Deloitte.

Ministry of Education Effectiveness & Efficiency Review

Hamilton-Wentworth Student Transportation Services

E&E Phase 4 Review

October 2010

Final Report

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

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

Executive Summary

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

The Consortium has overcome a number of challenges since its inception and, as a result of recent changes, has made rapid progress towards emulating a number of the best practices identified across the Province. Consortium management should be commended for initiating the Consortium's current trajectory; there is now a positive momentum within the organization that will need to be fully leveraged in order to ensure the Consortium's continued development.

While the Consortium has taken a number of positive steps before this review to improve its management processes, there are still a significant number of steps that will be necessary to bring the Consortium in line with best practices seen across the Province. Of key importance is the restructuring of the organization to realign the currently Board-centric structure, the attainment of separate legal entity status, and the modification of the Consortium Agreement to bring it in line with the Consortium's day-to-day practices. Other recommendations relate to required improvements in the Consortium's human resource policies and practices and strategic planning processes. Changes to the Consortium's budgeting process should also be implemented to ensure the budget developed for the Consortium provides an adequate framework within which the General Manager can work and to which the General Manager can be held accountable.

The review of Policies and Practices found that many key planning policies have been adopted by the Consortium. The established policies include significant differences in service expectations, particularly related to walk-to-school, walk-to-stop and ride time guidelines. The limited integration of many planning activities between the Boards and the continued Board-centric nature of both staffing and planning assignments should be reconsidered since they are negatively impacting service delivery. An additional key recommendation is for the enhancement of existing documentation to clarify responsibilities and timelines.

The review of the Consortium's Routing and Technology use found that opportunities exist to further increase the efficiency of operations. The most critical recommendations are associated with the comprehensive analysis of bell time options and routing strategies, and additional efforts related to data distribution and coding structures. These recommendations should be executed as part of the development of an integrated approach to realizing efficiency gains that transition staff from their current Board-centric assignments to more universal planning responsibilities.

The Consortium has generally complete bus, taxi and public transit operator Contracts, although modifications to these documents are recommended in addition to other significant changes related to the Consortium's procurement and contract management processes. With respect to the Consortium's procurement and contract management practices, the most significant recommendations include the development of a detailed plan for the execution of a competitive process and the implementation of a comprehensive, documented, governance approved process for ensuring operator compliance with the administrative, vehicle and facility maintenance, and on-the-road performance expectations outlined in their contracts.

As a result of this review of current performance, the Consortium has been rated **Moderate-Low**. Based on this evaluation, the transportation allocation for the Hamilton-Wentworth District School Board and the Hamilton-Wentworth Catholic District School Board will remain unchanged in the 2010-11 school year.

1 Introduction

1.1 Background

1.1.1 Funding for student transportation in Ontario

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

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

1.1.2 Transportation reform

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

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

1.1.3 The formation of school transportation consortia

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

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

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

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

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

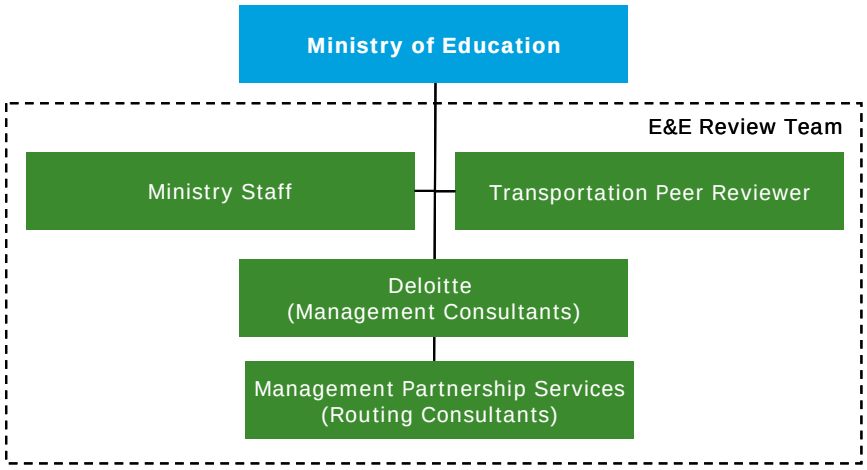
1.1.4 Effectiveness and Efficiency Review

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

1.1.5 The E&E Review Team

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

Figure 1: E&E Review Team



1.2 Scope of Deloitte Engagement

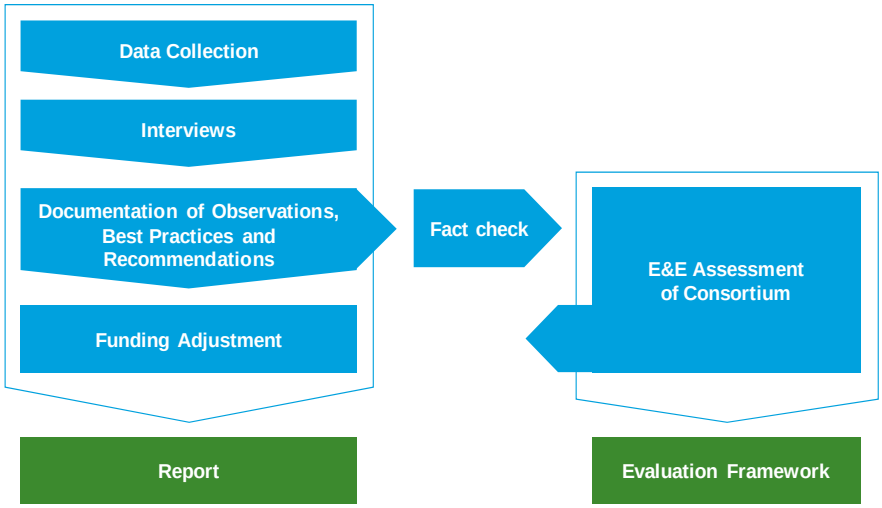
Deloitte was engaged to lead the Team and serve as the management consultants on the E&E Review Team. Deloitte's overall role is as follows:

- Lead the planning and execution of E&E Reviews for each of the 25 transportation consortia to be reviewed in Phases Three and Four (currently in phase 4);
- At the beginning of each E&E Review, convene and moderate E&E Review Team planning meetings to determine data required and availability prior to the review;
- Review consortium arrangement, governance structures and contracting procedures;
- Incorporate the results of the routing and technology and policies and practices reviews completed by MPS into the final report; and
- Prepare a report for each consortium that has been subject to an E&E Review in Phases three and four. The target audience for the report will be the Ministry, the consortium, and it's Member School Boards. Once finalized, each report will be released to the consortium and its Member School Boards.

1.3 Methodology Used to Complete E&E Review

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

Figure 2: E&E Review Methodology



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

1.3.1 Step 1 – Data collection

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

Data is collected in four main areas:

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

1.3.2 Step 2 – Interviews

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

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

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

- Observations that involve fact based findings of the review, including current practices and policies;
- Best Practices used by the consortium under each area; and

- Recommendations for improvements based on the Assessment Guide. Figure 3 below provides a summary of the key criteria used in the Assessment Guide to determine the effectiveness and efficiency of each consortium.

