

# Ministry of Education Effectiveness & Efficiency Review

Phase 2 Review

Ottawa School Transportation Consortium

May, 2008

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*Please note 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.*

# Executive Summary

## Introduction

This report details the findings and recommendations of an Effectiveness and Efficiency review (E&E Review) of the Ottawa School Transportation Consortium (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 reform student transportation across the province and minimize the administrative burden for boards in 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 that were particularly noteworthy. These major findings and recommendations are enhanced and supplemented by the specific 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 Ottawa School Transportation Consortium (the "Consortium") was created by *Le Conseil des écoles publiques de l'Est de l'Ontario* ("CEPEO") and *Le Conseil des écoles catholique de langue française du Centre-Est* ("CECLFCE") in 2005. The Consortium provides student transportation services to the two Partner Boards. Currently, the Consortium provides student transportation services to 18,500 students on over 400 routes, covering 35,000 kilometres on a daily basis within a 25,000 square kilometre catchment area.

The Consortium also purchases services from the Tri-Board Student Services Consortium ("Tri-Board") and from *Le Conseil scolaire catholique de l'Est Ontarien* ("Prescott-Russell") for Ottawa catchment area students more efficiently transported, due to the location of their homes, by Tri-Board or Prescott-Russell. Tri-Board transports approximately 1,000 Ottawa students and Prescott-Russell transports approximately 200 Ottawa students on a daily basis. The Ottawa Consortium also shares six bus routes with the Ottawa-Carleton Catholic District School Board ("OCCDSB") and the Ottawa-Carleton District School Board ("OCDSB").

Since its formation, the Consortium has accomplished many of the key steps necessary to fulfil its mandate as a student transportation Consortium. Notable achievements include:

- Operation of an organization that represents the best interests of both Partner Boards. The Governance Structure of the Consortium ensures that the voice of both Boards are heard and implemented.
- The financial management system implemented by the Consortium demonstrates sufficient internal control and timely reporting. The account recording and reconciliation process, in addition to the variance analysis, allow the Consortium and the Boards to identify budgeting issues in a timely manner.
- The Partner Boards have harmonized all critical transportation-related policies and have established policy guidance that allows the Consortium to establish an effective routing scheme.
- The creation of the student data interface between Trillium and BUSTOPS (when fully implemented for both of the Partner Boards) will provide a valuable data management tool by reducing the need for double entry of student data and increasing the timeliness of student data to ensure effective service delivery.

Based on the findings from the E&E review, the primary opportunities for improvement relate to:

- *Entity Status* – The Consortium should examine establishing itself as 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 the school boards as owners. The primary benefit of incorporation is an effective safeguard against a third party establishing any liability on the part of a member School Board. Incorporation has secondary qualitative benefits which include enhancements to the credibility of the Consortium by requiring additional public accountability. There are more formal reporting requirements and well established incorporation by-laws that govern organizational behaviors and decision making. Clearly defined roles and responsibilities of 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.
- *Contracting Process and Management* – It is highly recommended that the Consortium have signed contracts with the Transportation Operators in place before the beginning of the school year. While there are several reasons why this is ideal, specific concerns relate to the appropriate sharing of accountability between the Consortium, Partner Boards, and operators. It is important to define terms and conditions related to the agreed upon service level to be received by the Consortium, and to have a basis to enforce accountability related to the services that have been contracted. This would require the Consortium to have a robust contract negotiation plan and to exercise diligence in the execution of the plan in starting the process several months before the beginning of the school year.
- *Identification of signatories to Operator Contracts* – The School Boards and the school bus operators are the only established legal entities than can enter into a contract for the provision of bus services. Neither the Consortium, nor the bus operators association, are legal entities. As such, and until the Boards establish the Consortium as a legal entity, the contracts for bus services from operators must be signed between the Boards and operators.
- *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, in particular in urban centres, 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. In areas 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.
- *Operating policies and procedures* – The consolidation of all policies and operational procedures into a single policy and procedures manual, approved and supported by the Partner Boards, is recommended to ensure the consistent and equitable application of service.
- *Integration of runs and routes* – A complete routing and bell time assessment should be undertaken across the entire service area to analyze the potential for service delivery improvements and cost savings of one fully integrated routing system. The goal of the analysis should be to determine if capacity use can be increased without significant impacts to service quality. Route planning parameters and the granting of necessary bell time changes must be agreed upon and supported by each of the Partner Boards.
- *Routing software setup* - The Consortium should focus on improving data availability by completing the integration of both Partner Boards student information system with BUSTOPS. A formal plan for the integration that established timelines, responsibilities, and resources required should be established to ensure that the effort can be completed in a manner that is not overly disruptive to daily operations. Consideration should also be given to expanding the current coding structure in manner that would enable more complete analysis of specific subsets of data. In addition, continued efforts should be undertaken to ensure equal access by both Partner Boards to relevant transportation-related data via the World Wide Web.

## Funding Adjustment

As a result of this review of current performance, Ottawa has been rated as a **Moderate-Low** Consortium. Based on this evaluation, the Ministry will provide additional transportation funding that will narrow the 2007-08 transportation funding gap for *Le Conseil des écoles publiques de l'Est de l'Ontario* ("CEPEO") and *Le Conseil des écoles catholique de langue française du Centre-Est* ("CECLFCE").

The funding adjustments to be received are detailed below<sup>1</sup>:

- |  |           |
|--|-----------|
| • Le Conseil des écoles publiques de l'Est de l'Ontario              | \$570,522 |
| • Le Conseil des écoles catholique de langue française du Centre-Est | \$288,318 |

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<sup>1</sup> 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. From 1998-1999 to 2007-2008, an increase of over \$195 million in funding has been provided to address increasing costs for student transportation, such as fuel price increases, despite the fact that there has been a general decline in student enrolment in recent years.

### 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 will 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.

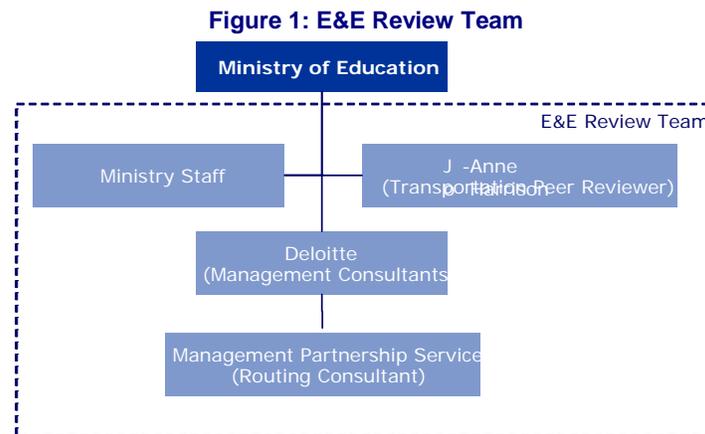
Approximately 99% of student transportation service in Ontario is provided through contracts between school boards or transportation Consortia and private transportation Operators. The remaining 1% of service is provided using board-leased vehicles used to complement services acquired through contracted 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. Phase 1 of the E&E Reviews was completed in March 2007 and included reviews on 4 consortia sites. As a result, a total of \$7.6M in additional funding was provided to the reviewed boards.

#### 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. The Transportation Peer Reviewer has provided the E&E Review Team with valuable insight into student transportation delivery in Ontario.



## 1.2 Scope of Deloitte Engagement

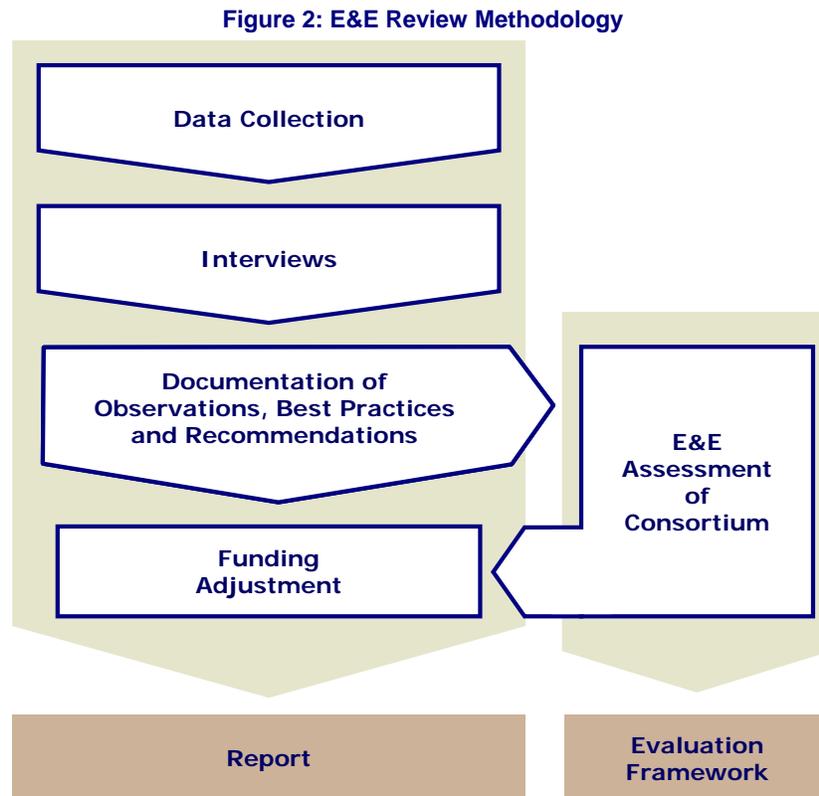
Deloitte was engaged to lead the Team and serve as the Management Consultants of the E&E Review Team. Deloitte’s overall role is as follows:

- Lead the E&E Review for each of the five (5) transportation Consortium to be reviewed in Phase Two (refer to Section 1.1.4);
- 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, 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 an E&E Review in Phase Two. 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 5 step approach, as summarized in the following sections.



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:

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

#### 1.3.2 Step 2 – Interviews

The E&E Review Team 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:

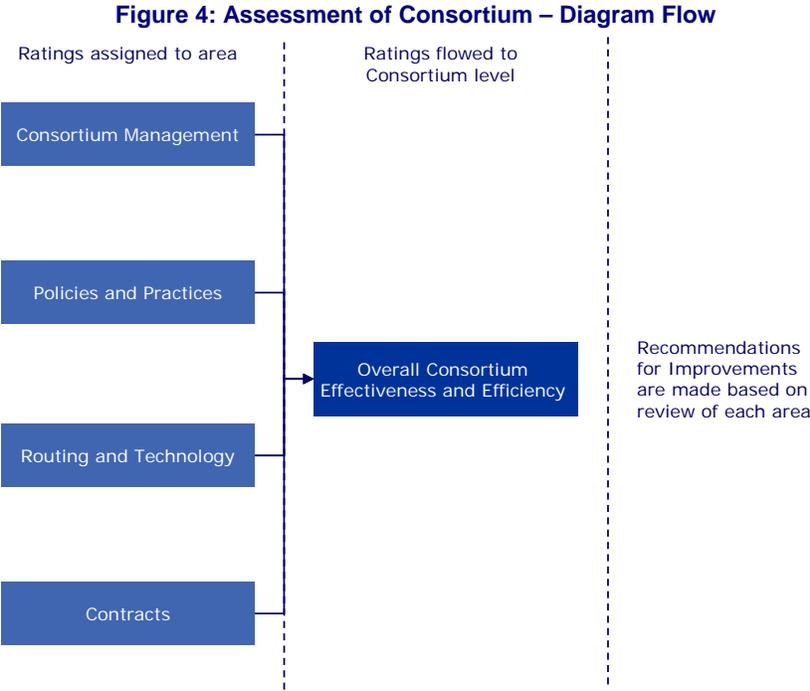
- Observations which involved fact based findings of the review, including current practices and policies;
- Best Practices used by the Consortium under each area; and
- Recommendations for improvements based on the Assessment Guide. Figure 3 provides a summary of the key criteria used in the Assessment Guide to determine the effectiveness and efficiency of each Consortium.

