Deloitte.

Ministry of Education Effectiveness & Efficiency Review

Student Transportation Services of Thunder Bay

Phase 4 Review

September 2010

Table of Contents

The English version is the official version of this report. In the situation where there are differences between the English and French versions of this report, the English version prevails.

À noter que la version anglaise est la version officielle du présent rapport. En cas de divergences entre les versions anglaise et française du rapport, la version anglaise l'emporte.

Executive Summary

This report details the findings and recommendations of an Effectiveness and Efficiency Review ("E&E Review") of Student Transportation Services of Thunder Bay (hereafter "STSTB" or "the Consortium") conducted by a review team selected by the Ministry of Education (hereafter the "Ministry"). The E&E Review evaluates four areas of performance – Consortium Management, Policies and Practices, Routing and Technology use and Contracting practices – to determine if current practices are reasonable and appropriate; to identify whether any best practices have been implemented; and to provide recommendations on areas of improvement. The evaluation of each area is then used to determine an overall rating for the Consortium that will be used by the Ministry to determine any in-year funding adjustments that may be provided.

While the Consortium has taken a number of significant positive steps in the recent past, a number of modifications are required to the Consortium's governance, management and financial management practices in order to bring the Consortium in line with best practices seen across the sector. The most critical recommendation arising from the assessment of Consortium Management is a review of the delineation between the Consortium's operational responsibilities and the oversight responsibilities of the Consortium's governance structures. Other recommendations relating to the Consortium's human resource, planning, reporting and financial practices should also be implemented in order to institutionalize effective management practices within the Consortium. The Consortium should also consider incorporating as a separate legal entity in order to distinguish itself from its Member Boards and limit liability

The review of Policies and Practices found that while efforts have been made to develop an appropriate array of harmonized policies and procedures, the Consortium has yet to fully implement and integrate the requirements of the policy documents into daily operations. Eliminating inconsistencies in the use of coding practices, strengthening bell time assessment procedures, implementing established auditing procedures, and improvements to the planning schedule are the significant tasks that should be undertaken in this respect.

Demonstrable progress in the implementation and use of transportation technology was clear during the review. Efforts to establish a single route planning solution coupled with a substantial effort to document expected use of the system will serve the Consortium well in its continuing efforts to improve routing efficiency. The annual route planning procedure and its description of alternative routing techniques is a model for other consortia across the Province. In order to increase efficiency and effectiveness, a reconsideration of the Member Board-centric nature of the Consortium's current

planning efforts is necessary. A strategy that integrates students on routes coupled with bell time changes that allow for improved use of assets will also be critical components to future efficiency improvements.

A number of modifications are required in order to increase the clarity and effectiveness of the Consortium's contracting practices. The primary areas for improvement include the continuation of efforts related to the implementation of competitive procurement processes for all operator services, and the implementation of a comprehensive, documented, governance approved process for ensuring operator on-the-road safety and service monitoring. Positive elements of the Consortium's contracting practices include a complete bus operator contract and effective operator administrative, contract, facility and maintenance compliance processes.

As a result of this review of current performance, the Consortium has been rated **Moderate-Low**. Based on this evaluation, the transportation allocation for the Lakehead District School Board, the Thunder Bay Catholic District School Board, and Conseil scolaire de district catholique des Aurores Boréales will remain unchanged in the 2010-11 school year.

1 Introduction

1.1 Background

1.1.1 Funding for student transportation in Ontario

The Ministry provides funding to Ontario's 72 School Boards for student transportation. Under Section 190 of the *Education Act* (Act), School Boards "may" provide transportation for pupils. If a School Board decides to provide transportation for pupils, the Ministry will provide funding to enable the School Boards to deliver the service. Although the Act does not require School Boards to provide transportation service, all School Boards in Ontario provide service to eligible elementary students and most provide service to eligible secondary students. It is a School Board's responsibility to develop and maintain its own transportation policies, including safety provisions.

In 1998-1999, a new education funding model was introduced in the Province of Ontario outlining a comprehensive approach to funding School Boards. However, a decision was made to hold funding for student transportation steady, on an interim basis, while the Ministry worked to develop and implement a new approach. From 1998-1999 to 2010-2011, an increase of over $267 million in funding has been provided to address increasing costs for student transportation, such as fuel price increases, despite a general decline in student enrolment.

1.1.2 Transportation reform

In 2006-07, the government began implementing reforms for student transportation. The objectives of the reforms are to build capacity to deliver safe, effective, and efficient student transportation services, achieve an equitable approach to funding, and reduce the administrative burden of delivering transportation, thus allowing School Boards to focus on student learning and achievement.

The reforms include a requirement for consortium delivery of student transportation services, effectiveness and efficiency reviews of transportation consortia, and a study of the benchmark cost for a school bus incorporating standards for safe vehicles and trained drivers.

1.1.3 The formation of school transportation consortia

Ontario's 72 School Boards operate within four independent systems:

- English public;

- English separate;
- French public; and
- French separate.

As a result, a geographic area of the province can have as many as four coterminous School Boards (i.e. Boards that have overlapping geographic areas) operating schools and their respective transportation systems. Opportunities exist for coterminous School Boards to form a consortium and therefore deliver transportation for two or more coterminous School Boards in a given region. The Ministry believes in the benefits of consortia as a viable business model to realize efficiencies. This belief was endorsed by the Education Improvement Commission in 2000 and has been proven by established consortium sites in the province. Currently, the majority of School Boards cooperate to some degree in delivering transportation services. Cooperation between School Boards occurs in various ways, including:

- One School Board purchasing transportation service from another in all or part of its jurisdiction;
- Two or more coterminous School Boards sharing transportation services on some or all of their routes; and
- Creation of a consortium to plan and deliver transportation service to students of all partner School Boards.

Approximately 99% of student transportation service in Ontario is provided through contracts between School Boards or transportation consortia and private transportation operators. The remaining 1% of service is provided using Board-owned vehicles to complement services acquired through contracted private transportation operators.

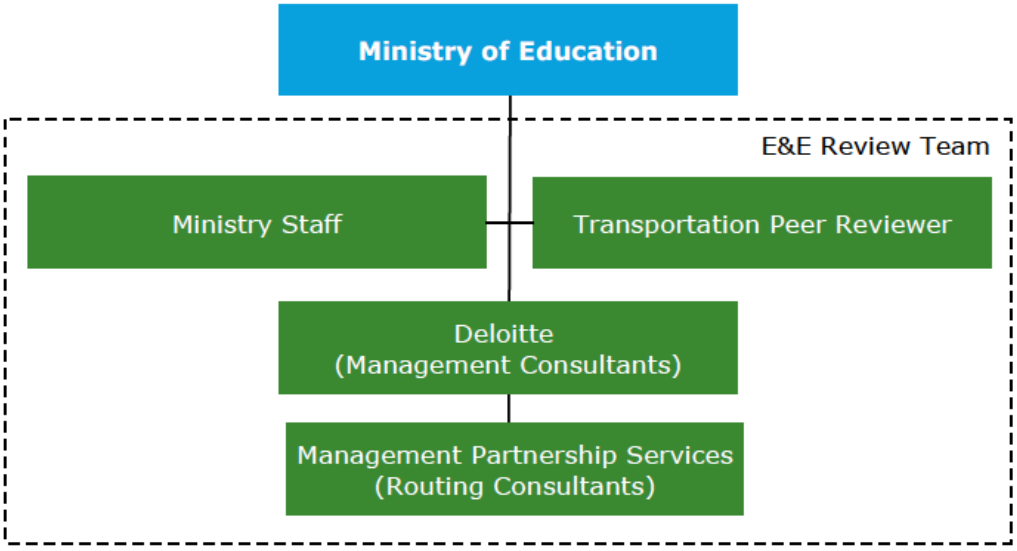
1.1.4 Effectiveness and Efficiency Review

According to the Ministry consortium guidelines, once a consortium has met the requirements outlined in memorandum SB: 13, dated July 11, 2006, it will be eligible for an E&E review. This review will be conducted by the E&E Review Team who will assist the Ministry in evaluating Consortium Management; Policies and Practices; Routing and Technology; and Contracts. These reviews will identify best practices and opportunities for improvement and will provide valuable information that can be used to inform future funding decisions. The Ministry has established a multi-phase approach to review the performance of consortia (collectively the “E&E Reviews”) across the province.

1.1.5 The E&E Review Team

To ensure that these reviews are conducted in an objective manner, the Ministry has formed a review team (see Figure 1) to perform the E&E Reviews. The E&E Review Team was designed to leverage the expertise of industry professionals and management consultants to evaluate specific aspects of each consortium site. Management consultants were engaged to complete assessments on Consortium Management and Contracts. Routing consultants were engaged to focus specifically on the acquisition, implementation, and use of routing software and related technologies and on policies and practices.

Figure 1: E&E Review Team



1.2 Scope of Deloitte Engagement

Deloitte was engaged to lead the Team and serve as the management consultants on the E&E Review Team. Deloitte's overall role is as follows:

- Lead the planning and execution of E&E Reviews for each of the transportation consortia to be reviewed in Phases Three and Four (currently in phase 4);
- At the beginning of each E&E Review, convene and moderate E&E Review Team planning meetings to determine data required and availability prior to the review;
- Review consortium arrangement, governance structures and contracting procedures;

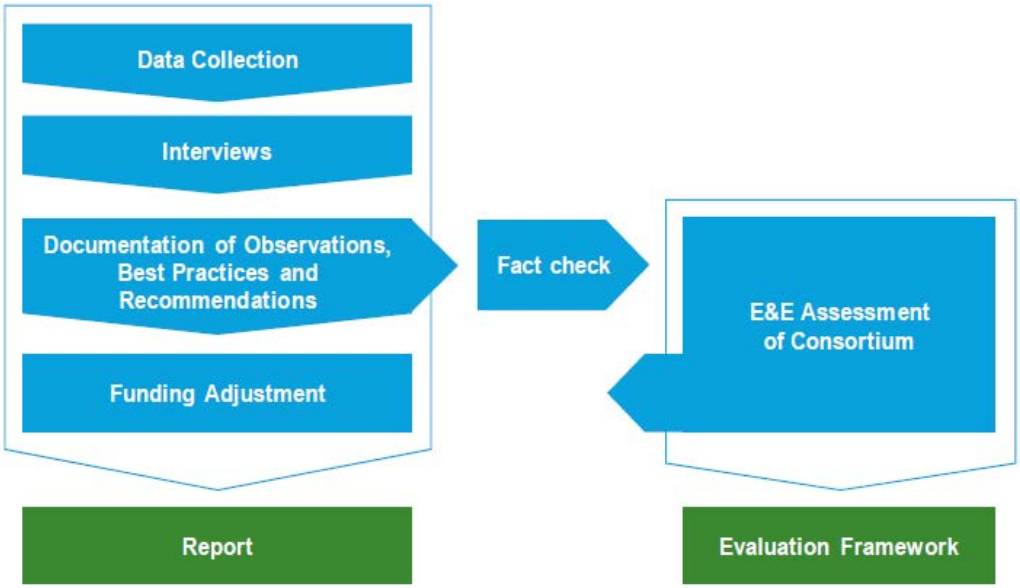
- Incorporate the results of the routing and technology and policies and practices reviews completed by MPS into the final report; and

- Prepare a report for each consortium that has been subject to an E&E Review in Phases three and four. The target audience for the report will be the Ministry, the consortium, and it's Member School Boards. Once finalized, each report will be released to the consortium and its Member School Boards.

1.3 Methodology Used to Complete E&E Review

The methodology for the E&E Review is based on the six step approach presented in Figure 2 and elaborated below:

Figure 2: E&E Review Methodology



A site review report that documents the observations, assessments and recommendations is produced at the end of a site review. The Evaluation Framework has been developed to provide consistency and details on how the Assessment Guide was applied to reach an Overall Rating of each site.

1.3.1 Step 1 – Data collection

Each consortium under review is provided with the E&E Guide from the Ministry of Education. This guide provides details on the information and data the E&E Review Team requires the consortium to collect, organize and provide.

Data is collected in four main areas:

1. Consortium Management;
2. Policies and Practices;
3. Routing and Technology; and
4. Contracts.

1.3.2 Step 2 – Interviews

The E&E Review Team identifies key consortium staff, outside stakeholders and key policy makers with whom interviews are conducted to further understand the operations and key issues impacting a consortium's delivery of effective and efficient student transportation services.

1.3.3 Step 3 – Documentation of observations, Best Practices and Recommendations

Based on data collected and interviews conducted, the E&E Review Team documents their findings under three key areas:

- Observations that involve fact based findings of the review, including current practices and policies;
- Best Practices used by the consortium under each area; and
- Recommendations for improvements based on the Assessment Guide. A summary of the key criteria used in the Assessment Guide to determine the effectiveness and efficiency of each consortium are given bellow:

Consortium Management

- Distinct entity focused on providing student transportation services for member boards
- Well defined governance and organizational structure with clear roles and responsibilities
- Oversight body exists with the mandate to provide strategic directions to Consortium management on the provision of safe, effective and efficient transportation service to support student learning

- Management has communicated clear goals and objectives of the Consortium and these are reflected in the operational plan
- The Consortium takes a comprehensive approach to managing human resources
- Well established accountability framework reflected in the set up and operation of the Consortium including documentation of terms in a Consortium Agreement
- Operations are regularly monitored and performance continually improved
- Financial processes ensure accountability and transparency to member boards
- A budgeting process is in place ensuring timely preparation and monitoring of expenses
- All of the Consortium's key business relationships are defined and documented in contracts
- Governance committee focuses only on high level decisions
- Organizational structure is efficient and utilizes staff appropriately
- Streamlined financial and business processes
- Cost sharing mechanism is well defined and implemented
- The Consortium has appropriate, documented procedures and confidentiality agreements in place governing the use of student data and ensuring compliance with Freedom of Information and Privacy legislation

Policies and Practices

- Safety programs are established for all students using age appropriate training tools
- Development of policies is based on well defined parameters dictated by the strategic goals of the governance structure and Consortium Management operating plans
- A mechanism is defined to allow for regular review and consideration of policy and practice changes to address environmental changes

- Established procedures allow for regular feedback on the impact that current and proposed policy and procedural changes would have on costs, safety and service levels

- Regular monitoring and evaluation of policy expectations is conducted to ensure their continued relevancy and service impacts

- Enforcement procedures are well defined and regularly executed with timely follow–up

- Harmonized transportation policies incorporate safety, operational and cost considerations

- Position-appropriate delegation of decisions to ensure the efficiency of decision making

- Operational alternatives to traditional practices are considered and implemented where reasonable and appropriate

- Service levels are well defined, considerate of local conditions, and understood by all participating stakeholders

- Policy and practice modifications for students with special needs are considered in terms of both the exceptionality and its service and cost impacts

Routing and Technology

- Transportation management software has been implemented and integrated into the operational environment

- Key underlying data sets (e.g., student and map data) are regularly updated:

- Responsibility and accountability for the updates is clearly defined and performance is regularly reviewed

- Coding structures are established to facilitate scenario modeling and operational analysis of designated subgroups of students, runs, schools, etc.

- Procedures are in place to use software functionality to regularly evaluate operational performance and model alternatives to traditional practices

- Disaster recovery plans and back up procedures are established, performed regularly, and tested

- Operational performance is regularly monitored through KPI and reporting tools are used to distribute results to appropriate parties
- Technology tools are used to reduce or eliminate manual production and distribution activities where possible in order to increase productivity
- Training programs are established in order to increase proficiency with existing Tools
- Route planning activities utilize system functionality within the defined plan established by Consortium management

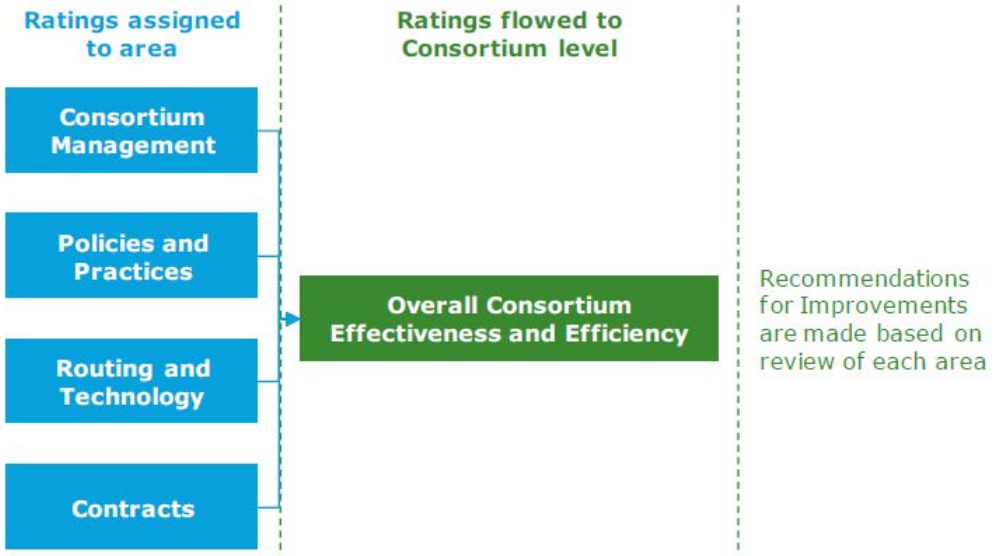
Contracts

- Contracts exist for all service providers, including taxi, boat and/or municipal transit services and parent drivers
- Contracts are structured to ensure accountability and transparency between contracted parties
- All operator contracts are complete with respect to recommended clauses
- Compensation formulae are clear
- Operator contracts are in place prior to the start of the school year
- Procurement processes are conducted in line with the Consortium's procurement policies and procurement calendar
- The Consortium has laid the groundwork for, or is actively using, competitive procurement processes
- Proactive efforts are made to ensure operator contract compliance and legal compliance
- The Consortium collects and verifies information required from operators in contracts
- The Consortium actively monitors and follows up on operator on-theroad performance using random, documented route audits or their equivalent
- The Consortium avoids using School Board owned vehicles

1.3.4 Step 4 and 5 – E&E assessment of consortium and site report

The Assessment Guide was developed to enable the E&E Review Team to provide each consortium that undergoes an E&E Review with a consistent, fair, and transparent method of assessment. The Assessment Guide is broken down along the four main components of review (i.e. Consortium Management, Policies and Practices, Routing and Technology, and Contracts) and, for each, illustrates what constitutes a specific level of effectiveness and efficiency (refer to Figure 3 for diagram of process).

