for the most part, be made up of the current staff from each the Boards' respective transportation departments. The transfer of these employees presents a number of human resource related challenges such a pay equity, comparable benefits, transfer of pension rights, and collective bargaining unions. Although none of these issues are insurmountable, these are some of the most challenging and contentious issues to address.

By seconding employees from each of the Boards as opposed to transferring them, the issues related to benefits, pension and unions are minimized. That being said, secondment still needs to deal with the issue of pay equity, and other issues such as bumping rights. As a compromise, the Consortium can choose to initially second employees from the Boards on a temporary basis, and once the Consortium is fully established and operating, begin transferring employees to the Consortium, either all at once or gradually through attrition. This alternative has the benefit that issues regarding benefits, pensions and unions do not need to be dealt with immediately, the Consortium will be able to use the initial secondment period to fully address these. In addition, some of the issues around secondment, such as which of the Boards will be responsible for filling vacant positions within the new Consortium, will not be a concern, as new positions can be filled by new employees of the Consortium.

In terms of issues regarding collective bargaining units, the Boards should be proactive and have these issues reviewed in detail by human resources personnel and legal counsel as soon as possible. In addition, the Boards should establish communications with the collective bargaining leaders, and be open about the Boards' intention in order to determine a path that works for both parties.

Communications

The success of the Consortium is dependent on a variety of stakeholders, including, the Boards, trustees, schools, parents, students, carriers, and the Consortium's employees. Although it is impossible to guarantee that all stakeholders will support the formation of a consortium, a lack of communication can lead to stakeholders reacting negatively towards the idea based solely on speculative information. As a result, it is critical that the Boards develop a comprehensive stakeholder communications plan/strategy to ensure that accurate information on both the process and the reasoning behind the process is available to all stakeholders. In addition, it is important that all stakeholders are fully aware of how a consortium will directly impact them on a daily basis.

The plan/strategy should include methodology for communicating both with stakeholders in general, and on a stakeholder specific basis, and include a variety of communication mediums. For example, formal communications such as emails and announcements to all stakeholders, informal communications such a phone conversations with carriers, organized presentation or informational sessions with parents, and instructional packages for school administration could all be laid out in the communication strategy. The strategy should also ensure that appropriate communication is two-way; including stakeholder input as much as possible will help ensure the Consortium is aligned with stakeholders needs. Finally, communication with stakeholders should begin as early as possible, with all parties being kept up to date throughout the implementation process.

Summary

Establishing a consortium is not a process that will happen overnight; the process will take some time, and there will inevitably be challenges along the way. This section of the report identified a potential lack of support from schools, the initial implementation costs, cost sharing arrangements, human resource complications, and communications as key challenges that will need to be overcome. Each of these challenges, although substantial, are not insurmountable, provided they are identified early and mitigating action is appropriately taken.

Board Advocacy and Provincial Funding

Board Advocacy and Support

One of the key factors that will determine whether or not the Consortium is successful is stakeholder buy-in and support from all of the key parties. Support from the Boards can come in several different forms, such as the approval and funding required to initiate this study. However, it is also important that the Boards provide ongoing support in terms of taking on an advocacy role on behalf of the Consortium with Alberta Education.

The extent of the advocacy role is hard to determine at this preliminary stage in the process, but it is expected to include the following topics:

- Support of the Boards' initiative to establish a Consortium in terms of:
  - Alberta Education providing financial support for the pilot project in terms of implementation costs; and
  - Alberta Education refraining from reclaiming any funding as a result of efficiency cost savings and, at a minimum, leaving current funding levels in tact; and
- Jurisdictions should have an active role in the review of the provincial funding model and the regulations that drive the model (discussed in more detail below).

Provincial Funding

It is feasible to establish and operate a Consortium under the current block grant funding model utilized by Alberta Education. That being said, there are certain aspects of the block grant funding model that are not responsive to the changing transportation requirements of the two Edmonton Boards. For instance, in terms of program distribution and student accommodation, the changing urban/suburban landscape of the city is requiring the Boards to transport more and more students from new outlying developments to existing schools within the city, resulting in increasing travel distances and costs. In addition, the increasing diversity of the city's urban population is resulting in pressure on the Boards to provide additional access to alternative programs. The current block grant funding model lacks the nimbleness or flexibility to adjust funding levels in response to the changing urban student transportation requirements noted above.

