Deloitte.

Ministry of Education Effectiveness & Efficiency Review

Student Transportation Services Consortium of Grey-Bruce

Phase 3 Review

January 2009

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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

Introduction

This report details the findings and recommendations of an Effectiveness and Efficiency review (E&E Review) of the Student Transportation Services Consortium of Grey-Bruce (hereafter "STSCGB" or the "Consortium") conducted by a review team selected by the Ministry of Education. This review is the result of government initiatives to establish an equitable approach to reforming student transportation across the province and minimize the administrative burden for School Boards associated with providing safe, reliable, effective, and cost efficient transportation services. This section of the report is designed to provide an overall assessment of the Consortium and detail the findings and recommendations of the overall report that were particularly noteworthy. These major findings and recommendations detailed in each section of the body of the report.

The E&E Review evaluated the Consortium's performance in four specific areas of operation including consortium management; policies and practices; routing and technology use; and contracting practices. The purpose of reviewing each of these areas was to evaluate current practices to determine if they are reasonable and appropriate; identify whether the Consortium has implemented any best practices; and provide recommendations on opportunities for improvement in each of the specific areas of operation. The evaluation of each area was then utilized 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.

Effectiveness and efficiency review summary

The Consortium represents three coterminous School Boards - the Bluewater District School Board (BDSB), the Bruce-Grey Catholic District School Board (BGCDSB) and le Conseil Scolaire de District des Ecoles Catholique du Sud-Ouest (CSDECSO). The Consortium provides transportation services to approximately 15,000 daily riders. The geographic challenges that have a direct impact on routing include: winter hazards such as extreme cold and heavy snowfall, varying degrees of municipal road service and a vast geographic area with a sparsely distributed population.

The Consortium and its Partner Boards have established a long and cooperative working relationship which will be of great benefit as the Consortium continues to evolve. The Consortium has been moving in the right direction in terms laying the foundation for the attainment of increased effectiveness and efficiency. Nonetheless, continued diligence will be required as there are still critical steps that need to be taken and adopting the recommendations of this report will lead to further improvements in effectiveness and efficiency.

Some notable achievements of the Consortium include:

- *Structure and role of the Management Committee:* The Management Committee, which is charged with oversight responsibilities for the Consortium, has equal representation from each School Board in terms of membership. The roles and responsibilities of the Management Committee are clearly articulated in the Partnership Agreement. This ensures that there is no ambiguity in the function of the Management Committee;
- *Transportation software* The Consortium has implemented a functional transportation software application that allows for the development, review, and analysis of existing and alternative routing strategies. Complete and accurate map data is maintained through an all-inclusive approach to stakeholder input;
- Availability of job descriptions Detailed job descriptions have been produced for support roles in the Consortium, thus ensuring that roles and responsibilities are clearly defined and can be executed efficiently. In addition, extensive, relevant staff training is provided on a regular basis;
- Service monitoring survey A survey of school principals was conducted to gauge the adequacy of service levels being provided by the Consortium. If acted upon, this will help to narrow the gap between the expectations of school principals and the quality of service they are actually receiving. This is a novel approach to service monitoring; and
- *Community involvement* Public Safety Announcements and leaflets are produced outlining the services available to riders, the process by which riders can apply for these services and the availability of these services.

Based on our findings from the E&E review, the primary opportunities for improvements are:

Examine the establishment of a separate legal entity through incorporation Partnerships have several inherent risks which make them less than optimal
entity structures for coordinating student transportation for School Boards.
Through incorporation, a Consortium is recognized as a legal entity separate
from school boards as owners. It is an effective safeguard against a third party
establishing any liability on the part of a member School Board. Incorporation
enhances the credibility of the Consortium by requiring some public

accountability. There are more formal reporting requirements and well established incorporation by-laws that govern organizational behaviours and decision making. Clearly defined roles and responsibility of incorporation governance provides a robust accountability framework for all key parties involved including School Boards, the Consortium and Operators or other service providers under contracts. In addition, incorporation provides assurance of continuous existence and gives the Consortium greater stability in the long run

- Documentation of internal practices The Consortium should work to document and formalize a number of its internal practices, including accounting, budgeting, staff evaluations and overall Consortium performance assessment. The formalization of these processes is critical to ensure the long term sustainability of the Consortium; and
- Long Term and Short Term Planning A process to develop the goals and objectives of the Consortium, including implementation plans, should be undertaken to ensure the significant momentum gained by the Consortium in the last year continues to drive continued success into 2009 and beyond.
- Procurement policies Well defined rules and conditions for the acquisition of goods and services support effective internal control within the consortium. The management committee, in reviewing the policies of each member boards, should establish and communicate clear procurement policies to consortia staff to guide all purchasing decisions and processes. Adherence to policies and guidelines will ensure accountability in procurement decision making, safeguard consortium's interests as well as make sure that the process is open, fair and transparent.
- *Review documentation of Policies and Procedures* Additional procedural definition is required to fully establish the Procedures Manual as the source for transportation planning and operational oversight.
- Access to information Continued coordination and cooperation of the Partner boards is needed to both improve the accuracy and the availability of the data for planning purposes. Improvements in this area will allow consortia staff to focus efforts on operational analysis and planning rather than data completeness and accuracy.
- Competitive procurement process A competitive procurement process brings fairness, impartiality, and transparency to any procurement exercise and will allow the Consortium to purchase services from Operators that are able to meet specific requirements. Using a competitive procurement process will provide the

Consortium with the opportunity to obtain the best value for their money and set service level expectations. Furthermore, this process will reflect market prices as it allows Operators to submit proposals based on achievable operational efficiency and an appropriate return on investment, with full knowledge of the service level requirements as specified by the Consortium. Additionally, it provides a fair and measurable basis for evaluating Operator performance and allows the Consortium to utilize financial incentives to meet desired service levels. If there are areas within the Consortium geography where this process may not be appropriate, the Consortium can use the competitively procured contracts as a proxy for service levels and costs negotiated with the Operators. Based on Ministry's direction as communicated through numbered memorandum 2008:B15 of December 10, 2008, the Consortium should start developing an implementation plan for competitive procurement. A plan should include a review of existing procurement policies, an analysis of the local supplier market, strategies to help determine the RFP scope and process and a criteria and timeline to phase-in competitive procurement. The plan should also utilize the best practices and lessons learned from the pilot Consortia.

The Transportation Manager and the Management Committee have demonstrated a commitment to performing the tasks required to provide effective and cost efficient services. Continued refinement of identified best practices and the implementation of the recommendations identified throughout the report will be required to ensure that service delivery practices continue to be satisfactory and that the congenial relationships currently benefiting all parties will continue in to the future.

Funding adjustment

As a result of this review, the Student Transportation Services Consortium of Grey-Bruce has been rated as a **Moderate-Low** Consortium. Based on this evaluation, the Ministry will provide additional transportation funding that will narrow the 2008-09 transportation funding gap for the Conseil Scolaire de District des Ecoles Catholique du Sud-Ouest while the transportation allocation for the Bluewater District School Board and the Bruce-Grey Catholic District School Board will remain unchanged in the 2008-09 school year.

The funding adjustments to be received are detailed below ¹ :	
Bluewater District School Board	\$Nil
Bruce-Grey Catholic District School Board	\$Nil
Conseil Scolaire de District des Ecoles Catholique du Sud-Ouest	\$11,969
(Numbers will be finalized when regulatory approval has been obtained.)	

¹ Refer to Section 7 for the calculation of funding adjustments.

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 2008-2009, an increase of over \$247 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 Consortia 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 has been endorsed by the Education Improvement Commission in 2000 and proven by established Consortium sites in the province. Currently, the majority of School Boards cooperate to some degree in delivering transportation services. Cooperation between 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 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 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 (the "E&E Review Team" as defined in Figure 1) to perform the E&E Reviews. The E&E Review Team was designed to leverage the expertise of industry professionals and consulting firms 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.





1.2 Scope of Deloitte engagement

Deloitte was engaged to lead the Team and serve as the Management Consultants of the E&E Review Team. Deloitte's overall role is as follows:

- Lead the E&E Reviews for each of the 18 transportation Consortium to be reviewed in Phases Three and Four (currently in phase 3A);
- At the beginning of each E&E Review, convene and moderate planning meetings to determine data required and availability prior to the review;
- Lead the execution of each E&E Review. The Ministry facilitated the process by providing the Consortium with information required in advance so that preparation and collection of information would be done prior to the on-site review;

- Review Consortium arrangement and governance structures, and contracting procedures;
- Incorporate the results of the routing and technology review in addition to the policies and practices review to be completed by MPS; and
- Prepare a report for each Consortium which has undergone E&E Reviews in Phases three and four. The target audience for the report will be the Ministry, the Consortium, and its Partner Boards. Once finalized, each report will be released to the Consortium and its Partner Boards.

1.3 Methodology used to complete E&E review

The methodology for the E&E Review is based on a five step approach, as summarized in the following sections.



Figure 2: E&E Review Methodology

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

1.3.1 Step 1 – Data collection

Each Consortium under review was provided with the E&E Guide from the Ministry of Education. This guide provides details on the information and data needs that the E&E review team would require, and the E&E Guide will become the basis for the data collection.

Data is collected in four main areas:

- Consortium Management;
- Policies and Practices;
- Routing and Technology; and
- Contracts.

1.3.2 Step 2 – Interviews

The E&E Review Team identified key Consortium staff, outside stakeholders and key policy makers with whom interviews would be conducted to further understand the operations and key issues impacting 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 documented their findings under three key areas:
- Observations which involved 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 below:

Effectiveness

Consortium management

- Distinct entity focused on providing student transportation services for the partner boards
- Well defined governance and organizational structure with clear roles and responsibilities
- Oversight body exists with the mandate to provide strategic directions to the 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
- Well established accountability framework reflected in the set up and operation of the consortium including documentation of terms in a Consortium Agreement
- Operations are monitored for its performance and continuous improvement
- Financial processes ensure accountability and equality to Partner Boards
- A budgeting process is in place which ensures timely preparation and monitoring of expenses
- Key business relationships are defined in contracts

Policies and Practices

- Development of policies is based on well defined parameters as set by strategic and operational plans to provide safe, effective and efficient transportation service to students of the partner boards; and
 - Policy decisions are made with due considerations to financial and service impacts to partner boards
 - Communication between the consortium and partner boards facilitates informed decision making on issues directly affecting student transportation
 - Consortium's policies and practices are adequate and in compliance with all relevant safety regulation and standards

• Practices on the ground follow policies

Routing and Technology

- Advanced use of transportation management software to store student data, and create a routing solution.
- Disaster recovery plans and back up procedures are in place and operating properly
- Responsibility and accountability for student data management is clearly identified
- Routing is reviewed regularly
- Reporting tools are used effectively
- Special needs routing is integrated with regular needs where reasonable

Contracts

- Competitive contracting practice is used
- Contract negotiations are transparent, fair, and timely
- Contracts are structured to ensure accountability and transparency between contracted parties
- Contracts exist for all service providers
- Ongoing compliance checks for safety, legal and service requirements are performed by the consortium

Efficiency

Consortium management

- Oversight committee focuses only on high level decisions
- Organizational structure is efficient in utilization of staff
- Streamlined financial and business processes
- Cost sharing mechanism are well defined and implemented

Policies and Practices

- Harmonized transportation policies between partner boards enable efficient planning
- Proper level of authority delegated to consortium to enable the realization of potential efficiencies e.g. bell times setting
- Best practices in planning are adopted e.g. utilize tiered runs and combination runs to maximize the use of available capacity
- Public transit usage is optimized where available and efficient
- Service levels are reasonable and comparable to common practices

Routing and Technology

- System can be restored quickly if database fails
- Student data is accurate, requires little post processing verification
- System functionalities are used to identify efficiencies

Contracts

- Contracts awarded are based on market prices and best value for money
- Fair payment terms are included in contracts and implemented with clarity to both parties

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 between the four main components of review (i.e. Consortium Management, Policies and Practices, Routing and Technology, and Contracts) and, for each, illustrates what would constitute a specific level of E&E (refer to Figure 3 for diagram of process).





The Evaluation Framework provides details on how the Assessment Guide was applied, including the use of the Evaluation Work Sheets, to arrive at the final Overall Rating. The E&E Review Team then compiled 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 to inform any future funding adjustments. Only Boards that have undergone E&E Reviews are eligible for a funding adjustment. Table 1 illustrates how the Overall Rating will affect a Board's transportation expenditure-allocation gap.

Overall Rating	Effect on deficit Boards ²	Effect on surplus Boards ²
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 30%	Same as above
Low	Reduce the gap in the range of 0% to 30%	Same as above

Table 1: Funding Adjustment Formula

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 December 15, 2008.

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.