Figure 3: Assessment of consortia - Ratings Analysis and Assignment



The Evaluation Framework provides details on how the Assessment Guide is to be applied, including the use of the Evaluation Work Sheets, to arrive at the final Overall Rating. The E&E Review Team then compiles all findings and recommendations into an E&E Review Report (i.e. this document).

1.3.5 Funding adjustment

The Ministry will use the results of the E&E Reviews and the cost benchmark study to inform any future funding adjustments. Only School Boards that have undergone E&E Reviews are eligible for a funding adjustment. Table 1 below illustrates how the Overall Rating will affect a Board's transportation expenditure-allocation gap.

Table 1: Funding Adjustment Formula

Overall Rating	Effect on deficit Boards[1]	Effect on surplus Boards[1]
High	Reduce the gap by 100% (i.e. eliminate the gap)	No in-year funding impact; out-year changes are to be determined
Moderate-High	Reduce the gap by 90%	Same as above
Moderate	Reduce the gap by 60%	Same as above
Moderate-Low	Reduce the gap by 0%	Same as above
Low	Reduce the gap by 0%	Same as above

The Ministry has announced, through memorandum 2009:B2 dated March 27, 2009, that effective from the 2009-2010 school year, in addition to the funding adjustments made based on the overall E&E rating, for any consortium not achieving a high rating in Routing and Technology, a negative adjustment of one percent to a Board's transportation allocation will be made to recognize potential efficiencies through ongoing routing optimization and technology use. To acknowledge sites whose systems are already operating in an efficient manner, the adjustment will only apply to School Boards that have not achieved a "high" rating in Routing and Technology from the Effectiveness and Efficiency reviews. School Boards that achieve a "high" rating in the Routing and Technology area in future reviews will be exempt from the reduction in the subsequent year.

1.3.6 Purpose of report

This Report serves as the deliverable for the E&E Review conducted on the Consortium by the E&E Review Team during the week of September 25, 2010.

1.3.7 Material relied upon

Refer to Appendix 3 for a list of documents that the E&E Review Team relied upon for their review. These documents were used in conjunction with interviews with key Consortium staff, outside stakeholders, and key policy makers to arrive at the assessment and rating of the Consortium.

[1] This refers to Boards that have a deficit/surplus on student transportation (see Section 7 – Funding Adjustments)

1.3.8 Limitations on the use of this report

The purpose of this Report is to document the results of the E&E Review of the consortium. The E&E Review is not of the nature or scope so as to constitute an audit made in accordance with generally accepted auditing standards. Therefore, as part of this E&E Review, Deloitte has not expressed an opinion on any financial statements, elements, or accounts to be referred to when reporting any findings to the Ministry. Additionally, procedures used by the E&E Review Team are not intended to disclose defalcations, system deficiencies, or other irregularities.

2 Consortium Overview

2.1 Consortium Overview[2]

Student Transportation Services of Thunder Bay ("STSTB" or "the Consortium") provides transportation services for the Lakehead District School Board ("LDSB"), the Thunder Bay Catholic District School Board ("TBCDSB") and the Conseil scolaire de district catholique des Aurores Boréales ("CSDCAB"; collectively the "Member Boards"). The Consortium provides transportation services to approximately 14,990 elementary and secondary students using 185 vehicles covering over 14,989 kilometres each day. The service area covers 5,086 square kilometres, and includes 49 elementary and secondary schools. These transportation services are provided primarily through a combination of bus operators, taxis, parent drivers and public transit.

The Consortium was created in January, 2008 upon the execution of an inter-board transportation Consortium Agreement. The Consortium was formed based on an agreement among the Member Boards and is not a separate legal entity.

The geographic area covered by the Consortium is a combination of urban and rural areas. The service area stretches from Jacques and Fowler Townships in the north to the American border in the south as well as from Shebandowan/Raith area to Sibley in Shuniah Township west to the east respectively.

Table 2 and Table 3 below provide a summary of key statistics and financial data of each Member Board:

Table 2: 2008-2009 Transportation Survey Data

Items	LDSB	TBCDSB	CSDCAB	Total Consortium
Number of schools served	31	20	2	53
Total general transported students	5,947	4,920	389	11,256
Total special needs[3] transported students	23	44	0	67

[2] Data reported in this section of the report may be inconsistent with data presented in other sections due to the different timing of data collection. Data reported in this section of the report includes noon-hour transportation.

[3] Includes students requiring special transportation such as congregated and integrated special education students who require dedicated routes and/or vehicles; students who must ride alone; students who require an attendant on the vehicle

Items	LDSB	TBCDSB	CSDCAB	Total Consortium
Total wheelchair accessible transportation	0	49	0	49
Total specialized program[4] transportation	725	773	0	1,498
Total courtesy riders	587	661	8	1,256
Total hazard riders	558	570	0	1,128
Total students transported daily	7,840	7,017	397	15,254
Total public transit riders	296	6	0	302
Total students transported including transit riders	15,976	14,040	794	30,810
Total contracted full and mid-sized buses[5]	98	83	5	186
Total contracted mini buses	1	7	1	9
Total contracted school purpose vehicles[6]	0	0	0	0
Total contracted PDPV	0	6	0	6
Total contracted taxis	3	0	0	3
Total number of contracted vehicles	102	96	6	204

[4] Includes students transported to French Immersion, magnet and gifted programs, students with special needs who are transported to specialized programs are captured as special needs transported students.
[5] Includes full-sized buses, mid-sized buses, full-sized buses adapted for wheelchair use and mid-sized buses adapted for wheelchair use; all vehicle counts are rounded to the nearest whole number.
[6] Includes school-purposed vans, mini-vans, and sedans.

Table 3: 2009-2010 Financial Data[7]

Items	LDSB	TBCDSB	CSDCAB
Allocation	$6,565,213	$5,258,034	$719,790
Net expenditures	$6,618,954	$5,024,862	$740,918
Transportation surplus (deficit)	$(53,741)	$233,172	$(21,128)
Percentage of transportation expenses allocated to the Consortium	100%	100%	54%

[7] 2009-2010 allocations and expenditures based on Ministry data – Revised Estimates for 2009-2010

3 Consortium Management

3.1 Introduction

Consortium Management encompasses the management of the entire organization providing student transportation services. The analysis stems from a review of the four key components of Consortium Management:

- Governance;
- Organizational Structure;
- Consortium Management; and
- Financial Management.

Each component has been analyzed based on information provided by the Consortium and from information collected during interviews. The analysis included an assessment of areas requiring improvement that were informed by a set of known best practices identified during previous E&E Reviews. These results are then used to develop an E&E assessment for each component. The E&E assessment of Consortium Management for the Consortium is as follows:

Consortium Management – E&E Rating: Low

3.2 Governance

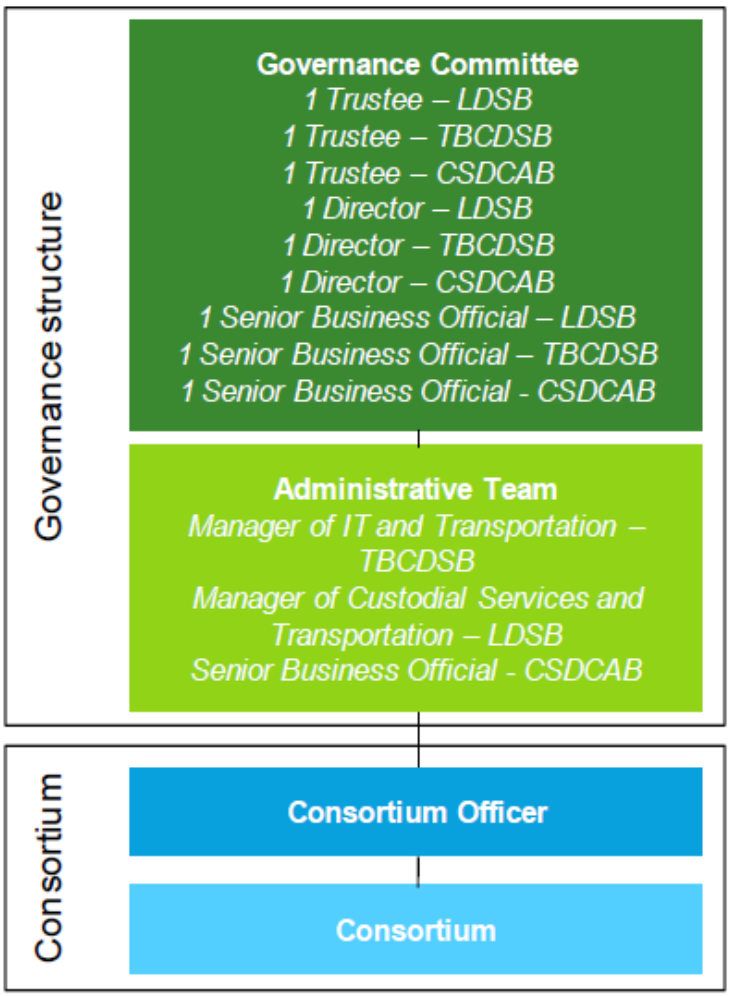
Governance refers to the way in which an organization is directed and controlled. Establishing administrative structures and processes that facilitate, monitor, measure and improve effective business management are primary responsibilities of a governance structure. Three key principles for an effective 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.

3.2.1 Observations

Governance structure

Governance for the Consortium is provided by two structures – the Governance Committee and the Administrative Team (collectively the “governance structures”), both of which are established in the Consortium Agreement. The Consortium’s governance structures are illustrated below:

Figure 4: Consortium governance structures



Note: The Consortium Officer holds a non-voting position on both the Governance Committee and the Administrative Team

The Consortium Agreement outlines the roles and responsibilities of the Consortium's governance structures. The primary responsibilities of the Governance Committee are to, among other things, approve financial budgets and reports; approve the Consortium's planning and strategic documents; enforce and provide input into the Consortium Agreement, and assess the Consortium and Consortium Officer's performance. The Governance Committee is required to meet at least three times per year.

Governance Committee meeting minutes are taken and ratified, but not signed. The Consortium Agreement does not outline a voting mechanism or a structure for chairmanship, although discussions with members of the Governance Committee

indicated that decisions are usually made by consensus and that chairmanship rotates annually among the Member Boards.

As defined by the Consortium Agreement, “the Administrative Team, through the Consortium Officer, [is] responsible for the day-to-day operations of the STSTB”. This includes responsibility for operational, HR, financial, safety and policy issues. Individual members of the Administrative Team are also primarily responsible for reporting on transportation matters to their respective Member Boards. The Administrative Team is required to meet bi-monthly; meeting minutes are taken, ratified and signed. The Consortium Agreement does not outline a voting mechanism or a structure for chairmanship, although discussions with members of the Administrative Team indicated that decisions are usually made by consensus and that chairmanship is held by the Consortium Officer.

Discussions with Consortium management and members of the Consortium’s governance structures indicated that the role of the Governance Committee and Administrative Team have varied from the descriptions provided in the Consortium Agreement. These discussions indicated that the Governance Committee’s role is to act as a policy, strategic and financial decision making body; to act as a conduit for communication back to the Member Boards with respect to transportation and cooperation matters; and to discuss various initiatives being generated at the Consortium and Administrative Team levels. These discussions also indicated that the role of the Administrative Team is to act as a working subcommittee of the Governance Committee that is responsible for the development of consensus among the Member Boards, to provide granular guidance and advice on operational matters to the Consortium Officer, and to guide the development of the organization as a whole during its current state of transition. The Administrative Team’s role has included matters such as budget and website development.

Board level governance and arbitration clause

A Member Board level arbitration clause is provided in the Consortium’s Agreement. This states that disputes will first be escalated to a mutually agreed upon arbitrator that is appointed by the Manager/Supervisor of the STSTB (the Consortium Officer). All decisions of the arbitrator shall be final and binding.

3.2.2 Best Practices

It is recognized that the Consortium has demonstrated best practices in the following areas:

Structure of the governance structures

The Consortium's governance structures have equal representation from each Member 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.

Meetings of the governance structures

The Consortium's governance structures are required to meet a minimum number of times per year and utilize formal agenda. Meeting minutes are taken, ratified and, in the case of the Administration Team, signed. It is suggested that the Governance Committee also undertake the signing of meeting minutes in order to ensure that an 'official' copy of decisions made at these meetings is retained.

Dispute resolution

A Member Board level dispute policy is in place between the Member Boards. The policy is an effective mechanism to protect the rights of Member Boards and will also help to ensure that decisions made represent the best interests of parties involved.

3.2.3 Recommendations

Separate operations from governance

An effective governance structure calls for a clear line to be drawn between those individuals that are responsible for ensuring the smooth function of all of the Consortiums activities, i.e. its operations, and those individuals that are responsible for the oversight of those activities. The Governance Committee for this Consortium has established a two tier governance structure. Two tier structures have been established by several Consortia across the Province and can facilitate the effective oversight of the Consortium with the Administrative Team as the liaison between daily operations and the Governance Committee and Member Boards. With this structure, the role of the Administrative Team is generally more tactical in nature and as a result its responsibilities are more focused on the Consortium's day to day operations and activities. The risk with a two tier structure, however, is that the line between operational execution and operational oversight is easily blurred. The Administrative Team for STSTB plays quite a large role in the day to day broader operations of the Consortium, being responsible for such operational functions as website development, budget development and management, and HR management but does not appear to be involved in the routing operations of the Consortium. We recommend that the Administrative team reduce its role in the day to day management of the general

operations of the Consortium (and changes the role of the Administrative Team outlined in the Consortium Agreement accordingly.)

While it is recognized that the role of the Administrative Team will naturally be more hands on in the infancy stages of the Consortium and transition to being less heavily involved as the Consortium evolves, it is still never-the-less recommended that the role of the STSTB Administrative Team be repositioned to ensure that its members are primarily involved with the oversight, and not the execution, of the Consortium's activities. Doing so will not only strengthen the Administrative Team's oversight capabilities. Combined with an appropriate delegation of authority this repositioning will also help to ensure that Consortium management has sufficient leeway and independence to enable the effective execution of its functions. In situations where the special expertise of particular members of the Administrative Team or other Member Board staff is required, it is recommended that this expertise be provided through executed purchase of service agreements between the Consortium and its Member Boards.

Align the documented role of the governance structures with day-to-day practice

While the Consortium Agreement clearly defines the roles of both the Governance Committee and the Administrative Team, discussions with members of both governance structures indicated that their role has varied from these documented descriptions. In order to increase the clarity of the Consortium's oversight functions, it is recommended that the Consortium Agreement be modified to better reflect actual roles and responsibilities.

Provide additional clarity on procedural elements related to the governance structures

It is recommended that the Consortium Agreement be modified to include additional information on voting mechanisms and the structures used to determine chairmanship for both the Governance Committee and, if relevant, the Administrative Team. The inclusion of such information will not only enhance the clarity of the Consortium's governance structures, it will also provide a common reference point for the resolution of potential future disputes.

3.3 Organizational structure

An optimized 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.

3.3.1 Observations

Entity status

The Consortium's was formed based on an agreement among the Member Boards. The Consortium Agreement acts as the Consortium's primary founding document and is outlined in the section below.