As an alternative to a rigid funding formula, many jurisdictions utilize a budget based funding model. Under a budget based funding model, boards/districts would develop a budget for the upcoming year collaboratively with Alberta Education. Provided the Alberta Education was satisfied with the budget, the amount of funding provided would match the projected budget. Although budget based funding has the benefit that it is directly linked to the cost that the board is incurring, the model does not provide adequate incentive for boards and their transportation departments or consortia to ensure the system is operated efficiently.

However, there is a third alternative, performance based funding. In a performance based funding model, funding is allocated to boards/districts based on their performance on set, agreed upon criteria, and not based on the current cost to deliver the service, or a formula. As a result boards/districts have an incentive to improve their performance in order to increase the amount of funding they receive. It should be noted that in order to implement a performance based funding model, a mechanism for measuring performance needs to be established.

Performance based funding has been adopted by the Ministry of Education in Ontario. The Ministry evaluates the efficiency of transportation delivery consortia, and the higher the efficiency and effectiveness of the organization, the greater percentage of the transportation deficit the Ministry will fund. The program has been extremely effective in the province in improving the safety, accountability and transparency of service delivery and the sector has seen a dramatic improvement in routing efficiencies with a decline in asset requirements.

Over the long run, the Consortium in Edmonton would like to see changes to the funding model that are more closely tied to consortium performance and will be looking for the Boards to advocate for changes at the provincial level.

Conclusion

The objective of this study was twofold; first, to determine the feasibility of establishing a consortium between the EPSB and the ECSD, and second determine if the benefits associated with establishing a consortium outweigh the associated costs.

In terms of feasibility, the Boards are well aligned; they currently use the same carriers, the same routing software, the same student information systems, similar contracts, etc. There are still some hurdles that will have to be overcome, such a policy harmonization and human resourcing issues, however, there are no issues that present roadblocks to the establishment of a consortium.

The fundamental benefit of establishing a consortium is the potential for routing efficiencies. More specifically, the integration of students from the two Boards on buses and bus routes resulting in a decreased total number of buses required. Based on the Boards' preliminary routing analysis, routing efficiencies have the potential of creating costs savings of $2,500,000 on an annual basis. There are other additional quantitative and qualitative factors that highlight the operational and financial efficiencies that can be achieved with the model, some of which will be realized immediately, and some that are anticipated to evolve over time as the Consortium operationalizes. There are implementation costs that will be required up front, but will be recouped quickly from routing and other efficiencies.

One of the most critical factors that determine whether or not a consortium is successful, is stakeholder buy-in from all of the key parties and a willingness for the Consortium to be successful. This includes Alberta Education, whose support the Boards will be looking for in order to confidently proceed with this process.

As evidenced by the multiple initiatives that the two boards already coordinate together, such as special needs transportation, first rider programs, the previous development of the standard contract, and indeed the development of this feasibility study, it is clear that the two Boards cooperate effectively for the benefit of both jurisdictions. In addition, by proactively initiating this study, and other activities such the integrated routing analysis and site visits to established consortia in Ontario, the Boards have made it clear that there is support for this idea throughout each organization, and a willingness to see it a success.

A consortia model in Edmonton is feasible and operationally and financially beneficial.

Implementation plan

One of the key lessons learned from the establishment of consortia in Ontario is that it takes a significant amount of work to establish a consortium, and overall, the process can be long and slow. As a result, the Boards need to develop a comprehensive implementation plan to guide them through the process over the next two to three years. With the right motivation, leadership, stakeholder buy in and detailed project planning, it is possible to make huge strides in a very short period of time. The following section provides a high level discussion of the next steps required in order for the two Boards to implement a consortia model, along with an associated timeline. The timing is based on the assumption that ECSD and EPSB enter into an Agreement in Principle and initiate Phase 1 of detailed design and implementation.