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

2 Consortium overview

2.1 Consortium overview

The BDSB and the BGCDSB have a combined enrolment of approximately 23,699 students and provide daily transportation service to approximately 15,231 students over 361 routes, travelling over 42 thousand kilometres every day. The district covers approximately 8,613 square kilometres and includes 69 schools. The Conseil Scolaire de District des Ecoles Catholique du Sud-Ouest is also a Partner Board in the Student Transportation Services Consortium of Grey-Bruce. Transportation for students is provided primarily through a combination of bus Operators. A small portion of the Owen Sound area is serviced by municipal transportation services and carries limited number of students.

The geographic area covered by the Consortium is surrounded by two bodies of water – the Georgian Bay and Lake Huron – and is predominately rural, stretching from Tobermory in the north to Lucknow in the south and from Kincardine in the west to Dundalk in the east.

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

ltem	BDSB	BGCDSB	CSDECSO ³	Total Consortium
Number of schools served	54	13	1	68
Total general transported students	11,308	2,791	96	14,195
Total special needs ⁴ transported students	267	25	0	292
Total wheelchair accessible transportation	27	0	0	27
Total specialized program ⁵	823	444	0	1,267

Table 2: 2007-08 Transportation survey data

³ Data for CSDECSO is for the portion of the board serviced by STSCGB

⁴ 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.

Item	BDSB	BGCDSB	CSDECSO ³	Total Consortium
transportation				
Total courtesy riders	26	8	0	34
Total hazard riders	0	0	0	-
Total students transported daily	12,451	3,268	96	15,815
Total public transit riders	0	<10	0	<10
Total contracted full and mid- sized buses ⁶	251	63	1	315
Total contracted mini buses	26	6	3	35
Total contracted school purpose vehicles ⁷	6	0	0	6
Total contracted PDPV	1	0	0	1
Total contracted taxis	1	2	0	3
Total number of contracted vehicles	285	71	4	360

 ⁵ 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.
 ⁶ 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.
 ⁷ Includes school-purpose vans, mini-vans and sedans.

Table 3: 2007-08 Financial Data⁸

Item	BDSB	BGCDSB	CSDECSO
Transportation Allocation	\$12,733,652	\$3,414,996	\$5,102,196
Transportation Expenditures	\$12,555,262	\$3,402,325	\$6,253,086
Transportation Surplus (Deficit)	\$178,390	\$12,671	(\$1,150,890)
Percentage of transportation expenses attributed to the Consortium	100%	100%	3.47%

The Consortium is set up as a partnership between the three School Boards aimed at realizing the cost savings that are expected to result from each Board's participation. The Consortium is currently located in the main board office of the BGCDSB at 799, 16th Avenue, Hanover, ON.

⁸ Based on Ministry Data – see Appendix 2.

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 analysed based on information provided by the Consortium, and from information collected during interviews with the Transportation Manager and selected Operators. The analysis included 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 Consortium Management as shown below:

Consortium Management – E&E Rating: Moderate-Low

3.2 Governance

Governance refers to the way in which an organization is directed and controlled. Establishing administrative structures and processes which facilitate and monitor effective business management are primary responsibilities of a governance structure. Three key principles for an effective governance structure are as follows: accountability, transparency, and the recognition of stakeholders. In order to respect these three principles, it is important that the governance body be independent of the management of day-to-day operations.

3.2.1 Observations

Governance structure

The Consortium's governance structure is outlined in the Partnership Agreement signed on January 31, 2007 between the BGCDSB, BDSB and CSDECSO.

Consortium operations are administered by a Management Committee that is composed of up to three members; the Senior Business Official or their designate from each Partner Board. The Committee operates by consensus. Should the Committee be unable to reach a consensus, each Partner Board is allotted one vote and the majority prevails. Meetings occur once a month and are chaired by the Transportation Manager, who also sets the agenda. Minutes are taken and ratified but not signed. The roles and responsibilities of the Management Committee are outlined in the Partnership Agreement.

Board level mediation and arbitration clause

The Consortium agreement outlines arbitration procedures. It states that in the event of a dispute, the matter shall be referred to each Board's Director of Education. Should the Directors fail to reach an agreement, or at the request of at least two Partner boards, the matter will be referred to arbitration in compliance with the Arbitration Act of Ontario.

Twelve months notice is required should one Board wish to withdraw from the Consortium. The withdrawing Board is entitled to obtain a paper copy of all data held by the Consortium that relates to that particular Board. In addition, the withdrawing Board waives its right in the ownership or the sharing of assets, data, information or personnel of the Consortium. The withdrawing Board shall remain jointly and severally liable and responsible for all activities of the Consortium that occurred while it was a Partner.

3.2.2 Best Practices

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

Structure of the Management Committee

The Management Committee, which is charged with oversight responsibilities for the Consortium, has equal representation from each Partner 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. This is a key element in effective governance and management.

Notwithstanding the recommendation below, it has been observed that the Transportation manager's participation at the Management Committee has facilitated open communication amongst the member boards and the Consortium.

Role of the Management Committee

Roles and responsibilities for the Management Committee are clearly articulated in the Partnership Agreement. This ensures that there is no ambiguity in their function. This is a key element in efficient governance and management.

Management Committee meetings

The Management Committee meets monthly and requires a formal agenda and minutes, making the Consortium accountable and transparent to its stakeholders.

Dispute policy

A Board level dispute policy is in place between the Boards. The policy is an effective mechanism to protect the rights of all Boards. It ensures that the decisions made represent the best interests of the three Boards.

3.2.3 Recommendations

Signing of meeting minutes

Decisions made by the Management Committee should be officially documented, ratified and signed. It is understood that while documentation of decisions made during meetings does take place, there is no official signed copy of the minutes. It is recommended, in addition to ratifying the minutes during the following meeting, that a signature is obtained from the Board representatives present at the meeting and that a record of the official minutes of the meeting be retained by the person acting in the role of secretary for the meetings.

Separation of operations from governance

An effective governance structure calls for a clear line to be drawn between the Management Committee and the management of the Consortium. This line is less easily determined when there is a management level position that chairs the meetings of the Management Committee. It is recognized that the input of the Transportation Manager is clearly required and value adding, and that despite chairmanship, the Transportation Manager is not granted a vote at these meetings. However, in the interest of more clearly separating management from governance, it is recommended that the Management Committee be chaired by a representative from a Partner Board.

3.3 Organizational structure

An optimized organizational structure promotes effective communication and coordination that enables operations to run more efficiently. The roles and

responsibilities within the organization must be well defined. This leads 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) and all core business functions are identified.

3.3.1 Observations

Entity status

The Consortium is arranged as a partnership between the Boards, with each held jointly and severally liable. Each Board is required to carry its own insurance to cover against liabilities and all perils as part of the Partnership Agreement.

The BGCDSB and the BDSB have a history of cooperation in the area of transportation. The two Boards started sharing buses in 1970, with an increase in bus sharing in 1992 that resulted in cost savings for the Partner Boards. Each Board then created a transportation department in 1998. The Consortium as it exists today is the result of a Partnership Agreement signed between the three Boards executed on January 31, 2007. The Consortium is not currently a separate legal entity. No confidentiality agreements have been signed between the Consortium and Partner Boards.

The offices of the Consortium are located in the main board office of the BGCDSB.

Organization of entity

The organizational structure is outlined in the Partnership Agreement:



Figure 4: Organization Structure

Management Committee

The Management Committee is responsible for staffing - outlining the roles and responsibilities of the Transportation Manager and other personnel; contract issues; establishing operating procedures for the Transportation Manager; reviewing goals, objectives and budgets set by the Transportation Manager; and providing a link to each Board. Other functions include monitoring and reporting on the transportation implications of program priorities; fostering and facilitating inter-Board cooperation; periodically reviewing program costs; overseeing the acquisition of transportation service providers by attending meetings with them; and reporting to their respective Boards.

Manager of Transportation

A job description for this position is currently being drafted.

Currently employed by the BDSB, the Transportation Manager undertakes the day to day management of the Consortium and reports to the Management Committee. The Transportation Manager plans, organizes and directs all activities of the Consortium as well as provides leadership, vision and effective management of Consortium personnel and resources. The Transportation Manager is also responsible for running a courier service for the BDSB that is separate and unrelated to the work the Consortium.

The current Transportation Manager will retire at the end of 2008 and a new Transportation Manager is to assume the position on January 12, 2009. In addition to the above responsibilities for student transportation, the new Transportation Manager will also be responsible for managing a procurement consortium operated by the BDSB and the BGCDSB that is separate from the student transportation Consortium. The additional responsibility of managing the purchasing consortium is a re-alignment of responsibility resulting from the resignation of the current purchasing consortium manager. It is expected that a new position will be created within the procurement consortium to manage its day to day operations. This new position – called the purchasing supervisor - will report to the new Transportation Manager.

The incoming Transportation Manager is currently shadowing the outgoing Transportation Manager. In addition, the outgoing Transportation Manager will be available to the Consortium on a daily basis for reference; however, no formal contract is in place documenting this arrangement.

Transportation System Administrator

A job description and list of required qualifications for this position has been developed. No further documentation is in place outlining the day-to-day tasks performed by the Transportation System Administrator and the methods by which these tasks are accomplished.

The Transportation System Administrator reports to the Transportation Manager and is the lead administrator and coordinator of the use of *BusPlanner* software. The key responsibilities of the Transportation System Administrator is to assist in route planning and implementation; coordinate and direct staff in the use of the route planning software; review and investigate route optimization; update and maintain the student database; provide support to the transportation manager; manage bus Operator payments; respond to inquiries from parents and schools; prepare the annual Ministry survey; maintain and update a digital map of Bruce and Grey counties; assist the Transportation Manager in conducting performance appraisals; assist in the development of student transportation safety programs and assist in the development, implementation and monitoring of transportation policies, guidelines and procedures.

The current Transportation System Administrator is employed by the BGCDSB and is not a member of a collective bargaining unit.

Consortium management has indicated that, as the new Transportation Manager is to eventually oversee both the transportation and purchasing consortia; the role of the Transportation System Administrator may be expanded to include more supervisory functions.

Transportation Route Planner

A job description and list of required qualifications for this position is available. No further documentation is in place outlining the day-to-day tasks performed by the Transportation Route Planner and the methods by which these tasks are accomplished.

The Transportation Route Planners (Route Planner) create, plan and supervise the operation of school buses for all regular, special and summer programs as well as special trips; review and investigate optimal routes; input data into route planning software; respond to telephone enquiries; investigate and resolve problems; conduct route Operator monitoring; plan and organize routes for special program; and is the day-to-day contact person for schools and bus Operators.

All three Transportation Route Planners are currently employed by the BDSB and are members of a collective bargaining unit. Route Planners are cross-trained to be able to assume each other's responsibilities if needed.

3.3.2 Best practices

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

Job descriptions

Job descriptions for Transportation System Administer and the Transportation Route Planners are clearly defined within the Consortium.

3.3.3 Recommendations

Job description for the Transportation Manager

The availability of a clear, complete job description allows staff to have a clear understanding of their roles and responsibilities, thus allowing them to execute their duties efficiently. While the role of the Transportation Manager is briefly outlined in the Partnership Agreement, there is currently no complete, Management Committee approved job description for the position. It is recommended that the draft version of this job description be finalized and include specific references to the Transportation Manager's procurement and courier service responsibilities.

Job specifications

A comprehensive suite of training, orientation and procedural documents outlining dayto-day tasks to be completed and the methods by which to complete these tasks should be created for all positions within the Consortium. This will help Consortium staff in the execution of their daily responsibilities and will also act as a succession planning document in the event of staff turnover.

Re-position the Transportation System Administrator as a managerial position

It is recommended that the role of the Transportation System Administrator be positioned as a managerial role involved with the coordination of the Transportation Route Planners and the management of day-to- day transportation operations. The Transportation Manager will then be allowed to focus his/her efforts on the general, strategic management of the Consortium and on transportation matters that cannot be addressed by the Transportation System Administrator. It is acknowledged that current collective bargaining arrangements may hinder the implementation of this recommendation.

Role of the outgoing Transportation Manager

The outgoing Transportation Manager has said that he will make himself available to the Consortium on a daily basis after he has retired. While it is recognized that this is done on the basis of good-will, it is nonetheless important to formalize this relationship so the Consortium can help ensure a smooth transition and knowledge transfer while formalizing his compensation for this arrangement. As such, it is recommended that a contract be executed between the Consortium and the outgoing Transportation Manager outlining the scope of his responsibilities, the nature of his relationship to the Consortium and any compensation that will be provided.

Establishment of a separate legal entity

Generally speaking, all partners of a partnership are jointly liable for all debts and liabilities of that partnership. As such, any one partner can bind all other partners to matters involving the Consortium. As a result, partnerships have several inherent risks which make them less than optimal entity structures for coordinating student transportation:

- The risk that the actions of one Partner Board may be leaving the other Partner Boards open to liability;
- The risk that Partner Boards 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 partnership, may exceed the existing insurable limits. The Consortium should investigate with the assistance of their insurance carrier their 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 the Partner Boards should explore the establishment of the Consortium as a Separate Legal Entity through incorporation to formalize and improve its current contracting practices. The creation of a Separate Legal Entity effectively limits risk to the Partner Boards for activities related to the provision of student transportation. Thus, 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 School Boards. Over the long term, changing political environments and potential disputes amongst the Partner Boards could cause the current structure to destabilize. The formalization of the Consortium as a corporation would provide benefits from an organizational perspective in terms of corporate continuity, staff planning, liability, contracting and management. A Consortia Entity Resource Guide, available through the Ministry's student transportation website, can provide further assistance with this planning and decision making process.