**Figure 3: Criteria of an Effective and Efficient Consortium**

	Consortium Management	Policies and Practices	Routing and Technology	Contracts
Effectiveness	<ul style="list-style-type: none"> <li>• Distinct entity focused on providing student transportation services for the partner boards</li> <li>• Well defined governance and organizational structure with clear roles and responsibilities</li> <li>• 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</li> <li>• Management has communicated clear goals and objectives of the Consortium and these are reflected in the operational plan</li> <li>• Well established accountability framework reflected in the set up and operation of the consortium including documentation of terms in a Consortium Agreement</li> <li>• Operations are monitored for performance and continuous improvement</li> <li>• Financial processes ensure accountability and equity to Partner Boards</li> <li>• A budgeting process is in place which ensures timely preparation and monitoring of expenses</li> <li>• Key business relationships are defined in contracts</li> </ul>	<ul style="list-style-type: none"> <li>• 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               <ul style="list-style-type: none"> <li>◦ Policy decisions are made with due consideration to financial and service impacts to partner boards</li> <li>◦ Communication between the consortium and partner boards facilitates informed decision making on issues directly affecting student transportation</li> <li>◦ Consortium's policies and practices are adequate and in compliance with all relevant safety regulation and standards</li> <li>◦ Practices on the ground follow policies</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Advanced use of transportation management software to store student data, and create a routing solution.</li> <li>• Disaster recovery plans and back up procedures are in place and operating properly</li> <li>• Responsibility and accountability for student data management is clearly identified</li> <li>• Routing is reviewed regularly</li> <li>• Reporting tools are used effectively</li> <li>• Special needs routing is integrated with regular needs where reasonable</li> </ul>	<ul style="list-style-type: none"> <li>• Competitive contracting practice is used</li> <li>• Contract negotiations are transparent, fair, and timely</li> <li>• Contracts are structured to ensure accountability and transparency between contracted parties</li> <li>• Contracts exist for all service providers</li> <li>• Ongoing compliance checks for safety, legal and service requirements are performed by the consortium</li> </ul>
Efficiency	<ul style="list-style-type: none"> <li>• Oversight committee focuses only on high level decisions</li> <li>• Organizational structure is efficient in utilization of staff</li> <li>• Streamlined financial and business processes</li> <li>• Cost sharing mechanisms are well defined and implemented</li> </ul>	<ul style="list-style-type: none"> <li>• Harmonized transportation policies between partner boards enable efficient planning</li> <li>• Proper level of authority delegated to consortium to enable the realization of potential efficiencies e.g. bell time setting</li> <li>• Best practices in planning are adopted e.g. utilize tiered runs and combination runs to maximize the use of available capacity</li> <li>• Public transit usage is optimized where available and efficient</li> <li>• Service levels are reasonable and comparable to common practices</li> </ul>	<ul style="list-style-type: none"> <li>• System can be restored quickly if database fails</li> <li>• Student data is accurate, requires little post processing verification</li> <li>• System functionalities are used to identify efficiencies</li> </ul>	<ul style="list-style-type: none"> <li>• Contracts awarded are based on market prices and best value for money</li> <li>• Fair payment terms are included in contracts and implemented with clarity to both parties</li> </ul>

**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 4 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. Figure 5 illustrates how the Overall Rating will affect a Board’s transportation expenditure-allocation gap.

**Figure 5: Funding Adjustment Formula**

Overall Rating	Effect on deficit boards <sup>2</sup>	Effect on surplus boards <sup>1</sup>
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

**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 January 7, 2008.

<sup>2</sup> This refers to boards that have a deficit/surplus on student transportation (see Section 7 – Funding Adjustments)

### **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 Consortium de Transport Scolaire d'Ottawa. 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. Overview of the Consortium

### 2.1 Introduction to the Ottawa School Transportation Consortium

The Ottawa School Transportation Consortium was established in 2005 between *Le Conseil des écoles publiques de l'Est de l'Ontario* ("CEPEO") and *Le Conseil des écoles catholique de langue française du Centre-Est* ("CECLFCE"). Prior to the creation of the Consortium, both Boards had a working relationship to provide for student transportation, whereby they managed to synchronize some of their transportation policies and share a number of bus routes.

The Consortium also shares bus routes with Ottawa-Carleton Catholic District School Board ("OCCDSB") and Ottawa-Carleton District School Board ("OCDSB"). CECLFCE currently leases six (6) school buses which are driven by CECLFCE employees under the overall management of the Consortium.

The Consortium serves a large geographical area- 25,000 square kilometres - which includes the City of Ottawa, the Pembroke area in Renfrew County as well as students in Prescott-Russell attending special program schools. The relatively low density of schools within urban areas as well as the number of schools in rural regions makes the use of double or triple runs sometimes prohibitive. Comparatively within the City of Ottawa the English Language transportation Consortium serves nearly four times the number of schools.

Table 1 below provides a summary of key statistics for the consortium:

**Table 1: 2006-07 Transportation Survey Data**

Item	CECLFCE	CEPEO
<b>Number of schools served</b>	<b>42</b>	<b>17</b>
Total general transported students	9,105	2,811
Total special needs <sup>3</sup> transported students	262	77
Total riders requiring wheelchair accessible transportation	21	3
Total specialized program <sup>4</sup> transportation	782	All on public transit
Total courtesy riders	470	77
Total hazard riders	1,055	194
<b>Total students transported daily</b>	<b>11,695</b>	<b>3,162</b>
Total contracted full- and mid-sized buses <sup>5</sup>	154	38
Total contracted mini-buses	31	5
Total contracted school purpose vehicles <sup>6</sup>	104	52
Total contracted physically disabled passenger vehicles (PDPV)	-	-
Total contracted taxis	-	-
<b>Total Number of Contracted Vehicles</b>	<b>289</b>	<b>95</b>

<sup>3</sup> 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.

<sup>4</sup> 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.

<sup>5</sup> 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

<sup>6</sup> Includes school-purpose vans, mini-vans and sedans

Readers should note that the statistical data contained in Table 1 is a subset of board level data and only represents the catchment area served by the Consortium.

**Table 2: 2006-07 Financial Data<sup>7</sup>**

Item	CECLFCE	CEPEO
2006/2007 Transportation Allocation	11,391,265	6,484,120
2006/2007 Transportation Expenditure	12,401,180	9,605,307
2006/2007 Transportation Surplus (Deficit)	(1,009,915)	(3,121,187)
Percentage of transportation expenditure attributed to the Ottawa School Transportation Consortium	95.16%	44.34%

Readers should note that the percentage of transportation expenditure attributed to the Consortium does not necessarily correlate to the percentage of students from that board transported by the Consortium.

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<sup>7</sup> 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 selected school bus transportation 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 Consortium Management as shown below:

<b>Consortium Management – E&amp;E Rating:</b>	<b>Moderate</b>
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### 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 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*

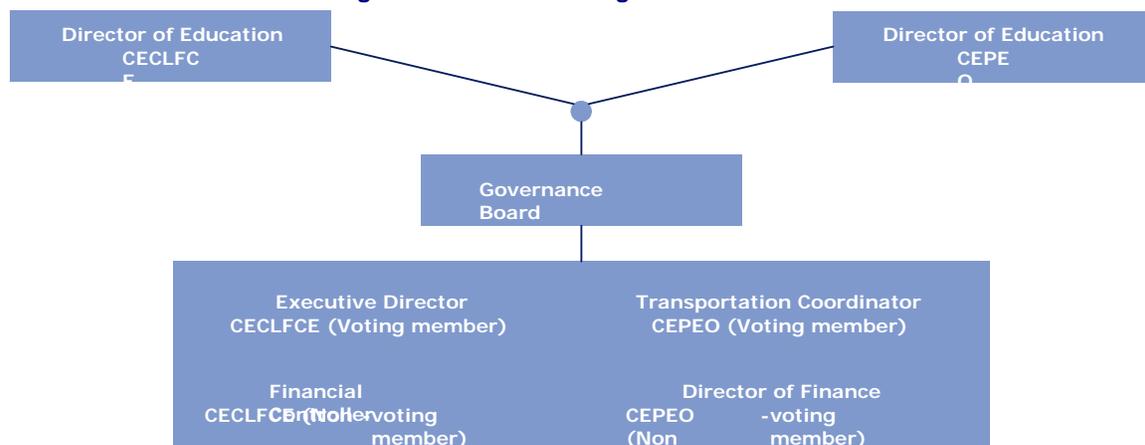
The role of the governance committee is to ensure that the Consortium is focused on an overarching objective – providing appropriate oversight of the Consortium and ensuring that all key stakeholders are appropriately represented. The governance committee takes steps to synchronize student transportation policies such as school bell time windows and bus eligibility boundaries while working with the management of the Consortium to set strategic objectives and approve their translation into goals and objectives for the Consortium. The governance committee approves the Consortium's budget and major expenditures. The actions of the governance committee ensure that the best interests of both Boards and all key stakeholders are represented while overseeing the Consortium to ensure it fulfils its mandate.

The Consortium was formed as a Partnership in 2005 by CEPEO and CECLFCE. The two Partner Boards have equal representation on the Governance Committee. The governance committee members include:

- Two Directors of Education, one from each of CECLFCE and CEPEO;
- Executive Director from CECLFCE;
- Transportation Coordinator from CEPEO;
- Financial Controller from CECLFCE (non-voting member); and
- Director of Finance from CEPEO (non-voting member).

Issues discussed at the governance committee level which are not resolved through consensus are escalated to the School Boards for resolution. If these individuals are unable to reach a consensus, the Board approved dispute resolution policy (as discussed below) is followed.

**Figure 6: Governance Organizational Chart**



#### *Board Level Dispute Policy*

A Board level dispute resolution policy is in place to resolve disputes between the Partner Boards. A legacy policy is in place that refers any disputes at the Consortium governance committee level to the School Boards for input and resolution. As of November 2007, the Governance Committee updated the dispute resolution policy to make proper reference to the Arbitration Act of Ontario. According to the revised dispute resolution policy, four arbitrators are proposed by the Partner Boards and the Governance Committee selects one of the four arbitrators to help resolve any disputes that are escalated beyond the Governance Committee and cannot be resolved based on input and involvement from the Directors of Education representing each School Board.

#### *Transportation Coordinator from CEPEO*

CEPEO employs a Transportation Coordinator to look after all student transportation related issues that are specific to the Board. This person is also a voting member on the Consortium's Governance Committee. While all individuals who work at the Consortium are, employed by CECLFCE, the reporting structure is such that those individuals would report through the manager of the Consortium. The Transportation Coordinator from CEPEO reports directly to the Director of Education of CEPEO. The Transportation Coordinator from CEPEO does not have a documented job description. Based on the information obtained, we note there are elements of management and oversight in the Transportation Coordinator's daily duties.

### **3.2.2 Best Practices**

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

- The Governance Committee that oversees the Consortium has equal representation from each of the Partner Boards. Each Partner Board has the same number of voting members within the committee. The structure of the Consortium governance body promotes fairness and equal participation in decision making and ensures the rights of the stakeholders are considered equally;
- Notwithstanding our comments below related to the role of the Transportation Coordinator from CEPEO, the roles and responsibilities between Consortium management and the Governance Committee are clearly delineated. Those in a governance capacity limit their participation to transportation policy making only, thus leaving Consortium management the freedom to run the day to day business. This is a key element in effective and efficient governance and management;
- The Governance Committee meets bi-monthly or on an as needed basis. These meetings are conducted with a formal agenda and result in documented minutes thus making the Consortium accountable and transparent to its stakeholders; and

- A well defined dispute resolution policy is in place for the consortium. The policy is an effective mechanism to protect the equal rights of both Boards. It ensures that the decisions made respect the interests of both Boards, as well as the continued operation of the consortium.

### 3.2.3 Recommendations

#### *Transportation Coordinator from CEPEO*

An effective governance structure calls for a clear line to be drawn between the governance committee and the management of the Consortium. This line is less easily determined when there is a management level position that executes both a monitoring function over, and management function within the scope normally reserved for the Consortium in terms of analysing and reporting findings based on transportation data and involvement in addressing transportation related complaints. It is recognized that the responsibilities that the office of the CEPEO Transportation Coordinator executes are clearly required and value added; however specifically in terms of effective governance it is recommended that these responsibilities be documented and a clear division including appropriate assignment of governance versus management tasks be implemented.

## 3.3 Organizational Structure

An organizational structure can have the power to provide for effective communication and coordination which will enable operations to run efficiently. The roles and responsibilities within the organization should be well defined. This will lead to operational efficiencies by ensuring tasks are not being duplicated and issues can be addressed effectively. Ideally the organization is divided functionally (by department and/or area) and all core business functions are identified.