Phase 1 – Establishment of consortium framework (February 2014 – June 2014):
Following the approval to proceed in January, the consortium can immediately begin working on developing a detailed consortium framework or structure. The above framework can be used as an initial guide, but the detailed structure will include formal decisions on items such as governance structure, organizational structure, and cost sharing. Once these decisions have been made, the Boards can start to develop all of the required agreements, such as the consortium agreement, cost sharing agreement, transportation service agreements, and purchase of support service agreements. This period of time can also be used develop and human resources plan for the establishment of the consortium which will include opening up discussions with the existing collective bargaining units for each Board. Early on in this phase, a communications plan will be developed to ensure the key messages behind establishing a consortium reaches all stakeholders. Once the Consortium is established, the Boards can then begin to plan the operations of the Consortium. This will include developing internal policies and practices to guide the operations or service delivery model of the Consortium, harmonizing and documenting transportation related policies, and reviewing and developing a standard carrier contract in line with industry best practices. Later on in this phase, the Consortium's staff will test and make a decision on the desired routing software moving forward. In addition, the Consortium will work on preparing procurement documents for issue in the winter/spring of 2015. It should be noted that during the 2014-2015 school year, routes will still be segregated between the Boards. At the end of this phase a suitable office location will be identified.

Phase 2 – Execution of consortium framework and service delivery model (June 2014 – May 2015)
By the beginning of Phase 2, the Consortium can consider formally incorporating itself as a separate legal entity, complete with the transfer or secondment of transportation department employees. This will require the signing of the consortium agreement, cost sharing agreement, transportation service agreements, and purchase of support service agreements. This will also coincide with the Consortium's staff physically moving to the new independent location. The procurement process for carrier services will take place in the winter/spring of 2015. This procurement process will occur one year prior to the expiration of the current ECSD carrier contracts, which will therefore need to be terminated. Finally, the Consortium will begin developing their own website in preparation of a launch in the summer of 2015.

Phase 3 – Full integration (May 2015 – August 2015)
With the completion of a procurement process for fully integrated routes in June, the Consortium will enter the summer of 2015 as a fully integrated entity, planning and routing for a complete roll out of integrated services for the start of the 2015-2016 school year.

Appendix A – Routing analysis

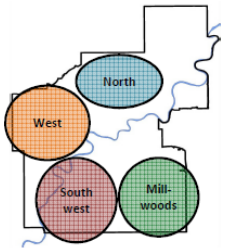
Joint Service Fixed Route Study

Rollup of All Edmonton Scenarios

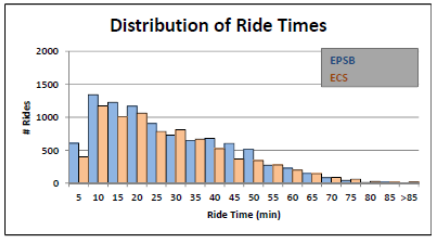
Study Description

- Eligible Fixed Route yellow bus riders attending regular, choice or special needs programs in North, West, Southwest and Millwoods regions. Also includes riders attending Victoria and St. Basil Schools.
- Curb-service and noon-hour busing not included.
- EPSB Conditional and ECS In-boundary riders not included.

	EPSB	ECS
Number of Schools	81	44
Number of Students	5085	4295

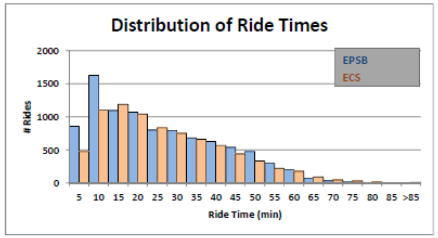


12-13 Actual



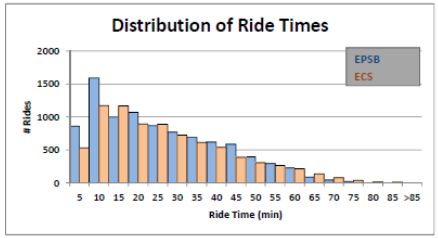
Key Performance Indicators	EPSB	ECS	Total
Avg Ride Time (minutes)	26	26	26
Avg Stop Distance (meters)	131	127	129
# Full Day Buses	149	127	276

Combined Resources - No changes to school hours



Key Performance Indicators	EPSB	ECS	Total
	Percentage Change		
Avg Ride Time (minutes)	-2	-1	-2
Avg Stop Distance (meters)	14	33	23
# Full Day Buses	-24%		
Approximate Cost Savings	$2.5-2.7 million		

Combined Resources - School hours modified +/- 15 minutes



Key Performance Indicators	EPSB	ECSD	Total
	Percentage Change		
Avg Ride Time (minutes)	-2	-3	-1
Avg Stop Distance (meters)	14	33	23
# Full Day Buses	-30%		
Approximate Cost Savings	$3.2-3.4 million		