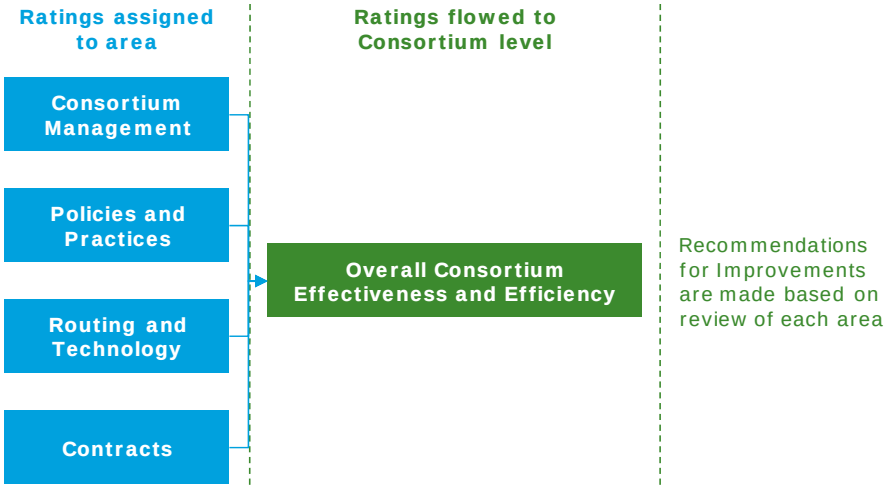
Figure 3: Criteria for an Effective and Efficient consortium

Consortium management	Policies and Practices	Routing and Technology	Contracts
• Distinct entity focused on providing student transportation services for member boards • Well defined governance and organizational structure with clear roles and responsibilities • Oversight body exists with the mandate to provide strategic directions to Consortium management on the provision of safe, effective and efficient transportation service to support student learning • Management has communicated clear goals and objectives of the Consortium and these are reflected in the operational plan • The Consortium takes a comprehensive approach to managing human resources • Well established accountability framework reflected in the set up and operation of the Consortium including documentation of terms in a Consortium Agreement • Operations are regularly monitored and performance continually improved • Financial processes ensure accountability and transparency to member boards • A budgeting process is in place ensuring timely preparation and monitoring of expenses • All of the Consortium's key business relationships are defined and documented in contracts • Governance committee focuses only on high level decisions • Organizational structure is efficient and utilizes staff appropriately • Streamlined financial and business processes • Cost sharing mechanism is well defined and implemented • The Consortium has appropriate, documented procedures and confidentiality agreements in place governing the use of student data and ensuring compliance with *Freedom of Information and Privacy* legislation	• Safety programs are established for all students using age appropriate training tools • Development of policies is based on well defined parameters dictated by the strategic goals of the governance structure and Consortium Management operating plans • A mechanism is defined to allow for regular review and consideration of policy and practice changes to address environmental changes • Established procedures allow for regular feedback on the impact that current and proposed policy and procedural changes would have on costs, safety and service levels • Regular monitoring and evaluation of policy expectations is conducted to ensure their continued relevancy and service impacts • Enforcement procedures are well defined and regularly executed with timely follow–up • Harmonized transportation policies incorporate safety, operational and cost considerations • Position-appropriate delegation of decisions to ensure the efficiency of decision making • Operational alternatives to traditional practices are considered and implemented where reasonable and appropriate • Service levels are well defined, considerate of local conditions, and understood by all participating stakeholders • Policy and practice modifications for students with special needs are considered in terms of both the exceptionality and its service and cost impacts	• Transportation management software has been implemented and integrated into the operational environment • Key underlying data sets (e.g., student and map data) are regularly updated: • Responsibility and accountability for the updates is clearly defined and performance is regularly reviewed • Coding structures are established to facilitate scenario modeling and operational analysis of designated subgroups of students, runs, schools, etc. • Procedures are in place to use software functionality to regularly evaluate operational performance and model alternatives to traditional practices • Disaster recovery plans and back up procedures are established, performed regularly, and tested • Operational performance is regularly monitored through KPI and reporting tools are used to distribute results to appropriate parties • Technology tools are used to reduce or eliminate manual production and distribution activities where possible in order to increase productivity • Training programs are established in order to increase proficiency with existing tools • Route planning activities utilize system functionality within the defined plan established by Consortium management	• Contracts exist for all service providers, including taxi, boat and/or municipal transit services and parent drivers • Contracts are structured to ensure accountability and transparency between contracted parties • All operator contracts are complete with respect to recommended clauses • Compensation formulae are clear • Operator contracts are in place prior to the start of the school year • Procurement processes are conducted in line with the Consortium's procurement policies and procurement calendar • The Consortium has laid the groundwork for, or is actively using, competitive procurement processes • Proactive efforts are made to ensure operator contract compliance and legal compliance • The Consortium collects and verifies information required from operators in contracts • The Consortium actively monitors and follows up on operator on-the-road performance using random, documented route audits or their equivalent • The Consortium avoids using School Board owned vehicles

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

The Assessment Guide was developed to enable the E&E Review Team to provide each consortium that undergoes an E&E Review with a consistent, fair, and transparent method of assessment. The Assessment Guide is broken down along the four main components of review (i.e. Consortium Management, Policies and Practices, Routing and Technology, and Contracts) and, for each, illustrates what constitutes a specific level of effectiveness and efficiency (refer to Figure 4 for diagram of process).

Figure 4: Assessment of consortia - Ratings Analysis and Assignment



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

1.3.5 Funding adjustment

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

Table 1: Funding Adjustment Formula

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

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

1.3.6 Purpose of report

This Report serves as the deliverable for the E&E Review conducted on the Consortium by the E&E Review Team during the week of October 18, 2010.

1.3.7 Material relied upon

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

1.3.8 Limitations on the use of this report

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

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

2 Consortium Overview

2.1 Consortium Overview[2]

Hamilton-Wentworth Student Transportation Services ("HWSTS" or "the Consortium") provides transportation services for the Hamilton-Wentworth District School Board ("HWDSB") and the Hamilton-Wentworth Catholic District School Board ("HWCDSB"; collectively the "Member Boards"). The Consortium provides transportation services to approximately 28,000 elementary and secondary students using 459 vehicles covering approximately 34,000 kilometres each day. The service area covers 1,140 square kilometres, and includes 171 elementary and secondary schools, 165 of which are currently receiving transportation services. Transportation services are provided through a combination of buses, taxis and public transit buses.

The Consortium was created in May, 2008 upon the execution of an inter-board transportation Consortium Agreement. A revised version of the agreement was later executed in June 2010. The Consortium currently exists as a partnership[3] and is headquartered at a site that is separate from those of its Member Boards.

The geographic area covered by the Consortium is a combination of urban and rural areas. The service area extends outward from the western shores of Lake Ontario between the borders of the Regional Municipalities of Halton and Niagara to the borders of the County of Wellington, Region of Waterloo, and the County of Brant and Haldimand.