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

Consortium formation and agreement

The Partnership Agreement outlines the structure, nature and legal foundation of the Consortium. It states that the purpose of the Consortium is – to achieve financial savings as a result of collectively providing student transportation services. The document also describes in broad terms the structure of the Consortium's organization, the role of the Transportation Manager, reporting structures and responsibilities. Other clauses in the agreement include the availability of bilingual services, insurance and benefits, withdrawal from the consortium and a process for dispute resolution.

Cost sharing

The Partnership Agreement outlines that each Board will provide it's pro rata share of financing according to a formula to be established annually by the Transportation Manager.

Transportation costs are split based on the total number of students transported for each Board. This formula is documented in the Consortium procedures manual. In addition, each Board is charged an amount for safety training provided to drivers and Operators. No payment is made to the Operators for school bus evacuation and safety training in the schools. The procedure by which the Consortium reconciles the transportation costs of different Boards and invoices the Operators is outlined in section 3.5.1.2. (Accounting practices and management) of this report.

Administration costs are allocated based on the total enrolment of each Board weighted by a historical cost sharing factor that is determined based on historical transportation costs and contributions made by each Board. This weighting factor was calculated using 2007-08 as a base year and is altered year over year to reflect changes in each Board's enrolment. There is no contract between the school Boards and the Consortium that outlines this administrative cost sharing arrangement. The requirement for the allocation of administration costs is not formally documented but the calculation of the allocation appears in the minutes of the Management Committee meetings. In practice, the Management Committee sets the administration cost sharing formula and calculates the cost sharing at year end.

Insurance

The Consortium has obtained property and crime insurance from the Ontario School Boards' Insurance Exchange (OSBIE). The policies are currently effective from March 1, 2008 till January 1, 2009. At the time of the review the Management Committee was negotiating the insurance policy for 2009.

Staff performance evaluation, training and management

Staff evaluations are conducted by the Transportation Manager with input from the Transportation Systems Administrator. Staff are evaluated based on the criteria set out by their respective school Boards. This process, while formalized at the School Board level, is largely conducted on an informal basis within the Consortium and is not necessarily linked to the goals and objectives of the Consortium.

Evaluation of the responsibilities, duties, benefits and privileges of the Transportation Manager is the purview of the Management Committee. However, there is no formal process by which this evaluation is conducted.

Learning plans are established for each employee by October 31 of each year with input from the respective personnel and the Transportation Manager. Learning plans are specific to Consortium responsibilities and are reviewed on an annual basis.

Long term and short term planning

The Consortium does not have a mission statement. Strategic goals are created by the Transportation Manager in conjunction with the Management Committee and are recorded in the Management Committee meeting minutes. Objectives for the Consortium are set informally on an annual basis by the Transportation Manager and are reviewed by the Management Committee, who also provides input. These goals and objectives are not linked to performance evaluations of Consortium staff.

There is no formal process for goal setting and there are no set deadlines to which the Transportation Manager or Management Committee are obligated. The informal target is to conduct goal-setting exercises prior to the beginning of the new school year, with the last Management Committee meeting in June used as an opportunity to review accomplishments against goals and objectives that have been set. The outgoing Transportation Manager has indicated that he, along with the incoming Transportation

Manager, are intending to use the E&E review process as a means of outlining the need for a strategic plan for the Consortium.

Key performance (service) indicators (KPIs)

A benchmark setting exercise has been conducted by the Transportation Manager. The following are the Consortium's benchmark targets:

Table 4: Key Benchmarks

Key Performance Indicators	Benchmark
Average Ride Time per Pupil	30 Minutes
Percentage of Ride Time within 60 minutes – AM	95%
Percentage of Ride Times within 60 minutes – PM	95%
Student Map Match Rates using School Data	99%

The Transportation Manager intends to utilize the bus planning software in order to continually monitor the Consortium's progress in relation to these benchmarks. There is currently no regular, formal process by which the performance of the Consortium is assessed.

Purchase of service agreements/support services

There are neither purchase of service agreements in place between the Consortium and Partner Boards for the provision of transportation services, nor service agreements in place between the Consortium and Partner Boards for the purchase of support services.

Administration and payroll are jointly provided by the BGCDSB and the BDSB as Consortium staff are employed by both Boards. The same is true for IT services, which are provided by both the BGCDSB and the BDSB depending on the Board that owns the specific piece of hardware in question. Space and telephone services are provided by the BGCDSB to the Consortium. The Consortium website is managed by the Transportation Systems Administrator. Accounting services are provided by all Partner Boards.

The Consortium implemented a new software system in February 2008 for which a service agreement has been signed with GEOREF systems. This contract was executed on August 28, 2007 and has no termination date. It is valid until cancelled. GEOREF provides training, implementation, technical support and updating services to the Consortium.

Procurement practices

The Consortium does not have its own formalized procurement/purchasing policies in place. The Consortium follows the purchasing policies of the BGCDSB and the BDSB, who each have distinct but similar purchasing policies. Both Boards share purchasing through a separate purchasing consortium in much the same way that they share transportation. For information about this joint purchasing consortium, refer to section 3.3. Refer to section 6.3.1.1 for a discussion of the method used by the Consortium to procure bus operators.

Eligibility appeal process

There is currently no standardized process that allows parents to appeal decisions that are made with regard to student transportation. Appeals are first managed by the Transportation Route Planners and if not resolved, by the Transportation Manager. In the event that the issue is not resolved by the Transportation Manager, it is referred back to the individual school Board.

Confidentiality agreements

Confidentiality agreements have been executed with bus operators, taxi operators and GEOREF systems. The BDSB also has an executed confidentiality agreement with bus operators.

3.4.2 Best practices

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

Insurance

Notwithstanding that the insurance contract is currently being negotiated, the Consortium has in the past obtained insurance coverage. In addition, each School Board carries its own insurance. Sufficient insurance coverage for both the Consortium and school Boards is essential to ensure each are suitably protected from potential liabilities.

Training

Staff training is provided on a regular basis and is tracked internally; training goals are aligned with consortium operations which is important to ensure alignment between efforts and results.
Organizational structure

Notwithstanding the recommendation below, it is recognized that the organizational structure reflects clear lines of reporting and functional areas of the Consortium. Support staff are effectively cross trained in operational functions to provide assistance in the event of redundancy which is important given the small size of the Consortium team.

3.4.3 Recommendations

Purchase of service agreement/support services

There are no contracts between the Consortium and the Partner Boards for transportation services provided by the Consortium, nor are there contracts between the Consortium and BGCDSB for the services it provides. Therefore, services are obtained by the Consortium/Boards and paid without terms, conditions, and service levels normally associated with such arrangements. The Consortium should establish formal contracts with all Boards as soon as possible. Formal contracts protect the Consortium by ensuring that scope of services and fees, insurance / liabilities, quality of service, dispute resolutions and contract term are clearly articulated and agreed upon prior to the delivery of service. Without a contract in place, there is a higher risk that disputes could arise over misunderstandings. This is also true for the administration, accounting, payroll, IT, space and telephone services provided to the Consortium.

Procurement policies

It is recommended that the Consortium review its member board's policies for appropriateness in transportation purchasing decisions, internal controls and work processes. Particular attention should be paid to the purchasing thresholds associated with initiating a competitive procurement process. This threshold should be practical to allow for sole sourcing of transportation services when it is warranted in varying circumstances. Formalizing these policies will ensure standardization in the procurement methods of the Consortium. 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.

Cost-sharing agreement

Cost sharing formulas and agreements are not documented in the Partnership Agreement and there is no formal contract outlining the formula by which costs will be split between the Partner Boards. We recommend that the cost sharing arrangements be documented in a formal, executed contract. This will help avoid any possible confusion and mitigate the risk of disputes arising in the future.

Confidentiality agreements

Since the Consortium provides services to a number of different Partner Boards, Consortium employees have access to information from the Partner Boards. In the interest of ensuring that confidential Board information is not passed from one Board to another, it is recommended that confidentiality agreements be signed between the Consortium and the Partner Boards stating that each Board's information is given to the Consortium and the Consortium Management Committee in confidence. Similarly, bus Operators have access to confidential Board information, including medical information of the riders. The confidentiality of this information should be ensured through signed confidentiality agreements between the Operators and all Partner Boards.

Long term and short term planning

Although the Transportation Manager and the Management Committee have informally set the goals and objectives of the Consortium, the process should be extended to include development of both short (less than 1 year) and long term (3-5 years) formal goals, objectives and implementation plans. The formalized operational plan should include clearly identified steps that the Consortium will take to achieve both the short term and long term goals. The implementation plans should also be defined to help differentiate the issues that need immediate attention from those which can be implemented over a longer term. It is also essential that the Management Committee review and approve the plan annually to make sure that it reflects the strategic direction of the Consortium.

A sound operational plan will formally identify goals and objectives, describe how these goals and objectives will be achieved and allow the Consortium to measure its performance against tangible steps and stages of progress.

Monitoring of Key Performance Indicators ("KPIs")

The Consortium, with guidance and approval from the Management Committee, should expand the list of KPIs that will be used to monitor and assess the performance of the Consortium. KPIs can be used to inform management decision making and provide a method to ensure that organizational goals and objectives are being met. Some sample KPIs include:

- Eligible Unassigned Student Lists;
- Total Students Transported;
- Average Vehicle Statistics and other route statistics;
- Program Costs; and

• Total vehicles in operation.

The Transportation Manager should also formally assess the performance of the organization against the set of key benchmarks that have been listed in Table 4.

Formally monitoring a relevant portfolio of KPIs allows the Consortium to quantify its performance. The Consortium can use the results of the analysis to generate realistic business improvement plans or make policy recommendations to the Partner Boards based on current and relevant data obtained through the KPIs.

Eligibility appeal process

The Consortium should finalize an appeals process to ensure consistency in the application of eligibility policies and procedures. This appeals process should allow school principals to provide input into the final decision.

Staff evaluation

While it is understood that the collective bargaining arrangement within the Consortium may present complications to the in-house evaluation of staff, it is nonetheless recommended that staff performance evaluations be conducted on a regular basis with a clear, easily understood framework that is specific to the Consortium and its needs. The metrics which are used should be supportive of the goals and objectives of the Consortium.

The performance evaluation of the Transportation Manager is the purview of the Management Committee and is not formally conducted. A clear framework should be developed to evaluate the Transportation Manager's performance with metrics that are clear and easily understood and tied to the goals and objectives of the Consortium. Given the Transportation Manager's managerial role, this evaluation framework should also provide for input from the Transportation Manager's subordinates.

3.5 Financial management

A sound financial management process ensures the integrity and accuracy of financial information. This includes the internal controls that exist within the accounting function and ensures that a robust budgeting process is in place which provides for accountability in decision making.

Financial management policies capture roles and responsibilities, authorization levels, and reporting requirements. The planning calendar refers to key dates for compliance, monitoring policies, or specifics to ensure proper segregation of duties. The policies ensure that a proper financial internal control system is in place for the Consortium.

3.5.1 Observations

Budget planning and monitoring

There is no documented, formal budgeting or budget review process for the Consortium itself.

Budgeting is managed by the Transportation Manager on a Board-by-Board basis. Each Board sets its own transportation budget that in turn gets communicated to the Consortium as the budget for that respective Board. Each Board issues a monthly report to the Transportation Manager in order to allow the Transportation Manager to track expenses.

Budgets are not revised throughout the year but are monitored monthly by the Transportation Manager with variances noted and sometimes investigated. Budget to actual reconciliation reports are not issued to the Management Committee.

Accounting practices and management

For regular home to school or school to school routes, the Transportation Systems Administrator, after receiving approval from the Transportation Manager, forwards biweekly payment summaries to each Partner Board's accounts payable department. This bi-weekly payments schedule is based on route information as of October 31st each year. If a route changes, the Operator must apply for an adjustment. All adjustments are calculated by the Transportation Systems Administrator and approved by the Transportation Manager. The Operators are then advised to invoice for the adjustment.

For administration costs, each Board calculates the transportation administration costs they have incurred and the net amounts owing from/to each of the Boards are reconciled on an annual basis.

There is no accounting function performed by the Consortium or on behalf of the Consortium. All financial/accounting matters are dealt with directly by the respective Boards.

Audit

Each Partner Board of the consortium is audited. No audit or internal audit is conducted for the Consortium.