### 3.3.1 Observations

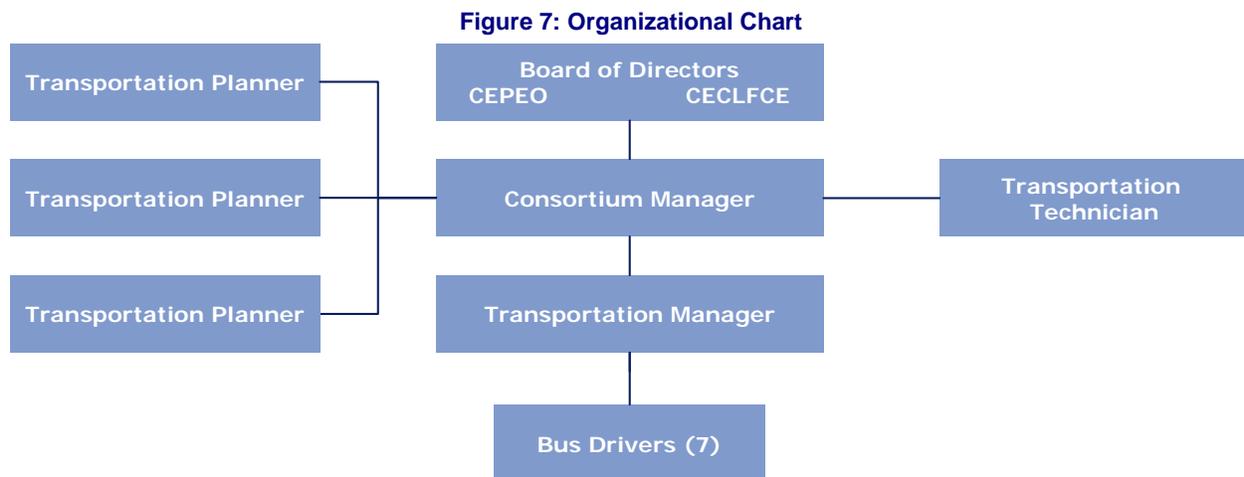
#### *Entity Status*

The Consortium was formed as a partnership between CECLFCE and CEPEO. The resulting Consortium has no legal standing separate from the two partner Boards. The Consortium is physically located within the CECLFCE building. There is currently no signed rental or lease agreement between the Consortium and CECLFCE documenting the terms of their relationship as tenant and property owner respectively; however, the minutes of November 2007 Governance Committee meeting highlight a discussion regarding key terms and costs associated with use of the space.

#### *Organization of Entity*

The organizational structure of the Consortium, as shown in Figure 7, reflects clear reporting relationships. All Consortium staff are employed by CECLFCE, and are subject to CECLFCE's annual staff performance evaluation framework. The purpose of having all Consortium staff employed under one Board is to ease the administrative burden for the Consortium. The Consortium Manager oversees the overall operation of the Consortium. The Transportation Manager, the Transportation Technician and three Planners report directly to the Consortium Manager. The Transportation Manager oversees the seven Bus drivers who are employed directly by CECLFCE.

The organizational chart shown in Figure 7 shows the structure of the organization.



### 3.3.2 Recommendations

#### *Establishment of a Separate Legal Entity*

Generally speaking, all partners of a partnership are jointly liable for all debts and liabilities of that partnership. Similarly, any one partner can bind all other partners to matters involving the partnership. 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 investigate, with its insurance carrier, the applicability 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 a 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 an incorporation would provide benefits from an organizational perspective in terms of corporate continuity, staff planning, liability, contracting and management.

### 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 defined business relationships.

#### 3.4.1 Observations

##### *Goals and Objectives of the Consortium*

The goals and objectives of the Consortium were brainstormed during the November 2007 Governance Committee meeting. A tracking system has not yet been developed by the Consortium to monitor the implementation of the goals and objectives of the Consortium; however, this task is intended to be completed in the short term.

##### *Consortium Key Performance Indicators ("KPIs")*

KPIs are statistics that can be reviewed or analyzed to evaluate the operation of the Consortium and are practical indicators to help identify areas for improvement. Indicators include:

Cost Reduction:	<ul style="list-style-type: none"><li>• Number of double runs</li><li>• Percentage vehicle utilization</li><li>• Time line report (cost of transportation per student, per region, per Board)</li><li>• Number of reported accidents</li></ul>
Provision of Safe Transportation Services:	<ul style="list-style-type: none"><li>• The number of schools receiving training on bus safety</li><li>• Current certification of each employee with CPR training</li><li>• Number of annual audits</li></ul>
Quality of service:	<ul style="list-style-type: none"><li>• Number of calls received</li><li>• Quality of the transportation service gauged by survey</li><li>• Response time to complaints</li></ul>

This list was recently developed and was documented in the November 2007 minutes of the Consortium's Governance Committee meeting. There was no evidence related to the implementation of these KPI monitoring plans at the time of review.

##### *Cost Sharing*

CECLFCE and CEPEO have agreed that direct transportation costs are to be shared based on the number of runs for each route regardless of the number of students on the bus or kilometres driven. The Boards have also agreed to equally share the costs for administration and other non-transportation related expenses such as safety or training services acquired from third party providers.

##### *Board Leased School Buses*

The CECLFCE currently leases six school buses that are driven by seven CECLFCE Board employed drivers with one driver acting as a spare. The terms of their employment are governed by a collective agreement. Should the spare driver not be required, his/her other duties include booking charter busses and other administrative tasks. CECLFCE entered into a five year bus lease agreement in 2004. Based on a cost analysis conducted by the Consortium, the annual cost of operating a leased bus (including driver) is twice as much as obtaining the same service level from a third party bus operator (approximately \$68,000 vs. \$35,000). The extra cost for the leased school bus is paid entirely by the CECLFCE.

The CECLFCE employed bus drivers are paid higher wages than those employed by private sector operators and are guaranteed five working hours per day during the school year. These leased school buses include a comprehensive warranty provided by the lessor. CECLFCE has kept the leased buses to provide equipment for the seven drivers which they employ. At the end of the bus lease, CECLFCE will purchase the leased school buses to match the number of bus drivers that have not yet retired. As

the Bus drivers gradually retire, CECLFCE has indicated it will sell all Board owned school buses, and the Consortium will integrate the corresponding runs into its contracts with private operators.

#### *Service Purchasing Agreement*

The Consortium purchases administrative services such as payroll, IT, HR, and office space from CECLFCE. Historically, these support services were provided to the Consortium as a courtesy from CECLFCE with no administrative charges being levied. Starting in 2007, a lump sum service fee was charged to the Consortium. The amount charged was agreed to by the Governance Committee, and this information has been shared with both Partner Boards. No cost study has been conducted by the Board or the Consortium to justify the amount. No agreement exists between CECLFCE and the Consortium for the administrative services that are being provided.

#### *Insurance*

The Consortium does not carry separate insurance specifically related to student transportation activities. However, both Partner Boards are protected from potential liabilities by the general insurance purchased at the Board level in the amount of \$20 Million each. Currently, there is no periodic review of the sufficiency of insurance coverage needs solely from the perspective of student transportation. The Consortium is not able to carry its own insurance due to its legal entity status and there is no transportation specific insurance held by the Board. The Consortium also utilizes a transfer site in a parking lot for two students. No transfer site insurance has been considered by the Consortium.

#### *Courtesy Riders*

Courtesy rides are provided by the Consortium. Each school submits a list with potential candidates for courtesy rides to the Consortium, and it is at the Consortium's sole discretion to approve eligible students on existing stops depending on space availability on a given bus route. Courtesy rider information is entered into the student database to ensure safety and proper management of these students.

#### *Employee Performance Evaluation Frameworks*

Annual staff performance reviews are conducted by Consortium Management. Ottawa uses the generic performance evaluation framework created by the CECLFCE for their own employees. Similar to any other large organization, this framework is meant to be used in a number of different circumstances. The design of the framework ensures they meet the needs of multiple departments.

#### *Employee Training*

Training for Consortium staff is provided on a regular basis. No records are kept by Consortium management to track progress and accomplishment of staff training; however, the relatively small number of Consortium staff means that a formalized tracking system for staff training is not critical. The interview of transportation operators and the results of the E&E review as a whole support the fact that the Consortium management team and the transportation planning staff demonstrate proficiencies in their positions.

### **3.4.2 Recommendations**

#### *Long Term and Short Term Planning*

Although the Governance Committee and the Consortium have already taken steps to develop the goals and objectives of the Consortium, the process should be extended to include development of implementation plans. The implementation plans should help differentiate between issues that need immediate attention and those which can be addressed over a longer term. This process will also assist in identifying key tasks and responsibilities that need to be assigned to specific Consortium personnel; eventually these tasks can be linked to staff performance plans and evaluations. It is also essential that the Governance Committee and the Consortium take the time to review the short and long term goals of the Consortium, ensuring that changing business and regulatory environments are reflected in their operating procedures.

### *Monitoring of Key Performance Indicators (“KPIs”)*

We acknowledge the recent and significant effort which the Consortium has put forth to determine the KPIs it will monitor. As this process continues to evolve, and in support of the KPI monitoring plan, we suggest that the KPIs be further analysed to determine the frequency of monitoring and the quantitative thresholds for changes in KPIs above which further action will take place. Further consideration of what requires formal monitoring as KPIs could include:

- Eligible Unassigned Student Lists;
- Student Map Match Rates;
- Total Students Transported;
- Average Vehicle Statistics and other route statistics;
- Total Vehicles on Operation; and
- Student Ride Times.

We acknowledge that some of these indicators are monitored by staff and that these statistics are available from the routing software. The recommendations here relate to the formalization of a monitoring, documentation, and response protocol. Additional recommendations related to system reporting and performance measurement are included in Section 5.4.2.

### *Board Leased School Buses and Board Employed Drivers*

It is understood that the intention is to continue leasing school busses for School Board employed drivers and to purchase the buses upon lease termination to the extent required until the Board employed bus drivers decide to retire. It is recommended that the decision to incur costs related to bus ownership be properly supported through an analysis that accounts for all relevant costs and alternatives. Given the institutional knowledge of the drivers employed by the School Board, in terms of their familiarity with the bus routes, bus safety and other regulatory requirements associated with the provision of transportation services, consideration should be given to the merits of matching that capacity and experience to the needs of the consortium such as regular and efficient execution of route audits.

### *Contracts for Support Services*

There is no contract between CECLFCE and the Consortium for administrative services which CECLFCE provides to the Consortium. It is recommended that for any service the Consortium procures, an agreement or contract be signed by both parties to document their mutual obligations. In this case, a signed contract or agreement protects the Consortium’s rights to ensure that it receives the level of services it would otherwise receive from a third party service provider. This is especially important in terms of, for example, the priority which the CECLFCE would give to the Consortium for fixing a significant system failure in times of competing priorities or the binding of the CECLFCE IT staff to confidentially agreements related to the CEPEO student information which they can access through their roles in system and database support. While there was no indication that service expectations were not being met, we nevertheless feel that it is prudent for service contracts to be in place.

### *Staff Performance Evaluations & Monitoring*

We noted that the staff performance evaluation framework is well designed for a generic audience and to satisfy the needs of multiple departments within the CECLFCE Board. Performance evaluations are a powerful tool to guide and encourage employees to keep the goals and objectives of the overall Consortium in mind during day to day operations. It reflects the adage that what is monitored gets managed. There is also an element of technology in the Consortium that is more predominant in importance compared to the departments of the CECLFCE Board where the evaluation framework is used; likewise the goals and objectives of the Consortium are very specific compared to the rest of the Board and the Consortium should consider integration of the goals and annual strategic objectives of the Consortium in customizing the performance evaluation frameworks. These goals should be communicated to staff so they are aware as to what objectives they are collectively being measured against.

### 3.5 Financial Management

A sound financial management process ensures the integrity and accuracy of financial information. Financial management includes the internal controls, roles and responsibilities, authorization levels, and reporting requirements. The documented accounting policies of the Consortium refer to key timelines for compliance, monitoring policies, and specifics to ensure proper segregation of duties.

#### 3.5.1 Observations

##### *Accounting Practices and Management*

The Consortium does not have a separate accounting system or bank account. Accounting services are provided by CECLFCE. The expenditure cycle for transportation services within the Consortium begins with an approved Purchase Order ("PO"). At beginning of each school year, or as new service contracts are signed, a PO for transportation services representing the entire school year is entered by the Transportation Technician and is approved by the Consortium Manager.

The Operators submit monthly invoices to the Consortium for services rendered. Bus operator invoices are verified by the Consortium Manager against the most current route information to ensure the invoice reflects the correct route information, quantum of billings, and proper cost split between the two partner Boards. The invoice is then signed to indicate that verification has been done and the appropriate PO number is recorded on the invoice.

The Consortium indicates receipt of services on the electronic PO in the accounting system to acknowledge that services have been received and payment can be processed for that bus operator for that month. Within the CECLFCE accounting department, upon receipt of a bus operator invoice from the Consortium, the accounting clerks will verify the invoices have been signed in approval by the Consortium and will match to the approved PO. Payments are then released during the following cheque run by the CECLFCE Board.