Consortium formation and agreement

The Consortium Agreement establishes the STSTB as the administrator of all home-to-school, school-to- school and special needs transportation services for the Member Boards with the exception of LDSB transportation requirements in Armstrong. It outlines, among other things:

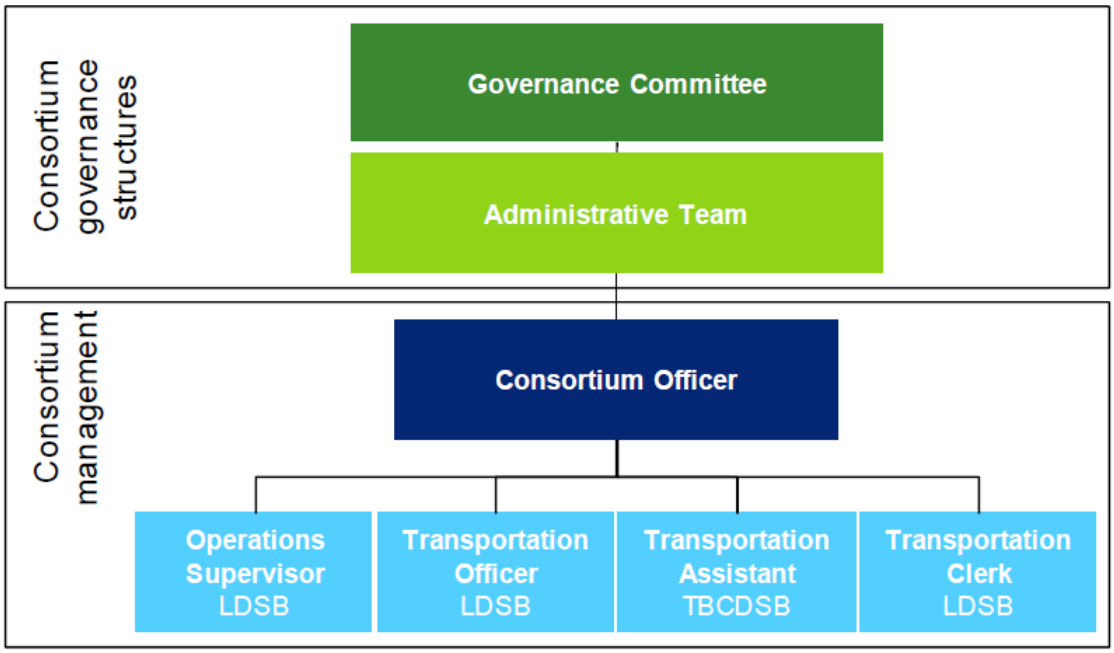
- The structure, roles and responsibilities of the Consortium's governance structures;
- The roles and responsibilities of Consortium management;
- Cost sharing mechanisms and formulae;
- Policy concerns – the STSTB is to take direction from existing Member Board policies in the operation of transportation services; and
- Clauses related to arbitration, indemnification and mandated insurance requirements.

The Consortium Agreement also states that all Member Boards disclaim any intention to create a partnership and that none of the Member Boards will be responsible for claims, losses, costs or damages associated with the actions of another Member Board.

Organization of entity

As identified in the Consortium Agreement, all Consortium staff are employees of their respective Member Boards but technically report to the Consortium Officer, however, discussions with Consortium management indicated that, in practice, LDSB staff report to the Operations Supervisor on particular matters due to their affiliation with their collective bargaining unit. The organization of Consortium staff is illustrated below:

Figure 5: Consortium organizational structure



Consortium staff are currently members of their respective Member Boards' collective bargaining units. Secondment agreements have been executed for employees of the TBCDSB but have not been executed for staff from the LDSB.

Staff currently have job descriptions at the Member Board level; however, job descriptions that outline each of their specific responsibilities, decision making authorities, skills and reporting/delegation authority do not exist at the Consortium level. Some of the roles and responsibilities of the Consortium Officer are outlined in a schedule to the Consortium Agreement.

Discussions with members of the Administrative Team indicated its members from the LDSB, TBCDSB and CSDCAB dedicate between 10% and 25% of their time respectively to the STSTB.

3.3.2 Recommendations

Establish the Consortium as a separate legal entity

The Consortium's was formed based on an agreement among the Member Boards and is not currently a separate legal entity. The current structure has several inherent risks which make it a less than optimal structure for coordinating student transportation:

- The risk that the actions of one Member Board may be leaving the other Member Boards open to liability;

- The risk that one Member Board can be involved in litigation for issues involving students that are not part of their School Board; and

- The risk that liability, brought about through the Consortium's joint status, may exceed its Member Board's existing insurable limits. The Consortium should investigate, with the assistance of its Member Board's insurance carrier, its coverage related to, but not limited to, punitive damages, human rights complaints, and wrongful dismissal lawsuits. It is recommended that the Consortium investigates, with its insurance carrier, the applicability of errors and omissions insurance.

Based on these risks, which may not be fully addressed through clauses in the Consortium Agreement related to the sharing of liabilities, the Member Boards should explore the establishment of the Consortium as a Separate Legal Entity through incorporation to formalize and improve its current managerial and contracting practices. The creation of a Separate Legal Entity effectively limits risk to the Member school Board for activities related to the provision of student transportation and will also help to further separate the Consortium's oversight structures from its operational functions. When an incorporated entity takes responsibility for student transportation services, this incorporated entity status is an effective safeguard against any third party establishing liability on the part of Member Boards. A Consortia Entity Resource Guide available through the Ministry's student transportation website can provide further assistance with this planning and decision making process.

Upon attainment of separate legal entity status, the Consortium should execute a transportation service agreement that, where possible, jointly signed by all participating Boards. This document should outline all clauses that are relevant to the provision of transportation services such as the scope of services to be provided, fees, insurance/liabilities, quality of service, and dispute resolution.

Organization of Entity

The Consortium's organizational structure, on paper, reflects clear lines of reporting between staff and Consortium management. However, in line with recommendations made throughout this report, it is suggested that Consortium ensure appropriate lines of reporting are implemented that eliminate the differing reporting requirements for staff based on their "home" Member Board. Lines of reporting, as implemented, should reflect an appropriate reporting structure for the Consortium as a whole and respect the authority delegated to the Consortium officer. This revised structure can help to

increase effectiveness by creating an appropriate system by which issues can be escalated within the Consortium. This reorganization will also give the Consortium officer control over all resources and matters involved in transportation planning and the management of the Consortium which will allow for increased coordination and integration and will ensure a more equitable reporting structure for all.

Create relevant job descriptions for all positions within the Consortium

Clear, detailed and updated job descriptions should be defined at the Consortium level for all positions within the Consortium in order to ensure that staff can efficiently execute on their daily duties and help to ensure a smooth transition in the event of staff turnover. Job descriptions should make reference to actual operational responsibilities and support an appropriate segregation of duties.

Sign secondment agreements with the Member Boards

Consortium staff are currently employed by their respective Member Boards and have been seconded to the Consortium. However, secondment agreements have only been executed for employees of the TBCDSB. Pending decisions on a longer term human resources plan, it is recommended that the Consortium sign appropriate secondment agreements with the LDSB in order to document this critical relationship and in order to provide clarity in addition to that provided in the Consortium Agreement with respect to the terms on which Consortium staff are being seconded to the Consortium.

3.4 Consortium 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.

3.4.1 Observations

Cost sharing

A cost sharing agreement for the Consortium is outlined in the Consortium Agreement. Operating costs for each Member Board are to be allocated based on the number of weighted students on a given route. Administration costs are calculated based on the un-weighted ridership for all transported students.

Individual policy decisions made by Member Boards that create additional transportation costs are allocated directly to them.

Transportation service agreements

The Consortium does not currently have transportation service agreements in place that outline the service-level expectations of the Member Boards; however, some of these expectations are outlined at a high-level in the Consortium Agreement.

Purchase of service agreements/support services

The Consortium purchases HR, payroll, and financial services from each of its Member Boards, purchases additional IT services from the TBCDSB and LDSB, and purchases telecommunications services from the TBCDSB. Purchase of service agreements are in place and are valid for one year starting September, 2009 with automatic renewal on an annual basis. Additional clauses relating to dispute resolution; confidentiality; and ownership of data are included in the contracts. These agreements refer to the Consortium as a partnership.

Service providers are compensated through the cost sharing formula contained in the Consortium Agreement; purchase of service agreements also include a payment schedule. Special projects are to be submitted to the relevant Member Board in a formal proposal for approval. Costs associated with these special projects are to be included as part of the Consortium's cost sharing agreement.

Trapeze Software, Inc

The Consortium has executed a standard software licensing agreement between itself and Trapeze.

Property

The Consortium rents its property from an Ontario-based property management company and this relationship is documented in a standard lease agreement that has been executed between the LDSB and the property management company.

Procurement policies

The Consortium does not currently have its own purchasing policies. Purchase of service agreements between the Consortium and both of its Member Boards include purchasing services, although discussions with Consortium management indicated that the Consortium adopts the purchasing policies of its Member Boards depending on the Board through which the good or service is being procured.

Insurance

The Consortium has purchased joint venture insurance through the Ontario School Boards' Insurance Exchange (OSBIE). This insurance is valid from July 1, 2010 to

January, 2011 and includes coverage for general liabilities. Governance Committee and Administration Team meeting minutes indicate that the Consortium's insurance needs are reviewed regularly in consultation with OSBIE.

Staff performance evaluation, training and management

Performance evaluations for Consortium staff are currently not conducted at either the Consortium or Member Board level; however, the Administration Team and Governance Committee have conducted performance evaluations for the Consortium Officer. While the LDSB is currently in the process of developing a staff evaluation process for all non-academic staff, there is currently no documented staff performance evaluation process at the Consortium level that outlines the process, structure and reporting requirements associated with measuring staff performance.

Training for STSTB staff is currently conducted using in-house and off-site resources. The Consortium does not currently have training plans in place for staff members and the training provided to Consortium staff is not documented and tracked over time on an individual basis. Discussions with Consortium management indicated that Consortium members take advantage of external training opportunities when available and that internal training is currently also provided.

The Consortium's goals and objectives are communicated to staff through formal monthly staff meetings. Staff meetings are scheduled in advance; however, meeting minutes are currently not taken.

Succession planning

Succession plans are not currently in place and Consortium staff are not cross-trained in each other's responsibilities. Discussions with Consortium management and a review of Administrative Team meeting minutes indicate that the development of a succession plan is an operational objective for the Consortium. Consortium management anticipates that a succession plan for the Consortium will be developed, finalized and implemented in the coming months.

Long term and short term planning

The Consortium has developed a long term and short term operational plan in consultation with its governance structures that identifies the Consortium's immediate short term and long terms goals and objectives. This document does not, however, allocate responsibility for the objectives to individual staff, does not outline the timelines over which the objectives are to be met, and does not indicate reporting requirements associated with the objectives.

Short term objectives for the Consortium include, among other things, a review of special education costs, the provision of additional training to Consortium staff, and an examination of the effect of Ministry programs on the Consortium's funding and routing scheme. Long term goals include, among other things, the development of a succession plan; an assessment of the potential to adjust school bell times; and additional technological improvements.

The Consortium does not currently have documented, governance approved long term and short term planning processes that outline the process, structure, individuals and principles underlying the development of the Consortium's goals and objectives. The Consortium also does not have a governance approved strategy for evaluating the future impact of decreasing budget allocations resulting from declining student enrolment.

Key performance (service) indicators (KPIs)

The Consortium does not currently have a documented, governance approved policy on the use and reporting of KPI's that assess its own operational performance. However, a review of Administrative Team meeting minutes indicates that the Consortium does report on its performance. Some KPI's presented to the Administrative Team are outlined in the table below; these KPI's are not regularly reviewed by the Governance Committee and do not differentiate between KPI's for the TBCDSB and the CSDCAB.

Sample of KPIs tracked by the Consortium:

1. Total number of buses by leg
2. Number of routes
3. Distance information
4. Average kilometers per bus
5. Average students per bus
6. Student and bus travel time information
7. Exception riders
8. Bus utilization
9. Cost per student
10. Average students per route

11. Run pairing ratio
12. Cost per bus per year
13. Cost per kilometer per day
14. Average exception riders per route

Information management

The Consortium does not have documented, governance approved policies and procedures in place governing the use of student data and ensuring compliance with Freedom of Information and Privacy legislation. The Consortium obtains formal authorization to collect student information indirectly through its Member Boards' student information collection forms.

Signed confidentiality agreements are in place with all Consortium staff.

3.4.2 Best Practices

It is recognized that the Consortium has demonstrated best practices in the following areas:

Cost sharing agreements

The Consortium Agreement outlines the cost sharing mechanism for STSTB. A documented methodology for cost sharing is a best practice to ensure accountability over costs and appropriate operational cash flow for the financial obligations of the Consortium.

Insurance

The Consortium has obtained insurance coverage and coverage needs are periodically reviewed. Insurance coverage is essential to ensure the Consortium and Member Boards each are suitably protected from potential liabilities.

3.4.3 Recommendations

Execute a formalized transportation service agreement

While the Consortium Agreement outlines some of the Member Boards' service level expectations at a high-level, this document is primarily intended to be an agreement among the Member Boards that establishes the Consortium; it is an over-arching agreement that is to specify the terms and structure of the Member Board's joint

venture[8]. Distinct from the Consortium Agreement, the transportation service agreement articulates the service relationship between the Member Boards and the Consortium. In order to make the above distinction clearer, it is recommended that the Consortium develop and execute transportation service agreements with all Member Boards. The transportation service agreement should include clauses that specify the scope of services to be provided, fees, insurance/liabilities, quality of service, dispute resolution and other terms that the Member Boards deem to be appropriate.

Modify existing purchase of service agreements

It is recommended that three modifications be made to the Consortium's purchase of service agreements:

1. The Consortium currently leases its premises through a rental agreement signed between the LDSB and an Ontario property management company. However, the provision of lease space from the LDSB to the Consortium is not included as part of the purchase of service agreement signed between the LDSB and the Consortium. It is therefore recommended that the Consortium modify its purchase of service agreement with the LDSB to state that the LDSB will provide the Consortium with leased space in which to locate its offices.

2. The Consortium's software licensing agreement with Trapeze has been executed between the Consortium and Trapeze; however, the Consortium does not currently exist as a separate legal entity and therefore does not have the ability to sign contracts with external parties on its own behalf. In a manner similar to that used for its bus operator contract, it is recommended that the software licensing agreement be modified and executed between Trapeze and each of the Member Boards, while recognizing that STSTB is a joint provider of transportation services to them.

3. The Consortium's purchases of service agreements with its Member Boards refer to the Consortium as a partnership; however, the Consortium Agreement explicitly states that the Consortium is not a partnership. It is recommended that Consortium management, working with members of the Governance Committee and the Administrative Team, modify its documentation as necessary in order to more accurately reflect its current legal status while also ensuring consistency among its documentation.

[8] This does not refer to a legally structured Joint Venture

Develop procurement policies for the Consortium

The Consortium should establish formal procurement policies in order to increase the accountability and transparency of its transportation purchasing decisions. 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. Particular attention should be paid to the purchasing thresholds associated with the initiation of a competitive procurement process. This threshold should be practical to allow for sole sourcing of transportation services when warranted by circumstances. Formalizing these policies will ensure standardization in the procurement methods of the Consortium and will also act as an accountability mechanism by providing clarity to the Consortium and the Member Boards. It will also allow the Consortium to harmonize each Board's purchasing policies while ensuring that these policies are adapted to the particular needs of the Consortium.

Implement a documented, formal staff performance evaluation, monitoring and training process

It is recommended that the Consortium, working with its Member Boards, develop, document and implement a process for staff evaluation so as to ensure an alignment between staff performance and the Consortium's goals and objectives. Effective staff evaluation processes establish clear performance evaluation criteria for each position, are conducted regularly, and are fully documented. When implemented effectively, performance evaluations can be a powerful tool to guide and encourage employees to keep the goals and objectives of the overall Consortium in mind during day to day operations.

Building on the above, the Consortium should also develop, document and implement clear staff training/learning initiatives and plans to promote continuous learning. Effective staff training initiatives will help to develop skills and will ensure that staff are able to fully utilize available technological aids. All training provided, including cross-training initiatives, should be documented and tracked over time.

Document staff meetings

It is recommended that Consortium management initiate the maintenance of meeting minutes for its formal monthly staff meetings. The maintenance of such meeting minutes will help to clarify delegated responsibilities, enhance performance measurement and communication with the Consortium's governance structures, and promote a culture of teamwork and cohesion within the organization. Meeting minutes should be ratified by all staff involved in order to further encourage accountability.

Develop succession planning document

It is acknowledged that Consortium staff has experience and is able to keep the Consortium running should a key staff member depart or be absent. However, in order to bolster the Consortium's risk management efforts and in line with its stated long term objectives, the Consortium should develop a formal succession plan to ensure the continued smooth operation of the Consortium should key personnel leave or be absent.