An annual check of all inputs and mileage is performed by a contracted third party (a former Consortium employee) to verify the accuracy of information. This accuracy check also includes an audit of all route data entries, including total mileage, bus information and capacity utilization, among other information.

3.5.2 Best practices

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

Accountability

All expenses and major transactions are reviewed, validated and approved by the Transportation Manager. It is not until expenses are reviewed, validated and approved by the Transportation Manager that payment is made. The fact that the Transportation Manager has this ability delegated to him ensures that proper internal controls are in place to properly manage the accounts of the Consortium.

3.5.3 Recommendations

Accounting procedures

There is a clear need to centralize the functional responsibility for budgeting and accounting to a single individual or entity for the purpose of ensuring appropriate financial controls and transparency. Currently, there is no centralized location where the Consortium's budgeting or accounting takes place. It is recommended that responsibility and accountability for financial management be moved to a single individual or entity for the purpose of streamlining the management of accounts; ensuring proper management of the financial relationship with the Operators; and reducing financial risks to the Boards and the Consortium through effective financial control.

Documentation of financial management policies and procedures

It is recommended that the accounting policies and procedures currently being used by the Consortium be formalized and documented. The documentation of these procedures is critical as it will help to ensure that appropriate checks are in place and that the financial stability of the Consortium will not be impacted due to employee turnover.

3.6 General information

3.6.1 Observations

Communication of safety information and procedures

The Consortium is a member of the Great Lakes Association and works with other members to produce public safety announcements that are broadcast on the radio and

television. A school bus safety brochure is also provided to the elementary schools for distribution every fall.

The Consortium also produces a Parent Fact sheet that provides information on transportation policies, requirements and the procedures to be followed in order to make special transportation arrangements.

3.6.2 Best practices

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

Public safety announcements

Public Safety Announcements and Parent fact sheets produced by the Consortium in collaboration with other consortia increase public safety and policy awareness; inspiring confidence amongst parents in the quality and safety of the services provided by the Consortium

3.7 Results of E&E review

This Consortium has been assessed as a **Moderate-Low** Consortium. Positive elements include the structure of the Management Committee, which provides sufficient oversight to the Consortium and ensures that the Consortium is operating under the best interests of all Partner Boards.

It is recommended that the Consortium, as a first step, modify the role of the Transportation Manager on the Management Committee to further distinguish management from governance. The Consortium should also examine its entity status and the merits of establishing itself as a separate legal entity. It is important to formally document goals; objectives; procurement, accounting and budgeting policies and procedures in order to ensure the long term sustainability of the Consortium. It is also important to establish a method by which the performance of the Consortium and Consortium staff can be monitored using KPIs.

4 Policies and practices

4.1 Introduction

Policies and practices examine and evaluate the established policies, operational procedures, and the 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 findings and recommendations found in this section of the report are based on onsite interviews with the Transportation Manager, senior staff, routing technicians, and on an analysis of supplied documents and data. Best practices, as established by the E&E process, provided the source of comparison for each of these key areas. The results were used to develop an E&E assessment for each of the key components and to determine the overall effectiveness of the Consortium's Policies and Practices as shown below:

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

4.2 Transportation policies & practices

Clear and concise policies, procedures, and enforceable practices are essential elements of an effective and efficient transportation operation. Policies establish the parameters that define and determine the *level of service* that ultimately will be provided by the Consortium. Equally important is the application of policies through well defined and documented procedures, operational practices and protocols all of which determines *how* services are actually delivered. Policy harmonization between the Partner Boards and the application of practices helps to ensure that service is delivered safely and equitably to each of the Partner and Service Purchasing Boards. This section will evaluate the established policies and practices and their impact on the effective and efficient operation of the Consortium.

4.2.1 Observations

The Consortium plans and manages transportation services under the guidance and direction of an established Procedures Manual. While the Procedures Manual attempts

to provide the necessary guidance for effective route planning and management, many of the procedures lack *procedural definition* which may lead to inconsistency in application of the intended procedure. The lack of clear documented procedures may be the result of the length of tenure by senior Consortium staff members and a long history of successful cooperation between the Boards. The following paragraphs summarize the major policy areas, the consistency or inconsistency between Board policies, and suggestions for improvements.

General transportation eligibility

To facilitate efficient planning, provide equitable and effective service, control and predict expenditures, it is imperative that a transportation eligibility policy clearly define which students are eligible to receive service and that the policy is understood and consistently administered. Currently, transportation eligibility varies between the Partner Boards resulting in disparate walking distances to school and to bus stops for students. Consortium management recognizes the benefit of a harmonization of the eligibility policy and has, over the past several years, made it a goal to work towards full harmonization of walk distances. As an example, in the 2007-08 school year, urban walk distances for BDSB were reduced from 4.8 kilometres to 3.2 kilometres resulting in closer parity to walk distances for both the BGCDSB and the CSDECSO Partner Boards.

The following table summarizes the current policies:

Items	Grades JK to 6	Grades 7 to 8	Secondary
BDSB	1.6 km	3.2 km	3.2 km
BGCDSB	Designated Walking	Designated Walking	Designated Walking
	Boundaries	Boundaries	Boundaries
CSDCSO	Designated Walking	Designated Walking	Designated Walking
	Boundaries	Boundaries	Boundaries

Table 5: Eligibility Walk Distances

Stop placement and walk to stop distances

A procedure is in place for the review of bus stop locations to determine the safe placement of a new stop or in response to a safety concern of a current stop. Criteria for a safe stop includes: Operator and driver input, line of sight visibility, and a safe waiting area and walking path. Concurrence by local police agencies may be considered when appropriate. All findings are documented on a *Bus Stop Review* form for future reference.

Rural walking distances to a stop are harmonized between the Boards at 0.8 km for both elementary and secondary students. Urban walk distances to a stop vary by Board as illustrated in the following table:

Walk to Stop Distances by Board	Grades JK to 6	Grades 7 to 8	Elementary	Secondary
BDSB	.8 km	1.6 km	-	2.4 km
BGCDSB	-	-	.8 km	1.2 km
CSDCSO	-	-	.8 km	1.2 km

Table 6: Urban Walk to Stop Distances

The Consortium is currently analyzing the impact of a full harmonization of walk distances between the Boards with an outcome expected by the end of the fiscal year. The full harmonization of the eligibility policy would not only equalize service levels but may present opportunities for cost savings and service improvements.

Student ride times

Consortium planning procedures limit maximum ride times (when possible) to 90 minutes prior to the start of school. As the Consortium provides service to students over a large geographical area, effective planning is paramount to minimize a student's time on the bus while staying within the 90 minute limit and balancing the overall cost of providing services. An analysis of route data indicates that the median student ride time is well within the established guidelines. Ride times and overall routing efficiency are discussed in further detail in Section 5 (Routing and Technology).

Bus transfers

Route planning strategies include the use of transfer sites to reduce student ride times and promote overall efficiency. The use of bus to bus transfers can be an effective strategy resulting in shorter ride times and or a reduction on the number of required buses. The Consortium has established procedures to ensure student safety including limiting the number of transfers to one, scheduling the time of the transfer to concur with staff arrival at school sites, and the use of school sites exclusively for elementary students.

Hazardous transportation

The granting of transportation for students otherwise ineligible for service based on the presence of hazardous conditions is an excellent example of how a transportation system supports student safety. While the Consortium's Procedures Manual refers to a process under which hazardous transportation can be provided, clear hazardous definitions are not well documented. Route planning has historically included loosely defined hazards such as four lane highways, river, water crossing, and rail crossings.

Courtesy transportation

Courtesy transportation is not available for BDSB students but is available for BGCDSB students. The Consortium is in the process of reviewing the provision of this service which may result in a recommendation that would eliminate the historical practice of granting courtesy transportation. In the event that courtesy transportation remains an option for BGCDSB students, a comprehensive analysis should be conducted to determine both the cost and service impacts. At the time of the review, 40 students were identified in the student database as being provided courtesy transportation.

Alternative drop-off locations

Each of the Boards support alternative stop-locations for daycare purposes providing approval by the principal and that there is space available on the "alternate" bus. A form is required to be completed that explains the conditions required for approval. This includes a requirement for a regular schedule for the entire school year.

General information and student discipline

The Partner Boards jointly produce and distribute a *Riding the School Bus* pamphlet to provide parents and students with important transportation information. Topics discussed include general information on what equipment students may bring on a bus, general safety information, weather related information, and driver responsibilities. Also included is a section on student conduct which explains what is expected of the student and the potential consequences for inappropriate behaviour.

Dispute resolution

In practice, questions regarding a student's transportation are first considered by the area Route Planner and Consortium management. In the event that an issue is not resolved, a parent may appeal to the principal and the appropriate Board superintendent. Consideration should be given to the establishment of a formal dispute resolution policy which clearly defines the roles of the Consortium, building principals, and Board staff. Supported by concise and documented polices, the Consortium should,

over time, be established as the primary point of contact and resolution for all transportation issues.

Inclement weather procedures

An inclement weather procedure has been established that determines a plan of action to be implemented in the event of adverse weather conditions for each transportation area. The web site contains static information regarding weather procedures and links to local media; however, the site does not currently provide real time information on delays or run cancellations.

Fleet age policy

Consortium Operators must maintain bus fleets with a maximum vehicle age of 12 years. An analysis of data indicates that the median age of the bus fleet is 6 years which is well within policy requirements. This is illustrated in the following chart:



Figure 5: Distribution of Bus Age

Bell time management

The management of bell times is a key factor for efficient and effective route planning allowing planners to shift school times to maximize the use of fleet assets. Currently, school principals request a change in their times which are forwarded to the Consortium

for consultation. In general, the request is denied if it is determined to result in additional costs. While this procedure has served the Consortium and its Partner Boards well, a formal bell time management policy should be considered that clearly establishes a common procedure in the event of a change in either Consortium or Board management.

Policy enforcement

New staff members are given a copy of the Procedures Manual and policy statements to obtain an understanding of the basis for route planning decisions. While interviews with the Route Planners indicate a common understanding of the Consortiums policies and practices, refinements in the Procedures Manual should be considered to provide Route Planners, school principals, Operators, and drivers with a comprehensive all inclusive document that clearly explains the practices that govern the provision of transportation services. Examples include documenting the requirements for the provision of special needs transportation, hazardous condition determination, and driver training and skills improvement programs.

4.2.2 Recommendations

Procedures manual refinement

A comprehensive review of the Procedures Manual is recommended to ensure that all guiding procedures are supported by *procedural definitions* to give the necessary clarity for Route Planners and reduce the potential for misinterpretation by school staff and parents. As stated in the proceeding paragraphs, while many of the daily practices are well established, they are not well documented.

Procedure elements that should be considered include an insurance requirement assessment for non- school sites, site supervision, and a documented on-site procedure for drivers that clearly explain the transfer process.

Formalize a policy harmonization process

The degree to which policies, practices, and undocumented procedures are harmonized is a key factor in the assessment of policies and practices for the Consortium. A review of the Procedures Manual presents an opportunity to examine each policy and practice for potential service improvements and harmonization for service equity. It is recommended that the Consortium and its Partner Boards formalize a process to determine the potential for harmonization of key policies including an agreed upon timeline for the completion of the review and approvals. Several of the key areas where harmonization of policy may result in improved route planning and cost savings is eligibility, walk to stop distances, and courtesy transportation. Additional policy statements should be considered that clearly define the criteria to determine the existence of hazardous conditions based on the grade level and competencies of the student.

4.3 Special needs transportation

For any transportation operation to be fully effective, it must consider the needs of all of its students including those with special needs or students attending special programs. Special needs transportation in particular must meet the specific needs of the students which in many instances have predetermined time and distance limitations. Additional considerations include student mobility, the need for special equipment such as lifts and restraints, accommodations for aids or assistants, medication administration, and behavioural issues.

4.3.1 Observations

Each of the Route Planners is responsible for planning for the special needs students within their area of responsibility. Route Planners are notified in writing by school principals of the unique needs of each student and have no formal constraints in planning for special needs students. The lack of constraints allows for the assignment of special needs students to regular education routes within the needs and capabilities of the student, resulting in greater efficiencies. Operator contracts require drivers to receive First Aid, CPR and anaphylactic shock recognition training with 60 days of employment. The Procedures Manual establishes the process for requesting and planning special needs transportation but again lacks clear definitions that determine how services will actually be delivered such as limiting the time that a student may be on a bus, wheel chair loading and securing practices, and emergency evacuation procedures.

4.3.2 Recommendations

Special education transportation policy development

The development of a set of comprehensive written policies, and operational procedures to govern every aspect of special needs transportation is recommended. These include (but are not limited to) wheelchair loading and unloading and emergency evacuation procedures, driver training to meet the specific emotional or medical needs such as students with autism or medication requirements, and clear responsibility statements for parents, drivers, and building staff.

4.4 Safety policy

The paramount goal for any transportation operation is the safe transportation of its students. As the Consortium serves many communities across a large geographical area utilizing multiple Operators, it is essential that there are clear and concise safety policies, practices, and regular training programs to promote a culture of safety within both the school and local communities.