Reconciliation of the accounts is conducted by the CECLFCE budget manager three times a year. A summary report reflects PO payments authorized to date, total actual cash payments to date and the residual PO authorized amount of the school year. The Consortium Manager has viewing and authorization of PO rights within the accounting system of CECLFCE. The Transportation Technician has view, prepare and goods receipt privileges related to PO's in the CECLFCE accounting system.

Appropriate cost sharing and cash flow is maintained from CEPEO through ten monthly payments based on budgeted annual transportation and administrative expenses and one year-end adjustment to bring those 10 monthly payments to actual. Payments to the Operators are made at the beginning of the month in prepayment for that month's pending services based on the previous month's actual costs.

Both CEPEO and CECLFCE are subject to external financial audits. As the scope of these audits includes items in the transportation line, the Consortium does not have a separate external auditor to conduct an audit of the Consortium's operations.

##### *Budget Planning and Monitoring*

The budgeting process in place at the Consortium reflects a robust documented process complete with timeline and documented approval process. Highlights of this process include the following documented budgeting steps:

1. Identification of the needs of the Consortium including confirmation of any new administrative direction, changes in student rider eligibility, and changing transportation needs resulting from new schools or program changes.
2. Receipt of transportation needs including verification and, if required, a period of clarifying questions.
3. Preparation of each Board's preliminary transportation budget including specific identification of shared expenses (such as Consortium staff salary & benefits) and expenses attributable to each Board (such as bus operator, taxi, and small vehicle costs).
4. Verification of the Budget Toolkit including mechanical accuracy and comparison to previous year.
5. Submission of the preliminary budgets to the Board for review; provide explanations as required.

6. Approval of budgets by each School Board.
7. Receipt of written confirmation acknowledging approval of the budgets.
8. Budget revisions based on contracts, any adjustments resulting from the negotiation process, and approval of revised amounts takes place at the Governance Committee level for any minor changes.
9. Approved budget is entered into SAP and is used in periodic analysis and reporting to the School Boards.

Actual expenses are tracked against the budget forecast on a monthly basis by the accounting staff at each Board. Variance analysis is performed and internally reviewed by the Consortium Manager on a monthly basis. This budget setting policy is documented and signed as approved by the Board; it was last updated in November 2007.

### 3.5.2 Best Practices

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

The financial management system implemented by the Consortium demonstrates sufficient internal control and timely reporting. The account recording and reconciliation process and the variance analyses allow the Consortium and the Boards to identify problems in a timely manner; and

Consortium budgeting process is robust in its documentation and approval requirements. The policy is Board approved and recent. While the process does not document preliminary approval by the Governance Committee of the Consortium, the written approvals received from the respective School Boards are regarded as best practice.

### 3.6 Results of E&E Review

This Consortium has been assessed as **Moderate**. The structure of the Governance Committee provides sufficient oversight to the Consortium and ensures that the Consortium is operating under the best interests of both Partner Boards and the key stakeholders. The Consortium has robust financial management practices in place, specifically strong budget setting and approval controls that support the Consortium.

It is recommended that the consortium examine its entity status and the merits of establishing itself as a separate legal entity. It is also important that a clear line between governance and management responsibilities be drawn to enable effective governance. An analysis to support the decision to lease, and eventually own, school buses should be developed. It is also important to establish methods to monitor the performance of the consortium through key performance indicators and to establish service level agreements with all providers of service including if services are received from departments of the member School Boards.

## 4. Policies and Practices

### 4.1 Introduction

Policies and practices include the development of guiding policies, operational procedures, and the daily practices that determine transportation standards of service. 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.

Interviews with Consortium staff and an analysis of supplied documents and data provided the basis for the findings and recommendations found in this section of the report. 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:

<b>Policies and Practices – E&amp;E Rating:</b>	<b>Moderate</b>
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### 4.2 Transportation Policies & Practices

Clear and concise policies and enforceable practices are fundamental elements of an effective and efficient transportation operation. Policies establish the parameters that define 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 equal application of practices helps to ensure that service is delivered safely and equitably to 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

To ensure equitable service to each of the Partner Boards, a full array of policies, procedures, and established practices are required to address the many operational aspects that are necessary to serve the needs of students across a large service area that includes both urban and rural attributes. Examples of these include general transportation eligibility criteria; allowable walking distances to a stop or school; stop placement criteria; allowable student ride times; courtesy transportation eligibility; appeal processes, identification of hazards and related transportation eligibility; the management of school bell times to improve service efficiency; the use of transfers and other specialty transportation to improve service efficiency; student behaviour management; and weather related events and closings.

Special Needs transportation requires specific policies, practices, safety training, and operational regulations to clearly establish the parameters under which the Consortium will operate. Furthermore, such policies ensure that the system will provide effective services within the established guidelines that meet the unique and individual requirements of special needs students in the most cost efficient method possible. In conjunction with overall policy statements, specific policies related to safety, operational practices, and training programs help to ensure that the ultimate goal of safe transportation is achieved for all students served by the Consortium.

#### *Policy Harmonization and Eligibility*

The Consortium operates under an array of harmonized policies and practices that address the service needs of both regular and special education students within clearly defined safety parameters. While overall policy harmonization is consistent with the expectations of the E&E process, the Consortium operates under the direction of policy statements from each Partner Board without the benefit of a consolidated Policy Manual.

The Boards have recognized the importance of harmonization in the policies that they have directed the Consortium to implement. Harmonization facilitates service equity and allows for more efficiency in the planning process. Policies that dictate walk-to-school distances have been harmonized at 1.5 kilometres for students in grade 1 through 6; 2.5 kilometres for grade 7 and 8; and 4.0 kilometres for secondary students.

Walking to a bus stop distance has also been harmonized at 0.5 kilometres for all students, with the exception of JK. In practice, JK students are not normally required to walk further than 0.3 km. Bus stop locations are planned with the following considerations to promote efficiency and safety:

- In an effort to increase the efficiency of routing services, stops are located at central street intersections with safety of the location the primary consideration;
- Major road stops are located (to the extent possible) in areas that do not require students to cross the road; and
- Stops will be limited to fewer than 15 students where possible.

Students have been limited to a single pickup and drop-off location through Consortium adopted policies. Students may be eligible for transportation to and from day care centres providing the student is enrolled in the attendance area of the day care centre. Parents of students in Grades 7 to 12 who share custody of a student may be granted transportation for their child to more than one address provided that specific conditions are met. The conditions to qualify for multiple stops are clearly defined by policy. The policy appropriately deems students in Grades JK to 6 as ineligible for multiple stops given concern over potential confusion for younger students resulting in a younger student boarding the wrong bus. A policy that limits student pickup and drop-off locations, similar to the one established by the Consortium, greatly enhances planning efficiency by minimizing the variance in daily run planning requirements. In addition, safety is enhanced through minimizing the possibility of students boarding the wrong bus due to daily variances in stop locations.

#### *Route Planning Process*

The Consortium has established an annual planning process that allows it to review the efficiency of its routing scheme that begins in early March for CECLFCE with a reminder for schools to enter any new students or known changes into Trillium. Routing agents are primarily responsible for the construction of runs which are assembled into routes by the entire routing and management team. Board policy allows students from JK to Grade 12 and/or students from different Boards to travel on the same bus. However, current practice provides for limited sharing of runs other than in the Renfrew area.

In mid-March CECFLE data is entered into a separate planning database in BUSTOPS. The planning process involves each of the Transportation Agents under the overall guidance of management. Planning for CECLFCE is usually completed by mid-May of each year. The planning process for CEPEO begins at the conclusion of the planning cycle for CECLFCE and is completed by mid-June. At the completion of the planning process for each Board, letters are prepared which are mailed to parents in late June. In early July, bus routes are matched to operators which are again verified in August. By mid-August, final lists are sent to each of the schools.

Each Transportation Agent is assigned a geographical area of primary responsibility for the ongoing maintenance of the routes and runs. These changes generally are the result of a difference in the student's address or the enrolment of a new student. All changes are documented on a paper form that also serves as the primary source of communication with school administration and bus operators. While each of the Agents have a primary area of responsibility, each Agent is familiar with the entire service area and are empowered to add students to runs as long as there is a current stop location and space available on the bus. All changes that may result in the creation of a new stop are reserved for the Agent primarily responsible. Changes that would result in the need for an additional bus must be approved by the Consortium Manager. While the use of a paper form serves to track changes and provides a means of communication, its use is redundant as it simply duplicates the changes that have been entered into BUSTOPS along with the subsequent uploading into Trillium. The tracking and reporting functions available within BUSTOPS would potentially reduce the work required while serving the same needs of tracking and communication.

The separate planning process for each of the Boards is an indicator of where a change of operational practices may provide a positive influence on the efficiency and effectiveness of routing for the Consortium. Currently, the overall route planning strategy is in reality, route planning for two separate systems that primarily share the same buses and operators with little sharing of actual runs and

routes. Given the large geographic served by the Consortium, the general practice of not sharing runs limits the Consortium's ability to realize greater efficiency and service effectiveness. The practice of not sharing runs most directly impacts the use of seating capacity on the buses and student ride times as discussed in Section 5.5.1.

#### *Student Ride Times*

The analysis of student ride times is an important indicator of overall service levels being provided by a Consortium. Route planning parameters state that the ride time for JK to Grade 8 must not exceed one hour with a maximum of one and half hour for secondary students. Analysis of ride times indicates that the average bus run time is 49 minutes for all regular and special education runs. Further analysis of the afternoon runs indicates that while the average run time is well within established parameters, approximately 17 percent of all runs are greater than 60 minutes and approximately 67 percent are 40 minutes or over. While this may be correlated to the distance of travel and density of population, the lack of integration of students from each Board on any bus may be limiting the ability to reduce run times through alternative run pairings.

#### *Courtesy and Hazard Transportation*

Courtesy transportation may be granted upon a request from the school principal in co-operation with the Consortium. Eligibility is granted based on space availability and is first granted to the youngest students who live the farthest from their school of attendance. The policy clearly defines eligibility and also places the responsibility on the principal for withdrawing eligibility in the event of a lack of available space. An analysis of the data indicates that approximately 497 students or 2.67 percent of the students eligible for transportation receive rides on a courtesy basis.

Hazardous transportation eligibility is well defined within policy that provides a comprehensive listing of elements considered. Analysis of student data indicates that approximately 1,555 or 8.37 percent of students receive transportation based on hazardous conditions. Examples of hazardous considerations include:

- Traffic speed and volume;
- The grade level of students;
- Four lane highway and truck routes;
- Railway crossings; and
- The availability of sidewalks in areas with speeds over 50km/h with traffic density over 600 vehicles per hour.

While the creation of well defined hazardous boundaries supports the safe transportation of students, a systematic review of hazardous areas should be conducted to ensure that areas continue to be necessary and current. For example, one area identified during the review was an "island boundary" where students living in one attendance area were assigned to a different school. The students assigned to the out of boundary school would have had to cross a major roadway to get to school, despite being within the approved walking area. Consequently, these students were transported due to the hazardous condition. If these students had been assigned to their home school, they would have been ineligible for service and within the walking boundary.

#### *Bell Time Management*

The Consortium operates a two tier system where each Board generally operates on its own tier. This strategy allows the Consortium to use the same bus to provide service to both Boards and is an important component to efficiency. The establishment of offsets between the bell times is clearly a critical policy and operational component. The Boards have provided the Consortium with the authority to evaluate alternative bell time arrangements that would improve the efficiency of resource use. Consortium senior management are generally tasked with developing the alternative scenarios and presenting them to Board staff. The Boards have retained ultimate authority to approve the bell time changes, and the process for approving proposed bell time changes varies by Board.

While there appears to be a high level of co-operation between the Consortium and the Boards, specific bell time change procedures should be considered including:

- Documentation of the process for requesting bell time changes by either the school or the Consortium;
- Establishment of a formal mechanism for each Board to evaluate the costs associated with alternative bell times; and
- Approval processes and notification procedures.

#### *Student Behaviour Management*

Student behaviour expectations are clearly defined in Board policies and on the Consortium's web site. Disciplinary measures are explained and list the potential for the loss of transportation for each infraction. Student, parent, principal, and driver responsibilities are also clearly defined to aid in orderly and safe transportation.

#### *Weather Related Events and Closings*

Closing procedures are well documented and detail the responsibility for each staff member of the Consortium. A calling chain is implemented to ensure that communications are provided to parents, schools, administration, media, operators, and drivers. The procedures include sample messages to ensure consistency in reporting. These procedures ensure that all stakeholders receive the critical travel messages required when school is closed or buses are not running.

#### *Policy Enforcement*

Policies and practices without strict adherence would result in less than optimal service and the potential for inequitable service between Boards. Observations and interviews indicate that a uniform enforcement of Consortium policies and practices is in place throughout the system. New staff members are provided with policy and procedure documents as a component of their employee orientation.