Develop a formal, documented long term and short term planning process

It is recognized that the Consortium has developed a long term and short term operational plan that identifies the Consortium's immediate short term and long term goals and objectives. However, the Consortium does not currently have a documented process by which these plans are developed. It is therefore recommended that the Consortium define the process through which it will develop its long term and short term goals and priorities. The goals, and the process used to develop them, should be specific, clear, documented, and approved by the Governance Committee and/or the Administrative Team.

Developing such a document will help to inspire a culture of continuous, proactive self-improvement within the Consortium.

Modify the Consortium's long term and short term planning documents

The Consortium's existing long term and short term plans do not allocate responsibility for the identified objectives, outline the timelines over which these objectives will be executed, or include the timelines over which progress on these objective must be reported. It is recommended that this additional detail be included in the document in order to bolster the Consortium's performance measurement and accountability frameworks. The availability of such specific, tangible plans will also allow Consortium management to more effectively allocate resources to meet the Consortium objectives.

Develop a strategy for declining enrolment

School enrolment across Ontario has been in steady decline over the last decade. Given the Ministry's recent notice that transportation funding is to be reduced in line with declining enrolment, it is recommended that the Consortium incorporate a strategy for the management of transportation costs into its long term planning process. Developing such a plan will provide the Consortium with a framework that will help it address not only the issue of funding, it will also signal a proactive approach to dealing with issues before they arise – a key element of effective long-term Consortium management.

Develop a formal policy on KPI monitoring and enhance the current KPI monitoring process

The Consortium does not currently have a formal policy framework within which the use of KPIs to monitor the Consortium's performance is institutionalized. It is recommended that the process to be used to gather and analyze KPIs be documented in a governance-approved KPI monitoring plan. This KPI monitoring plan should define the KPIs to be analysed, frequency with which the KPIs will be analyzed and the quantitative thresholds for changes in KPIs above which further action will be taken and reported to either the Governance Committee or the Administrative Team.

In line with the recommendation on expanding data analysis and reporting efforts (see 5.4.2.1), it is further recommended that the Consortium's current KPI monitoring document be enhanced to include year-over-year comparisons, trending analysis and additional context related to the metrics in order to increase their meaningfulness to members of the Administrative Team and Governance Committee.

Develop policies and procedures related to the treatment of confidential information

The Consortium should develop appropriate, documented policies, procedures and confidentiality agreements to govern the use of confidential information in order to ensure compliance with freedom of information and privacy legislation. These policies and procedures should address all issues related to the collection, storage, use, access, distribution and destruction of information, and should also require the Consortium's governance structures and Member Boards to review and reflect on freedom of information and privacy legislation requirements on a regular basis. The Consortium is further encouraged to review the findings and recommendations contained in the OASBO Guidelines for Sharing Personal Student Information with Transportation Consortia.

3.5 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.

3.5.1 Observations

The Consortium does not have documented, governance approved policies with respect to its financial management and reporting policies and practices. Discussions with Consortium management indicated that financial management responsibilities are retained at the Member Board level.

Budget planning and monitoring

Budget development takes place at the Administrative Team level with Member Board representatives providing their costing information, and Consortium management providing information on direct transportation costs. These budgets are then divided by the Consortium Officer among the Member Boards and are taken back to the respective Member Boards for approval. Budgets are developed based on previous year actuals, with allowances for planned initiatives and projects.

Budget-to-actual reconciliations are conducted at the Member Board level. Budget reconciliations are done at the Member Board level in line with monitoring requirements included in each Member Board's financial management policies. This reconciliations and actual expenditure information is not provided to Consortium management.

Accounting practices and management

The Consortium's accounting practices are governed by each Member Boards respective financial management policies.

Monthly operator payments are based on one tenth of the contract amount. The Consortium prepares a monthly contract payment release for each Member Board except the CSDCAB. Upon receipt of this payment release, the Member Boards pay each operator based on their respective accounting policies and procedures. These payment releases are adjusted as required to reflect the annual contract amounts. Monthly fuel adjustments are made to the fuel component of the payment based on the fuel price calculations from the Ministry of Education. Payment releases for the CSDCAB are not created separately since the CSDCAB does not enter into contractual agreements with the bus operators and obtains home to school student transportation from either the LDSB or the TBCDSB.

All other operators (including taxi operators) submit invoices that are sent to the Consortium for approval and forwarded to each Member Board for final approval, sign off and payment. All invoices for the TBCDSB are reviewed and initialled by the Consortium Officer. All invoices for the LDSB are reviewed and initialled by the Operations Supervisor.

While the Consortium Officer reviews and approves all transportation invoices, he does not review invoices or payments for non-transportation expenses (for example, rent).

Audit

Each of the Consortium's Member Boards is audited on an annual basis. The Consortium does not contract its own external auditor.

3.5.2 Recommendations

Delegate additional financial management authority to the Consortium Officer

The Consortium Officer currently only reviews invoices related to one of the Member Boards. In order to facilitate integration at the Consortium and to enhance the accountability and transparency of the Consortium's financial management processes, it is recommended that the Consortium Officer be given the authority to sign-off on all of the Consortium's expenses except for his own. Centralizing the expense approval function will provide members of the Governance Committee and Administrative Team with a single point of accountability for the Consortium's costs and will also give additional control over the Consortium's costs and revenues to Consortium management.

Modify the operator payment process

Currently, the Consortium develops payment releases for bus operator payments that are then sent to the Member Boards for payment. The Consortium does not receive invoices from bus operators. It is recommended that this process be modified to ensure that bus operators are submitting invoices to the Consortium for verification prior to them being sent to the Member Boards for payment.

Modify the budgeting creation and monitoring process

Given that Consortium management has specialized expertise in the financial implications of operating student transportation services, and given that budget allocations ultimately impact the Consortium's ability to provide effective transportation services, it is recommended that the Consortium's budgeting process be modified to allow Consortium management to provide greater input into the final allocations on both direct and indirect transportation costs. Having the Consortium develop its own budget also encourages accountability at the Consortium level by requiring the Consortium to commit to a particular level of costs relative to its "income".

Ideally, the Consortium Officer would prepare a detailed budget and provide projections by Member Board for each type of transportation and administrative cost. This budget

could then be sent for approval to the Consortium's governance structures and Member Boards. The Consortium Officer should also regularly monitor and document actual expenses and perform a review of significant variances between actual and budgeted amounts. The Consortium Officer should present the results of this variance analysis, including explanations for under/overspending, to the Consortium's governance structures on a regular basis.

Further to the above, the budgeting process for the Consortium should be documented and formally approved by the Consortium's governance structures. This process should also mandate the regular, documented review of budget-to-actual variances by the Consortium Officer and the regular presentation of this analysis to the Consortium's governance structures.

Centralize the Consortium's financial management function

Currently, both Member Boards develop the Consortium's budget and implement the Consortium's accounting. The Consortium's financial management function is therefore neither centralized, nor within the control of Consortium management, who have specialized expertise and knowledge of the financial implications of operating student transportation services. It is therefore recommended that the Consortium either centralize accounting services in-house or purchase accounting services from a single School Board and provide Consortium management with the approval authority for all direct and indirect transportation costs. This will reduce duplication and increase the Consortium's clarity and accountability.

3.6 Results of E&E Review

This Consortium has been assessed as **Low.** While the Consortium has taken a number of positive steps in the recent past, significant modifications are required to the Consortium's governance, management and financial management practices in order to bring the Consortium in line with best practices. The most critical recommendation arising from the assessment of Consortium Management is a review of the delineation between the Consortium's operational responsibilities and the oversight responsibilities of the Consortium's governance structures, and the attainment of separate legal entity status for the organization. Other recommendations relating to improvements to the Consortium's human resource, planning, reporting and financial practices should also be implemented in order to institutionalize effective management practices within the Consortium.

4 Policies and Practices

4.1 Introduction

Policies and practices examine and evaluate the established policies, operational procedures, and the documented daily practices that determine the standards of student transportation services. The analysis for this area focused on the following three key areas:

- General Transportation Policies & Practices;
- Special Needs and Specialized Programs; and
- Safety and Training Programs.

The observations, findings, and recommendations found in this section of the report are based on onsite interviews with Consortium staff, and on an analysis of presented documents, extracted data, and information available on the Consortium's website. Best practices, as established by the E&E process, provided the source of comparison for each of these key areas. The results of the assessment are shown below:

Policies and Practices – E&E Rating: Moderate-Low

4.2 Transportation Policies & Practices

The goal of any transportation operation is to provide safe, effective and efficient services. For transportation consortia, it is equally important that service to each of the Member Boards is provided in a fair and equitable manner. To support this goal, it is essential that well defined policies, procedures, and daily practices are documented and supported. Well defined policies ensure that the levels of services to be provided are clearly established while documented procedures and consistent practices determine how services will actually be delivered within the constraints of each policy. To the degree that policies are harmonized along with the consistent application of all policies, procedures, and practices ensures that service will be delivered safely and equitably to each of the Member Boards. This section examines and evaluates the policies, operational procedures, daily practices, and their impact on the delivery of effective and efficient transportation services.

4.2.1 Observations

General policy guidelines

STSTB has worked with its Member Boards to establish policies and operating procedures that provide the fundamental operating guidance necessary to design the routing system and manage transportation services. The structure and format of the policy and procedure statements are designed to identify both the rationale for the proposed requirements and to detail the specific procedures that STSTB and related stakeholders are expected to follow. In most, but not all, cases the specific expectations of each party involved have been detailed to promote accountability for adhering to established processes. Additionally, there has been an effort to articulate differences between policy expectations (what the Consortium and other stakeholders are expected to do) and procedural requirements (how STSTB will operate to meet the expectations of the policy guidance). Finally, in order to ensure the continued relevance of the guidance provided, a specific review period has been established for the transportation policy. However, no similar practice of defining a review period has been established for internal STSTB procedures.

The policies have their origin in the Member Board policies but have been adopted by STSTB in order to clarify service expectations and establish STSTB's accountability for service delivery consistent with the requirements. The policy guidance explicitly promotes the regular assessment of effectiveness and efficiency through a variety of routing techniques. Of particular note is the promotion of route and trip integration between Member Boards "where practical and feasible". The scope of the policy guidance is consistent with the expectations of the E&E process and the specific expectations established offer both best practice examples and areas for further consideration. A specific review of the critical planning and management criteria is detailed below.

Eligibility and walking distances

The Member Boards undertook a significant effort to harmonize the criteria for service eligibility. The table below summarizes the harmonized eligibility policies that have been established.

Table 4: Eligibility criteria

Grade	Distance Criteria
JK-SK	0.4 km
1 - 3	0.8 km
4 - 8	1.6 km

Grade	Distance Criteria
9 - 12	1.6 km

Through its governance structures, the Consortium has also established harmonized criteria related to the maximum distance a student can walk to a stop. This has been established as an operating procedure within STSTB. The table below summarizes the maximum expected distances by grade level.

Table 5: Walk to stop distances

Grade	Maximum Walk Distance
JK-SK	160 metres
Gr. 1 – 3	400 metres
Gr. 4 – 12	800 metres

Data provided during the review indicates that service provision is consistent with these guidelines. In instances where the distance to stop or school were greater than established guidelines, it was due primarily to special circumstance trips such as alternate addresses, courtesy riders, or hazard services.

Alternate addresses

STSTB has established a procedure related to requests for alternate address transportation. While a student can have only one primary address, the Consortium has recognized a need for flexibility in its service design. However, it has also recognized that this flexibility must be managed in order to ensure the safety and security of the students. The procedure allows for alternate pickups only during the morning panel and requires any alternate address to be within the school zone and to be consistent throughout the year. Both of these practices are designed to offer flexibility while limiting the variability in the service.

These allowances are well considered efforts to manage the safety of students, the procedure also allows for high school students who can manage alternating schedules to use the buses as long as there is no cost to the respective Member Board. The ambiguity has the potential to create a concern in the event of an accident or incident on the bus. For example, as it is currently written there is no explicit requirement that a student be assigned to the route by STSTB. However, STSTB uses an alternate

address field to record the address that helps mitigate concerns about the lack of a complete and accurate manifest.

The need to accommodate joint custody arrangements has also been addressed in procedure. If both parents do not reside in the attendance area of the school then it is incumbent on the parents to identify a primary address. If both parents live within the attendance area of the school, alternate stop locations will be accommodated. The procedure requires the child to be capable of managing the schedule without assistance and does not allow for new stops to be created to accommodate the arrangement. These are sound processes that allow for necessary flexibility without unduly complicating operations.

Courtesy transportation

A procedure has been established to allow for otherwise ineligible students to have the opportunity to obtain a bus ride. While not specifically identified in the procedure, parents must apply through the schools to STSTB to determine the availability of courtesy seats. Specific criteria have been established to determine when a courtesy seat will be allowed and when this privilege can be revoked.

The Transportation Codes procedure established by STSTB indicates that courtesy students can be identified by a CT code in the Program 1 field of the routing software. A review of the student dataset provided by STSTB did not indicate any students with the courtesy code despite interviews and the Ministry report indicating courtesy riders were in the system. In order to identify these students, STSTB has established a filtered list of students who live within a walking boundary but are assigned to a bus. While this is certainly a functional approach to identifying this group of students, it is inconsistent with established procedure statements and represents a need to ensure consistency in the application of coding structures or a revision of procedure to ensure consistent and accurate analysis of service data.

The data provided indicated that approximately 1,100 students (nearly 6.5 percent of all transported students) are transported as a courtesy. An analysis of why seating capacity is available to allow nearly seven percent of the total ridership to be transported when they are otherwise ineligible should be conducted. When courtesy transportation is coupled with the nearly 1,000 students transported as a results of hazardous conditions (see below) and nearly 300 Board directed students (students that have been assigned to buses due to exceptions made at the direction of senior administration at the Member Boards), nearly 13 percent of all students transported are not eligible based on distance criteria.

Special needs policies

The requirement for special needs transportation is generally established by the special needs coordinators at each of the Member Boards who then transmit the information to STSTB to develop the bus routes. Efforts are made to mainstream students where possible (data indicates approximately 100 special needs students are assigned to regular home-to-school buses) and then to assign them to the most appropriate vehicle.

The primary guiding document used by STSTB to develop special needs services is the "Special Needs Transportation Service Delivery Model". This is an extensive document describing both service requirements and disability expectations. Detailing the expected behaviours that drivers and/or caregivers could expect from students with particular exceptionalities is an excellent practice and useful training tool. The document also details the responsibilities and expectations of drivers, parents, and school staff when working with special needs students. This document is posted on the STSTB website to allow all stakeholders to be informed of the processes used.

Bell time management

In several of its policy and procedure statements, STSTB is identified as having a leading role in the establishment of bell times to capture operational and financial efficiencies. A procedure related to bell times has been established that encourages cooperation and coordination with the Member Boards. However, this procedure statement offers no insight into the expected time frames for the proposal and decision process to determine the efficacy of time changes. The annual route evaluation procedure does provide for guidance regarding the earliest and latest times that schools should start and end.

Analysis of the activity data, indicating when bus routes are scheduled to arrive and depart from designated service locations, indicates that there is a significant convergence of start times in the morning and departure times in the afternoon (see Section 5.5.1 of this report for additional information). This convergence prevents the use of a number of efficiency techniques such as tiering and transferring. As a result, there are likely opportunities for efficiency that will not be realized until a structured approached to assessing bell time changes is established.

Student Ride Times

Maximum ride time criteria are established in an STSTB procedure. The language used clearly indicates that STSTB will attempt to design routes such that an individual student's ride time is less than one hour *where feasible* (emphasis added). However, the Consortium has provided itself with necessary flexibility given the extent of the

service area through its use of a procedure rather than a policy to define ride time criteria. Analysis of the data, as detailed in Section 5.5.1, indicates that average ride times are approximately 30 minutes and that nearly 10 percent of routes exceed the one hour guideline. While this is certainly an area that requires continued vigilance, current service characteristics are consistent with the established guidelines.

Route planning schedules and strategies

STSTB has established a planning calendar that identifies key milestone dates associated with the planning process. As currently established, the plan lacks specific information on levels of effort required (i.e. the number of hours or days required to complete a task), designated task dependencies (i.e., the tasks that have to be completed before another designated task can be begin or finish), and assigned responsibility for the tasks. Not including these elements limits the usefulness of the schedule because it does not facilitate management decision making on the appropriateness of staff size and/or the assignment of tasks to individual staff members.

In addition to the previously mentioned policies on eligibility criteria, alternate addresses, and ride times, STSTB has also provided its route planners with guidance on vehicle loading. Two policies (Weighted Load on School Buses and Vehicle Loading) provide guidance regarding the maximum number of students who can ride the bus. While the purpose of these two documents is slightly different, it would be possible to combine them to a single statement in order to ensure clarity and consistency in their application.

In order to guide the annual route evaluation process, STSTB has developed an outstanding document that deconstructs the route planning process. By breaking the route development process into its component parts, STSTB has developed an array of questions that causes the planner to consider critical aspects of effectiveness and efficiency. Additionally, the procedure details a variety of routing techniques and when they are most appropriate. This document serves as both procedural guidance and an excellent training resource.