4.4.1 Observations

The Consortium, in partnership with the Operators, provides the First Rider program for JK students at multiple sites within the service area. Senior elementary students participate in the CAA Bus Patrol program. Outreach includes direct mail, phone contact, and newspaper ads. Informational safety brochures are distributed to all elementary students at the start of each school year. The Consortium pays \$2,000 per year to the Great Lakes Association for the production of public service announcements. The Consortium's web site contains links to Provincial safety sites along with a Code of Conduct page and information on the safe transportation of equipment.

Along with the contractually mandated emergency first aid, child and adult CPR, and anaphylactic shock recognition training, Operators are required to provide a minimum of two safety workshops per year with the agenda provided in advance to the Consortium for review. While an audit process has been developed to ensure compliance by the Operators, time constraints on Consortium staff have delayed its full implementation.

Vehicles are required to have strobe lights on all buses newer than 1999 and a Child Check system on all buses newer than 2000.

4.4.2 Recommendations

Safety training policy development

While the Consortium has demonstrated a commitment to safety with its participation in training programs for students and its contractual requirements for Operators to provide both initial and biannual driver workshops, the development of a comprehensive Safety and Training Policy and Procedures Manual is recommended. Items to be considered include:

• Defined defensive driving and skills improvement programs;

- Regular audits to confirm that Operators perform contractually mandated driver training, bus evacuations and, compliance monitoring including driver criminal and license checks;
- Student behaviour management, and
- Training specific to the transportation of special needs students including those with medical or emotional conditions.

4.5 Results of E&E review

Policies and Procedures development and implementation has been rated as **Moderate-Low**. The Consortium and its Partner Boards have established a long and cooperative working relationship which will be of great benefit as the Consortium continues to evolve. While the Procedures Manual begins to document the many procedures and practices required of any complex transportation operation, additional procedural definition is required to fully establish the document as the source for transportation planning and operational oversight. A comprehensive review and subsequent harmonization and documentation of existing policies, procedures, and practices would serve to ensure that equitable and effective service continues regardless of a change in Operators or Consortium management.

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

5.2 Software and technology setup and use

Modern student transportation routing systems allow transportation managers to make more effective use of the resources at their disposal. These systems allow for improvements in the management and administration of large volumes of student and route data. However, the systems must be fully implemented with well designed coding structures and effective mechanisms to extract and report data to all stakeholder groups. This section of the evaluation was designed to evaluate the baseline acquisition, setup, installation, and management of transportation related software.

5.2.1 Observations

Routing & related software

Consortium staff utilized *BusPlanner* from GEOREF Systems, Ltd. for the current school start cycle. The recent transition to *BusPlanner* was made as part of an effort to improve the ease of use of the transportation management software and to increase the availability of management data for decision making. Additionally, the change in software provided the opportunity for data sharing with other stakeholders such as

schools and bus Operators. The software has been fully implemented, including the establishment of regular data transfers from the student information system.

In addition to the core routing package, the Consortium has also purchased *GeoQuery*. This module allows for web-based querying of the transportation database for the purpose of identifying transportation eligibility and identifying school of attendance. This service is available through the websites of the Partner Boards as a link to the Consortium's web page as the Consortium does not maintain its own branded site.

Maintenance and service agreements

Maintenance and service agreements are in place to ensure that the transportation management software is current and that any related fixes have been addressed. System maintenance is generally performed by the Transportation Systems Administrator. These efforts include management of the backup and restoration process, targeted assistance to planners, and coordination with outside IT support. In addition to daily backups to a dedicated server, tape backups are removed off site. While these procedures ensure the critical need for basic data recovery in the event of a catastrophic event, comprehensive procedures specific to the needs of the Consortium are not well documented or defined at this time.

The Consortium is also working with its software vendor to establish data transfer procedures that will further reduce exposure to hardware failures. The proposed procedure would allow for daily updates of data and live data transfer when changes are made to the student information system. This type of procedure would allow for nearly immediate restoration of student data following the restoration of any database failures.

Training and system use

Consortium managers have established a progressive training program modeled on a structure established by the software vendor. This approach provides for the understanding and utilization of basic functionality. This training is followed by a second program that addresses more complex functionality within the program. All Route Planners have participated in the initial training and the Transportation Systems Administrator has received the second phase of training. The Consortium has established a schedule to provide the remaining Route Planners with the second phase of training. In the interim, the Transportation Systems Administrator serves as the primary in-house training resource. During the onsite interviews all Route Planners demonstrated competency in navigating the system functionality and in retrieving requested information.

5.2.2 Best Practices

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

Information system implementation

The Consortium has implemented a comprehensive transportation management information system that has improved the availability of management and operational data and allows for targeted analysis designed to improve operational efficiency.

5.2.3 Recommendations

Procedure documentation

The Consortium should formalize its existing procedures for systems management in an effort to ensure that all procedures will continue to be followed during periods of staff turnover. Specific procedures should be established related to back up and recovery procedures and data management.

5.3 Digital Map and Student Database Management

This aspect of the E&E Review was designed to evaluate the processes and procedures in place to update and maintain the student data and map data that forms the foundation of any student transportation routing system.

5.3.1 Observations

Digital map

One digital map is available for the entire service area. The map was established as part of the initial implementation and has been updated based on information received from area municipalities and regional agencies. The map allows for near universal geocoding of students and school site locations with little to no manual entry required. The primary concern is related to the accuracy of student data received from the schools and not the completeness of map data.

Map accuracy

Processes are established to utilize third party input to improve map accuracy. Data collected during the annual route verification process is used to verify stop loads, times and route directions. This process requires significant time and effort but it has resulted

in increasingly accurate route timing and distances and is consistent with best practices used to ensure data accuracy.

The Consortium has also established all of its exception boundary areas on the base digital map. While continuing efforts are required to ensure the continued necessity of each of the exception areas and when a hazard area should be established, the geocoding of the boundaries on the base map simplifies eligibility assignments when student data is imported or added to the database and improves Route Planner efficiency.

Default values

Management of default values helps promote accurate route timings. Default values were established upon the initial implementation of the system. Management of these values is assigned to the Transportation System Administrator who manages all key data elements including road speed values, default loading times, seating criteria, and travel restrictions. Individual Route Planners may address street numbering issues without submitting them to the Transportation System Administrator.

Limiting change authority to these key data elements is also an important tactic to ensure that the map reflects actual operating conditions. For example, road speeds may vary across the given time tiers. While it may be advantageous to one Route Planner to adjust road speed to more accurately reflect the times in their limited area, this change may adversely impact all of the other buses traveling over that same segment of road in a given day. This situation is most likely to be recognized by someone with a broad perspective on the entire routing network.

Data management

The Consortium has established an irregular schedule of student data downloads on an approximate eight week schedule. This is a revision from a monthly schedule that had been used previously. The rationale for the change was continuing concerns regarding the accuracy of student data. Data is currently imported from multiple student information systems (Maplewood and Trillium). Each of these systems has presented different challenges for the Consortium to manage in its efforts to promote data completeness and accuracy. Specifically, the concerns relate to street naming conventions and start and end dates of student addresses. The Consortium has continued to work with schools and its Partner Boards in an effort to remedy these concerns.

In an effort to mitigate the negative impact that the available data has on operations, the Consortium has developed an extensive processing sheet to review data after imports. While this approach does improve the accuracy of the data, it is a labour intensive and inefficient (but currently necessary) use of Route Planner resources. The change in data update schedule indicates that additional intervention will be required to promote greater efficiency in the use of Route Planners. This intervention is likely to include assistance from student information system managers to standardize data entry tables; assistance from school secretaries to ensure that complete information is entered into the system including both mailing and transportation data; and continued vigilance by Consortium staff to isolate the records that are in question and inform the Boards of the negative impacts that inaccurate data has on their ability to efficiently and effectively plan the use of transportation resources.

Coding structures

The Consortium has established a two tier structure that begins with identification of an eligibility code and followed by the use of a travel code to provide a more detailed description of service mode. Supplementary data describing student needs is kept in both comment and grouping fields that can be queried from the software. The current approach provides for an adequate structure for both reporting and analytical purposes, however, additional revisions and refinements are expected at the Consortium to ensure that the structure continues to meet operating needs. The Transportation System Administrator has established a process to review the codes and their continued relevancy, which is consistent with best practice expectations.

5.3.2 Best practices

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

Map accuracy refinement

The Consortium has established a process to utilize the input of other stakeholders to refine the accuracy of map attributes. Through the use of Operator input and Route Planner observations the digital map will increasingly provide more consistent and accurate route timings.

Coding structure

The Consortium has established a functional coding structure that supports standard reporting requirements and facilitates more complex systemic analyses. Additionally, the use of a regular process to evaluate the continued appropriateness of the coding will improve the functional use of the structure in the future.

5.3.3 Recommendations

Student database management

Emphasis should be placed on increasing the frequency with which student data is imported from the student information systems. The current eight week schedule necessitates the establishment and use of a number of alternative work processes to ensure the completeness and accuracy of student data that introduce inefficiency into the Route Planner's work requirements.

5.4 System reporting

Adequate reporting allows for the early identification of trends that may be detrimental to operations, improves the analytical capacity of the organization and allows for internal and external stakeholders to be more adequately informed about operations. The purpose of this aspect of the review was to evaluate what reports are typically generated, who receives these reports and what capabilities exist to develop ad hoc reports.

5.4.1 Observations

Reporting and data analysis

The Consortium has not instituted any formalized reporting schedule. The primary reports extracted from the system focus on run reports for schools and route reports for bus Operators. Increasing use of the *GeoQuery* module has reduced the need for the production of many of these basic reports for schools and Operators. However, there is no procedure for using the system reporting to conduct internal performance assessments.

Despite the lack of a formal reporting schedule a limited number of key performance indicators were provided during the review. However, no additional tracking data was provided that indicated the regular monitoring or evaluation of the impact of these measures.

Given that many Operators are extracting and replicating the data from the system into their own management systems, there would be an efficiency benefit to designing a mechanism to transmit data electronically to the Operators in a suitable format. *GeoQuery* provides for the capability to extract data into standard third-party productivity software that could be then imported into other management systems. In the event that this process is inadequate to support operator requirements, the Consortium should facilitate the development of a process between the software vendor, itself, and the Operators.

5.4.2 Recommendations

Reporting and operational analysis

The Consortium should establish a regular reporting initiative to include an evaluation of each position in the organization to determine what data those individuals require, the schedule on which it is required, and establish a proactive reporting schedule to reflect these requirements. These reports could include: a daily student change log for each technician (as part of the data management efforts discussed in Section 5.3.3); a weekly route change report for the Operations Manager; a quarterly performance operations report for the Operations Manager that provides summary statistics and detailed data on issues like capacity utilization, route pairing, average run times, and lateness; and an annual operational summary to the Manager that summarizes the key performance statistics mentioned above and incorporates detailed cost measures such as the direct and indirect cost per bus, cost per student, and cost per kilometre.

Data transfer

Protocols should be established to limit the manual re-entry of any information by stakeholders. Therefore, the Consortium should work with its Operators and school sites to determine if the operations would benefit from an electronic transfer of student, run, and route data. To the extent possible, efforts should begin as soon as practical to establish the most appropriate file structure and electronic data transfer.

5.5 Regular and special needs transportation planning and routing

Transportation route planning is the key activity undertaken by the Consortium. This portion of the review is designed to evaluate the strategies, tactics and processes used to provide transportation to regular and special education students and the approaches used to minimize the cost and operational disruption associated with both types of transportation.

5.5.1 Observations

Planning cycle

The Consortium has established a standard planning process that begins in May following completion of pre-registration. Students in the Trillium database are promoted to the next grade prior to the extract being taken while students in the Maplewood database are promoted for planning purposes by the Consortium. Route Planners will then utilize this test database to identify and evaluate possible changes to the routing scheme. Route Planners are responsible for identifying opportunities for increasing efficiency in their specific areas. The software is also used to conduct analyses of walk boundary changes, school attendance boundary changes and accommodation reviews. Following the start of school changes are triaged and managed by each of the individual Route Planners. Bus Operators are consulted where necessary in order to validate the feasibility of any route change. At the end of October changes are received from the Operators as part of the annual review process. Additionally, Route Planners have adopted the innovative practice of attending inclement weather meetings hosted by the area schools at the end of October. Final reconciliation of the routes is generally completed by the end of December. In January an updated student file is extracted from the student information systems and processed in order to prepare for the second semester. Daily activities then dominate Route Planner time until the cycle begins again in May.

Management of regular bus routes

Maintenance and modification of regular bus routes is the responsibility of the Route Planners. The area has been divided logically in an attempt to balance both planning and administrative demands in the case of the Transportation System Administrator. Within their assigned areas the Route Planners are responsible for all regular and special needs students. The design and development of runs is generally overseen by the Manager of Transportation. Adding, removing and changing students are more or less constant throughout the system and are reconciled with the student data transfers. Changes requiring the addition or deletion of stops, movement of stops among routes, re-sequencing of stops etc. are less frequent but still occur on a regular basis across the system.