All questions regarding transportation are forwarded directly to the Consortium for resolution. Appeals are first heard by an area Agent. If a resolution cannot be reached, the issue is referred to the Consortium Manager whose decisions are considered to be final. While this practice may satisfy the needs of the Consortium, creating a formal appeal process should be considered. Establishing a defined appeal process will allow all parents and students to know that they are treated fairly when questioning or challenging a Board policy. In addition, establishing a documented approach to policy appeals minimized the impact of personnel changes on the decision-making process.

### **4.2.2 Best Practices**

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

- The Consortium has established an annual planning process that regularly reviews its bus runs for their efficiency given established policy and practice constraints; and
- The Consortium has harmonized its array of critical planning policies in order to promote equitable service delivery and improve the ability of Transportation Agents to design runs efficiently.

### **4.2.3 Recommendations**

#### *Consolidate Individual Board Policies into a Consortium Policy Manual*

The consolidation of all policies and operational procedures, approved and supported by the Partner Boards, is recommended to ensure the consistent and equitable application of service. It is evident that much effort has been devoted to the development of comprehensive policies and procedures and that practices have been documented. The harmonization of policies aids in the fair and equitable application of practices to ensure that equal service is delivered to Partner and Service Purchasing Boards. An ongoing review of all policies and practices is necessary to ensure that long standing practices and operational procedures continue in the event of a change in Consortium or Board management. Bell time management is one example of a practice, vaguely supported by policy, which must rely on the established goodwill and co-operation of the Boards. Other examples include the discrepancy between planning policy statements (arrival and departure windows and vehicle loading)

and the Board Profile information that is presented to the Ministry. The impact of separate route planning for each of the Partner Boards with limited sharing of runs should be analyzed to determine its impact on the overall efficiency of the Consortium. This will be discussed in further detail in the following section specific to Routing and Technology.

### *Routing*

Opportunity exists for the Consortium to elevate sharing of resources beyond the current level. The fundamental philosophy in building stops, runs, and routes is based on segregating the systems of each Board. The integration happens at the route level but does not exist at the run level. Such duplication is of particular concern given the large geographic area that must be serviced. A primary benefit of integrating the runs is the opportunity to put more students on any given run, which would improve the overall use of seating capacity. Improving the use of seating capacity and eliminating the time required to return to the same neighbourhood multiple times should also provide the opportunity to reduce the number of buses required and thus reduce expenditures. This change would also require a detailed consideration of bell time changes to support the integration of multiple schools on the same bus where appropriate.

## **4.3 Special Needs and Specialized Programs**

For a transportation operation to be fully effective, the needs of all students, including students with special needs and those attending special programs, must be considered. Special education transportation must consider the mobility of the student, behavioural issues, special equipment operation and attachments, medical conditions, administration of medication, and the time and distance tolerance of the student. Specialized transportation, while less complex in the specific requirements for each student, is faced with similar pressures as transportation is often required from remote areas to centralized or distant programs. While both of these programs create service and cost demands on the system, opportunities do exist for the inclusion of these students on regular education runs to utilize the entire fleet to the highest degree possible.

This section examines the policies and practices that determine the approach to special needs and specialized transportation, and how well practice conforms to established policies.

### **4.3.1 Observations**

Each of the Partner Boards has established procedures for the transportation of students with special needs or accessibility requirements. The Transportation Manager serves as the primary contact with the Special Education Coordinator for each Board, and is also charged with the responsibility for route planning for all special needs students across the entire service area. Although the Consortium is not directly involved in specific educational planning for each special needs student, the Consortium does provide input regarding the most efficient means of transportation within the needs of the student. This may include the inclusion of special needs students on regular education runs; however, the student's specific needs ultimately determine the method of transportation and may include a special needs operator or a parent contract. Annual training for bus drivers is sponsored by the Consortium and the Children's Hospital of Eastern Ontario to provide drivers with greater understanding and communication skills for students with Autism and other special needs.

Supporting procedures have also been developed including:

- The use of restraint systems Car and Booster Seats with specific responsibility statements for parents and school staff to ensure that the child is buckled correctly; and
- Planning procedures for students in Self-Contained Classrooms.

While each of Boards' policy statements reflect the commitment to provide for special needs students, many of the elements that would be expected to be exhibited do not appear to be well documented or assembled into an all encompassing manual that clearly delineates the responsibilities of parents, students, school staff, drivers, and operators. Examples of this include:

- Policies specific to the individual medical or emotional conditions of students;
- EpiPen use and administration;
- Wheelchair loading and unloading;

- The use of securing devices;
- Lift operation; and
- Driver training requirements.

#### **4.3.2 Best Practices**

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

Inclusion of the Transportation Department in the decision-making process for mode of transport ensures that all modes and methods of providing services can be evaluated. In addition, inclusion allows for discussion about how to maximize service delivery to students with special requirements without significantly disrupting other aspects of the routing network.

#### **4.3.3 Recommendations**

##### *Special Education Policy and Procedure Refinement*

The development of a set of comprehensive written policies and operational procedures that govern every aspect of special needs transportation will ensure that a high level of service is delivered regardless of the operator or in the event of a change in Consortium management. One example is the administration of medicine for students with anaphylaxis. CECLFCE policy statements indicate that the principal is responsible for “regular training of all employees and other individuals who are regularly in contact with students such as school bus transportation services”. CEPEO policy statements are silent on the use of an EpiPen or its management on a school bus.

## **4.4 Safety Policy**

The safe transportation of students is the overriding goal in any school transportation system. The Consortium serves multiple Boards across a large area with both rural and urban attributes and utilizes a variety of operators. The development of clear and concise safety policies, practices, and regular training programs is imperative to promote a culture of safety with students, parents, drivers, and the general community.

#### **4.4.1 Observations**

The Consortium sponsors and supports a variety of safety and training programs for students and drivers. Examples of these include:

School Bus Safety Awareness Day: Co-sponsored with the area school bus operators and the coterminous English Boards, education is provided to first time riders who receive training on safe boarding and exiting. Training is supplemented by safety videos and home materials.

Junior Kindergarten to Grade 6 students attend safe rider programs provided by *Intertrain*. This also includes materials supplied by the Consortium for home use. School Bus Survivor targets students in grades 4 to 8.

All elementary students are required to participate in an annual bus evacuation simulation.

Drivers are required to have training in the following areas:

- Defensive driving;
- First and CPR training; and
- EpiPen use and management.

The Consortium has established a focus on safety through its contractual requirements and the on going training programs.

#### 4.4.2 Best Practices

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

The Consortium has demonstrated its commitment to safety and training by sponsoring direct training to students and drivers. The commitment is further demonstrated by the hiring of a new employee that will be charged with the development and oversight of all safety and training programs.

#### 4.4.3 Recommendations

While the Consortium has demonstrated a commitment to the development and support of ongoing safety training and awareness programs, it is recommended that a comprehensive Safety and Training Policy Manual (as a component of an overall Policy Manual) be developed that fully encompasses all safety and training elements required by the Consortium including:

- Operators responsibility for the training of new and returning drivers;
- Driver training auditing to ensure that training is consistent between operators; and
- The identification of opportunities to promote school bus safety to the general community by active participation on local traffic and safety committees.

#### 4.5 Results of E&E Review

Policies and Procedures development and implementation has been rated as **Moderate**. The harmonization of critical planning policies including walk to stop and walk to school distances ensures service delivery is equitable and these policies have been fully implemented in practice. In addition, clear policy statements have been established for student behaviour and school closures.

Harmonization of policies is not the only factor impacting the effectiveness and efficiency of service delivery. Operational practices that promote maximum use of assets, such as seating capacity, are critical to high quality, cost effective service delivery. The limited integration of students from both Boards on the same run is an important practice that is adversely impacting overall efficiency and should be reconsidered. Additional, consideration should be given to providing the Consortium with a greater level of authority on the establishment of bell times. This authority can be used to develop routing schemes that would reduce costs or increase service levels through non traditional routing practices such as the use of combination, transfer, and shuttle type runs where appropriate.

## 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 of these key components has been analyzed based on observations and interviews. Best practices, as established by the E&E process, provided the source of comparison for each of these components. The results were then used to develop an E&E assessment for each of the key areas, and to determine the overall effectiveness of the Consortium's Routing and Technical efficiency as shown below:

<b>Route and Technology – E&amp;E Rating:</b>	<b>Moderate-Low</b>
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### 5.2 Software and Technology Setup and Use

The effective use of a modern student transportation routing system enables transportation route planners and managers to more effectively plan runs and routes for the best utilization of resources. These systems allow for improvements in the management and administration of large volumes of student and route data. However, to fully capitalize on the capabilities of any routing system, it must be fully implemented with well designed coding structures based on well defined transportation policies and practices. A fully implemented system allows for the effective extraction of data enabling effective route planning, route analysis, and reporting 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

##### *System Setup and Maintenance*

Since 1991, the Consortium has utilized routing software from Micro Analytics, Inc. (BUSTOPS). As a long term user of the software, Consortium staff demonstrate a high level of operational competency. The student database within is comprehensive in that it contains all student records from each of the Partner Boards regardless of transportation eligibility.

BUSTOPS is installed on a Local Area Network (LAN) that includes a main and backup BUSTOPS server within the Consortium office. The backup sever is housed in a secured, fire proof room accessible to only employees with security access codes. The Consortium is provided with technical support for network maintenance and backup support by the CECLFCE as an informal service without cost. While documented data backup and recovery protocols are informal, a full backup is scheduled on a daily basis with weekly transfer of routing data offsite. These practices established by the Consortium to recognize the importance of the data are consistent with best practices. However, the establishment of a formal service agreement with the Board should be initiated in order to define a formal costing structure for the services provided and the levels of service that can be expected.

##### *Communication*

The Consortium generally uses email and facsimile to transmit information internally. There is also limited access to transportation data via the Consortium's website. Website access to a BUSTOPS query program is available for parents of CECLFCE providing an online (web-based) tool that accesses the BUSTOPS database to provide general school assignment information to parents and school

personnel. This service is not currently available for CEPEO students. Although consortium managers indicated that it was their intent to provide similar access to CEPEO through the Consortium's website, no specific plan had been provided that indicated when the interface with Trillium or the web access was expected to be implemented. The lack of an expected implementation plan, particularly in an environment as demanding as transportation, greatly increases the difficulty of allocating the resources necessary to implement and test any proposed solutions. Consortium managers should develop an implementation plan to ensure that both Boards are provided with similar service levels.

Operators do not have remote access to BUSTOPS. All changes resulting from new or changed student addresses are communicated by way of faxed or e-mailed copies of an internal form. This form is also utilized as an informational tool for reporting changes in a student's transportation plan directly to the school. The lack of operator access and/or the ability to provide an electronic download has resulted in some duplicate data entry as operators enter the data provided by the Consortium into their own transportation management systems.

The Consortium's website does provide parents with information on transportation policies and procedures including eligibility requirements, bus safety, responsibilities, and disciplinary measures. In addition, the website describes the procedures for weather related closings and delays and provides a listing of the local media where information is broadcast in English and French.

### *Training and System Use*

The Consortium Manager, Transportation Manager, and the Transportation Agent responsible for the maintenance of the digital map all received training directly from BUSTOPS. New transportation agents receive training and mentoring from experienced employees using a "train the trainer" approach. This training is supplemented by user conferences. The Consortium also provides courtesy support to other consortia using BUSTOPS, which is an indication of its proficiency with the software.

The Transportation Agents have primary responsibility for tactical management requirements (e.g., the placement or movement of a bus stop, establishment of a new student, changes to route directions) of the routing scheme. Onsite observations indicate that the Consortium's Transportation Agents are proficient in the use of the program for the routine maintenance of routes and runs and for basic reporting functions to provide information to senior management and school personnel. Agents have a very limited role in utilizing the system for any strategic planning purposes.

Use of the system for higher level strategic planning is primarily the responsibility of Consortium management. Analysis of alternative bell times, loading parameters, or routing strategies are primarily designed and developed by senior managers. The primary concern is that the Consortium may be underutilizing the skills of its Transportation Agents while overloading senior managers with operational responsibilities. Vesting responsibility for developing alternative routing scenarios in senior managers who already have significant management requirements limits the ability of the Consortium to utilize BUSTOPS to investigate alternative routing approaches that may increase efficiency or effectiveness. Consideration should be given to expanding the role of Transportation Agents to include the analysis of route structures that may improve the effectiveness and efficiency of system routing.