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

[3] The Consortium is not currently a limited liability partnership

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

Table 2: 2009-2010 Transportation Survey Data

	HWDSB	HWCDSB	Total Consortium
Number of schools served	**114**	**59**	**173**
Total general transported students	10,318	10,527	20,845
Total special needs[4] transported students	1,333	294	1,627
Total wheelchair accessible transportation	79	52	131
Total specialized program[5] transportation	364	657	1,021
Total courtesy riders	1,291	364	1,655
Total hazard riders	173	23	196
Total students transported daily	**13,558**	**11,917**	**25,475**
Total public transit riders	1,892	18	1,910
Total students transported including transit riders	**15,450**	**11,935**	**27,385**
Total contracted full and mid-sized buses[6]	149	142	291
Total contracted mini buses	140	60	200
Total contracted school purpose vehicles[7]	0	2	2
Total contracted PDPV	0	0	0
Total contracted taxis	4	0	4
Total number of contracted vehicles	**293**	**204**	**497**

Table 3: 2009-2010 Financial Data[8]

	HWDSB	HWCDSB
Allocation	$13,866,815	$7,175,116
Net expenditures	$13,882,874	$7,174,007
Transportation surplus (deficit)	$(16,059)	$1,109

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

[5] Includes students transported to French Immersion, magnet and gifted programs, students with special needs who are transported to specialized programs are captured as special needs transported students.

[6] Includes full-sized buses, mid-sized buses, full-sized buses adapted for wheelchair use and mid-sized buses adapted for wheelchair use; all vehicle counts are rounded to the nearest whole number.

[7] Includes school-purposed vans, mini-vans, and sedans

[8] 2009-2010 allocations and expenditures based on Ministry data – Revised Estimates for 2009-2010

3 Consortium Management

3.1 Introduction

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

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

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

Consortium Management – E&E Rating:	Moderate-Low

3.2 Governance

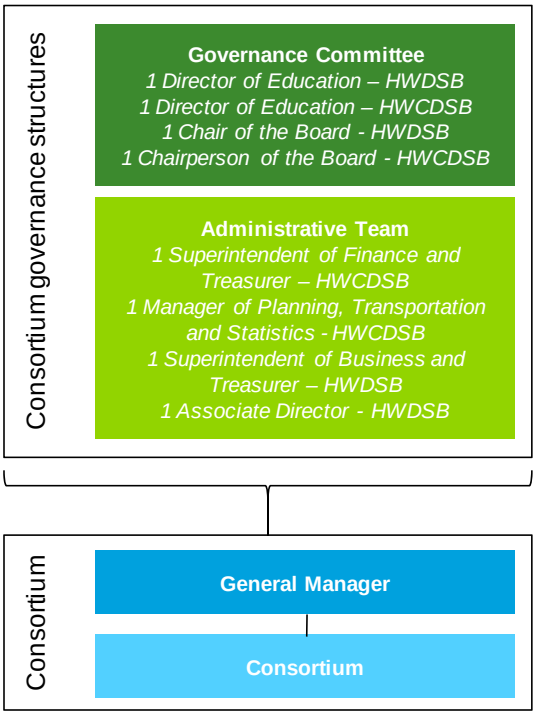
Governance refers to the way in which an organization is directed and controlled. Establishing administrative structures and processes that facilitate, monitor, measure and improve effective business management are primary responsibilities of a governance structure. Three key principles for an effective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

3.2.1 Observations

3.2.1.1 Governance structure

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

Figure 5: Consortium governance structure



Note: The General Manager holds a non-voting position on both the Governance Committee and the Administrative Team and reports to all components of the governance structures

The Consortium Agreement outlines the roles and responsibilities of the Consortium's governance structures. The primary responsibilities of the Governance Committee are to, among other things, approve the Consortium's annual plan, review and make policy recommendations, make major financial decisions, resolve any issues brought forward by the Administrative Team and review and recommend changes to the Consortium Agreement. Governance Committee meeting minutes are taken and ratified, but not signed. There is neither a schedule of meetings nor a mandated minimum number of required meetings per year, although members of the Governance Committee indicated that they met four times last year and intend to meet three times this year. The Consortium Agreement does not outline a voting mechanism, although discussions with members of the Governance Committee indicated that decisions are usually made by consensus. The Chairs of the Board from both Member Boards act as co-chairs for the Governance Committee.

The Consortium Agreement defines the role of the Administrative Team as including, among other things, budget development, conducting negotiations with operators, staffing, policy implementation, accounting, and conducting performance appraisals of the General Manager. Meetings for the Administrative Team are mandated under the agreement to occur bi-monthly. The Consortium Agreement does not outline a voting mechanism or a structure for chairmanship of the Administrative Team, although its members indicated that decisions are usually made by consensus. Administrative Team meeting minutes are taken and ratified, but not signed.

The existing structures are designed to reflect the governance structure at each Member Board, with the Administrative Team being responsible for frequent, day-to-day oversight while the Governance Committee is responsible for overall organizational development and strategic planning. The Administrative Team does not currently have the authority to make decisions for the Consortium; its prime responsibility is to make recommendations with respect to policy, staffing, budgeting and contracting which are then forwarded to the Governance Committee for approval.

The Administrative Team and Governance Committee are separate components of the Consortium's governance structures, with the General Manager reporting directly to the Administrative Team and to the Governance Committee. Currently, the General Manager acts as the singular point of contact between them. Members of the Consortium's Governance Committee indicated that they intend to alter the

Consortium's Governance Committee to include two representatives from the Administrative Team (one from each of the Member Boards) as non-voting members.

Discussions with Consortium management and members of the Consortium's governance structures also indicated that the role of the Administrative Team has varied from the descriptions provided in the Consortium Agreement. While the Consortium Agreement defines the role of the Administrative Team as including operational matters such as staffing, policy implementation and budget development, members of the governance structures indicated that, in practice, the Administrative Team primarily provides input into items put forward by Consortium management.

3.2.1.2 Board level governance and arbitration clause

A member board level arbitration clause is provided in the Consortium Agreement. This states that disputes will first be escalated to the Administrative Team and then, failing resolution, escalated to the Governance Committee for resolution through a mutually agreed upon arbitrator. Should the Governance Committee fail to select an arbitrator, one shall be selected by the Ministry of Education ("the Ministry"). Should the Ministry be unable to select an arbitrator, the dispute shall be settled through arbitration in line with the *Arbitration Act*.

3.2.2 Best Practices

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

Structure of the governance structures

The Consortium's governance structures have equal representation from each Member Board in terms of membership. Equal representation promotes fairness and equal participation in decision making and ensures that the rights of each Board are considered equally.

Meetings of the governance structures

Meetings of the Consortium's governance structures utilize a formal agenda and meeting minutes are taken and ratified. It is suggested that the Governance Committee and Administrative Team also undertake the signing of meeting minutes in order to ensure that an 'official' copy of decisions made at these meetings is retained, thus helping to ensure openness, accountability, and transparency to all stakeholders.

Dispute resolution

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

3.2.3 Recommendations

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

The current Consortium Agreement defines the Administrative Team as being responsible for day-to-day operational tasks such as staffing, policy implementation, budget development, and accounting for all of the Consortium's transactions. However, discussions with Consortium management and the Administrative Team and a review of meeting minutes indicated that the role of the Administrative Team has varied from the descriptions provided in the Consortium Agreement i.e. that these tasks have been effectively delegated to Consortium management. The Administrative Team is therefore, not involved with the day-to-day operations of the Consortium in the manner described by the Consortium Agreement. In order to increase the clarity of the roles and responsibilities of the Consortium's governance structures and to further delineate the Consortium's operational functions from its oversight functions, it is recommended that the Consortium Agreement be modified to better reflect the actual oversight roles and responsibilities of the Administrative Team.