Route Planners are not limited by policy or practice in how they can design bus runs or routes. Consideration is given to possible changes from multiple sources including bus Operators, parents, and the Route Planner's review of their own area. While no formally documented guidelines or principles exist to assist the individual Route Planner in their route development, Consortium management has impressed upon staff the need to maximize the use of individual assets to the extent possible. Data analysis indicates that the primary approach to achieving efficiencies is through efforts to maximize the use of available seating capacity through the assignment of multiple schools to individual runs. This approach is best demonstrated by the more than 70 percent of morning and afternoon runs (540 of 759 total morning and afternoon runs) that service more than one school. Additionally, more than one-third of all bus runs also include a transfer in an effort to increase the use of seating capacity and reduce ride time where possible. Given the limited density of the area these are appropriate strategies to maximize asset utilization.

Unique to this Consortium to date is the coordination of extracurricular runs for BGCDSB and BDSD. One Route Planner is assigned the responsibility for serving as the liaison between the Board and Operators to ensure the availability of assets required for these trips. The provision of this service does not require a substantial amount of Route Planner time but it is a service where costs are not uniquely captured or recovered based on any varying levels of effort between the Boards.

Special education route planning

Special needs students are managed in the same manner as regular education students by the individual Route Planners. Route Planners are provided the latitude to integrate special needs students onto general needs vehicles where possible but very limited integration is actually occurring. Regular students are also placed on special needs vehicles where efficiency and space permits, but only in exceptional circumstances where a regular bus is not available. The default approach throughout the system is to place special needs students on a special needs bus and vice versa.

Analysis of system effectiveness

The Consortium provides service over a large geographic area that includes a significant amount of rural and township –based population centers and more limited city centers. The Consortium provides services in an area that covers over 8,500 square kilometres and transports approximately 15,000 students daily to and from nearly 70 schools. It accomplishes this mission using a total of approximately 760 bus runs daily.

The design and implementation of an efficient bus routing system requires an orchestration of policy constraints, student locations, and site locations. The goal of the transportation operation is to establish the most appropriate balance between the level of service provided and the cost of operations. This balance is achieved through the use of routing strategies designed to maximize the use of each school bus within the constraints of the policy infrastructure. Maximizing the use of each bus is achieved through two primary means: using every seat that is available and reusing each bus as many times as possible throughout the system.

These two concepts are inextricably related. Maximizing capacity utilization, the use of each seat available on the bus, is impacted by how far a bus can travel in terms of both time and distance. More time allows for the pickup of more students which increases capacity use. Bell times, student ride time policies, and seating guidelines have a substantial impact on the ability of Operators to maximize seat use. In addition to maximizing seating capacity, it is also necessary to maximize asset utilization, or the number of times a bus is actually used during a given day. School start and end times and student ride lengths are again the key determinants of the ability to maximize asset utilization. Therefore, the design of an efficient approach to routing must consider all of these factors.

As mentioned in Section 4.2.2, there is a need for greater formalization in the policy documentation at the Consortium. Despite this lack of formalization, all of the Route Planners exhibited a clear understanding of their expectations to design an efficient system. Given the rural characteristics of the area and the hub- and-spoke nature of much of the routing, the primary means to promote efficiency has been the use of combination runs and transfer runs. Combination runs are a routing technique where students who live in one general area but attend multiple schools are all picked up using the same bus. This bus then stops at the different schools to drop the students off.

The prevalence of combination runs as the predominant routing technique is best demonstrated by the statistic that each bus run serves, on average, 2.3 schools in both the morning and afternoon panels⁹. The following table summarizes the number of schools serviced by individual bus runs in both the morning and afternoon panels.

Count of Schools Serviced by a Given Bus Run	Count of Morning Runs	Percent of Total Morning Runs	Count of Afternoon Runs	Percent of Total Afternoon Runs
1	113	30%	106	28%
2	131	34%	131	35%
3	77	20%	82	22%
4	47	12%	43	11%
5	15	4%	14	4%

 Table 7: Distribution of School Counts by Run

As seen in Table 7, approximately 70 percent of morning and afternoon runs service more than one school. In a system that is predominantly single tier because of the rural characteristics of the service area, efficiency considerations must necessarily focus on capacity use. Capacity use on individual bus runs is the key statistic to evaluate because the geography of the service area generally does not allow for a bus to be dispatched to serve another group of students due to a lack of available time. Analysis of these runs indicates that nearly 8 of every 10 seats available are expected to be filled. It is important to note that this measure is based on planned seating capacity.

⁹ All data reported in this section of the report refers to data collected from the Consortium while the E&E team was on site. There may be inconsistencies with some previously reported Ministry data due to the different timing of the data collection.

Planned seating capacity provides for more than one seat for older, larger students. For example, if a bus run had one elementary and one high school student riding the total student count would be two but the planned count would be 2.5. This method of accounting for seats ensures that buses with students from multiple grades are not overcrowded and do not present a safety hazard due to lack of available seating. The following chart demonstrates the number of seats planned to be filled by run for 72-passenger buses only.



Figure 6: Planned Capacity Use

It is clear from the chart that Route Planners are designing bus runs to fill a substantial portion of the number of planned seats available. While no data was available to verify *actual* ridership, a planned ridership value of approximately 80 percent is consistent with expected performance guidelines.

Use of transfers

In addition to designing runs that focus on attempting to maximize the use of available seats, the Consortium also promotes efficiency through the use of an extensive transfer system. Implementation of a transfer system allows students from more distant areas to be brought to their school through the use of a relay bus that takes students from a central collection point to their destination. More than one-third of all bus runs also

provide transfer services. While the use of transfers requires the implementation of comprehensive operational practices to ensure that all students get on the proper bus at the transfer location, their use in the routing structure does generally promote greater efficiency.

Out of boundary students

One aspect of note was the provision of service to out of boundary students. Approximately 14 percent of the total students attend schools outside their home school boundary as indicated by their Out of Boundary eligibility code. The Consortium provides service to approximately 60 percent of these students for a variety of reasons. The primary rationale for service delivery is that students have applied for service based on the policy and procedures developed by the Consortium and Partner Boards¹⁰. Key provisions in the approval of an application include: providing the service does not increase the cost of transportation to the Board; parents must transport their students to the nearest bus stop servicing the school (no new stops will be created); and the provision of service is not guaranteed on an annual basis. As part of this analysis, we did not assess the individual applications to determine the number that were approved or disapproved. On an individual basis, determining whether costs will be increased is relatively simple.

However, if the total six percent increase in ridership is considered, it is possible that additional costs are being incurred in the aggregate that are not readily apparent in the individual cases. Therefore, consideration should be given to periodically reviewing both the aggregate impact and the individual impact of providing services to students who are otherwise ineligible.

Consideration of service effectiveness generally considers how long students are on the bus, how often the buses are late for the expected arrival or departure times, and how often buses are unavailable to provide service. Analysis of the impact of these routing techniques indicates that the overwhelming majority of students are provided service that is well within the established ride time guidelines. Analysis of student ride length was performed by calculating the total time that each student was on the bus from their point of pick up to their point of arrival. The following chart demonstrates the percent of student ride lengths within given intervals of times for both the morning and afternoon panels.

Figure 7: Student Ride Times

¹⁰ 952 of the 1,258 students (76 percent) identified as Out of Boundary who are provided service are identified as Out of Boundary, Transported indicating they went through the necessary process and were granted service.



The average and median student ride time in the morning panel is approximately 30 minutes while the average and median time in the afternoon panel is approximately 35 minutes. These values are well within established policy criteria and indicate effective service delivery practices.

Evaluation of the other two effectiveness indicators was more difficult because service data was not available. However, interviews with staff did not indicate any significant concern regarding late arrivals or the ability of bus Operators to provide service in the event of a vehicle breakdown. Future consideration of these effectiveness measures would require the establishment of a data collection mechanism, most likely a sampling technique developed in conjunction with the route auditing process discussed in Section 6.4.1.2, that documents and evaluates on time service delivery and asset availability.

5.5.2 Best practices

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

Formal planning cycle

The establishment and documentation of a formal planning cycle to ensure that all necessary tasks are completed in a timely manner and that all staff, regardless of tenure with the organization, are aware of when particular tasks must be completed.

Appropriate routing techniques

The use of routing techniques that is considerate of the service area in an effort to promote efficiency.

5.5.3 Recommendations

Out of boundary riders

The Consortium should periodically review both the aggregate impact and the individual impact of providing services to students who are otherwise ineligible. While it is recognized that this is only a small portion of the overall population, the management of these records and the evaluation of service options takes no less time than for any other student. Regular analysis of both the individual and aggregate impact of these students will ensure that both the policy and procedure established to evaluate service provision are operating as intended.

Extracurricular route planning

Given that this service is specific to one board, the Consortium should review the current administrative cost allocation strategy and the level of effort required to ensure that costs are being properly allocated. While a shift in cost may not be necessary, it is reasonable to ensure that all partners are aware of any differences in service levels and allow the Management Committee to determine whether changes in allocation methods are warranted.

5.6 Results of E&E review

Routing and Technology use has been rated as **Moderate**. The Consortium has effectively implemented the transportation management software system and has established both a coding structure and a routing scheme designed to service their

specific needs. Additionally, staffing responsibilities have been reasonably assigned to promote effective management of the system.

The primary concern for the Consortium is the need to improve the availability of student data for planning. Improving the availability of this data will require continuing coordination with and cooperation of the Partner Boards to both improve the accuracy of the data entry at its source and the availability of the data for planning purposes. Much of the improvement in data accuracy will necessarily occur at the school sites and will require Consortium management to coordinate with the Management Committee to ensure that necessary understanding and training is provided to school staff. In addition, greater emphasis on ongoing operational analysis through regularized reporting will ensure the continuing provision of effective and efficient services.

6 Contracts

6.1 Introduction

The Contracts section refers to the processes and practices by which the Consortium enters into and manages its transportation 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 analysed based on observations and information provided by the Consortium, including interviews with Consortium management and select Operators. The analysis is composed of 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 Contracting Practices as shown below:

Contracts – E&E Rating: Moderate-Low

6.2 Contract structure

An effective contract 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.

6.2.1 Observations

The Operators in the Grey-Bruce area have formed an association called The Association of Grey-Bruce Bus Operators which represents all nine Operators that supply transportation services to the Consortium. The Association is not a legal entity and acts exclusively to negotiate contracts with the Consortium. The Assignment of routes remains the purview of the Consortium.

Bus Operator contract clauses

The Consortium executed a Transportation Agreement (hereafter the Agreement) with its Operators on September 1, 2008 that is valid from September 4, 2007 to June 30, 2009. This contract is signed between the Partner Boards and Operators but mentions the Consortium in-text.

The Agreement sets out the relationship between the Operators, Partner Boards and Consortium and outlines service levels; safety; and qualification standards required of Operators. Of particular note is clause 10 of Schedule 1 that requires the Consortium to provide two years notice prior to initiating the tender of any bus routes.

Drivers are required to be qualified in emergency first aid, including child and adult CPR, within 60 days of the start of employment. Training in the use of Epi-pens and the treatment of anaphylactic shock is to be provided as a part of initial driver training. The Operators are also mandated to provide two safety workshops per school year.

The Agreement includes provisions on the obligations of the driver for lawful operation of school vehicles; driver training; vehicle age policy (12 years maximum) and compliance with Federal and Provincial regulations. The fee structure is included in the Transportation Rate Schedule portion of the Agreement.

There are no Board owned vehicles and there is no spare vehicle specification except that the Operator is responsible for providing a replacement bus in the event of failure.

The Agreement stipulates that all buses manufactured in or after 1999 are to have video camera boxes by February 1, 2009. The installation of this capability is the purview of the Operators and issues related to sourcing are currently being negotiated. Currently, 25 percent of the bus fleet does not have this capability and cameras are used on an as-needed basis only. Both the BDSB and the BGCDSB have policies in place pertaining to the use of cameras on school buses. Operators are upgrading their system to a digital format. Child check and strobe lights are installed on all buses.

Bus Operator compensation

Operator compensation is based on a total daily kilometres calculation as defined in the Agreement. The total sum paid is based on a 188 day year and Operators are to receive 20 payments a year. Payments are calculated as follows:

The total Daily Kilometres travelled by each vehicle is calculated as the distance from the fist pick-up to the last drop-off in the morning (including the most direct route back to the first pick-up); and from the first school to the last drop off in the afternoon (including the return to the first school using the shortest route).

There is a price per kilometre which is broken into fixed and variable components. The variable component includes the cost of fuel.

The calculation of maintenance cost depends on the formula being used for that particular year. For the current year, the maintenance cost is fixed and calculated based on a 188 day year.