### *System Coding Structures*

The effectiveness of the system coding structure will, in large measure, define the effectiveness of the overall software system. Effective coding is of paramount importance enabling the efficient management and analysis of specific data records within the system. The ability to collect and analyze data provides the Transportation Agents with the data necessary to determine and track the performance of each operator and the Consortium's overall service delivery. Easily identifying, for example, a particular group of runs or students requires a comprehensive, hierarchical, and well conceived coding structure. This structure should have a basis in utility; that is, it should be reflective of what information is required by management and Transportation Agents on a regular basis. It should not be overly complex, but rather should balance the relative need for detailed data with the difficulty and error potential inherent in an overly complex structure.

The Consortium codes student records with a letter code for eligibility and grade level by the school of attendance. Walkers and "out of boundary students" (non transported) are also coded in the system along with students that receive transportation for reasons of hazards or on a courtesy basis. Additional codes identify special needs students and students that use public transit. Students are also categorized by each of the Boards served, primarily by means of school of attendance. Additional coding that indicates a Board designation is available but was not fully updated at the time of the site

visit. This approach is important from an analytical perspective as it facilitates evaluation of various factors on a Board and a school type basis, and provides a rapid association of students to routes and routes to schools during day-to-day operations. The eligibility code identifies whether the student is eligible for transportation and the nature of that eligibility. The following table summarizes all riders in the database by eligibility code.

### Transportation Codes<sup>8</sup>

User Eligibility Code	Count of Students Assigned to this Code	% of Total	Description
A	13,291	71.53%	Eligible for Transportation
A/OC	2,822	15.19%	Public Transit Students
A/SP	416	2.24%	Eligible for Transportation/Special Needs
C	497	2.67%	Courtesy Rider
E	1,555	8.37%	Hazard Rider
<b>Total</b>	<b>18,581</b>	<b>100.00%</b>	

While this approach is meeting the basic reporting and analytical needs of the Consortium, a more hierarchical approach where all eligible students receive the same base code and are then assigned a sub-code that identifies the specialty reason, would provide a more manageable structure and one that facilitates more effective analysis.

Special needs students are also coded within the system for identification, however a full coding protocol or structure is lacking. The primary example of this is students with allergies. As discussed in the previous section, the administration of medicine for students with anaphylaxis is not clear in policy. The lack of clarity within policies is also reflective in the coding structure for special needs students. Currently there is no consistent coding protocol for students with anaphylaxis. This lack of critical information may result in delays in responding to a student with anaphylaxis. This provides an excellent example of the benefits of a hierarchical coding approach that not only aids in the analysis of data and the needs of the students but supports the Consortium's overall goal of providing safe transportation.

#### 5.2.2 Best Practices

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

- Consortium staff is highly competent in the use of BUSTOPS routing software for tactical system management. Senior management are also highly functional users of the system that allows for the performance of detailed analysis and user training; and
- The Consortium has established practices that ensure that data is properly protected through a backup and recovery process that would limit the downtime associated with system failures.

#### 5.2.3 Recommendations

##### *System Coding Enhancement*

The Consortium should expand its coding structure using a hierarchical approach that would enable the analysis of specific subsets of data. The goal of the coding structure is to provide a progressively more detailed indication of whether a student can ride the bus, why the student rides, where the student goes, and what is required to deliver them to their program. Therefore, a hierarchical structure that looks at eligibility for service, the type of service provided (i.e., regular or special education), the nature of the service (i.e., hazard, courtesy, or a specific program), and the equipment that may be required (i.e., wheelchair, monitor, etc) would allow Consortium staff to more fully and readily analyze

<sup>8</sup> The counts in this table are based on data extracted from the routing software during the onsite portion of the E&E review. They may not match the values used elsewhere in the report which are based on data submitted by the Consortium at a prior date.

the types of service being provided. This would further allow more detailed reporting on the impact that different routing strategies would have on student populations under different routing scenarios.

#### *Formal Training Program*

The Consortium has demonstrated success in hiring capable personnel and providing on the job training and the sharing of expertise in the use and operation of the BUSTOPS routing software. Institutionalized regular training on all facets of the student transportation industry including route planning and analysis would serve to further advance the capabilities consortium staff. Given the expertise of the current employees, much of the training can be provided internally with support from outside resources including the providers of the routing software, representatives from the Operators, business officials from the Partner Boards, and other industry experts. The goal of this training would be to continue to support the realignment of strategic planning responsibilities as discussed below.

#### *Alignment of Responsibilities*

The Consortium should establish a process that allows Transportation Agents to utilize the routing software to proactively analyze alternative routing approaches. Realigning responsibility for strategic analysis would allow the Consortium to capitalize on its high level of user competence while more effectively rationalizing senior management duties.

### **5.3 Digital Map and Student Database Management**

Accurate student data and a current digital map form the basis for any efficient transportation routing system. This area will evaluate the procedures and practices the Consortium employs to ensure the accuracy of student data and the area map.

#### **5.3.1 Observations**

##### *Digital Map*

There is a single digital map for the entire area served by the Consortium. The map is maintained by one Transportation Agent with map maintenance as a collateral duty to managing a route set for an area. The Consortium Manager and Transportation Manager are also able to support map maintenance activities. Most changes are instituted as a result of recommendations from an operator or minor corrections in an area of the map and are made by the designated Transportation Agent. The Consortium continues to coordinate with area municipalities still provide updated maps at least annually to allow for the identification and insertion of new roads and subdivisions where required. Maps are also provided by area Boards and other Provincial sources. Emergency 911 addressing is current for the entire service area.

The map identifies all school locations and the associated walk and hazard boundaries. Road speeds and other similar map attributes are coded and match each area. There are segments designated as "No Travel" although it is minimal and primarily in the City of Ottawa.

##### *Student Data Management*

BUSTOPS has been integrated with the Trillium Student Accounting Software which greatly enhances the functionality of both software systems by reducing the manual uploading of student records. The interface allows CECFLE student data to be updated in real time while weekly downloads are required for the CEPEO student data. The lack of a comparable interface for CEPEO delays the matching of data and requires additional work on the part of Consortium staff to update CEPEO records.

The interface with Trillium and the procedures developed specifically for CEPEO data ensures that student addressing is nearly 100 percent matched to the street network in BUSTOPS. This interface provides a listing for view by each of the Transportation Agents and flags any student information that is incorrect. The Consortium is currently working with a local broker to modify the interface which will allow for the upgrading of BUSTOPS to BUSTOPS 2005. No specific timeline or plan was presented during the review that would indicate when this could be expected to be completed.

### 5.3.2 Best Practices

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

- The Consortium has recognized the importance of complete and accurate map data by designating accountability for map management to an individual Transportation Agent with experience in managing geographic information; and
- The creation of the interface with Trillium (when fully implemented for both of the Partner Boards) will provide a valuable data management tool by reducing the need for double entry of student data and increasing the timeliness of student data to ensure effective service delivery.

### 5.3.3 Recommendations

#### *Student Data Management*

The integration of BUSTOPS and Trillium is a model for other Consortia using this combination of software. The Consortium should make it a priority to complete the transition to real-time updating for CEPEO, which will ensure that student data is timely and accurate regardless of which Board or school the student attends. A detailed implementation plan should be established that sets timelines, responsibilities, testing requirements and any financial resources that will be necessary to fully implement the updated software version and the associated interface.

## 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 use and generation of reports is primarily reserved for the management level of the Consortium. Senior managers are responsible for the developing the reports for presentation at the quarterly Governance Committee meetings. Examples of regularly generated reports include:

- Current expenditure analysis;
- Operator performance/late arrivals;
- Fleet inventory including fleet age;
- The number of current routes; and
- Costs per bus and students for each of the Partner Boards.

Transportation Agents primarily use the reporting function of BUSTOPS to generate letters and to generate lists of students for schools and operators. This limited performance measurement program does not provide for a comprehensive operational review. Given the complexities of the transportation system regular evaluation of system performance through a comprehensive reporting schedule would enhance both the capabilities of the Agents and the efficiency of the operation.

Examples of performance measurement calculations include capacity utilization by route and fleet age by operator. These, and other performance measures discussed in the following section, are important because they provide the Consortium with valuable insight into current levels of performance and highlight areas where a focus on route planning may yield improvements in service delivery and/or a reduction in expenditures.

## 5.4.2 Recommendations

### *Reporting and Performance Measurement*

As previously noted each of the Transportation Agents and especially the Consortium management team exhibits a high level of proficiency with the routing software and are able to extract any necessary data required to support the analysis of data. It is recommended that the Transportation Department further leverage this expertise to establish a systematic approach to performance measurement. Establishment of a proactive reporting schedule that includes reports such as:

- A daily student change log for each Agent; a weekly route change report for each Agent;
- A quarterly performance operations report for the Transportation Manager that provides summary statistics and detailed data on issues such as capacity utilization, route pairing, average run times, and lateness; and
- An annual operational summary to the Partner Boards that summarizes key performance statistics such as the direct and indirect cost per bus, cost per student, and cost per kilometre would greatly increase the value that is received from the routing software.

This reporting structure could then also be used to provide each of the Transportation Agents with a greater understanding of the impact of their route planning strategies and decisions.

## 5.5 Regular and Special Needs Transportation Planning and Routing

Route planning is key to the effective and efficient delivery of transportation services for both regular and special needs transportation. While route planning for regular education students is largely based on the constraints established by policies, route planning strategies for special needs transportation must first consider the needs of the students while operating as efficiently as possible. This portion of the review was 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

#### *Special Education Route Planning*

The Transportation Manager is primarily responsible for the development of transportation for special needs students. The specific special needs requirements of a student are determined by the individual Board's Superintendent of Educational Services and or the Coordinator of Special Education. Students are placed on regular education runs when it meets the needs of the student. As a component of the annual planning process, the Transportation Manager meets with each Board to discuss changes in programs and the needs of any new students. A comprehensive planning calendar (similar to regular education route planning) begins in mid-April with the completion and assignment of runs to operators no later than early July. Operators are required to communicate directly with the parents and provide an introduction of the driver to each student. Booster seat use is also discussed and confirmed for each student.

#### *Analysis of Overall System Effectiveness*

Providing services to the Ottawa area, the Consortium manages a transportation system that must consider the planning needs for areas ranging from rural to urban. Multiple operators are used to provide services to students on over 400 single, double and triple runs. In addition to buses, students are also transported in taxis and on public transit buses where it meets service needs and makes economical sense. The first stops for students begin as early as 6:30 AM to meet bell times ranging from 8:00 AM to 9:15 AM. These vehicles serve both regular and special needs programs transporting approximately 18,500 students on a daily basis.

Vehicles in the fleet range from capacities of 6 to 72 passengers. Approximately 85 percent of runs are serviced by 72 passenger buses. The remainder of the runs, 14 percent, are served by 11, 20, or 24 passenger buses as summarized below<sup>9</sup>:

Vehicle Capacity	Run Count	Percentage
6	1	0.21%
7	1	0.21%
11	9	1.89%
20	45	9.47%
24	10	2.11%
36	1	0.21%
54	1	0.21%
60	1	0.21%
72	406	85.47%
<b>Total Number of Runs</b>	<b>475</b>	<b>100%</b>

Note: Includes combination runs

Approximately 50 percent of buses are able to perform double runs in both the morning and afternoon. Triple runs account for less than seven percent for both the morning and afternoon runs. The following table summarizes the daily activity of buses with capacity greater than 6 students:

AM Route Summary	Total	Percentage
Number of Routes	259	
Number of Routes with Single Runs	126	48.64%
Number of Routes with Double Runs	124	47.88%
Number of Routes with Triple Runs	9	3.47%

PM Route Summary	Total	Percentage
Number of Routes	254	
Number of Routes with Single Runs	123	48.43%
Number of Routes with Double Runs	122	48.03%
Number of Routes with Triple Runs	9	7.38%

Under the current routing scheme, an emphasis is placed on reusing the bus as frequently as practical during any given day. Despite this emphasis on reusing the buses, nearly 50 percent of the buses are only utilized for one run both in the morning and afternoon. This is due in part to both the large geographic area that must be served and the fact that students from the Partner Boards are not integrated into the same runs.