3.2.3.2 Provide additional clarity on procedural elements related to the governance structures

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

3.2.3.3 Move forward with the restructuring of the Consortium's governance structures

Discussions with members of the Governance Committee and the Administrative Team indicated that they intend to restructure the Consortium's Governance Committee to include one representative from each Member Board on the Administrative Team, in addition to the General Manager, as non-voting members. It is recommended that the Consortium move forward with this restructuring to ensure that there is adequate communication between the two governance bodies in order to allow them to effectively execute their oversight role.

3.3 Organizational structure

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

3.3.1 Observations

3.3.1.1 Entity status

The Consortium is currently structured as a partnership between the two Member Boards. The Consortium Agreement acts as the Consortium's primary founding document and is outlined in the section below.

Discussions with Consortium management and members of the Governance Committee and the Administrative Team indicated that the Consortium intends to attain separate legal entity status in the near future.

3.3.1.1 Consortium formation and agreement

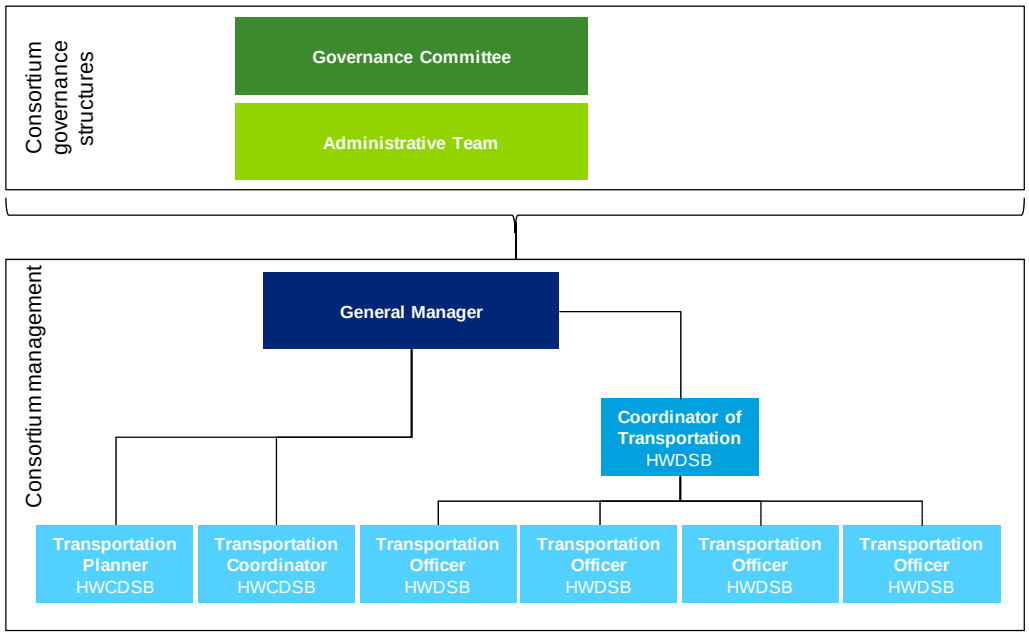
The Consortium Agreement establishes the HWSTS as a partnership between the two Member Boards with the primary purpose of providing shared transportation services for students to reduce costs associated with service delivery. It outlines, among other things:

- The structure, roles and responsibilities of the Consortium's governance structures;
- The Administrative Team retains responsibility for accounting for all transactions of the Consortium;
- The roles and responsibilities of Consortium management;
- Sharing mechanisms and formulae for costs and cost savings;
- Policy concerns – the HWSTS is to take direction from existing Member Board policies in the operation of transportation services. Should a Member Board cause a change in their policies that has an adverse financial impact on the Consortiums operations, that Board will be required to bear the cost of the change; and
- Clauses related to arbitration, indemnification, communication, confidentiality, and mandated insurance requirements for the Consortium.

3.3.1.2 Organization of entity

As identified in the Consortium Agreement, all Consortium staff are employees of their respective Member Boards but report to the General Manager. The organization of Consortium staff is illustrated below:

Figure 6: Organization Chart



Consortium staff are currently members of their respective Member Boards' collective bargaining units in line with the status of their employment; these collective bargaining units retain the ability to rotate staff out of the Consortium. There are currently no secondment agreements between the employees and either the Consortium or the Member Boards.

The General Manager is compensated through HWDSB's payroll and is an employee of HWDSB, although the cost of his employment is shared equally between the Member Boards. The General Manager's letter of acceptance/employment was created and executed by both Member Boards.

Discussions with Consortium management indicated that the Consortium's organizational structure is divided between the two Member Boards, with staff from the HWDSB reporting to the HWDSB Coordinator of Transportation (a member of Consortium staff, as identified above), and staff from the HWCDSB reporting directly to the General Manager.

Consortium staff do not currently have Consortium specific job descriptions that outline each of their specific responsibilities; decision making authorities; skills and reporting/delegated authority. The roles and responsibilities of the General Manager are outlined in the Consortium Agreement and further detailed in an up to date job description that outlines specific duties and responsibilities; reporting and delegated authority; and required qualifications.

3.3.2 Recommendations

3.3.2.1 Establish the Consortium as a separate legal entity

The Consortium was formed as a partnership between the two Member Boards and is not currently a separate legal entity. The current structure has several inherent risks which make it a less than optimal structure for coordinating student transportation:

- The risk that the actions of one Member Board may be leaving the other Member Board open to liability;
- The risk that one Member Board can be involved in litigation for issues involving students that are not part of that Member Board; and
- The risk that liability, brought about through the Consortium's joint status, may exceed its Member Board's existing insurable limits. The Consortium should investigate, with the assistance of its

Member Board's insurance carrier, its coverage related to, but not limited to, punitive damages, human rights complaints, and wrongful dismissal lawsuits.

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

Upon attainment of separate legal entity status, the Consortium should execute transportation service agreements with each Member Board. This document should outline all clauses that are relevant to the provision of transportation services such as the scope of services to be provided, fees, insurance/liabilities, quality of service, and dispute resolution.

3.3.2.2 Create relevant job descriptions for all positions within the Consortium

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

3.3.2.3 Re-position the Coordinator of Transportation as a managerial position

It is recommended that the role of the Coordinator of Transportation be positioned as a managerial role involved with the coordination of all transportation planning staff and the management of day-to-day transportation operations. This will then free the General Manager to focus his efforts on the general, strategic management of the Consortium and on escalated transportation matters that cannot be addressed by the Coordinator of Transportation.

3.3.2.4 Sign secondment agreements with the Member Boards

Consortium staff are currently employed by their respective Member Boards and have been seconded to the Consortium. However, there are currently no secondment agreements in place that outline the terms and conditions of their secondment. It is recommended that the Consortium sign appropriate secondment agreements with the HWDSB and HWCDSB in order to document this critical relationship and in order to provide clarity in addition to that provided in the Consortium Agreement with respect to the terms on which Consortium staff are being seconded to the Consortium.

3.3.2.5 Discuss the ability to rotate staff out of the Consortium with collective bargaining units

It is recommended that the Consortium and Member Boards work with their collective bargaining units to determine solutions to existing agreements related to the collective bargaining unit's ability to move Consortium staff into and out of the organization. This is to ensure the retention of the investment made by the Consortium in specialized staff training and to foster the development of a cohesive, stable team.