Hazard transportation criteria

STSTB has established a procedure to address Child Safety Zones that allow for transportation services to be provided for otherwise ineligible students to mitigate localized safety concerns. The Consortium has established the criteria under which hazard/safety transportation will be considered including:

- traffic volume;
- existence or absence of sufficient sidewalk space;

- posted speed limit of roads;
- roads and highways that are winding or have blind curves;
- roads and highways with steep inclines and declines;
- width of shoulder on roads/highways;
- unguarded railroad tracks;
- lack of crossing guard;
- commercial or industrial areas;
- questionable areas of high crime;
- number of traveled lanes of a road; and
- physical barriers such as construction, unprotected waterways, bridges.

The established procedure provides clear and consistent criteria to assess the rationale for establishing or maintaining a hazard. Approximately 1,000 students in the morning and 1,100 students in the afternoon (approximately 6.5 percent of all transported students) are transported due to safety conditions.

The hazard areas that have been established within *MapNet* allow STSTB to identify the students who are receiving services due to the presence of a hazard. As with courtesy students, the program coding structure is not used to identify students eligible for reasons of hazard. As a result, it is a slightly more challenging to assess service statistics because students riding due to hazard are identified as a regularly eligible student. Again, STSTB has established effective strategies to capture the needed data to identify these students, but consideration should be given to reconsidering the coding structure to ensure that the reason underlying the assignment of an otherwise ineligible student to a bus is clear. For example, using the program 1 code to identify that the student is within a hazard area and the program 2 code to detail the type or rationale for the hazard would provide for a much more complete understanding of the rationale for service provision. It is recognized that this would require a reasonably significant amount of effort to establish the necessary activities by school to automate this process. As a result, some other possible option, such as using the comment field or other user defined field may be an acceptable alternative.

Bus stop placement

The primary insight into bus stop placement criteria is found in the route evaluation procedure established by STSTB. This procedure provides insight into key criterion for locating a stop including appropriate sight lines, distances from intersections and roadways, and whether or not a student would be required to cross a street. However, there is no formalized structure to review a stop location against established criterion. Establishing guidelines for a stop location review ensures fairness and consistency of both the review process and the initial placement by STSTB staff.

Decision appeal process

The Transportation Policy provides for an appeal of decisions made by STSTB. The appeal must be documented and submitted to the respective Senior Business Official at the appropriate Member Board where it is then reviewed by Board staff. STSTB and the appellant would then be informed as to whether the STSTB determination has been affirmed or if changes are required. In the event that STSTB is directed to provide services outside of established policy guidelines or to accommodate ambiguity in policy or procedure, it is possible to specifically code those students. This is a useful procedure that allows for future analysis to ensure that any lack of clarity can be addressed. Additionally, it will help to ensure that a proper allocation of costs between the Member Boards can occur.

Inclement weather procedures

STSTB has developed a procedure for assessing weather conditions and determining whether transportation services will be delayed or cancelled. The service area is generally divided between urban and rural areas. The procedure details how each of the Boards and the areas will be notified of a delay or cancellation. Use of the local media and Consortium and Member Board assets to notify students, parents, and operators are also detailed. Service interruptions that occur during the school day are also addressed in the policy with appropriate decision chains detailed. In order to ensure that all stakeholders are familiar with the process it has been posted on the Consortium's website.

Accident and Incident procedures

The School Bus Accident procedure describes the process to be followed in the event of an accident or incident. The procedure includes the roles and responsibilities of the drivers, operators, schools and the Consortium. The procedure requires operators to report the accidents to STSTB who then completes a designated form and distributes the information to the Member Boards. The procedure also establishes a requirement for STSTB to monitor accidents and incidents to assess overall operator performance.

4.2.2 Best Practices

It is recognized that the Consortium has demonstrated best practices in the following areas:

Route Planning Guidance

The detailed route planning guide developed by the Consortium is an outstanding example of how procedural requirements can also serve as training refreshers for staff. Documenting the types of routing strategies available and when they are most appropriate within the procedure statement is an innovative way to ensure that route planners consider all available options and not only those most commonly used. In addition, developing a list of probing questions that planners should consider in assessing their areas of responsibility is an excellent way to bring structure to a complex, multi-variable problem like route design.

4.2.3 Recommendations

Clarify alternate address procedures

STSTB has designed flexibility into its system without adversely impacting student safety. Clarification should be provided as to whether the allowance for high school students is a morning only allowance, as specifically indicated in other parts of the statement, or whether the use of an alternate address applies to afternoon drop offs as well.

Reconcile current processes with the established Transportation Coding procedure

STSTB should reconcile its current management process with its established Transportation Coding procedure in order to determine the most appropriate manner to identify and evaluate the provision of courtesy transportation. While the current process allows STSTB to identify the students, it provides an incomplete picture of service demands as students are identified as being regular riders just as if they were eligible for services. The coding procedure statement provides a more accurate and appropriate method of identifying students given the stated philosophy of using program codes to explain why and how transportation is being provided.

Revise the bell time management policy

Revising the current bell time management policy to clarify timelines, responsibilities, and the approval process would enhance STSTB's ability to realize efficiencies. Currently, the process provides very limited formal guidance on the proposal

development or approval process and this has limited the effectiveness of the established procedure.

Expand current procedures related to walk to stop distances

STSTB should expand its current procedure related to walk to stop distance to include a procedure that details how stop locations will be established and/or reviewed to ensure they are a safe and appropriate location. Development of a standard form to accompany the procedure that documents the results of any review will provide STSTB with future training and reference materials that will not eliminate the discretion of operators or staff but will minimize the potential variability in the process review.

Enhance the planning schedule

The current planning schedule should be enhanced to include information on staff assignments, task flow, and level of effort required. The goal of this enhancement is to:

- Ensure accountability by assigning tasks to individual;
- Assess the appropriateness of staff assignments given workloads and task sequencing; and
- Evaluate staffing needs on both an annual and seasonal basis.

The addition of these elements will allow STSTB to better manage its workflow and plan for both known and unknown contingencies related to staff availability.

4.3 Special Needs Transportation

4.3.1 Observations

Planning transportation for special needs students can present additional challenges as one must consider not only time and distant constraints, but also the physical and emotional needs of each individual student. Additional factors to consider include equipment needs such as wheelchair lifts, special restraints or harnesses and medically fragile students who require assistance or medical intervention.

Policies specific to the transportation of special needs students are essential to ensure that transportation meets each individual student's needs and is provided in the safest manner possible.

Special needs planning guidelines

The development of special needs service requirements are generally dictated by processes established at the Member Boards. A procedure has been established that requires the Member Boards to complete a STSTB-designed form that provides the necessary transportation related information. At the time of the E&E Review, inconsistencies remained in the use of the form by the Member Boards. STSTB was establishing greater collaborative efforts with each of the Member Boards to assess the cost impacts associated with special needs site locations.

Once the information is received, routes are planned consistent with historical practices at the Member Boards. While no formal constraints exist in route design, it is clear that historical Board practices continue to influence planning activities at STSTB. This is most evident in the fact that there are distinct differences in the types of vehicles used by each Board. LDSB uses a substantial number of taxis and local para-transit services while TBCDSB use Type A school buses. The program times reportedly limit the opportunity to share vehicles between the Member Boards, but approximately 100 special needs students are assigned to regular home-to-school bus routes.

After special needs routes have been established, operators and schools have access to the manifests through the web portal *MapNetWeb*. However, taxi routes established for LDSB are not available via *MapNetWeb*. These are transmitted manually by STSTB to the taxi operators.

Driver Training

Drivers are provided training through their employers. Operators design curriculum to address specific requirements for special needs students. The Special Needs Transportation Service Delivery Model[9] provides significant background regarding the expectations related to a wide variety of exceptionalities. As is the case with all forms of transport, drivers are expected to receive first aid, CPR, and EpiPen training.

4.3.2 Best Practices

It is recognized that the Consortium has demonstrated best practices in the following areas:

[9] This document is titled the Special Needs Manual but is commonly referred to as the Special Needs Transportation Service Delivery Model

Special Needs Manual

The Special Needs Transportation Service Delivery Model developed by the Consortium is an excellent training and informational manual on both service requirements and expectations. Articulating the likely behaviours student's will exhibit helps both prepare bus drivers and allows for the development of strategies to mitigate the potential disruption associated with the behaviour.

4.3.3 Recommendations

Continue to assess differences in special needs route design

As part of a larger routing analysis recommended in Section 5.5.3, STSTB should continue to assess differences in the service model between the Member Boards. Assessments of program times, vehicle types, assignment policies, and administrative procedures should be included in the analysis.

4.4 Safety policy

4.4.1 Observation

Ensuring student safety is the foremost goal of any transportation organization. In support of providing safe transportation, it is imperative that clear and concise policies, procedures, and contractual agreements are developed, documented, monitored, and enforced to ensure that safety standards are understood and followed without exception. The bus operators are contractually required to provide safety related training to its drivers and are also mandated to provide programs to the schools including the First Rider Program, vehicle evacuation drills, and bus patroller.

Student training

Students are provided with a variety of training programs throughout their school career. The training programs begin with the First-Rider programs provided by operators. The curricula for these programs are developed in conjunction with STSTB. Additionally, all students are provided with bus evacuation drills through middle school years. In addition, school-based curriculum on school bus safety, has been established in conjunction with the Consortium. A particular focus on ensuring the safety of young students has been established through the KID program that uses tags to identify the appropriate bus and contact information for a student.

Driver training

An administrative procedure has been established that details the types of training that may be required and the expectations of drivers. The most basic driver training requirements including CPR and EpiPen training that are provided to every driver on a recurring basis. Operators conduct the training and report to STSTB to allow for auditing of driver records to ensure compliance with certification requirements. The transportation contract also requires supplemental training to be provided to drivers at least five times per year. The Consortium receives a copy of the training curricula in order to ensure that it complies with contractual requirements and addresses known issues or concerns.

Operator safety and service monitoring procedures

Procedures have been established that detail the expectations associated with an operator on-the-road performance auditing procedure to be implemented by STSTB. Items to be reviewed during the auditing process include stop safety, overloads or capacity concerns, distance between stops, road conditions, and route timing. STSTB has developed a standardized form to be used for these reviews to ensure consistency. The audit process also includes a feedback process where STSTB will review the results of the audit with its operators in an effort to identify possible efficiencies. While this process represents an appropriate part of STSTB's contract management requirements, interviews indicated that the process had not been implemented at the time of the review.

Use of cameras

The Transportation Policy provides for the use of video cameras on school buses. The cameras are owned by the operators and moved around to accommodate the needs of STSTB or to address known issues. The procedure clearly establishes the expectations for operators regarding management of the video data. In addition, procedures have been established to ensure that viewing of video data is limited to the greatest extent possible to ensure that student privacy is respected. Given the large service area, STSTB has worked with its operators and Member Boards to establish remote video viewing procedures that include a user name and password security scheme.

Maximum age of vehicles

The contract with transportation operators establishes maximum vehicle age criteria. These criteria are 8 years for small vehicles and 10 years for larger school buses. Operators are required to report vehicle age to the Consortium on an annual basis.

4.4.2 Best Practices

It is recognized that the Consortium has demonstrated best practices in the following areas:

Access to video data

Establishing a mechanism to review video data remotely simplifies access to the data for those who require it and helps ensure the security of the data. The security procedures developed by STSTB in conjunction with the operators and Member Boards are consistent with best practices seen across the Province.

4.4.3 Recommendations

Implement the operator safety and service monitoring procedures

The ongoing effort to implement the auditing procedure detailed in STSTB procedures should be expedited. Establishing a mechanism to ensure that appropriate services are being delivered and that established policies and procedures are being followed is a critical component of contract management.

4.5 Results of E&E Review

Policies and Procedures development and implementation has been rated as **Moderate-Low**. The Consortium and its Member Boards have clearly invested considerable time and effort in harmonizing policies and documenting expected operating practices. The Route Evaluation Procedure and the Special Needs Manual are particularly noteworthy examples of how procedure documentation can serve as both reference and training material.

While efforts have been made to develop an appropriate array of policies and procedures, efforts are still necessary to fully implement and integrate the requirements of the documents into daily operations.

Inconsistencies in the use of coding practices, strengthening the bell time assessment procedures, implementation of established auditing procedures, and improvements to the planning schedule are key efforts that should be undertaken.

5 Routing and Technology

5.1 Introduction

Routing and Technology encompasses the management, administration, and use of technology for the purpose of student transportation management. The following analysis stems from a review of the four key components of:

- Software and Technology Setup and Use;
- Digital Map and Student Database Management;
- System Reporting; and
- Regular and Special Needs Transportation Planning and Routing.

Each component has been analysed based on observations from fact (including interviews) together with an assessment of best practices leading to a set of recommendations. These results are then used to develop an E&E assessment for each component, which is then summarized to determine an E&E assessment of Routing and Technical efficiency as shown below:

Routing and Technology – E&E Rating: Moderate-Low

5.2 Software and technology setup and use

Any large and complex transportation organization requires the use of a modern routing and student data management system to support effective and efficient route planning. Effective route planning not only ensures that services are delivered within established parameters but also helps to predict and control operational costs. Modern software systems have the ability to integrate and synchronize with student accounting, communications, and productivity software. The integration of these software systems allow for more effective use of staff time and supports timely communications, data analysis and reporting.

Web-based communication tools in particular 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. To derive the greatest benefit from these systems, it is imperative that the implementation includes an examination of the desired expectations and outputs of the system to support comprehensive analysis and reporting. This section of the evaluation evaluates the acquisition, setup, installation, and management of transportation related software.

5.2.1 Observations

Routing software & related technologies

The Consortium is using the *MapNet* routing software from Trapeze Software, Inc. STSTB has also implemented the *MapNet Web* module which provides schools and operators with electronic access to student and bus route information via the Internet. STSTB has established a dedicated website to communicate transportation policy information[10], bus route status information, school boundary information, and safety program information. Finally, there is a Web-based module that is used to manage student data change requests between STSTB and the schools and operators.

Overall, these tools represent an appropriate array of management and communications tools. STSTB has dedicated significant resources to improve the use and availability of transportation technology.

Efforts to establish a single student database and functional coding schema are indicative of the types of improvement efforts that have been and will continue to be necessary components of the Consortium's evolution. However, the current implementation of the tools does not fully leverage the functionality of the available products and in some cases have been designed to serve as a workaround for process related concerns. For example, the web-based student data change module has functionality that allows all participating entities to know the status of a change at any time in the process and notifies all participating entities via electronic mail of status changes. While this is excellent functionality, it has been developed as a workaround due to difficulties associated with regular downloads of student data. Additionally, *MapNetWeb* has functionality that would allow parents access to student information using a pin and password combination similar to the process used at the schools. STSTB had not implemented this functionality at the time of the review and had developed manual processes to communicate bussing information. Continuing efforts to integrate all of the available technologies to improve decision making and communication abilities are necessary.

Maintenance and service agreements

Annual support for *MapNet* includes standard phone and email assistance, software upgrades, and updates to user guides. Technical support services provided by Member Board staff and other private entities all had appropriate service agreements established including specified services to be provided, rate schedules, and approval

[10] The website labels the transportation policy and procedure available as draft but the documents available are the approved statements.

processes. This standard agreement provides for the support necessary for STSTB to ensure that the major technologies used are current and maintain high rates of availability.

System backup and disaster recovery

STSTB has worked collaboratively with its Member Boards to establish an appropriately detailed data security, backup and recovery procedure process. The established structure begins with a reorganization of the need to secure the data in the form of a locked, limited access, climate controlled hosting location. The document establishes the daily and weekly backup routines to be followed to ensure the continued availability of transportation data in the event of a hardware failure or related incident, including offsite storage expectations. Additionally, there is also a risk management profile that has been established to allow STSTB to assess the robustness of its strategy against these potential issues. According to both interviews and documentation, the recovery process has been tested both as a result of real failures and simulations. It has been found to be adequate.

Staff training

Training STSTB staff and associated systems users has been a particular challenge for the Consortium due to the efforts required to establish the organization and the expense associated with travel to the region. No formal training programs have been structured to monitor and assess staff needs. However, efforts are made to take advantage of online resources where possible and to use vendor resources where possible. Additionally, internal training is offered through the use of in-house services to allow best practices to be transmitted across the organization. Given the limited size of the organization and the complexity inherent in any routing software and system design process, the provision of regular training will be a particular challenge for STSTB management as it continues to assess and improve the efficiency and effectiveness of transportation services. As new functionality is adopted by the organization the need to train stakeholders outside of STSTB on its use will also need to be considered.

5.2.2 Best Practices

It is recognized that the Consortium has demonstrated best practices in the following areas:

Data management and backup procedures

The establishment of multiple backup procedures, off-site storage, and documented support agreements are excellent examples of well designed procedures that ensure

the uninterrupted delivery of transportation services in the event of a catastrophic occurrence.