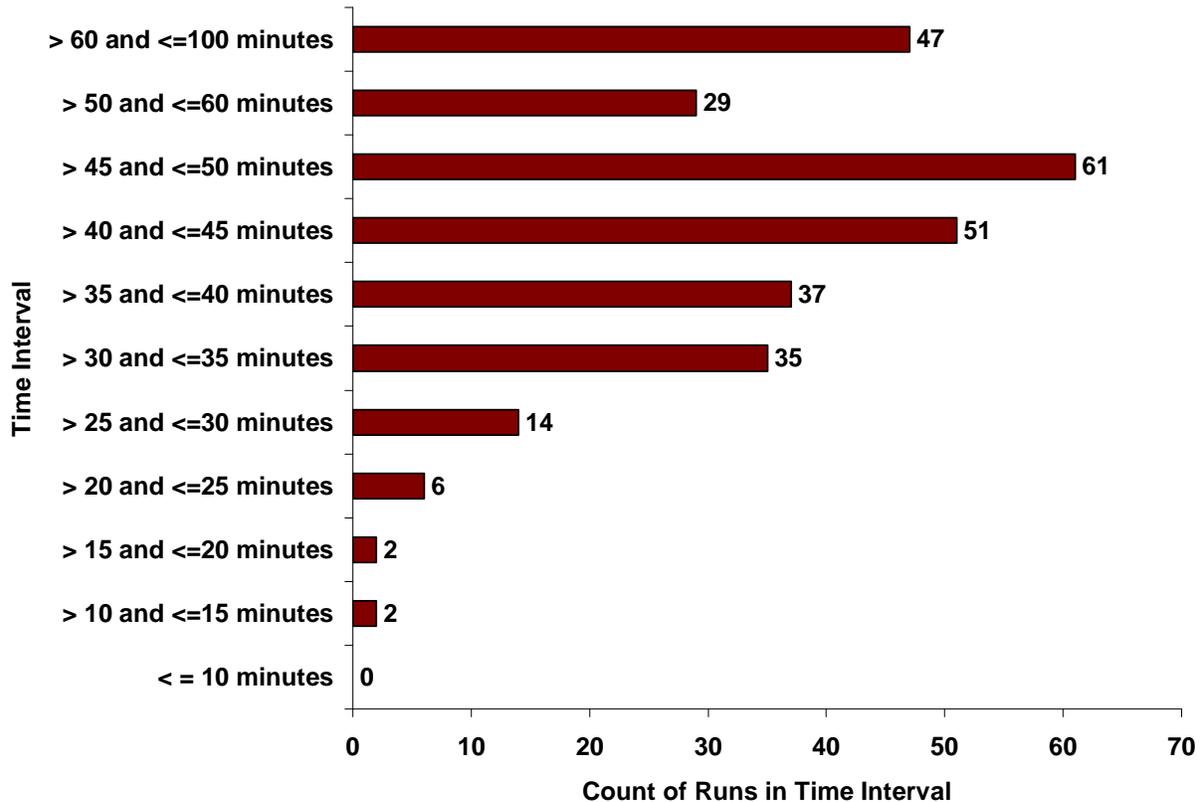
As it is currently structured the routing scheme is generally divided into two separate systems that are integrated at the route level and not at the run level. The results of this practice are clearly seen in the metrics presented above and later in this section. A practice of this nature limits the use of strategies such as transfers, shuttles, and combination runs. Without a reconsideration of this practice and the establishment of a clear mandate to operate as one system for the benefit of all, gains in efficiency and effectiveness will continue to be limited. Given the large geographic area and the time required to collect students and deliver them to a school and then return to the same area to collect students from the other Board, it would appear that utilizing a run integration strategy could positively

<sup>9</sup> The counts in this table are based on data extracted from the routing software during the onsite portion of the E&E review. They may not match the values used elsewhere in the report which are based on data submitted by the Consortium at a prior date.

impact both capacity utilization and run length. Implementation of this approach would require significant coordination of bell times between the Boards.

### *Bus Run Times*

The average bus run time is 43 minutes for morning runs and 49 minutes for afternoon runs. This is measured by taking the sum of route length in minutes for all runs, from first stop to last stop, and dividing by the number of runs. It should be noted that calculation is indicative of the longest distance any one student may be riding on the bus, rather than the distance that all students are riding.



The average run time is within established route planning parameters of 60 minutes maximum. As the graph illustrates, the frequency at which runs are approaching or above the run planning parameters is approximately 27 percent (78 of 284 runs) when considering runs 50 minutes and longer. This is clearly indicative of the large service area that must be covered and is an additional indication that an evaluation of alternative routing strategies should be considered in an attempt to address the length of these runs where possible.

### *Capacity Utilization*

The average simple capacity utilization across the fleet is approximately 56 percent. This is determined by taking the average utilization on all runs, with utilization calculated for each run by dividing the rated capacity of the bus, and dividing this by the maximum student load on the run. It is expected that capacity utilization on the basis of rated capacity of the bus (no factor for student weighting) will be lower than for planned capacity. Board policies weight secondary students at 1.5 which lowers the effective capacity of a bus by allowing two students per seat compared to the rated capacity of three students per seat.

As an actual rider count would likely be lower resulting in actual capacity utilization below the planned rate of 56 percent compared to an expected efficient operating range of 60 to 70 percent utilization (actual riders). While this may be partially attributable to factors including low student density in some service areas and expected lower capacity utilization of special needs runs, a significant contributing factor is the lack of integration of students from each Board and its impact on the ability to realize greater student loads.

### *Public Transportation*

Approximately 2,800 or 15 percent of students are transported by Public Transit Buses. The capacity use measurements above do not include these students or the levels of service provided to them. The majority of these students are secondary students attending CEPEO schools. Transportation for CECLFCE secondary students is by way of traditional school vehicles under the planning and control of the Consortium. While this method of service delivery is to be studied (by the Consortium) to determine its cost and service effectiveness, no time line for its completion was presented. The timely completion of this study is imperative to ensure equitable and cost effective service to the students of each of the Partner Boards.

## **5.5.2 Recommendations**

### *Routing Assessment*

It is recommend that a complete routing and bell time assessment be undertaken across the entire service area to analyze the potential for service delivery improvements and cost savings of one fully integrated routing system. Route planning parameters, agreed upon and supported by each of the Partner Boards, would provide the basis on which runs would be designed. Support from the Partner Boards must also include granting the necessary bell time changes to promote the logical paring of schools (regardless of Board) by area.

As part of this assessment, the Consortium should analyze the continued use of public transit services. The establishment of an integrated run and route network is likely to present opportunities to provide services to CEPEO students using existing school buses. The use of public transit services by CECLFCE students may be warranted. However, consideration of changes in the existing service models should be considered only as part of a broader routing analysis built on the use of integrated runs with the goal of increasing the use of existing vehicle capacity.

## **5.6 Results of E&E Review**

Routing and Technology use has been rated as **Moderate-Low**. While the Consortium's implementation of BUSTOPS and its interface with Trillium is a model for others to follow, the system is primarily used to document existing runs and routes with little ongoing analysis for the identification potential gains in efficiency. While implementation of major changes in policy is the responsibility of the Governance Committee and the Partner Boards, it is imperative that the Consortium proactively presents solutions for consideration.

Effective use of transportation resources is built on the idea that run design maximizes, to every extent possible, the use of seating capacity and the repeat use of each asset. Allowing for the integration of students from multiple Boards on any given bus will help address both issues. Removing the need for any single bus to travel through a neighbourhood and collect all students attending schools that are in a reasonable proximity to each other will both increase the number of students on any given bus and reduce the time students spend on each bus. The integration of students across runs, coupled with a school bell schedule that supports the use of alternative routing strategies, is the key component to controlling or reducing the cost of transportation services and/or improving service.

## 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 from 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:

<b>Contracts – E&amp;E Rating:</b>	<b>Low</b>
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### 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, ensuring 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

##### *Bus Operator Contract Clauses*

The Consortium enters into contracts with both small vehicle operators and operators of designated school purpose vehicles referred to in this report as School Bus Operators or “Operators”. At the time of the review, there were no signed contracts in place to govern the service being provided by school Bus Operators to the Consortium for the 07/08 school year. Based on our review of the previous year’s Operator contracts, the contracts in use by the Consortium include clauses pertaining to the arrival and departure time window; maximum ride time; bus loading; cancellation of services; minimum kilometres; route changes; kilometres per litre; school bus age and size; and radio communication policies. The Operators are also required by contract to meet all provincial and federal regulations and the driver training requirements as set forth by the Consortium. The prior year contracts we reviewed were signed by the Consortium and the Bus Operator Association which represent the school bus operators. No recent review by legal counsel has been conducted on the contract. It was noted during the contract review that the signatures on the contracts were generally not accompanied by a date indicating when the contract was signed. There is also no fuel escalator clause in the contract and it is left open to interpretation as to whether each bus will be equipped with either a cell phone or a radio communication device.

##### *Snow Day Compensation for Operators*

In cases where inclement weather prevents the buses from safely operating, or there is a school closure as a result of inclement weather, the contract terms stipulate that school bus operators will be paid the “regular” amount—which includes payment of the fixed and variable components of the contract, as well as driver wages. The Consortium guarantees full payment on snow days because the Consortium believes that reducing these payments to the fixed fee would negatively impact the ability of operators to retain drivers. Further justification for this expense by the Consortium is that operators

still incur costs such as time spent clearing the bus of snow and moving the buses to enable the clearing of snow around the vehicle.

## **6.2.2 Recommendation**

### *Use of Contracts*

A contract that clearly articulates the expectations and obligations of each party is a fundamental requirement for an effective business relationship. The lack of current and complete contract documentation for bus operators reduces the extent to which the School Boards and Consortium can ensure and enforce accountability related to the provision of student transportation. The Consortium should make every effort to ensure that contracts with Bus Operators are signed prior to the start of the school year. Signed contracts ensure that Operators are bound to the agreed upon service levels. It is important, through the use of proper contracts, that accountability related to student transportation is properly shared between the School Boards, Consortium, and Operators.

### *Snow Day Compensation for Operators*

We acknowledge that driver attrition is a problem that affects all school bus operators and in turn Consortia across the province. Further, we acknowledge that there are costs which are incurred in terms of ensuring the fleet of buses and drivers are ready to resume duty when the inclement weather passes by. However, these costs are fully captured within the fixed and driver wage components of the contract. It is important that we make this distinction because variable costs, those which are specifically derived from distance travelled, are not incurred by the operators and operators are not out of pocket for these expenses; as such, payment of these variable amounts on inclement weather days should not continue. Driver attrition should remain unchanged if drivers' wages continue to be paid on snow days and likewise proper fleet maintenance should continue given the continuation of the fixed component of remuneration.

## **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 large school bus operators are represented by an association, and through this association it is intended that a common contractual agreement be developed but that the execution of the contract would be between the School Boards and individual bus operators. The negotiation process for the 2007/2008 year is not yet complete and in general the Operators do not know the contract rate until the contract is signed well into the current school year. The Consortium adjusts the contract rate each year to match the percentage of transportation funding adjustment received from the Ministry. At the time of our review, there was no draft of the 2007/2008 contract available for discussion or review. The Consortium has been in contact with the School Bus Association, which represents local operators, regarding the changes to the 2006/2007 contract, which the Consortium is using as a starting point to develop the 2007/2008 contract.

#### *School Bus Association*

The bus operators in the Ottawa region are represented by a School Bus Association which they have collectively formed. There is currently no process through which outside operators can apply to become part of the association, and as such new members are only able to join the Association through acquisition of an existing bus operator who is already a member. The Consortium pays the same price for contracted services to all Operators in the Association and does not contract for any bus services with operators in Ottawa who are not part of the Association. The Consortium will not entertain offers for service from operators outside of the school bus association regardless of the value offered. When assigning new bus runs or removing existing bus runs, the Consortium makes efforts to maintain the existing relative share of the number of bus runs assigned to each bus operator.

### 6.3.2 Recommendations

#### *Competitive Procurement Process*

Contracts for 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, 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 value for money expended for service provided. A competitive procurement process may not be appropriate for all areas or routes under service depending on the available supply of service providers.

A competitive process should 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 bid or 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.

In areas where this process may not be appropriate, such as remote areas where there may not be many operators interested in providing the service to a particularly remote area, the current negotiation process may serve the needs of both the Operator and the Consortium. The Consortium, however, can use the competitively procured contracts as a proxy for service levels and costs negotiated with the more rural Operators.

Within the competitive process, the Consortium should also require that all contracts with Operators be signed and held with the Consortium prior to the beginning of the school year. This will ensure that all contractual terms are agreed upon in advance and that responsibility and accountability for the various elements of providing student transportation are documented and agreed upon.

#### *Identification of proper parties to the Operator Contracts*

The school bus association has no legal standing; therefore the association is not a legal entity and should not be named in a contract as they were in the 2006/2007 contract. The individual School Boards and the individual school bus operators are the only established legal entities that can possibly enter into a legally binding contract for the provision of bus services to the students who attend CEPEO and CECLFCE schools. It is understood from discussions with the Consortium that they are aware of this requirement from the Capacity Building exercises conducted over the summer and will ensure that the proper legal entities are named in the 2007/2008 contract when it is finalized.