Fuel cost is calculated as the price per litre of fuel. This is adjusted on a monthly basis by taking the average list price of unleaded gasoline and diesel from six specified fuel stations, less 2.6 cents per litre, less the rebated Goods and Service Tax. A list of standard fuel consumption rates per kilometre is specified in the Transportation Rate Schedule.

In practice the average list price is not calculated, the list price at the specified fuel stations on the first of the month is the rate used for the month. The price is the average of the six services stations less GST and discount on the first day of the month.

The total amount is then adjusted for:

- Holidays; Contract is over 188 days-holidays excluded
- Tech Centre transportation for the BDSB;
- Accessibility of buses (availability of a wheelchair lift);
- Charters for the BGCDSB; Charters are invoiced separately
- Additional services for extra days and runs or cancellations caused by inclement weather (inclement weather days are common for all Boards); Professional Activity days are also common for all Boards;
- The correctness of the daily route kilometres calculation originally submitted by the Operators; and
- Seating capacity on the bus.

Other clauses outline the measurement of the required bus size per route; that all buses should be equipped with a two way radio and the conditions under which strobe lights and video cameras are required to be installed.

The transportation rate schedule for the 2008-09 school year is still being negotiated as the previous rate schedule expired on June 30, 2008. Operators are currently being compensated based on the 2007-08 rate schedule. No rate schedule was in place during the 2007-08 school year as the entire contract, including the rate schedule, was

still being negotiated during that period. The 2007-08 contract negotiations were only resolved in September, 2008; delayed due to the reconciliation of separate contracts for each individual Board.

Taxi contracts

The Consortium has contracts in place between taxi service providers and the BDSB and BGCDSB. These include requirements for criminal background checks, liability, confidentiality, driver training, safety, insurance and documentation requirements including a list of all vehicles to be used and a copy of its taxi license. Taxi companies contracted by the Consortium are usually small operators using school bus vans.

The contract does stipulate that drivers must have first aid, CPR or Epi-pen training.

The Transportation Manager reserves the right to inspect the service provider's office in order to ensure compliance with the agreement.

6.2.2 Best practices

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

Relationship with Operators

The Consortium and Operators enjoy a professional, congenial relationship that ensures open communication between all parties.

Standard contracts

The Consortium has standard contract in place for Operators which outlines appropriate legal, safety and other non-monetary terms. This ensures the contractual relationship between transportation service providers and the Consortium is defined and enforceable.

Taxi operator contract clauses

Notwithstanding the recommendation below, and referring only to the clauses within the contract, the Consortium has detailed contracts in place for taxi operators that outline all appropriate legal, safety and other non-monetary terms including confidentiality and the obligations of the both the Consortium and the taxi operator.

Epi-pen safety training

The Consortium requires that all drivers be trained to use an Epi-pen prior to beginning their work. This ensures that all drivers are appropriately trained to deal with this type of emergency should it occur.

6.2.3 Recommendations

Operator contract signing

The current transportation agreement for bus Operators is signed between individual Operators and all three Partner Boards. The taxi contract is signed between individual operators and the BDSB and BGCDSB but does not include CSDECSO as a signatory. It is recommended that future transportation agreements be signed by the Consortium on behalf of the Partner boards. This will increase clarity as to the role of the Consortium in relation to the Partner Boards. If necessary, the Consortium should obtain appropriate authority to bind the Partner Boards.

Bus Operator contract clauses

The transportation agreement expires on June 30, 2009 and does not have a provision that automatically extends its validity should negotiations continue past that date. It is imperative that a contract be in place between Operators and the Consortium prior to the start of the school year. Should negotiations not be completed prior to June 30, 2009 a contract should be signed that extends the validity period of the current contract during the negotiation period. A similar extension should be formally executed for all rate agreements that are not finalized prior to the start of the school year.

It is also recommended that clause 10 of Schedule 1, stipulating that the Consortium needs to provide Operators with two years notice prior to initiating a tender, or a competitive procurement process, of any bus routes not be included in the next contract. The Consortium should maintain its flexibility in choosing its procurement methods.

Camera use policies

While it is recognized that policies pertaining to camera use are currently in place at the BDSB and the BGCDSB, it is recommended that the Consortium either use these documents to develop its own policy or formally adopt the camera use policy of one of these Boards.

First-aid safety training

The Consortium currently requires drivers to have first-aid training within 60 days of the start of employment. It is recommended that this time period be reduced or eliminated to ensure that drivers are qualified to manage emergency situations from the first day of employment.

6.3 Contract negotiations

Contract negotiations 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 efficient market prices.

6.3.1 Observations

Bus Operator contract negotiation process

All Operator contracts are procured through annual negotiations with the Association of Grey-Bruce Bus Operators. No competitive procurement process is followed. The Transportation Manager negotiates on behalf of the Consortium and reports the results to the Management Committee.

During the 2007-08 negotiation process, the Operators provided the Consortium with operating cost details based on a hypothetical 40-bus operator with the intention of providing support and rationale for negotiated rates. For the 2008-09 year, the Operators have provided actual operating cost schedules to the Consortium to support the rates to be established for the coming school year. The Consortium has solicited the services of a consultant to conduct a review of the operating costs that have been presented by the Operators. The consultant's final report was in draft form at the time of the review. Once costs have been established a reasonable profit margin will be negotiated. The 2007-08 profit margin was set within the cap suggested by the cost benchmark study. It is the Transportation Manager's intention that this process be undertaken annually as part of the rate negotiation process.

As per the consultant retained to review the Operators' presented costs, the amounts presented do not significantly differ from the cost benchmark study undertaken by the Ministry.
6.3.2 Recommendations

Compensation for Operators

It is recommended that negotiations between the Consortium and the Operators related to the Transportation Rate Schedule be concluded prior to the beginning of the school year. It is understood that the 2007-2008 negotiations were delayed due to the completion of a new consolidated contract. However, it is of concern that the rate schedule for the current year is yet to be signed as this places a financial burden on the Operators, who have continued to provide transportation services based on last year's rates. The Consortium may have to alter the contract it maintains with the cost consultant in order to make this possible.

Cost benchmarking analysis

We understand that the Consortium conducts annual cost reviews of the financial information provided by Operators to inform their rate negotiations and that they have hired an independent cost consultant to undertake the appropriate analysis. This work is duplicating the investment and work conducted by the Ministry in their cost benchmarking analysis. It is therefore recommended that the Consortium leverage the pre-existing cost benchmarking study provided by the Ministry to eliminate duplication, reduce costs and to make rate negotiations more timely.

Competitive procurement process

Contracts for school bus transportation services are currently not competitively awarded. By not engaging in a competitive process, the Consortium will not know whether it is paying best rates for services provided. If a competitive process is used to procure contracted services, the Consortium can clearly state all service requirements in the procurement document. In addition, the Consortium can be sure that it will obtain the best value for its money as Operators will compete to provide the required service levels at prices that ensure they earn an appropriate return on investment. This may not mean that rates will decline; however, the concern for the Consortium should be to obtain best value for money expended.

A competitive process can be used with certain safeguards in place to protect the standards of service. The Consortium should continue to enforce limits placed on the amount of business any one Operator can hold to avoid a monopoly situation. Additionally, in evaluating the successful proponents, cost should not be the overriding factor as that will encourage low cost proponents to enter the market while not necessarily ensuring that the same or improved levels of service are being provided. Local market conditions should be considered at all points in the development and evaluation of any service proposal. For example, local Operators can be encouraged to

participate in this process by placing a value on having local experience as part of the evaluation criteria; however, this specific criterion for local experience should also not be an overriding factor in the proposal evaluation process.

If the current negotiation process is deemed to be most appropriate for particular areas such as remote areas where there may not be many operators interested in providing the service - the Consortium will be able to use the competitively procured contracts as a proxy for service levels and costs negotiated with the more rural operators. Established procurement policies will determine the process for service acquisition.

As the package on competitive procurement has been released and pilot programs are underway, the Consortium should start developing an implementation plan for competitive procurement. A plan should include a review of existing procurement policies, an analysis of the local supplier market, strategies to help determine the RFP scope and processes and a criteria and timeline to phase-in competitive procurement. The plan should also utilize the best practices and lessons learned are available from the pilot Consortia.

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 services that were agreed upon. Monitoring should be performed proactively and on a regular and ongoing basis in order to be effective.

6.4.1 Observations

Bus Operator contract management

Procedures related to the cancellation of services caused by inclement weather are decided at an annual meeting that includes the schools, Operators, administration and consortium staff. This meeting takes place prior to October 31 each year.

Both the Consortium and Operators maintain separate student databases. Currently, the Consortium provides a hard-copy of the student list that details student names, addresses, telephone numbers and order of pick up. Consortium and Operator staff meet prior to the beginning of the school year in order to reconcile the two lists prior to completion of route planning. It is expected that Operators adjust their data to match that of the Consortium. Operators have access to *GeoQuery* that allows for the printing of run and student information in order to provide that information to their driver. Operators communicate routes and route changes to parents. Practice runs of bus

routes are conducted prior to the start of the year only when major changes have been implemented to the schedule.

Medical information is not given to the Operators by the Consortium; this is provided to them by the Schools.

A first rider program managed by the Consortium in cooperation with Operators is currently in place. Operators call parents in August to inform them of the availability of this program. The response from students, parents and teachers has, thus far, been very positive.

A bus patrol program run by the Canadian Automobile Association and the Ontario Provincial Police is currently in place. As part of this program, children are provided training in the use of two way radios and other safety techniques that may be utilized in case of emergency. Parents are required to sign a form in order for the student to attend the training session. This program is usually held in June for the following school year.

All elementary schools are required to do school bus safety and evacuation training. The Operators are compensated for providing this training.

Monitoring

The Consortium initiated a survey of BDSB and BGCDSB schools in order to assess bus Operator performance in terms of the Operators' ability to be on time; maintain a committed relationship with the school; act in a professional manner; resolve complaints by parents; and maintain a team of drivers that meets the schools expectations in terms of student management. The survey did not include schools that are a part of the CSDECSO. The results of the survey are currently being reviewed and finalized by the Transportation Manager and follow-up phone calls have been made to address concerns.

No formal monitoring (route audit) is conducted on the routes or on the Operators. The Consortium has informed us that they intend to make monitoring a part of the Transportation Route Planner job description.

A list of drivers is provided to the Consortium by the Operators prior to the start of the school year with the dates the drivers received first aid certification and the date this certification is to expire. Bus driver's licenses and numbers are submitted with the Vehicle and Bus Route Information form on an annual basis. The validity of the driver's license is thus verified. However, ensuring the validity of bus driver's licenses is the purview of the Operators. No copies of the driver's licenses are retained by the Consortium.

A list of all buses used by Operators is also provided to the Consortium in order to verify vehicle and fleet age.

Incident reports are investigated using forms and processes that are currently in place. Incidents related to bus driver performance are recorded in *BusPlanner*. The Transportation Manager intends to use *BusPlanner* functionality for incident tracking more fully in the future.

Route distance information sent by the Operators is checked on an annual basis by the Transportation Route Planners. This is done by comparing the route distance provided by *BusPlanner* software to the route distance reported by the Operator in the Vehicle and Route Information sheet. The Operator is required to resubmit route distance information if the variance is greater than 5km per day.

6.4.2 Best practices

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

School survey

The Consortium conducted a survey of the BDSB and the BGCDSB school principals. This is a novel idea and ensures that the level of service being provided by the Consortium (and Operators) is consistent and matches the school's expectations.

Safety training

The Consortium requires Operators to demonstrate that they have provided their Drivers appropriate safety and first aid training in addition to demonstrating they have met contract requirements.

Treatment of inclement weather

Procedures related to the treatment of inclement weather days are decided upon and communicated well in advance of the beginning of the winter season and there is a hard deadline by which these meetings should occur. This ensures that the procedures are agreed upon in advance and also provides sufficient time for any queries to be dealt with.

Parent-Operator contact

Parents receive sufficient contact with Operators through the first rider program and through route calls made by the Operators. This helps ensure that there is a personal element to the services being provided by the Operators and the Consortium.

6.4.3 Recommendations

Monitoring

A proactive monitoring system should be implemented by the Consortium to monitor Operator performance. Comprehensive route audits involve a trained and experienced individual riding along within a selected bus to monitor compliance with contractual requirements imposed by the Consortium such as adherence to the stated bus route, no unauthorized pickup or drop off points, and proper use of the student list. Proper route audits also provide the Consortium with a basis to determine the accuracy of the student numbers that the Operators report on the annual count of students.

Route audits should be conducted on a regular basis and be supported with appropriate documentation summarizing the results. This type of follow-up reporting can aid in the evaluation of Operators and be used as evidence of proper implementation of the stated monitoring policies. Efforts should be made to obtain a broad and representative sample of audit results which represent all of the Operators which serve the Consortium. Results of the route audit should be documented by the Consortium and later be communicated back to the Operators to assist them in managing their drivers and improving overall service quality. Passive monitoring or a reliance on the bus Operators, students or parents to self regulate and/or report instances of non-compliance with contract terms such as instance of unauthorized bus stops is not an effective method to detect, nor deter, actions which potentially impact the safety of students being transported.