3.4 Consortium Management

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

3.4.1 Observations

3.4.1.1 Cost sharing

A formula and process for cost sharing is documented in the revised Consortium Agreement; however, two conflicting methodologies for payment are presented. Additionally, the process identified for the sharing of cost savings was in the early stages of being implemented at the time of the E&E Review.

Administration costs, excluding the General Manager's compensation, are shared among the Member Boards according to their respective proportion of the combined official FTE enrolment as of October 31st

of the previous year. The cost of the General Manager's employment is shared equally by the Member Boards.

The Consortium Agreement outlines two cost sharing formulae for the yearly operating costs of the Consortium based on year. It states that 2008/2009 administrative and operating costs for each route shall be developed by each Member Board and submitted to the Consortium. These cost estimates are subject to an external audit. It further states that operating costs for 2009/2010 year are to be shared based on student ridership. No cost sharing formula is identified for future years, although discussions with Consortium management indicated that the 2009/2010 formula is currently being used. Discussions with Consortium management indicated that the cost sharing formula referenced for 2008/2009 addresses the "separated service costs" that were incurred by the Member Boards prior to the launch of the Consortium in September 2009 and was used to establish a baseline for comparing savings as the organization moves forward.

In addition to outlining formulae for cost sharing, the revised Consortium Agreement outlines detailed processes and methodologies that are to be used for payment. The Consortium Agreement states that each Board agrees to pay its proportionate share of operating costs at the commencement of the month following the incurrence of such costs. The Agreement then further explains that, on the first of each month, each Board will fund its share of the operating and administrative costs, indicating that these prepayments are to fund the operations of the Consortium. Discussions with Consortium Management indicated that the former process is used in practice, with the HWDSB invoicing the HWCDSB on behalf of the Consortium for its portion of operating and administration expenses that have been incurred. As such, the processes outlined in the agreement to be used are neither consistent among themselves, nor consistent with current practice.

The Consortium Agreement outlines a detailed formula for the sharing of cost savings associated with transportation; discussions with Consortium management indicated that this methodology is currently in the process of being implemented as the first year of the Consortium's operations ended in August 2010. The formula states that cost saving opportunities shall only be pursued if they do not increase costs for either Member Boards. Further, the Consortium mandates that costs incurred by each Board shall not exceed the costs incurred by that Board during the previous school year after accounting for agreed upon contractual increases with operators. The cost-saving sharing formula pools Consortium-wide cost savings and treats them as follows:

- If both Boards realize savings, then total savings are shared based on ridership; or
- If only one Board realizes savings, then the savings realized by that Board will be transferred to the other Board to the extent that it ensures that the other Board's costs do not increase from the previous year.

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

3.4.1.2 Transportation service agreements

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

3.4.1.3 Purchase of service agreements/support services

The Consortium purchases IT, telephone and network services from the HWCDSB; purchases finance and accounting services from the HWDSB; purchases routing software from Education Logistics ("Edulog")*;* purchases Transportation Resource Allocation and Control System (TRACS) and purchases contact centre support during the start up period and production server hosting & backup services from independent third party suppliers. These service level relationships are all documented in executed purchase of service agreements.

The Consortium does not currently have purchase of service agreements in place with respect to HR services. Consortium management has indicated that a draft lease agreement with the HWCDSB for office space is currently being finalized and has not yet been executed.

HWCDSB – IT, telephone and network services

The Consortium receives hardware, network connectivity, telephony and helpdesk services from the HWCDSB. Additional clauses included in the purchase of service agreement relate to roles and responsibilities, confidentiality, dispute resolution and severability. The agreement includes a clause on compensation which states that the HWCDSB will not be compensated for the provision of these services. This purchase of service agreement is valid for three years starting September, 2010.

Discussions with Consortium management indicated that as there no fee is charged for the provision of this service, the cost of the Member Board providing these services is not captured in the Consortium's financial processes and financial statements.

HWDSB – finance and accounting services

The Consortium receives cash flow, accounts receivable, payable and invoicing services from the HWDSB. Additional clauses included in the purchase of service agreement relate to roles and responsibilities, confidentiality, dispute resolution and severability. The agreement includes a clause on compensation which states that the HWDSB will not be compensated for the provision of these services. This purchase of service agreement is valid for three years starting September, 2010.

Discussions with Consortium management indicated that as there no fee is charged for the provision of this service, the cost of the Member Board providing these services is not captured in the Consortium's financial processes and financial statements.

Education Logistics, Inc

The Consortium has executed a standard software licensing agreement between itself and Edulog. This contract was signed by senior administrators from each Member Board on behalf of the Consortium.

Other Third Party suppliers

The Consortium has executed contracts with each of its independent third party suppliers.

3.4.1.4 Procurement policies

The Consortium does not currently have its own purchasing policies in place that document the various procurement methods to be used by the Consortium based on the value of the goods being purchased. The Consortium has adopted the purchasing policies of the HWDSB as they provide the Consortium with finance and accounting services, although this relationship is neither documented in the Consortium's operating procedures nor included as part of the Consortium's purchase of service agreement with that Member Board.

3.4.1.5 Insurance

The Consortium does not currently have its own insurance coverage as is mandated in the Consortium Agreement but is currently in the process of obtaining such coverage. A review of Governance Committee meeting minutes indicates that the committee gave direction to the General Manager to proceed with arranging coverage through OSBIE in October. OSBIE has since notified HWSTS that approval of their insurance policy will likely take place by December of this year.

3.4.1.6 Staff performance evaluation, training and management

In line with the status of their employment, Consortium staff are part of the performance evaluation processes that take place at the Member Board level. However, discussions with Consortium management indicated that staff performance evaluations have not taken place in the recent past. As mandated in the Consortium Agreement, responsibility for assessing the performance of the General Manager rests with the Administration Team; these performance evaluations are yet to take place. The Consortium does not currently have a documented, Consortium specific staff performance evaluation process that outlines the process, structure and reporting requirements associated with measuring staff performance.

Training for staff is currently conducted using internal and external resources. While governance approved staff training plans do not currently exist, the Consortium does document and track training provided over time. The professional development log allocates the training provided into six categories (such as, for example, technical focus, safety focus, team building, etc), which provides a description of

the training, and documents those staff that attended. Training provided to staff has included, among others, training on the use of *Edulog, TRACS* and pupil transportation management.

The Consortium's goals and objectives are communicated to staff through formal staff meetings. Although staff meetings are not established on a fixed schedule and are not required to be documented through meeting minutes, a log of the key topics discussed is retained.

3.4.1.7 Succession planning

The Consortium does not currently have a documented plan with which to manage staff turnover; Consortium staff are not currently cross-trained in each other's roles and responsibilities. However, the Consortium does currently have a documented, governance approved business continuity plan that identifies the Consortium's key processes, services and personnel, and assesses the impact of their absence on the Consortium's performance. However, this document does not suggest methodologies that can be used mitigate the impact of staff turnover on the Consortium.

3.4.1.8 Long term and short term planning

The Consortium has neither a formal strategic plan, nor a documented, governance approved planning procedures that outline the process, structure, individuals and principles underlying the development of the Consortium's goals and objectives. Some of the Consortium's objectives are documented at a high level in an annual student transportation planning document that has been presented to the governance structures. Some of the short term goals and objectives identified in this document include, among other things, an update of the Consortium's routing software; the launching of a Consortium website; the development of HR plans and structural definitions; the development of a strategic plan; an investigation of operational efficiency improvements; and assessing the implications of the Ministry's competitive procurement pilot project.