5.2.3 Recommendations

Enhance data management and distribution capabilities

Concurrent with efforts related to student data management detailed below, STSTB should continue to evaluate the tools available to distribute information to all stakeholder groups. Consideration of additional functionality (e.g., the parent portal aspect of *MapNetWeb*) and a reassessment of existing functionality (e.g., the continued use of the web form to manage change in light of changes to student download processes) should be the initial focus. Future concerns to be addressed include a full French translation of web site information for the French member board users and staff training on advanced use of the available products.

Increase staff training and system use documentation

Recognizing the concerns associated with cost and access to training resources, STSTB will need to consider creative options to provide on-going training to its array of software products. Focusing on both skills development and staff turnover necessitate a multi-faceted approach to address this concern.

Potential options include the development of internal best practices manuals that focus on basic system use (to allow new employees to quickly be introduced to system functionally and use) and on advanced functionality (to allow existing staff to leverage capabilities associated with optimization and bell time management, for example). The development of a shared training program with neighbouring Member Boards may also be a viable option to reduce the cost of acquiring vendor services.

5.3 Digital map and student database management

An accurate digital map is paramount to support effective route planning and also the effectiveness of the staff and the efficient use of the fleet. This aspect of the E&E Review was designed to evaluate the processes and procedures in place to update and maintain the map and student data that forms the foundation of any student transportation routing system.

5.3.1 Observations

Digital map

One digital map is used for the entire service area and the maintenance of the map is primarily the responsibility of a single Transportation Assistant. Assignment of overall maintenance of the map to a single staff member is an appropriate strategy that ensures map accuracy and eliminates the possibility of changes made by one coordinator impacting the accuracy of the entire base map and subsequent planning accuracy. The Consortium has developed relationships with local municipalities and, in conjunction, the operators use the information provided by both sources to change or update the map. A procedure statement is in place summarizing the history of the base map, and detailing a quarterly schedule as a guideline for map updates. While the procedure establishes a quarterly schedule for the updating of the map, the procedure also provides for updates as needed to address issues associated with addressing matching or route timing.

Map accuracy

Interviews with staff indicate that there is an extremely high level of accuracy with the base map. In most instances, the unmatched student reports made available indicated spelling or address errors in base student data, not geocode errors related to the map itself. The process for map maintenance and updating is consistent with best practices, which helps ensure complete and accurate student eligibility and supports effective route planning.

Default values

The Transportation Assistant responsible for map management also manages the default values used in the system. These include street address ranges, road speeds, no travel roads, hazard polygons, and coding structures. Establishing a single position responsible for management of these values is consistent with best practices and helps ensure that changes made in the map are done consistently and in a manner that will not negatively impact bus routes that travel between different geographic areas of responsibility.

Student data management

Student data is one of two key datasets that must be rigorously managed in a transportation system (the map data is the other). Currently, STSTB retains only transported students in its transportation database. This data is obtained through downloads of data from the Member Boards' student information systems, and is updated as needed using a web-based change management procedure established by

STSTB. In order for a student to be included in the download, the school secretary must be sure to request transportation services by identifying bussing requirements in the student record (this is not a default setting). Both the scope of the data and the manner in which it is managed requires further consideration.

The capture of only transported students in the database prevents STSTB from conducting a number of efficiency related analyses without significant additional effort. For example, if the Member Boards were to consider a policy change related to eligibility (as was recently done) it is necessary for STSTB to conduct a series of complex and time consuming efforts just to establish the baseline datasets needed to perform the analysis. Additionally, the lack of non-transported student information prevents STSTB from performing basic statistical analyses on the percent of transported versus non-transported under various scenarios. The lack of a complete student dataset also limits the ability of the transportation management information system to serve as the primary source of all transportation information for both eligible and ineligible students.

The current registration process essentially requires students to request transportation even if they are eligible. This process used to identify transportation requests could result in students who are eligible for transportation not being identified in the download because the appropriate indicator has not been set. While this is an unlikely concern during the year when the changes and additions are done on an almost individual basis, the higher volume of changes over the summer increases the potential for errors.

Establishing a process that requires students to opt-out of transportation rather than opt-in should be established.

Student data that is captured in the system is managed in a manner that further limits the usefulness of the data for analytical purposes. It should be understood that established data management procedures have been adequate for operations management in that it provides the needed information to determine eligibility and transmit bussing information to schools and bus companies. However, workarounds established to address issues associated with system functionality reduces STSTB's ability to analyze current system performance and to conduct prospective analysis on system changes. One simple example is related to students who reside in areas designated as hazard. Currently, students who reside in a hazard polygon established on the map are considered eligible students and are not identified in any of the other underlying aspects of the coding structure as residing in an area designated as hazardous. Consequently, the ability of STSTB to identify students who are eligible for reasons other than established eligibility guidelines is a difficult process. Rather than a simple querying of the coding structure it is necessary to evaluate student distances to school, eligibility requirements, and other data concerns in order to answer the same

questions. This is one of several possible examples of where student data capture and coding structures limit the analytical capabilities of STSTB.

Coding structures

There are a number of coding structures that transportation managers must consider when implementing their routing software application. A coding structure that conveys meaningful information at a glance when reviewing student, route, or school information is an underappreciated, but critical aspect of system setup. STSTB is evolving its coding structure as it completes the integration of Member Board information in MapNet.

The most immediate coding concern that transportation managers must address are related to eligibility for services. Within MapNet this is determined based on a series of polygons that identify school boundaries, walk zones, hazard areas, and other designated geographic areas on the map. Within the functionality of the software is a process that determines a student's eligibility for service based upon criteria established during the setup. Given that STSTB is retaining only eligible students in the transportation database, this is generally not a significant concern. However, implementation of previous recommendations with this section to retain both eligible and ineligible students in the database may require STSTB to reconsider how eligibility is identified in the student record.

Within the student record there are three key coding related fields: census, program 1 and program 2. The census field identifies specific school-based programs that the student attends such as French Immersion and International Baccalaureate. If a student is not in a designated program, their Board affiliation (English or French) is identified in the census code. The program codes are used to describe the "where" and the "how" of service requirements. This could include a program 1 code identifying a multi-needs classroom (where) and a program 2 code identifying the need for a wheelchair (how).

Overall this is a reasonable basis for the student coding structure but it is applied inconsistently throughout the system. For example, students whose parent drives them to school (clearly related to how a student gets to school) is not identified anywhere in the program coding structure, but their transportation address is deleted and changed to driven. As was mentioned previously, this is a functional method of dealing with this student because their record is retained in the system but it leads to an incomplete understanding of service demands. It was clear during the review that staff knew this was a workaround that had been established to accommodate how *MapNet* manages student data, but this does not mitigate the impact on the usefulness of the data for systemic analysis. Evaluating the underlying activities, census codes, and program

codes will be a necessary activity for STSTB to maximize the value of the routing software.

Route and trip coding as established are designed to provide some meaningful information in their structure. Of particular note is the establishment of the destination schools and the associated panel (either morning or afternoon) within the route and trip identifiers, respectively. While functional, there are opportunities to further refine the coding structure to identify route type, service area, and operator among other variables that should be considered in the future.

5.3.2 Best Practices

It is recognized that the Consortium has demonstrated best practices in the following areas:

5.3.3 Map management

STSTB has recognized the importance of regular map maintenance and the need to ensure that the consequences of map changes are fully considered prior to implementation. The assignment of a designated individual for this purpose ensures there is accountability for the accuracy of the underlying geocode and consistency in the application of changes.

5.3.4 Recommendations

Redesign the student data management process

STSTB should redesign its student data management process to capture all students from all Member Boards. This will vastly expand and simplify the Consortium's ability to identify alternative efficiency techniques such as bell time changes, boundary changes, and eligibility requirements. It should be noted that the relatively simple language of the recommendation has a number of associated implications that must be considered. The issues include, but are not limited to:

- Will the expansion of the student database require changes to the current student coding structure?
- Will the increase in the number of students adversely impact current reporting and data access procedures for operators and students?
- Will the increased data result in a need to update computer or server hardware or networking equipment?

Therefore, STSTB must proceed judiciously but expeditiously to effectively implement this recommendation.

Improve the coding structure

The development of an improved coding structure for student and route data is a key requirement to improve the ability of STSTB to fully assess current and future efficiency opportunities. Designing a schema that helps expedite the analysis of the data must be part of the larger effort that includes student data management and the use of technology to communicate bussing information. The basic "where" and "how" philosophy of the current structure can be, but does not have to be, retained and expanded upon to better reflect the actual service demands that STSTB must accommodate. The goal of the structure should be to address a hierarchy of detailed questions that begin with, but are not likely to end with, the following:

- How many students are eligible for service? How many students are ineligible for service?
- How many students are eligible for service for reasons that are not distance related? What are the reasons (i.e., courtesy, hazard, board directed, etc)? What would be the change in bus requirements if these students became ineligible? How would they change if student loading values were changed?
- How would the number of buses change if eligibility distances were altered?
- How would costs change if we altered bell times? How would they change if the contract structure was changed?

Given the data management structure of *MapNet* it is likely that implementation of this recommendation will require the establishment of a significant number of additional activities to accommodate the revised coding structure. As a result, establishing a balance between the usefulness of the coding structure and the level of effort required must be considered.

5.4 System reporting

A key benefit of modern routing software is the ability to quickly gather, collate and analyze large data sets. These data sets can then be used to communicate a wide variety of operational and administrative performance indicators to all stakeholders. Actively using transportation data to identify trends that may negatively impact either costs or service and communicate both expectations and performance is a key component of a continuous improvement model. This section will review and evaluate

how data is used to evaluate and communicate performance and assess organizational competencies in maximizing the use of data retained in the routing software and related systems.

5.4.1 Observations

Reporting and data analysis

Very limited formal or structured reporting is used within STSTB. There have been recent efforts to increase the formal reporting structure through a program of key performance indicators. Much of what was presented during the review was statistical information delivered during Administrative Committee meetings. While this data provided useful statistical indicators of system performance, there was no associated report that provided either the context or interpretation of the measures. What was important, how it had changed, why it was important, and what it might mean to future planning efforts were not included in the documentation, although they may have been discussed in the meetings. For KPIs to be meaningful, the statistical data must be combined with an appropriate analysis and interpretation of the results in a manner that stakeholders can understand and use in future planning efforts. Also of note was the continuation of Member Board-specific reports provided by former Member Board staff. In order to reinforce the organizational structure and the identity of STSTB, all informational reports and analysis should be approved and signed off by the Consortia Officer.

Additional reporting is used to evaluate the completeness and accuracy of the information in the routing software. These reports generally focus on the tactical aspects of system management such as identifying students not assigned to a bus stop and stops not assigned to bus routes. Additionally, the annual route planning process requires the use of a variety of established reports to ensure students who are transitioning to different eligibility criteria are properly assigned.

A formal reporting structure has been supplemented by the use of filters built into the software that allow staff to develop their own custom reports. These filters greatly simplify the ability of the STSTB staff to isolate the data needed to conduct targeted analyses to promote effective service delivery.

5.4.2 Recommendations

Expand data analysis and reporting efforts

The use of data for both performance analysis and reporting is a recognized best practice as both are paramount for effective and efficient operations. While STSTB has

begun a process to focus on key performance measurement, current efforts will have to be expanded to be consistent with best practice expectations. It will be necessary to incorporate the results of previous recommendations regarding student data management and coding structures into the implementation of this recommendation.

Particular consideration should be given to establishing a regular reporting program that couples tactical analysis of system health and accuracy with strategic analysis of the possibilities associated with strategic changes such as bell time changes, route integration, and alternative routing strategies.

5.5 Regular and special needs transportation planning and routing

Effective route planning is a key function of any high performing transportation operation. This section of the report evaluates the processes, strategies, and procedures that are used to maximise the use of the fleet, control costs while delivering a high level of service to students using each mode of transportation.

5.5.1 Observations

Bus route management

STSTB has divided planning responsibilities by Member Board and function. Special needs students for all Member Boards are assigned to an individual planner while LDSB students are assigned to one individual and TBCDSB and CSDCAB regular education students are planned by the same individual who manages the routing software. These Board-centric assignments for the predominance of students are reflected in the limited number of integrated routes. However, a number of trips are integrated between Boards.

Annual route planning is supported by the procedure statements mentioned in the *Policies and Practices* section of this report. The document provides excellent guidance in how to assess and develop different route types. Vehicle assignment is based primarily on the capacity requirements of the route and the type of student needs. However, an exception to this general principle is seen in the assignment of special needs students. There is a distinct difference in vehicle types used by LDSB and TBCDSB in that the TBCDSB uses Type A buses while the LDSB is using taxis and local paratransit. It was reported that there is limited integration of these routes due to the program times, which is also evident in the data provided. While each of the route planners is aware of contract requirements they do not represent a significant consideration in the route design process

For students with special needs, planning has been assigned to a staff member. The individual responsible has worked to establish relationships with special needs coordinators at the Member Boards. Efforts are being made to standardize the transfer of data between the Boards and Consortium using a single, consolidated form. This effort is still underway as information continues to be received in different formats. A detailed process describing planning for special needs students has been established. The procedure establishes the separate responsibilities of the special needs departments and of STSTB and describes how they will coordinate. Additionally the manual provides for insight into concerns and expectations for specific exceptionalities.

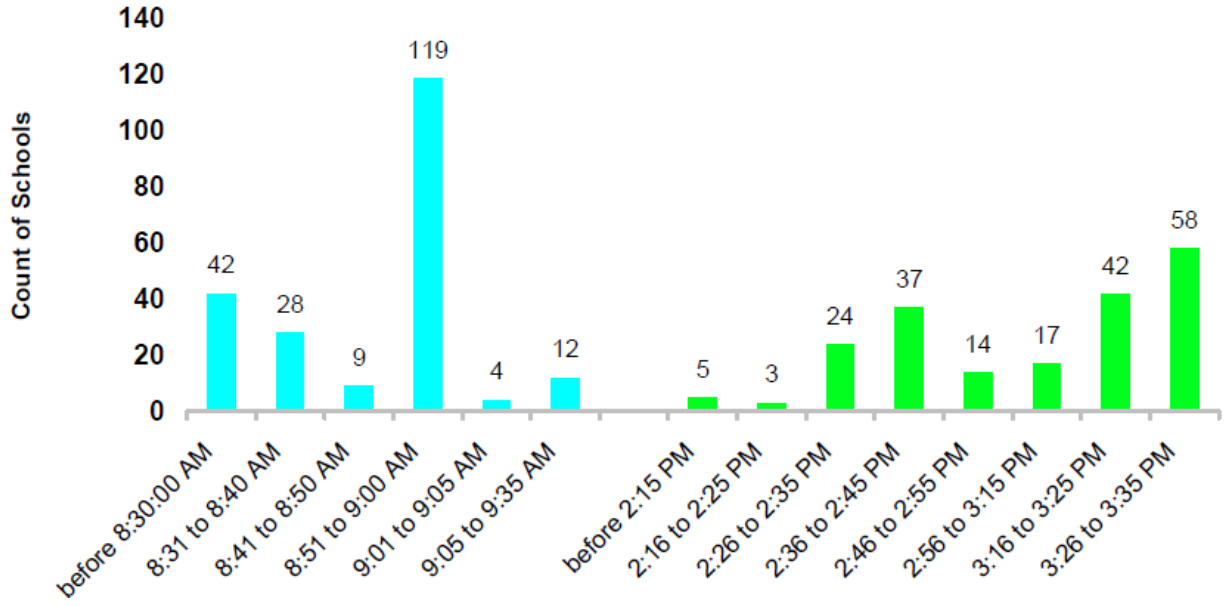
Analysis of system effectiveness[11]

STSTB transports approximately 14,000 students to nearly 50 schools on 634 bus routes that are grouped into 383 bus trips using two primary operators. The service area is highly diverse in that it includes a mix of some urban areas within the confines of the City of Thunder Bay and a large rural component in the surrounding area. The geographic challenges are a major consideration, especially related to student ride time management.

One reason for the lack of integration is the similarity of school start times among the Member Boards. The current bell time structure that STSTB must accommodate is highly clustered around the 8:50 to 9:00 AM operating window in the morning and two twenty minute windows in the afternoon. The chart below shows the number of activities that have common latest start and end bell times within a given 10 minute time block.

[11] All data reported in this section of the report refers to data collected while the E&E team was on site. There may be inconsistencies with some previously reported Ministry data due to differences in the timing of the data collection.