Dispute resolution

A clause regarding dispute settlement should be included in future Transportation Agreements. This will ensure that there is a formal system by which disputes can be settled without the need for a reduction in service levels or litigation. This process should be neutral and transparent.

Common databases

The current route planning process allows Operators to by-pass the system being used by the Consortium. This is of concern since route information and student lists should be available to the Consortium at all times for safety purposes in case of emergency. It is recommended that one common process be used by the Consortium and Operators to ensure that all available route and student information is consistent.

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**. While the consortia has demonstrated progress in developing standardized contracts, the process of contract negotiations remains lengthy and has extended beyond the start of the school year in the previous two years.

Currently, contracts for transportation services are not awarded using a competitive procurement process. By not engaging in a competitive procurement process, the Consortium will not know whether it is paying the best rates for services provided. If a competitive process is used to procure services, the Consortium can clearly state all service requirements in its procurement document. In addition, the Consortium can be sure that it will obtain the best value for its money as Operators will compete to provide the required service levels at prices that ensure an appropriate return on investment. A competitive procurement process should be used with certain safeguards in place to protect the standards of service and be sensitive to local market conditions.

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 3A. 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 percent of Board A's expenditures are attributed to Consortium A, and 10 percent of expenditures are attributed to Consortium B, the funding adjustment resulting from Consortium A's review will be applied to 90 percent of Board A's deficit or surplus position.

The Ministry's funding formula is as follows:

Overall Rating	Effect on deficit Boards ¹¹	Effect on surplus Boards
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 30%	Same as above
Low	Reduce the gap in the range of 0% to 30%	Same as above

Table 8: Funding Adjustment Formula

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:

¹¹ This refers to Boards that have a deficit/surplus on student transportation

Bluewater DSB

Item	Value
2007-08 Transportation Surplus (Deficit)	\$178,390
% of Surplus (Deficit) attributed to the Consortium (rounded)	100.00%
Revised amount to be assessed under the Consortium	\$178,390
E&E Rating	Moderate-Low
Funding Adjustment based on Ministry's Funding Adjustment Formula	No adjustment
Total Funding adjustment	\$0

Bruce-Grey Catholic DSB

Item	Value
2007-08 Transportation Surplus (Deficit)	\$12,671
% of Surplus (Deficit) attributed to the Consortium (rounded)	100.00%
Revised amount to be assessed under the Consortium	\$12,671
E&E Rating	Moderate-Low
Funding Adjustment based on Ministry's Funding Adjustment Formula	No adjustment
Total Funding adjustment	\$0

Conseil Scolaire de District des Écoles Catholique du Sud-Ouest

Item	Value
2007-08 Transportation Surplus (Deficit)	(\$1,150,890)
% of Surplus (Deficit) attributed to the Consortium (rounded)	3.47%
Revised amount to be assessed under the Consortium	(\$39,896)
E&E Rating	Moderate-Low
Funding Adjustment based on Ministry's Funding Adjustment Formula	30%
Total Funding adjustment	\$11,969

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	
BDSB	Bluewater District School Board	
GCDSB	Bruce-Grey Catholic District School Board	
CSDECSO	Le Conseil Scolaire de District des Ecoles Catholique du Sud- Ouest	
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.	
Consortium or STSCGB	The Student Transportation Services Consortium of Grey-Bruce Deloitte	
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 STSCGB Student Transportation Services " 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
Іт	Information Technology
JK/SK	Junior Kindergarten/Senior Kindergarten
KPI	Key Performance Indicators Management Consultants
Management Committee	As shown in Figure 4
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
Мто	The Ministry of Transportation of Ontario
Operators	Refers to companies that operate school buses 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 or Boards	The school boards that have participated as full partners in the Consortium
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
Transportation Route Planner	As shown in Figure 4
Transportation System Administrator	As shown in Figure 4
Manager of Transportation or	As shown in Figure 4

Terms	Definitions
Transportation	
Manager	

9 Appendix 2: Financial review – by School Board

Bluewater District School Board (BDSB)

Item	2004/2005	2005/2006	2006/2007	2007/2008
Allocation ¹²	\$11,936,765	\$12,426,928	\$12,488,762	\$12,733,652
Expenditure ¹³	\$11,852,469	\$12,206,580	\$12,112,825	\$12,555,262
Transportation Surplus (Deficit)	\$84,296	\$220,348	\$375,937	\$178,390
Total Expenditures paid to the Consortium	\$11,852,469	\$12,206,580	\$12,112,825	\$12,555,262
As % of total Expenditures of Board	100%	100%	100%	100%

Bruce-Grey Catholic District School Board (BGCDSB)

Item	2004/2005	2005/2006	2006/2007	2007/2008
Allocation	\$3,068,631	\$3,201,090	\$3,243,235	\$3,414,996
Expenditure	\$3,064,256	\$3,121,185	\$3,344,045	\$3,402,325
Transportation Surplus (Deficit)	\$4,375	\$79,905	(\$100,810)	\$12,671
Total Expenditures paid to the Consortium	\$3,064,256	\$3,121,185	\$3,344,045	\$3,402,325
As % of total Expenditures of Board	100%	100%	100%	100%

¹² Allocation based on Ministry data – includes all grant allocations for transportation (Section 9 0008C, Section 13 00006C, Section 13 000012C)

¹³ Expenditure based on Ministry data – taken from Data Form D: 730C (Adjusted expenditures for compliance) – 212C (Other Revenues) + 798C (Capital expenditures funded from operating)

Le Conseil Scolaire de District des Écoles Catholique du Sud-Ouest	
(CSDECSO)	

Item	2004/2005	2005/2006	2006/2007	2007/2008
Allocation	\$4,338,191	\$4,597,550	\$4,743,761	\$5,102,196
Expenditure	\$5,199,954	\$5,637,210	\$5,850,026	\$6,253,086
Transportation Surplus (Deficit)	(\$861,163)	(\$1,039,660)	(\$1,106,265)	(\$1,150,890)
Total Expenditures paid to the Consortium	N/A	60,182	N/A	216,763
As % of total Expenditures of Board	N/A	1.07	N/A	3.47%

10 Appendix 3: Document list

- 1. Agreement for transportation bus operators
- 2. Agreement for transportation taxi operators
- 3. Annual costing review report by CMAC Group
- 4. Annual learning plan BDSB office professionals and technicians
- 5. Application for student transfers beyond school boundary BDSB
- 6. Bus driver monitoring note
- 7. BusPlanner, training manual
- 8. Bus stop review form
- 9. Capacity planning report STSCGB MPS
- 10. Consortia plan submission to the Ministry of Education
- 11. Consortium Budgeting procedure
- 12. Consortium Management Committee meeting minutes April 18, 2008
- 13. Consortium Management Committee meeting minutes June 18, 2008
- 14. Consortium Management Committee meeting minutes May 23, 2008
- 15. Consortium Managemnt Committee meeting minutes August 23, 2008
- 16. Consortium Management Committee meeting minutes January 18, 2008
- 17. Consortium Management Committee meeting minutes November 20, 2008
- 18. Consortium Management Committee meeting minutes October 24, 2008
- 19. Consortium Management Committee meeting minutes October 25, 2007
- 20. Consortium Management Committee meeting minutes September 2008
- 21. Consortium staff training memorandum

- 22. Consortium management agreement STSCGB
- 23. Contractor compensation note
- 24. Costing Program GB school bus company
- 25. Fleet list
- 26. GEOREF systems Agreement
- 27. Goals and objectives Memorandum 2007-08
- 28. Goals and objectives memorandum 2008-09
- 29. Hazard transportation procedure
- 30. Job description Route Planner
- 31. Job description Systems Administrator
- 32. Job description (draft) General Manager Transportation and Purchasing Services – STSCGB
- 33. Key performance indicators STSCGB
- 34. Kunkel adds to fleet (article)
- 35. List of contracted operators
- 36. List of special programs
- 37. Maximum ride time memorandum
- 38. Missing student flow-chart
- 39. Negotiating transportation contracts memorandum
- 40. Organization chart STSCGB
- 41. Operator audit form
- 42. Out-of-Boundary student request procedure
- 43. Out-of-Boundary Transportation requests Elementary and Secondary
- 44. Parent fact sheet

- 45. Performance assessment manual BGCDSB
- 46. Performance appraisal manual BDSB office professionals and technicians
- 47. Procedure to set up new student transportation BGCDSB
- 48. Procedures manual STSCGB
- 49. Route planning timeline
- 50. Run file (data)
- 51. Safety workshop leaflet
- 52. Schedule of athletic and arts program
- 53. School file (data)
- 54. School boards sign transportation deal (article)
- 55. School board transportation cost information
- 56. School bus rear-ended (article)
- 57. School bus operator annual survey form
- 58. School bus safety initiatives
- 59. School-Guard insurance policy STSCGB
- 60. Schools under capacity, boards under review (article)
- 61. Specialized transportation
- 62. Student brochure
- 63. Student file (data)
- 64. Stop file (data)
- 65. Transportation administration cost sharing ratios
- 66. Transportation Policy, BDSB
- 67. Transportation cost history BDSB

- 68. Transportation cost history BGCDSB
- 69. Walking distance memorandum

11 Appendix 4: Common practices

Activity	JK/SK	Gr. 1 – 3	Gr. 4 – 6	Gr.7 – 8	GR. 9 – 12
Common Practice	0.8 km	1.2 km	1.6 km	1.6 km	3.2 km
Policy - BDSB	1.6 km	1.6 km	1.6 km	3.2 km	Policy
Policy - BGCDSB	Designated Walking Boundaries	Designated Walking Boundaries	Designated Walking Boundaries	Designated Walking Boundaries	Policy
Policy - CSDCSO	Designated Walking Boundaries	Designated Walking Boundaries	Designated Walking Boundaries	Designated Walking Boundaries	Policy

Home to School Distance

Home to Bus Stop Distance

Activity	JK/SK	Gr. 1 – 3	Gr. 4 – 6	Gr.7 – 8	GR. 9 – 12
Common Practice	0.5 km	0.8 km	0.8 km	0.8 km	0.8 km
Policy - BDSB	0.8 km	0.8 km	0.8 km	1.6 km	2.4 km
Policy - BGCDSB	0.8 km	0.8 km	0.8 km	0.8 km	1.2 km
Policy - CSDCSO	0.8 km	0.8 km	0.8 km	0.8 km	1.2 km

Arrival Window

Activity	JK/SK	Gr. 1 – 3	Gr. 4 – 6	Gr.7 – 8	GR. 9 – 12
Common Practice	18	18	18	18	25
BDSB	15 to 30	15 to 30	15 to 30	15 to 30	15 to 30
BGCDSB	15 to 30	15 to 30	15 to 30	15 to 30	15 to 30
CSDCSO	15 to 30	15 to 30	15 to 30	15 to 30	15 to 30

Departure Window

Activity	JK/SK	Gr. 1 – 3	Gr. 4 – 6	Gr.7 – 8	GR. 9 – 12
Common Practice	16	16	16	16	18
Policy - BDSB	15 to 30	15 to 30	15 to 30	15 to 30	15 to 30
Policy - BGCDSB	15 to 30	15 to 30	15 to 30	15 to 30	15 to 30
Policy - CSDCSO	15 to 30	15 to 30	15 to 30	15 to 30	15 to 30

Earliest Pick Up Time

Activity	JK/SK	Gr. 1 – 3	Gr. 4 – 6	Gr.7 – 8	GR. 9 – 12
Common Practice	6:30	6:30	6:30	6:30	6:00
Policy - BDSB	-	-	-	-	-
Policy - BGCDSB	-	-	-	-	-
Policy - CSDCSO	-	-	-	-	-

Latest Drop Off Time

Activity	JK/SK	Gr. 1 – 3	Gr. 4 – 6	Gr.7 – 8	GR. 9 – 12
Common Practice	5:30	5:30	5:30	5:30	6:00
Policy - BDSB	-	-	-	-	-
Policy - BGCDSB	-	-	-	-	-
Policy - CSDCSO	-	-	-	-	-

Maximum Ride Time

Activity	JK/SK	Gr. 1 – 3	Gr. 4 – 6	Gr.7 – 8	GR. 9 – 12
Common Practice	75	75	75	75	90
Policy - BDSB	90	90	90	90	90
Policy - BGCDSB	90	90	90	90	90
Policy - CSDCSO	90	90	90	90	90
Practice Average/Median	35	35	35	35	35

Seated Students Per Vehicle

Activity	JK/SK	Gr. 1 – 6	Gr. 7 – 8	Gr. 8	GR. 9 – 12
Common Practice	69	69	69	53	52
Policy - BDSB	69	69	69	46	46
Policy - BGCDSB	69	69	69	46	46
Policy - CSDCSO	69	69	69	46	46



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