The Consortium does not have a governance approved strategy for evaluating the future impact of decreasing budget allocations resulting from declining student enrolment.

3.4.1.9 Key performance (service) indicators (KPIs)

The Consortium does not currently have a documented, governance approved procedures on the use and reporting of KPIs to assess its own operational performance. However, the Consortium has developed an annual student transportation planning report that has been presented to the Administrative Team and the Governance Committee for each of the last two years. These reports document the progress of the Consortium with respect to improvements in its managerial and operational functions and also analyze trends and changes in the Consortium's KPIs. Some of the types of KPIs presented are outlined below.

Table 4: Sample of the types of KPIs tracked by the Consortium

Key Performance Indicator	
1. Fleet composition	2. Ridership information
3. Capacity utilization by vehicle type	4. Morning trip pairing statistics
5. Average bus run length	

3.4.1.10 Information management

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

Confidentiality agreements have not been executed for all staff.

3.4.2 Best Practices

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

Tracking staff training

The Consortium logs and tracks the training provided to staff over time. Such mechanisms not only help to document the investments made by Consortium management in the professional development of staff, it also contributes to the development of future staff training plans.

3.4.3 Recommendations

3.4.3.1 Modify the cost sharing processes and clauses in the Consortium Agreement to reflect current practices

Discussions with Consortium management indicated that a number of the processes and formulae related to cost sharing outlined in the Consortium Agreement are not currently implemented. It is therefore recommended that the Consortium:

- Modify existing cost sharing practices to more closely reflect the mechanisms outlined in the Consortium Agreement or vice versa.
- Remove year-specific clauses. The Consortium Agreement is intended to be a foundational, over-arching agreement that specifies the terms and structure of the Member Boards' cooperation. The inclusion of time-specific cost sharing formulae increases the risk of misinterpretation among the Member Boards and, as is the case with this Consortium, increases the risk that the cost sharing agreement will have 'expired'. Given that the 2008/2009 cost sharing agreement is now redundant, and given that the 2009/2010 terms are currently agreeable to both Member Boards, the 2008/2009 cost sharing agreement can be safely removed from the Consortium Agreement and can be replaced by a permanent cost sharing mechanism that reflects the 2009/2010 formula.
- Remove references to redundant and/or inconsistent practices and formulae. Given the inconsistency presented between the two cost sharing processes outlined in the Consortium Agreement, it is recommended that the Consortium select the process that best reflects current practices and remove references to redundant practices in order to increase the clarity and enforceability of the Consortium Agreement.

While making these changes, we encourage the Consortium to consider its ability and the cost to determine and calculate each of the clauses prior to their inclusion in the Agreement, and consider the downstream implications of having clauses that could restrict the Consortium's ability to act in a manner that achieves optimal effectiveness and efficiency.

3.4.3.2 Execute a formalized transportation service agreement

While the Consortium Agreement outlines some of the Member Boards' service level expectations at a high-level, this document is primarily intended to be an agreement among the Member Boards that establishes the Consortium. Distinct from the Consortium Agreement is the transportation service agreement, which articulates the service relationship between the Member Boards and the Consortium. In order to make the above distinction clearer, it is recommended that the Consortium develop and execute transportation service agreements with both Member Boards. The transportation service agreement should include clauses that specify the scope of services to be provided, fees, insurance, quality of service, dispute resolution and other terms that the Member Boards deem to be appropriate.

3.4.3.3 Modify existing and execute additional purchase of service agreements

The Consortium's existing purchase of service agreements with its Member Boards do not outline a fee structure that will be paid by the Consortium to the relevant Member Board for services provided. Given that the provision of these services are a real cost to the Member Boards, and given the lack of clarity with respect to the accounting of these administrative costs in the transportation line (highlighted in section 3.5.1), it is recommended that these agreements be modified to include a mechanism by which the Member Boards are compensated by the Consortium for costs incurred in providing these services. This will add clarity of the Consortium's accounting for transportation costs.

It is further recommended that the Consortium either modify existing agreements, or execute new agreements that outline the scope of HR services provided to the Consortium by each Member Board. Further, the Consortium should execute an existing draft lease agreement with the HWCDSB in order to ensure that this important relationship is documented and agreed upon.

3.4.3.4 Develop procurement policies for the Consortium

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

3.4.3.5 Continue efforts to purchase insurance for the Consortium's operations

It is recommended that the Consortium continue efforts to ensure that it has adequate insurance coverage including, but not limited to, general, property, liability and errors and omissions insurance. Adequate insurance coverage is an essential risk management tool.

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

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

Building on the above, the Consortium should also develop, document and implement clear staff training/learning initiatives and plans to promote continuous learning. Effective staff training initiatives will help to develop skills and will ensure that staff are able to fully utilize available technological aids and, ultimately, provide safer, more efficient student transportation.

3.4.3.7 Modify the disaster recovery procedure to include staff succession planning

It is acknowledged that Consortium staff are experienced and are able to keep the Consortium running should a key staff member depart or be absent. However, in order to bolster the Consortium's risk management efforts, the Consortium should modify its existing business continuity plan to include a formal succession plan that outlines cross-training processes and initiatives as well as methodologies to ensure that future staff turnover/absenteeism will not impact the continued smooth operation of the Consortium.

3.4.3.8 Develop a formal, documented long term and short term plan and process

It is recommended that the Consortium develop a process through which it can define its long term and short term goals and priorities. The goals, and the process used to develop these goals, should be specific, clear, documented, and governance approved. Additional detail regarding how the Consortium's goals are to be achieved should be included in an operational plan that highlights the specific tasks required to be implemented, with associated timelines, and the delegation of responsibility for these tasks. The development of such a process and documents will allow the Consortium to measure its performance against tangible goals, will allow the Consortium to allocate resources effectively to meet Consortium objectives, and will also help to inspire a culture of continuous, proactive self-improvement within the organization.

The process used to develop the Consortium's long term and short term objectives should also include a documented procedure to monitor and report on progress against the Consortium's strategic goals and objectives at regular intervals.

3.4.3.9 Develop a strategy for declining enrolment

School enrolment across Ontario has been in steady decline over the last decade. Given the Ministry's recent notice that transportation funding is to be reduced in line with declining enrolment, it is recommended that the Consortium incorporate a strategy for the management of transportation costs into

its long term planning process. Developing such a plan will provide the Consortium with a framework that will help it address not only the issue of funding, it will also signal a proactive approach to dealing with issues before they arise – a key element of effective long-term Consortium management.

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

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

3.4.3.11 Develop policies and procedures related to the treatment of confidential information

It is recognized that the Consortium's current practice of attaining permission from parents to collect student information is appropriate. However, this information is currently collected without there being an appropriate framework governing the use of this data. Therefore, the Consortium should develop additional policies, procedures and confidentiality agreements to govern the use of confidential information in order to ensure compliance with freedom of information and privacy legislation. These policies and procedures should address all issues related to the collection, storage, use, access, distribution and destruction of information, and should also require the Consortium's governance structures and Member Boards to review and reflect on freedom of information and privacy legislation requirements on a regular basis. The Consortium is further encouraged to review the findings and recommendations contained in the OASBO Guidelines for Sharing Personal Student Information with Transportation Consortia.