Figure 6: School Arrival and Departure Distribution



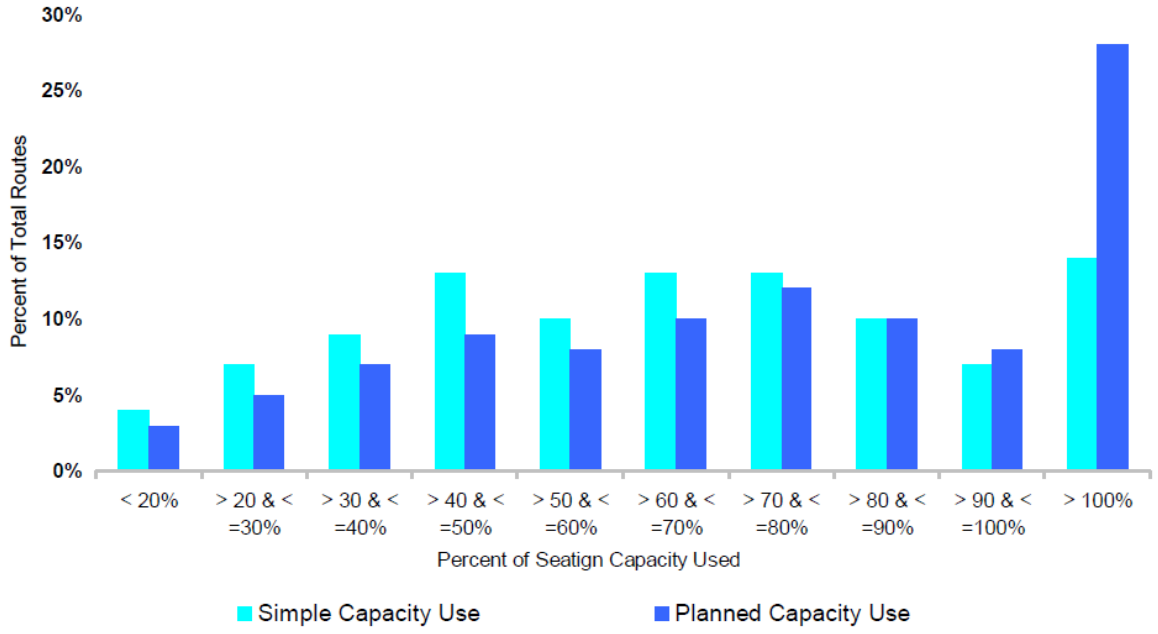
The clustering present in the chart will limit the opportunities to reuse an asset in the morning to service multiple schools unless they are very proximal. This clustering, coupled with the organizational strategy of assigning Member Board requirements to specific individuals, has resulted in very limited sharing between the Boards. Route data indicates that of the 634 routes, 517 (82 percent) service one school and thus one School Board. Analysis of bus trips (where multiple routes are grouped together) indicates that only 3.3 percent of all trips include schools from multiple Member Boards. Review of the school boundaries and school locations indicates that there are opportunities to assess bell time changes and route design strategies that would allow for greater integration of routes in an effort to reduce the total number of buses used throughout the system.

The predominance of single school routes means that STSTB must make effective use of seating capacity in order to be efficient. Capacity utilization is generally measured in two ways. The first, known as simple capacity use, considers the legal capacity of each bus (e.g., a 72-passenger bus has 72 possible seats available) and analyzes the number of students that are scheduled to be on that bus. The second approach is to evaluate planned capacity use which considers the influence of policy decisions regarding how many students can be placed on a bus (e.g., seating high school students two to a seat reduces legal capacity from 72 seats to a planned capacity of 48 seats). Evaluating each of these statistics provides an indication of the effectiveness of the route planning strategies.

Both the simple and planned capacity use averages are very high at STSTB. The average simple capacity utilization is 67 percent and the average planned capacity utilization is 85 percent. While initially this would appear to be consistent with best practices, it is clear that these values are highly influenced by the practice of overloading buses. Overloading buses is a practice where more students are assigned to the bus than there are seats available. The impact of overloading buses is to increase the overall percentage of seats used. Route data indicates almost 15 percent of all routes are overloaded based on student counts and nearly 30 percent of routes are overloaded based on planned student parameters.

The following graph summarizes capacity utilization in 10 percent increments.

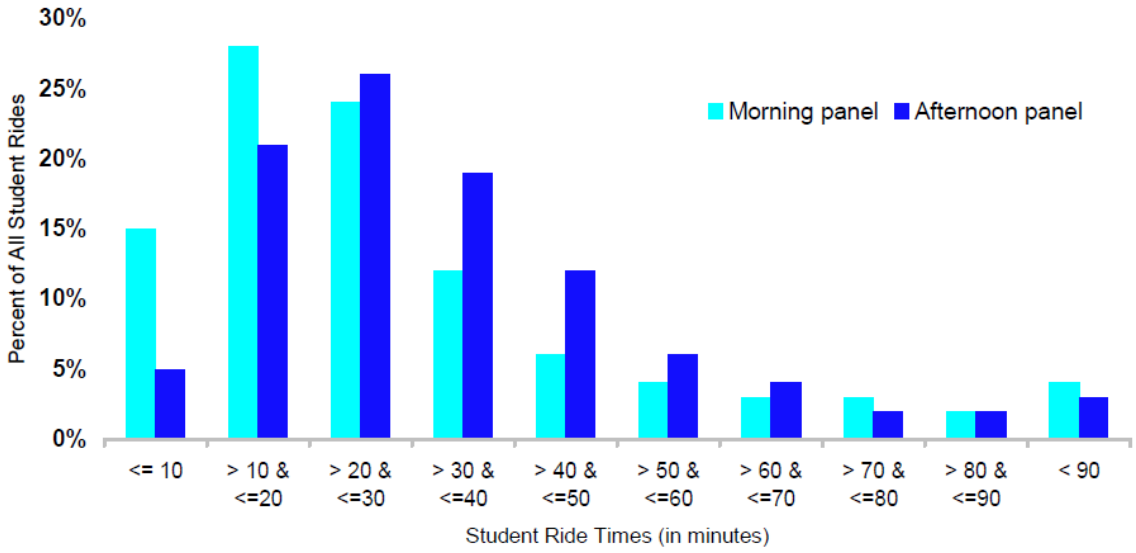
Figure 7: Simple and Planned Use of Seating Capacity



Overloading of routes is a common and appropriate strategy particularly for secondary schools where actual riders are likely to be less or much less than planned because high school students often do not ride the bus. However, of the 91 routes where the student load exceeds the number of seats available, 28 routes service one elementary school. The rationale for overloading elementary school routes is less clear than using the strategy at the high school level. Consequently, the question of the sustainability of this strategy and its influence on understanding and interpreting capacity use performance indicators must be a point of emphasis for STSTB.

Student ride time, a key measure of service effectiveness, was evaluated against the established ride time guidelines of 60 minutes. This analysis was conducted using all available student ridership data including ride times of special needs students. Student ride time was calculated by determining the difference in minutes between the student's point of pick up to their point of departure from the bus. The overall average student ride time is 30 minutes. The following chart demonstrates the percent of student ride times within given intervals of times.

Figure 8: Distribution of Student Ride Times



The chart demonstrates that a significant majority of students have ride times of less than 40 minutes. Approximately 10 percent of students in the morning and afternoon panels have ride times above the established guidelines. These values are consistent with the service guidelines established in procedure, but continuing efforts to address the longer ride times will be necessary.

5.5.2 Best Practices

It is recognized that the Consortium has demonstrated best practices in the following areas:

Route planning practices

The understanding of the contractual implications on effective route planning is a best practice. This understanding ensures that the type of vehicle is matched correctly to provide both cost effective and efficient services.

5.5.3 Recommendations

Undertake a complete routing and bell time assessment

It is recommend that a complete routing and bell time assessment be undertaken across the entire service area to analyze the potential for service delivery improvements and cost savings of one fully integrated routing system. Route planning parameters, agreed upon and supported by each of the Member Boards, would provide the basis on which routes would be designed. Support from the Member Boards must also include granting the necessary bell time changes to promote the logical paring of schools (regardless of Board) by area. Part of this effort should be a consideration of reassigning routing responsibilities to a geographic area of responsibility instead of a board-centric assignment.

5.6 Results of E&E Review

Routing and technology has been rated as **Moderate-Low**. The Consortium has established effective map management practices and has attempted to leverage training opportunities where available.

However, continued attention to achieving efficiency and effectiveness improvements through better asset utilization must include a reconsideration of the Board-centric nature of the current planning efforts. A strategy that integrates students on routes coupled with bell time changes that allow for improved use of assets will be a critical component to future efficiency improvements.

6 Contracts

6.1 Introduction

The Contracts section refers to the processes and practices by which the Consortium enters into and manages its transportation and other service contracts. The analysis stems from a review of the following three key components of Contracting Practices:

- Contract structure;
- Contract negotiations; and
- Contract management.

Each component has been analyzed based on observations from information provided by the Consortium, including information provided during interviews. The analysis included an assessment of areas requiring improvement that were informed by a set of known best practices identified during previous E&E Reviews. These results are then used to develop an E&E assessment for each component. The E&E assessment of contracting practices for the Consortium is as follows:

Contracts – E&E Rating: Moderate-Low

6.2 Contract Structure

An effective contract[12] establishes a clear point of reference that defines the roles, requirements, and expectations of each party involved and details the compensation for providing the designated service. Effective contracts also provide penalties for failure to meet established service parameters and may provide incentives for exceeding service requirements. Contract analysis includes a review of the clauses contained in the contract to ensure that the terms are clearly articulated, and a review of the fee structure is conducted to enable comparison of its components to best practice.

[12] The word Contract in this context refers to detailed documents outlining the scope of services, rates and expected service levels. The phrase Purchase of Service agreement is used in this report to describe a less detailed document that only outlines the services to be provided and the rates at which they are to be provided.

6.2.1 Observations

Bus operator contract clauses

The Consortium has standardized, executed contracts with all of its bus operators. These contracts are signed between each operator and the individual Member Board to whom they provide service except for the CSDCAB, that purchases its transportation services from both TBCDSB and LDSB. The contract notes that the Consortium has retained primary responsibility for contract management procedures.

The current contract was executed June 1, 2010 and is valid for one school year. A clause that extends the contract until the execution of a new contract is included. Noteworthy clauses in the contract outline, among other things:

- Training requirements for drivers: The Consortium mandates that operators provide five annual safety training meetings for every driver and provide the Consortium with an outline of their training programs. These training programs are required to include a number of topics, including First Aid/CPR and EpiPen training. The Consortium does not require that EpiPen training be provided prior to a driver commencing with driving responsibilities; however, discussions with Consortium management indicated that this is usually done in practice. The cost of providing this training is compensated by the Consortium;

- Details related to driver, vehicle and operator performance, communication, and operational expectations;

- Compliance requirements with respect to the contract, Consortium policies, and Provincial and federal regulations;

- Vehicle age requirements. The contract mandates a maximum vehicle age of 10 years for 72- passenger school buses;

- Fee structures and payment schedules, including information on adjustments due to inclement weather, labour disputes and fuel cost; and

- Other terms related to insurance coverage requirements; dispute resolution, termination and confidentiality.

The Consortium reserves the right to re-allocate routes among operators.

Bus operator compensation

The compensation formula identified in the bus operator contract is based on the following components:

- A per kilometer rate with a 50 kilometer minimum. This per kilometer rate covers the operator's fuel and maintenance costs;
- A hourly rate for driver wages;
- A vehicle depreciation rate;
- A rate to ensure that operators are receiving an adequate return on investment;
- Adjustments for inclement weather days: Operators are paid the expected wages, depreciation and return components on inclement weather days; and
- Adjustments for service interruptions caused by either operator or Member Board labour disputes. Operators will continue to receive compensation for up to 14 days in the event they are unable to provide service due, for example, to a labour dispute with their employees.

Taxi operator contract clauses

The Consortium utilizes taxi operators primarily to transport special education students. The Consortium has executed standard contracts with all of its taxi operators. This contract is a standing contract with no expiry date. Noteworthy clauses included in the taxi operator contract include, among other things:

- Operator information submission requirements such as vehicle information and criminal background check for drivers;
- Clauses related to driver, vehicle and operator performance;
- Clauses related to compliance with appropriate legislation and Consortium policies; and
- Other terms related to insurance coverage requirements, termination and confidentiality.

The taxi operator contract does not currently include clauses related to operator compensation, driver or safety training requirements. Discussions with Consortium management indicated that the Consortium pays the meter-rate to its taxi operators and that safety training is currently not provided to drivers since drivers are randomly assigned trips and there can be no assurance that the trip is provided by a driver who has had the appropriate training.

Parent drivers

The Consortium has executed contracts with parent drivers; however, the situations in which parent drivers are to be used is currently not documented in a governance approved policy. The Consortium currently utilizes one parent driver.

The parent contract outlines the Consortium's licensing and insurance requirements - which are verified upon the execution of the contract, the conditions under which students are to be transported, and the process to be used by parents to receive their payment. Parent drivers are paid a per kilometre rate.

Student attendance is verified using each Member Boards' student database.

Public transit operator contract clauses

The Consortium currently manages the distribution of public transit passes to students using municipal transit service operators. Discussions with Consortium management indicated that the Consortium does not have a signed agreement with the municipal transit service provider. These discussions also indicated that students are provided with public transit passes in the event that they cannot use bussing due to school schedules, or if they are alternate education or co-op students.

6.2.2 Best Practices

It is recognized that the Consortium has demonstrated best practice in the following areas:

Insurance

STSTB requires its operators to provide proof of insurance prior to the start of the school year. This ensures that this important risk mitigation measure is met prior to providing any services.

Parent drivers

Contracts are signed with all parent drivers. The formalization of this type of arrangement through contracts and stipulated compliance requirements helps to limit the liability to the Consortium. It is suggested, however, that the Consortium document the conditions under which the services of parent drivers will be utilized.

6.2.3 Recommendations

Modify safety related clauses in the bus operator contract

It recognized that the Consortium requires bus operators to provide First Aid/CPR and EpiPen to its drivers and that, in practice; drivers receive this training prior to the start of the school year. However, in order to bring contract clauses in line with current best practices, and in order to bolster the Consortium's risk management efforts, it is recommended that the Consortium modify its operator contract to require operators to provide EpiPen training prior to the first time they are to drive with students. This ensures that all drivers are appropriately trained to deal with this type of emergency should it occur.

Modify the contracting process

While the execution of bus operator contracts between the Member Boards and the operators is in line with the Consortium's current entity status (i,e, the Consortium is not a separate legal entity and therefore requires each Member Board to sign contracts with each operator), it will become increasingly difficult to administer separate contracts and payment mechanisms for each Member Board as the Consortium's routes become more integrated. Therefore, it is recommended that the Consortium execute bus operator contracts between itself and the bus operators, with the key signatories on the Consortium's behalf being appropriate officials from the Member Boards. This will help to solidify the Consortium's status as the provider of transportation services to the Member Board, and will also help ensure that financial and contract management processes do not become an impediment to additional bus integration in the future.

Include additional clauses in the taxi operator contract

While it is recognized that there are logistical challenges associated with the provision of this training, it is strongly recommended that the Consortium review its contract with taxi operators to include a clause related to the mandatory provision of First Aid, EpiPen and CPR training for all drivers. It is also recommended that the Consortium require drivers to be trained to manage the particular types of emergencies that could arise as a result of the unique conditions of each child that they are carrying. This is particularly critical given that taxi operators are primarily used to transport special education students. Such training should be provided to drivers upon hire or soon after hire in order to ensure that drivers have the appropriate skills and training to manage life threatening emergencies should they arise.

While the taxi operator contract was found to be comprehensive with respect to non-monetary terms, it is recommended that this contract be modified to include an additional clause outlining how taxi operators are to be compensated for services

provided. The addition of this clause will significantly enhance the clarity and enforceability of this contract

Re-assess the operator compensation formula

The current operator compensation formula indicates that operators will receive compensation in the event of an operator labour dispute even though operators would not be providing services during these periods. It is recommended that the Consortium re-assess its compensation formula in this respect to ensure that this clause is necessary in the geographic market serviced by the Consortium. The Consortium should not be compensating bus operators when they are not providing transportation services.

Document the relationship between municipal transit authorities and the Consortium

The Consortium should sign either a contract or a statement of understanding with the municipal authorities outlining the service level relationship with respect to the provision of transit passes.

6.3 Goods and Services Procurement

Procurement processes are intended to provide an avenue by which the Consortium, as a purchaser of services, can ultimately obtain the best value for money. The goal of the Consortium is to obtain high quality service at fair market prices.

6.3.1 Observations

The Consortium is part of the Ministry's competitive procurement pilot program and is currently in the process of developing documents for the procurement of bus operators. The Consortium's current bus operator contract is one that was developed through a negotiated process.

The Consortium has developed a high-level policy on the requirements associated with the negotiation of the annual operator contract. This policy states the rationale to be used for route allocations through the negotiations process and also outlines the conditions under which contracts are to be negotiated. The policy includes a deadline by which negotiations are to have commenced; however, no additional information regarding the timing of negotiations or contract signing is provided. Contract procurement timelines are included at a high-level in the Consortium's annual planning calendar; however, additional details regarding the timing of negotiations and expectations and responsibilities of all parties involved is not included.