## 6.4 Contract Management

Contracting practices do not end after a contract is signed. Ongoing monitoring for compliance and performance of contracted service is an important and valuable practice to enhance service levels and ensure that contractors are providing the level of service that was agreed upon. Monitoring should be performed proactively and on a regular and ongoing basis in order for contract management to be effective.

### 6.4.1 Observations

#### *Monitoring*

Generally, there does not appear to be a formal process in place to proactively monitor Operator performance. The planners verify the accuracy of data for all runs once per year and analyse the annual bus report including vehicle make, driver, licence, insurance, student list, time sheet, route descriptions, and stops. The bus report is distributed to the Operators to confirm the information is up to date and correct. Twice per year, the Planners visit schools to check the arrival and departure time window of the school bus. The Consortium asserted that their coverage rate is 100% of all schools for each time that this monitoring process is done in a given year. However, no documentation is

recorded by the Planners regarding the results of the check and these reviews do not require the planners to step onto a bus, ride the route, or check other items that require monitoring such as bus age, proper use of student lists, or evidence of bus license on hand. These aspects are monitored passively through reliance on a combination of self-reporting done by the school bus operators and through the knowledge that the operation of a school bus fleet requires periodic audits by the Ministry of Transportation.

Cameras are installed in some school buses to record drivers' and students' behaviour after issues are formally reported. The cameras have date and time pre-programmed into the system for documentation purposes. On-Board route audits are only conducted by Planners as a result of parent or school complaints. Based on the frequency and severity of the complaints the Consortium receives, the Consortium reserves the right to remove drivers or runs from a particular Operator. There was no formal document that stated the Board approved policies related to the storage, review, retention, or destruction of video that results from these cameras.

### *Bus Industry*

Consistent with the concerns expressed by operators in other areas of the province, the operators in the Ottawa area expressed concern over operating costs that continue to increase, fuel and capital costs as an example, and the ongoing issues regarding driver retention. The bus operators interviewed acknowledged the timely and relevant information provided by the Consortium which enables the bus operators to do a good job. Examples of timely and relevant information include route information provided to operators early in July each year and updated student lists.

### *Value for Money in Contracting*

The Consortium is waiting for direction from the Ministry regarding competitive procurement best practices before implementing their own competitive procurement process. Efforts are made by the Consortium to ensure that contracts best reflect market prices and provide value for money through benchmarking against the 2007 Ministry Costing Study and against other Consortia in the Province. The Ottawa Consortium has self assessed itself to be in line, or well below, these cost standards thus ensuring value for money. There were no working papers available for review as a result of the benchmarking exercises conducted by the Consortium; however, consortium staff did indicate that costs associated with the operation of Board leased buses and Board employed drivers, as discussed in section 3.3.1 and 3.3.2, were adjusted for.

## **6.4.2 Best Practices**

### *Provision of Route and Student Information*

The Consortium provides complete and timely information to the school bus operators with respect to the runs they are responsible for and in terms of student information for the operators to be able do a good job in ensuring safe and reliable student transportation. Route information is generally provided in early July each year enabling bus drivers to complete dry-runs and communicate any route modifications for safety reasons well in advance of the start of the school year.

## **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 October 31 count of students which is used to determine cost sharing.

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 to self

regulate and 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.

## 6.5 Results of E&E Review

The Consortium has been assessed as **Low** in terms of their transportation contracting practices. The low rating is due to the absence of current contract documentation, a negotiation process that does not meet the best procurement practices in terms of ensuring accountability, transparency, and the lack of comprehensive route audits.

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. In areas where this process may not be appropriate due to limited service availability, the Consortium can ensure that transparent and accountable processes are supported, by using the competitively procured contracts as a "proxy" for negotiating service levels and costs.

In order to become highly effective and efficient, the Consortium should update the contracts in a timely fashion; have signed contracts in place prior to the start of the school year which are signed by the appropriate parties (individual school bus operators and school boards); increase the effectiveness of route audits using auditors which ride along with the bus routes, and introduce a competitive procurement process which is fair and transparent.

## 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 2. Note that where Boards are incurring transportation expenses in multiple Consortium sites, the Board's adjustment will be prorated for the portion attributed to the Consortium under review. For example, if 90% of Board A's expenditures are attributed to Consortium A, and 10% of expenditures are attributed to Consortium B, the funding adjustment resulting from Consortium A's review will be applied to 90% of Board A's deficit or surplus position.

The Ministry's funding formula is as follows:

Overall Rating	Effect on deficit Boards	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

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:

### *Le Conseil des écoles catholique de langue française du Centre-Est*

Item	2006/2007
2006-07 Transportation Surplus (Deficit)	(1,009,915)
% of Surplus/(Deficit) attributed to the Consortium (rounded)	95.16%
Revised amount to be assessed under the Consortium	(961,061)
E&E Rating	Moderate-Low
Funding Adjustment based on Ministry's Funding Adjustment Formula	30%
2007-08 Total Funding adjustment	\$288,318

### *Le Conseil des écoles publiques de l'Est de l'Ontario*

Item	2006/2007
2006-07 Transportation Surplus (Deficit)	(3,121,187)
% of Surplus/(Deficit) attributed to the Consortium (rounded)	60.93%
Revised amount to be assessed under the Consortium	(1,383,920)
E&E Rating	Moderate-Low
Funding Adjustment based on Ministry's Funding Adjustment Formula	30%
2007-08 Total Funding adjustment	\$570,522

# Appendix 1: Glossary of Terms

Act	<i>Education Act</i>
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
Budget and Administration Assistant	As shown in Figure 7
Business Analyst	As defined in Figure 7
CECLFCE	Le Conseil des écoles catholique de langue française du Centre-Est
CEPEO	Le Conseil des écoles publiques de l'Est de l'Ontario
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 Ottawa	Consortium de Transport Scolaire d'Ottawa
Deloitte	Deloitte & Touche LLP (Canada)
Department Clerk	As defined in Figure 7
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 STSYR 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 1.3.6
HR	Human Resources
IT	Information Technology
JK/SK	Junior Kindergarten/Senior Kindergarten
KPI	Key Performance Indicators
Manager	As defined in Figure 7
Memo	Memorandum 2006: SB13, dated July 11 issued by the Ministry
Ministry	The Ministry of Education of Ontario
MPS	Management Partnership Services Inc., the routing consultant, as defined in Section 1.1.5
MTO	The Ministry of Transportation of Ontario
OCCDSB	Ottawa-Carleton Catholic District School Board
OCDSB	Ottawa-Carleton District School Board
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)
Run	The collection of one or multiple groups of students that are dropped at one or multiple points. It defines the mission of a bus for a specified time period.
Route	A collection of runs.
Separate Legal Entity	Incorporation
Transfer Site	A location not owned by the School Board where students move from one vehicle to another to enable more efficient routing.
Transportation Planner	As shown in Figure 7
Transportation Technician	As shown in Figure 7

## Appendix 2: Financial Review – by School Board

### *Le Conseil des écoles catholique de langue française du Centre-Est*

Item	2004/2005	2005/2006	2006/2007	2007/2008
Allocation <sup>10</sup>	9,215,617	9,641,948	11,391,265	11,585,303
Expenditure <sup>11</sup>	10,302,053	10,992,770	12,401,180	13,026,165
Transportation Surplus (Deficit)	(1,086,436)	(1,350,822)	(1,009,915)	(1,440,862)
Total Expenditures paid to the Consortium	\$9,891,527	\$10,542,670	\$11,801,282	\$12,418,443
As % of total Expenditures of Board	96.02%	95.91%	95.16%	95.33%

### *Le Conseil des écoles publiques de l'Est de l'Ontario*

Item	2004/2005	2005/2006	2006/2007	2007/2008
Allocation <sup>10</sup>	5,892,936	6,347,950	6,484,120	6,622,004
Expenditure <sup>11</sup>	9,209,055	10,353,031	9,605,307	9,750,000
Transportation Surplus (Deficit)	(3,316,119)	(4,005,081)	(3,121,187)	(3,127,996)
Total Expenditures paid to the Consortium	\$4,105,474	\$4,983,195	\$4,258,948	\$5,940,705
As % of total Expenditures of Board	44.58%	48.13%	44.34%	60.93%

<sup>10</sup> Allocation based on Ministry data – includes all grant allocations for transportation (Section 9 0008C, Section 13 00006C, Section 13 000012C)

<sup>11</sup> Expenditure based on Ministry data – taken from Data Form D: 730C (Adjusted expenditures for compliance) - 212C (Other Revenues) + 798C (Capital expenditures funded from operating)

# Appendix 3: Document List

1	Financial Data 0405 to 0708
2	Ottawa FL Consortium Site Profile
3	Consortium Governance Structure
4	Consortium Organizational Structure
5	Consortium Planning Policy and Practice
6	Ottawa School Bus Transportation Consortium Memorandum of Agreement
7	Governance Committee Meeting Minutes (November 16, 2007)
8	Ottawa School Transportation Consortium (Accounting Procedures Manual)
9	Chart of Accounts
10	Budget Process
11	Revised Budgetary Provisions 2007-2008 CECLFCE (Ottawa)
12	Revised Budgetary Provisions 2007-2008 CEPEO (Ottawa)
13	Consortium Re-localization study
14	Transportation Service Purchase Agreement with Tri-Board Ottawa School Bus Transportation Consortium – Contract Amendment (2006/2007) (Large Vehicles)
15	Ottawa School Bus Transportation Consortium – Contract Amendment (2006/2007) (Small Vehicles)
16	Collection of Job Data
17	Performance Evaluation – Human Resources
18	Personnel Training Policy
19	Objectives, indicators of measurement or performance
21	Financial Status Report as of August 31, 2007
22	Ottawa School Bus Transportation Consortium - Procedures for the Purpose of Negotiation
23	Procedures to Grant Contracts for Special Transportation
24	Contract for the 2006-2007 School year, Schedules of Tariffs – School Bus Transportation
26	Remuneration Guide (2007-2008)
27	Bergeron Transport 2006-2007
28	Consortium Plan Submission
29	C2 Arrival and Departure Windows
30	C7B Load Factors
31	CM7 Goals and Performance Indicator Reports
32	CM8 Index to Policies
33	PP2 Route Planning Calendar
34	PP3 Route Planning Philosophy
35	PP4 Benchmark Reports
36	PP5 Route Planning Calendar – Special Needs Students
37	PP6 Safety Programs
38	PP7 Lost Child and Booster Seat Procedures
39	PP8 Special Needs Programs
40	R2 Route Change Procedures
41	RTE 1 Special Needs Operator / Contract Award

## Appendix 4: Common Practices

	JK/SK	Elementary Gr. 1 - 6	Middle Gr. 7 - 8	Secondary
<b>Home to School Distance</b>				
Common Practice	0.8	1.2	1.6	3.2
Policy - CECLFCE	0	1.5	2.5	4
Policy - CEPEO	0	1.5	2.5	4
Practice	0	1.5	2.5	4
<b>Home to Bus Stop Distance</b>				
Common Practice	0.5	0.8	0.8	0.8
Policy - CECLFCE	0.5	0.8	0.8	0.8
Policy - CEPEO	0.5	0.8	0.8	0.8
Practice	0.3	0.8	0.8	0.8
<b>Arrival Window</b>				
Common Practice	18	18	18	25
Policy - CECLFCE	15	15	15	15
Policy - CEPEO	15	15	15	15
Practice	15	15	15	15
<b>Departure Window</b>				
Common Practice	16	16	16	18
Policy - CECLFCE	10	10	10	10
Policy - CEPEO	10	10	10	10
Practice	10	10	10	10
<b>Earliest Pick Up Time</b>				
Common Practice	6:30	6:30	6:30	6:00
Policy - CECLFCE	-	-	-	-
Policy - CEPEO	-	-	-	-
Practice	6:30	6:30	6:30	6:30
<b>Latest Drop Off Time</b>				
Common Practice	5:30	5:30	5:30	6:00
Policy - CECLFCE	-	-	-	-
Policy - CEPEO	-	-	-	-
Practice	5:00	5:00	5:00	5:00
<b>Maximum Ride Time</b>				
Common Practice	75	75	75	90
Policy - CECLFCE	60	60	60	90
Policy - CEPEO	60	60	60	90
Practice <b>Note 1</b>	60	60	60	90
<b>Seated Students Per Vehicle</b>				
Common Practice	69	69	69	52
Policy - CECLFCE	69	69	48	48
Policy - CEPEO	69	69	48	48
Practice	39	39	27	27

**Note 1:** In practice, approximately 17 percent of rides times are over 60 minutes.

**Note 2:** Policies are fully harmonized.



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