3.5 Financial Management

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

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

3.5.1 Observations

The Consortium follows the accounting practices and policies of the HWDSB, in line with its purchase of service agreement with that Board. However, the Consortium's compliance with these policies is neither stated in the purchase of service agreement, nor documented in the Consortium's foundational documents.

3.5.1.1 Budget planning and monitoring

The budgeting process for the Consortium is documented in a governance approved operational procedure on financial management. This document outlines the roles and responsibilities of the General Manager and the Consortium's governance structures and also outlines the process to be used to develop the budget. The procedure requires the HWSTS strive towards implementing a balanced transportation budget but does not provide additional detail with respect to the formulae to be used to develop the Consortium's budget. The Consortium Agreement mandates that a budget be presented to the Administrative Team by May 1st of each year with a revision required to take place before November 1st; additional information related to expected timelines are provided in the procedure.

The Consortium's budgeting process begins in March of each year with the announcement of Ministry funding allocations. The General Manager develops the budget, with particular line items such as salary being input by the Member Boards. The draft budget is required to be presented to the Administrative Team by May 1st of each year. After completing revisions and receiving the Administrative Team's endorsement, the budget is then presented to the Governance Committee for approval by June 30th of

each year. Discussions with Consortium management and a review of budgeting information provided indicates that the line items put forward by Member Boards include allocations for resources that are neither employed by the Consortium, nor captured in the Consortium's purchase of service agreements.

Reconciliations and revisions are done on a monthly basis by the General Manager, with a draft revised budget being presented to the Administrative Team by November 1st of each year. Upon receiving additional revisions and the endorsement of the Administrative team, the revised budget is to be forwarded to the Governance Committee for approval by December 30th. A final year end assessment is then conducted by the General Manager and submitted to the Administrative Team by August 1st of the following calendar year. This final budget is submitted to the Consortium's external auditor to verify the cost-saving allocation formula described in section 3.4.1.1. This process was underway at the time of the E&E Review.

Additional budget-to-actual reconciliations are also conducted at the Member Board level throughout the year.

3.5.1.2 Accounting practices and management

The accounting and financial management process for the Consortium is documented in a governance approved operational procedure on financial management. This document outlines the roles and responsibilities of the General Manager and the HWDSB and also outlines the internal processes to be used to account for the various transactions that may be executed by the Consortium. These processes are broken down by the various systems being used by the Consortium, as well as the Member Boards that are to be involved.

The Consortium pre-pays 80% of the expected monthly base vehicle costs to operators at the beginning of each month. These pre-payment invoices are created electronically by the Consortium's TRACS management software based on the routing solution contained in the routing software. This invoice is reviewed by the Coordinator of Transportation and, upon being verified, is submitted to the General Manager for sign off. Upon receiving the General Manager's approval, the invoice is made available electronically to the HWCDSB for their information and to the HWDSB for review and payment. Concurrently, operators are able to access the TRACS system in order to verify that the pre-payment invoices are accurate.

The remaining 20% 'top-up' payment is initiated at the end of month by the operators, who submit an invoice through TRACS. This invoice is then electronically split according to each Member Board's ridership and sequentially inspected and approved by a Transportation Officer/Planner, Coordinator of Transportation, and General Manager. Errors in the submitted invoices are returned to the operators and re-submitted through TRACS. Upon receiving the General Manager's sign off, the invoice is forwarded to the HWCDSB for information and to the HWDSB for review and payment.

The Consortium's financial management operating procedures do not outline the thresholds for expenses over which the General Manager is required to receive approval from the Consortium's governance structures. Discussions with Consortium management indicated that the General Manager is not required to receive approval from the Administrative Team for all day-to-day expenses provided that the expenses are aligned with the budget. This practice has been implemented despite a clause in the Consortium Agreement stating that no expenditure shall be entered into on behalf of the Consortium without the prior approval of the Boards and that the Administrative Team is responsible for accounting and signing off on all of the Consortium's transactions.

Discussions with members of the Consortium's governance structures and with Consortium management indicated that there are a number of accounting and financial practices that are mandated by the Consortium Agreement that are not followed in practice. These discussions and a review of budgeting documentation also indicated that there are resource expenses i.e. salaries for staff at the Member Boards, that form part of the Consortium budget. The amounts are provided by the Administrative Team during the development of the budget, however, the General Manager is not aware of the details of these amounts nor does he have 'control' over the resources.

Audit

The Consortium Agreement mandates that the Consortium's allocation of costs is to be subject to an external audit on an annual basis. Discussions with Consortium management indicated that the first audit is about to commence.

3.5.2 Best Practices

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

3.5.2.1 Budgeting processes

The Consortium has established a process that, in conjunction with its Member Boards, allows budgets to be prepared on a timely basis. The budget monitoring process in place forces the General Manager to be accountable for expenditures through regular reporting to the Governance Committee and Administrative Team. This process ensures that Consortium management is accountable for the financial management of the Consortium.

3.5.3 Recommendations

3.5.3.1 Modify the budgeting procedure

While it is recognized that the Consortium currently has effective budgeting processes and procedures in place, it is recommended that this procedure be modified to ensure the General Manager is aware of the details of all items included in the budget. The Consortium budget should establish the financial framework within which the General Manager can work and have full knowledge of all budget items. Additionally, it is a best practice that substantially all responsibility for transportation, and thus transportation costs, be transferred from Member Boards to the Consortium. As such, the General Manager can be held accountable for all items in the budget as they are within his purview.

3.5.3.2 Formally adopt the accounting policies of the HWDSB

It is recommended that the Consortium develop a formal policy stating that it will adopt the accounting policies of the Member Board from which it purchases accounting services. This will ensure that there is policy support for existing practices and thereby increase the clarity and alignment of the Consortium's financial management processes.

3.5.3.3 Modify the Consortium Agreement to align it with current practices

Discussions with members of the Consortium's governance structures and with Consortium management indicated that there are a number of accounting and financial practices that are mandated by the Consortium Agreement that are not followed in practice. In order to mitigate liability and improve the clarity of the Consortium's financial management practices, it is recommended that financial management related clauses in the Consortium Agreement be modified to reflect the actual practices of the Consortium. This recommendation includes the delegation of expense monitoring and accounting responsibilities from the Administrative Team to the General Manager.

3.5.3.4 Modify the process for allocating transportation related costs

Discussions with Consortium management and members of the Administrative Team and Governance Committee indicated a lack of clarity with respect to Member Board staff time being allocated to the transportation line item. These discussions and a review of budgeting information also indicated that the line items put forward by Member Boards during the budgeting process included allocations for resources that are neither employed by the Consortium, nor captured in the Consortium's purchase of service agreements. As such, and in line with recommendations 3.4.3.1and 3.4.3.3 regarding cost sharing mechanisms and purchase of service agreements, it is recommended that Consortium management work with its Member Boards to review its financial management processes and formulae in order to ensure that the Consortium's budgets and financial statements fully reflect the cost of providing student transportation for each Member Board.

3.6 Results of E&E Review

This Consortium has been assessed as **Moderate-Low.** Consortium management has taken a number of positive steps in the recent past in order to improve the effectiveness and efficiency of its management processes and there is currently a positive momentum within the organization to deliver on these expectations. However, a number of additional significant steps will be required in order to bring the Consortium in line with best practices seen across the Province. The most critical recommendations arising from the assessment of Consortium Management are the restructuring of the organization to integrate the currently Board-centric organizational structure, the attainment of separate legal entity status and the modification of the Consortium Agreement to bring it in line with the Consortium's day-to-day practices. Other recommendations relate to improvements in the Consortium's human resource policies and practices, strategic and operational planning, as well as financial practices.