Operator services procurement

Bus operator contracts have been procured through a negotiated process that starts in June of every year and are primarily focused on the terms included in the rate sheet. Discussions with Consortium management indicated that the operator contract negotiation process has not been completed prior to the start of the school year in the past, however, the latest round of contract negotiations were concluded in a timely manner.

Special needs transportation

Discussions with Consortium management indicated that special needs transportation is procured through the same process used to procure regular operator services.

6.3.2 Recommendations

Develop and communicate a procurement calendar

While it is recognized that the Consortium's participation in the Ministry's competitive procurement pilot program will help to ensure that bus operator contracts are executed in a timely manner, we nonetheless suggest that the Consortium develop and document a procurement calendar to communicate key dates, milestones and expectations to operators and members of the Consortium governance. This will ensure that the Consortium and operators can reach agreement on next year's contract prior the start of the school year and, in particular, will help prepare the supplier's market through the current transition to competitive procurement.

Continue efforts to implement a competitive process for the procurement of bus operator services

While it is recognized that the Consortium is taking part in the Ministry's competitive procurement pilot program, at the time of the E&E Review, the Consortium had not used a competitive process for the procurement of any service providers. As such, we encourage the Consortium to continue to work with the Ministry through its pilot program. Further, we encourage the Consortium to consider competitive procurement for its taxi operators to ensure it is obtaining the best value for its money. Using a competitive process to procure contracted services allows the Consortium to clearly state all service requirements in the procurement document; this may not mean that rates will decline; however, the concern for the Consortium should be to obtain best value for money expended.

6.4 Contract Management

Contracting practices do not end after a contract is signed. Ongoing monitoring of compliance and performance of contracted service is an important and valuable practice to enhance service levels and ensure that contractors are providing the level of service that was previously agreed upon. Effective contract management practices focus on four key areas:

- Administrative contract compliance to ensure that operators meet the requirements set out in the contract;
- Operator facility and maintenance audits to ensure that operators keep their facilities and vehicles in line with the standards outlined in the contract;
- Service and safety monitoring to ensure that the on the road performance of drivers and operators reflects the expectations set out in the contract; and
- Performance monitoring to track the overall performance of operators over time.

6.4.1 Observations

The Consortium has recently executed a process for ensuring operator compliance with information and performance related clauses included in the operator contract. The basis for the implementation of contract management processes is included in a documented, governance approved policy related to the Consortium contract management processes. This policy outlines, at a high level, the processes and scoring matrix to be used to evaluate operator performance, but does not include a detailed methodology or a target number of site-visits and route audits to be conducted.

Bus operator administrative, contract compliance, facility and maintenance monitoring

The Consortium monitors operator compliance with administrative, facility and maintenance related clauses through on-site visits by the Consortium Officer of which the operators are informed in advance. As documented in the Consortium's policies, operators are scored according to their safety, operational management, communication, training and document control protocols and processes. Operators are required to achieve a minimum of 75% on these assessments.

Operator safety and service monitoring

The Consortium has recently executed a program for the monitoring of operator on-the-road performance. The basis for the execution of such route audits is included, at a high-level, as part of the Consortium's policies on contract management.

Discussions with Consortium management indicated that, due to resourcing constraints, route audits are currently limited to assessments of route times, arrival times, departure times, student counts and route numbers. Compliance with route sheets, student safety measures and traffic regulations is not verified. The Consortium is also reliant on the operator's internal processes for route audits and assessments.

Route audits are expected to be conducted through visits to school sites. Consortium staff do not currently follow buses on the road or ride on busses, although Consortium staff will occasionally verify the use of vehicles on specific routes visually.

Discussions with Consortium management indicated that they expect to audit approximately 10% of all routes over the coming school year.

Performance monitoring

The Consortium documents and communicates the results of its administrative and operational reviews as well its route audits back to operators.

6.4.2 Best Practices

It is recognized that the Consortium has demonstrated best practice in the following areas:

Operator administrative, contract, facility and maintenance compliance

The Consortium ensures that the information, facility and vehicle requirements outlined in the operator contracts are verified in a timely manner and tracks the performance of operators over time. Such efforts to ensure operator compliance help the Consortium to measure whether the operators are complying with stated contract clauses and, ultimately, if they are providing safe and reliable service.

6.4.3 Recommendations

Enhance the operator safety and service monitoring process

It is recommended that the Consortium modify its operator safety and service monitoring process to include random, documented on-the-road assessments of, among other things, route sheet compliance, student safety measure implementation and

compliance with traffic regulations. Operator audits should be conducted on a random but regular basis and should be supported with appropriate documentation summarizing the results. The verification of bus operator compliance with on-the-road performance expectation is critical from a safety, risk management, contract management and perception management perspective. It is imperative that the Consortium verify that safety standards are being met by operators. By checking compliance with route sheets the Consortium is also mitigating several risks ensuring that only eligible students are transported, route sheets are followed and only appropriate stops are made.

From a contract management perspective, having on-the-road performance knowledge of operators will allow the Consortium to work with operators to ensure they are receiving the quality of services for which they are paying. Additionally, since end-users ultimately base their perception of the services provided by the Consortium on their experience with operators, the implementation of monitoring processes will help the Consortium more effectively gauge the quality of the service being provided by operators to end users.

Where resource constraints have prevented the implementation of such a system, Consortium management should undertake discussions with the Member Boards in order to identify alternate systems (such as GPS monitoring) that may be implemented to mitigate the risk of non-compliance with the contract.

Modify policies related to the Consortium's contract management processes

While the Consortium has policies related to contract management, these policies describe the methodologies to be used at a high level. However, they do not mandate target numbers of site-visits and route audits to be conducted or require the Consortium to report and follow up on its findings. It is therefore recommended that the Consortium's contract management processes be modified to include this information.

6.5 Results of E&E Review

The process by which the Consortium negotiates, structures, and manages its contracts for transportation services has been assessed as **Moderate-Low**. Positive elements include a complete bus operator contract and operator administrative, contract, facility and maintenance compliance procedures, although modifications to both of these elements are recommended.

Changes are required in order to increase the clarity and effectiveness of the Consortium's contracting practices. The primary areas for improvement include the continuation of efforts related to the implementation of competitive procurement

processes for bus operator services and the implementation of competitive procurement for taxi operators as well. Additionally, the Consortium should implement a comprehensive, documented, governance approved process for ensuring operator on-the-road safety and service monitoring. The implementation of on-the-road monitoring processes is particularly relevant as it helps to ensure operators are following vital safety and risk management procedures. The Consortium should also consider changes to its practice of contracting operator services for each Member Board separately as this practice will create challenges for planning integrated routes.

7 Funding Adjustment

The Ministry has asked the E&E Review Team to apply their Funding Adjustment Formula to each Board that was subject to an E&E Review in Phase 4. Note that where Boards are incurring transportation expenses in multiple Consortium sites, the Board's adjustment will be prorated for the portion attributed to the consortium under review. For example, if 90% of Board A's expenditures are attributed to consortium A, and 10% of expenditures are attributed to consortium B, the funding adjustment resulting from consortium A's review will be applied to 90% of Board A's deficit or surplus position.

The Ministry's funding formula is as follows:

Table 6: Funding Adjustment Formula

Overall Rating	Effect on deficit Boards[13]	Effect on surplus Boards[13]
High	Reduce the gap by 100% (i.e. eliminate the gap)	No in-year funding impact; out-year changes are to be determined
Moderate-High	Reduce the gap by 90%	Same as above
Moderate	Reduce the gap by 60%	Same as above
Moderate-Low	Reduce the gap by 0%	Same as above
Low	Reduce the gap by 0%	Same as above

Based on the Ministry's funding formula, in conjunction with our E&E assessment of the Consortium, it is anticipated that the following funding adjustments will be made for each Board:

Lakehead District School Board

Item	Values
2009-2010 Transportation Surplus (Deficit)	($53,741)
% of Surplus (Deficit) attributed to the Consortium	100%
Revised amount to be assessed under the Consortium	($53,741)

[13] This refers to Boards that have a deficit/surplus on student transportation

Item	Values
E&E Rating	Moderate-Low
Funding Adjustment based on Ministry's Funding Adjustment Formula	0%
2010-2011 Total Funding adjustment	Nil

Thunder Bay Catholic District School Board

Item	Values
2009-2010 Transportation Surplus (Deficit)	$233,172
% of Surplus (Deficit) attributed to the Consortium	100%
Revised amount to be assessed under the Consortium	$233,172
E&E Rating	Moderate-Low
Funding Adjustment based on Ministry's Funding Adjustment Formula	0%
2010-2011 Total Funding adjustment	Nil

Conseil scolaire de district catholique des Aurores Boréales

Item	Values
2009-2010 Transportation Surplus (Deficit)	($21,128)
% of Surplus (Deficit) attributed to the Consortium	54%
Revised amount to be assessed under the Consortium	($11,409)
E&E Rating	Moderate-Low
Funding Adjustment based on Ministry's Funding Adjustment Formula	0%
2010-2011 Total Funding adjustment	Nil

(Numbers will be finalized once regulatory approval has been obtained.)

8 Appendix 1: Glossary of Terms

Terms	Definitions
Act	Education Act
Assessment Guide	The guide prepared by the E&E Review Team and the Ministry of Education which will be used as the basis for determining the overall effectiveness and efficiency of each Consortium
Common Practice	Refers to a set of planning parameters that have been reported by Ontario school boards as the most commonly adopted planning policies and practices. These are used as references in the assessment of the relative level of service and efficiency.
CSDCAB	Conseil scolaire de district catholique des Aurores Boréales
Consortium, the; or STSTB	Student Transportation Services of Thunder Bay
Deloitte	Deloitte & Touche LLP (Canada)
Driver	Refers to bus Drivers, see also operators
E&E	Effectiveness and Efficiency
E&E Review Team	As defined in Section 1.1.5
E&E Reviews	As defined in Section 1.1.4
Effective	Having an intended or expected effect; the ability to deliver intended service
Efficient	Performing or functioning in the best possible manner with the least waste of time and effort; the ability to achieve cost savings without compromising safety
Evaluation Framework	The document, titled “Evaluation Framework for Student Transportation Services of Thunder Bay” which supports the E&E Review Team’s Assessment; this document is not a public document
Funding Adjustment Formula	As described in Section 1.3.5

Terms	Definitions
HR	Human Resources
IT	Information Technology
JK/SK	Junior Kindergarten/Senior Kindergarten
KPI	Key Performance Indicators
LDSB	Lakehead District School Board
Management Consultants	As defined in Section 1.1.5
Memo	Memorandum 2006: SB13, dated July 11 issued by the Ministry
Ministry	The Ministry of Education of Ontario
MPS	Management Partnership Services Inc., the routing consultant, as defined in Section 1.1.5
MTO	The Ministry of Transportation of Ontario
Operators	Refers to companies that operate school buses, boats or taxis and the individuals who run those companies. In some instances, an operator may also be a Driver.
Overall Rating	As Defined in Section 3.2 of the Evaluation Framework
Partner Boards, Member Boards, School Boards or Boards	The School Boards that have participated as full partners or members in the Consortium; the LDSB, TBCDSB and the CSDCAD
Rating	The E&E Assessment score on a scale of High to Low, see Section 1.3.4
Report	The report prepared by the E&E Review Team for each Consortium that has undergone an E&E Review (i.e. this document)
Separate Legal Entity	Incorporation
TBCDSB	Thunder Bay Catholic District School Board
Type A school bus	A smaller asset, typically with a 20 passenger capacity, oftentimes used to transport special needs students

9 Appendix 2: Financial Review – by School Board

Lakehead District School Board

Item	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010
Allocation[14]	$6,154,014	$6,086,297	$6,208,024	$6,412,889	$6,565,213
Expenditure[15]	$6,118,849	$5,894,858	$6,194,039	$6,228,850	$6,618,954
Transportation Surplus (Deficit)	$35,165	$191,439	$13,985	$184,039	$(53,741)
Total Expenditures paid to the Consortium	$6,118,849	$5,894,858	$6,194,039	$6,228,850	$6,336,731
As % of total Expenditures of Board	100%	100%	100%	100%	100%

Thunder Bay Catholic District School Board

Item	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010
Allocation	$4,985,268	$5,005,202	$5,105,305	$5,273,780	$5,258,034
Expenditure	$4,829,255	$4,830,559	$4,745,001	$5,211,931	$5,024,862
Transportation Surplus (Deficit)	$156,013	$174,643	$360,304	$61,849	$233,172
Total Expenditures paid to the Consortium	$4,829,255	$4,830,559	$4,745,001	$5,211,931	$5,131,463
As % of total Expenditures of Board	100%	100%	100%	100%	100%

[14] Allocation based on Ministry data – includes all grant allocations for transportation (Section 9 00008C, Section 13 00006C, Section 13 00012C)
[15] Expenditure based on Ministry data - taken from Data Form D:730C (Adjusted expenditures for compliance) - 212C (Other Revenues) + Schedule 10:620C (Transportation Amortization)

Conseil scolaire de district catholique des Aurores Boréales

Item	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010
Allocation	$629,523	$635,231	$686,048	$711,433	$719,790
Expenditure	$525,595	$548,200	$622,285	$662,730	$740,918
Transportation Surplus (Deficit)	$103,928	$87,031	$63,763	$48,703	$(21,128)
Total Expenditures paid to the Consortium	$322,880	$387,523	$382,278	$407,124	$222,275
As % of total Expenditures of Board	N/A%	N/A%	N/A%	53%	54%

10 Appendix 3: Document List

1. C1.PDF
2. C10.PDF
3. C2.PDF
4. C3.PDF
5. C4.PDF
6. C5.PDF
7. C6.PDF
8. C7.PDF
9. C8.PDF
10. C9.PDF
11. CM1.PDF
12. CM10.PDF
13. CM11.PDF
14. CM12.PDF
15. CM13.PDF
16. CM14.PDF
17. CM2.PDF
18. CM3.PDF
19. CM4.PDF
20. CM5.PDF
21. CM6.PDF
22. CM7.PDF

23. CM8.PDF
24. CM9.PDF
25. PP1.PDF
26. PP2.PDF
27. PP3.PDF
28. PP4.PDF
29. PP5.PDF
30. PP6.PDF
31. PP8.PDF
32. RT1.PDF
33. RT2.PDF
34. RT3.PDF
35. RT4.PDF
36. RT5.PDF
37. RT6.PDF
38. STSTB Capacity Building Report

11 Appendix 4: Common Practices

Home to School Distance

Activity	JK/SK	Gr. 1 – 3	GR. 4 - 12
Common Practice	0.8 km	1.2 km	3.2 km
Policy - LDSB	0.4 km	0.8 km	1.6 km
Policy - TBCDSB	0.4 km	0.8 km	1.6 km
Policy - CSDCAB	0.4 km	0.8 km	1.6 km

Home to Bus Stop Distance

Activity	JK/SK	Gr. 1 – 3	GR. 4 - 12
Common Practice	0.5 km	0.8 km	0.8 km
Policy - LDSB	0.2 km	0.4 km	0.8 km
Policy - TBCDSB	0.2 km	0.4 km	0.8 km
Policy - CSDCAB	0.2 km	0.4 km	0.8 km

Arrival Window

Activity	JK/SK	Gr. 1 – 3	GR. 4 - 12
Common Practice	18	18	25
Policy - LDSB	15	15	35
Policy - TBCDSB	15	15	30
Policy - CSDCAB			

Departure Window

Activity	JK/SK	Gr. 1 – 3	GR. 4 - 12
Common Practice	16	16	18
Policy - LDSB	20	20	35
Policy - TBCDSB	10	10	15

Activity	JK/SK	Gr. 1 – 3	GR. 4 - 12
Policy - CSDCAB			

Earliest Pick Up Time

Activity	JK/SK	Gr. 1 – 3	GR. 4 - 12
Common Practice	6:30	6:30	6:00
Policy - LDSB	6:18 AM	6:18 AM	6:18 AM
Policy - TBCDSB	6:18 AM	6:18 AM	6:18 AM

Latest Drop Off Time

Activity	JK/SK	Gr. 1 – 3	GR. 4 - 12
Common Practice	5:30	5:30	6:00
Policy - LDSB	5:51 PM	5:51 PM	5:51 PM
Policy - TBCDSB	5:51 PM	5:51 PM	5:51 PM

Maximum Ride Time

Activity	JK/SK	Gr. 1 – 3	GR. 4 - 12
Common Practice	75	75	90
Policy - LDSB	60	60	60
Policy - TBCDSB	60	60	60
Policy - CSDCAB	60	60	60

Seated Students Per Vehicle

Activity	JK/SK	Gr. 1 – 6	GR. 9 - 12
Common Practice	69	69	52
Policy - LDSB	3 per seat	3 per seat	2 per seat
Policy - TBCDSB	3 per seat	3 per seat	2 per seat
Policy - CSDCAB	3 per seat	3 per seat	2 per seat

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