4 Policies and Practices

4.1 Introduction

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

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

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

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

4.2 Transportation Policies & Practices

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

4.2.1 Observations

4.2.1.1 General policy guidelines

HWSTS and its Member Boards have developed policy and procedure guidance through the use of formal Board policy statements and Consortium procedures. The policies adopted by the Boards differ in specific terms and the framework of the documentation, most specifically in terms of eligibility distances, walk to stop criteria, and ride time expectations. The internal HWSTS procedures are designed to accommodate those differences where necessary; otherwise, there is a single HWSTS policy that applies to both Boards. The compilation of the policy documents provides sufficient guidance on key planning expectations. The procedural documents address important operational concerns such as management of data, route planning and design, accident and incident expectations, and technical management of the routing software. Overall the document adequately supports the planning effort but will require expansion to further define HWSTS' methods for providing service.

Harmonization expectations include an explicit identification of the differences in policy or procedure between the Boards, recognition of the differences in either the Consortium Agreement or Consortium policy statements, and a mechanism to account for the cost differences associated with the differing criteria. The Member Boards have made progress towards harmonization through the Consortium Agreement and costing practices. Within the agreement both Member Boards have recognized the significant differences that currently exist in policy between the Boards (see Table 5 below) and efforts to reconcile these differences are primarily within the cost sharing mechanism. The presumption is that the differences in ridership counts can be primarily attributable to differences in policy and thus the cost sharing mechanism reasonably accounts for the policy differences. The documentation does not provide any indication that the Boards have assessed these differences to determine if that presumption is correct.

Additionally, the Consortium Agreement has a clause that requires a Board making a policy that will have a material adverse financial or operational impact on the other Board to bear the full cost associated with both the change and the adverse impact. The documentation also did not indicate whether the differences in policy have been assessed relative to the "material adverse financial or operational impact" clause of the Agreement. This may be due to the fact that the policies in use have not been changed but are the original Board policies. However, such differences of the magnitude adopted by the Member Boards are likely resulting in issues of service equity. Continued efforts to assess and reconcile these differences will be necessary to ensure services are being delivered consistently with the expectations of each of the Member Boards.

Much of the procedural and policy infrastructure established by HWSTS is relatively recent. Consequently, the Consortium is still in the process of transitioning from Board-centric operations previously in place, to the adoption of a single operating philosophy. Onsite observations indicated that this adoption will be necessary to continue to reinforce both the availability and content of the Consortium to internal and external stakeholders; which ensures that the HWSTS' operating philosophy and procedures become prevailing guidance for system design and management.

4.2.1.2 Eligibility and walking distances

Fundamental to designing an effective and efficient routing scheme is knowing which students must be transported. Eligibility criteria are the key policies that provide guidance on which students will be provided service. Each of the Boards have established criteria for the minimum distance students must be from school to be eligible for transportation and the maximum distance eligible students must walk to a bus stop. The HWSTS' "Eligibility Criteria" procedure incorporates these Board policies into its procedures. The table below summarizes the criterion.

Table 5: Walk-to-school and Walk-to-stop criteria

Board	Distance to School Criteria	Walk-to-Stop Criteria
HWDSB	0.8 km in non urban areas; JK-SK 1.0 kms Grades 1 to 6 - 1.6 kms Grades 6 to 8 - 2.4 kms Grades 9 to 12 - 3.2 kms	0.8 kms all grades
HWCDSB	JK/SK - over 1.2 kms Grades 1-12 - over 1.6 kms No transportation will generally be provided for secondary students within the City of Hamilton where public transportation is available unless for: a) Special Education b) at the discretion of the Board	JK/SK - 0.4 km Grades 1 through 8 - 0.6 km Grades 9 through 12 - 1.6 km

The management of differing policy criteria is possible through the use of the transportation routing software and established procedure statements. However, the differences in policy have been a source of inefficiency and confusion as the Consortium has worked toward operating as a single entity. Staff are required to learn both the policies and exceptions that have been established by the individual Boards which has resulted in increased difficulty researching and addressing questions of eligibility and school assignments in particular. This problem is likely to remedy itself over time, but leads to a lack of clarity in the near term regarding eligibility expectations.

4.2.1.3 Alternate addresses

The allowance for alternate address pickup or drop-offs is typically done to increase the flexibility of the system to meet parental needs or expectations. In a Consortium these allowances must be managed carefully in order to minimize the impact that allowances have on administrative workload and safety. The allowance for alternate address transportation occurs very infrequently for the HWCDSB. Conversely, HWDSB practices are different in that alternates are allowed provided there is room on the bus and the alternate location is both within the school boundary and beyond the walk boundary. Requests for alternate address service are directed to the HWSTS, who has the approval authority. If approved, the

alternate location is recorded in *Edulog* to maintain the accuracy of route manifests received through *TRAC*S. The process used by HWSTS is adequate to ensure both data accuracy and completeness. The lack of a policy documenting the service differences between the two Boards provides no formal recognition that these differences in service expectations will continue with the evolution of the Consortium.

4.2.1.4 Courtesy transportation

The Member Boards both have policies related to the provision of transportation for otherwise ineligible students. At HWSTS the policy details requirements for courtesy seats while at HWCDSB the policy identifies the use of empty seats. HWSTS has established a courtesy transportation procedure that adopts the established Board policies and includes additional details on the expectations of all participants. The procedure for HWCDSB delegates authority for determining the availability of empty seats to HWSTS. At HWDSB authority for assigning courtesy riders is vested with the school principal. The procedure details how the number of seats available for use will be determined.

Interviews suggested that compliance with the procedure is uneven and as a result HWSTS must return courtesy applications and require the principal to re-review applications. Both procedures detail the criteria for removing an allowance for courtesy seats in the event that the available capacity is needed for eligible riders. This is an additional area where differences in Board practices introduce complexity to the HWSTS management processes.

4.2.1.5 Bell time management

Transportation policies adopted by the Boards and a subsequent HWSTS Bell Time Spread procedure have established time bands within which schools will start and end. While the bell time procedure provides a basic framework for establishing school times, there are no provisions for dealing with requests for school time changes from schools, Boards, or HWSTS. Additionally, there is no timeframe established for these requests that allows all stakeholders to be aware of the planning schedule used to determine bell times. Policy now states that transportation will dictate bell times. Alternative efforts to realize efficiencies early in the Consortium development process have been tried, and interviews suggest that bell time assessments will be an element in 2011-2012 planning.

4.2.1.6 Student Ride Times

The Member Boards have established ride time expectations within their transportation policies and HWSTS has adopted these criteria within its Ride Time procedure. The expectations for maximum ride time are 60 minutes for HWDSB and 70 minutes for HWCDSB. A review of student data indicates that approximately 200 HWDSB students (1.5 percent) and 13 HWCDSB students (less than 1 percent) exceed the ride time criteria in the afternoon panel. However, it should be noted that these numbers are likely to be slightly overstated due to the use of combination runs. While continued monitoring is always necessary this analysis would indicate that services are generally being provided within established guidelines.

4.2.1.7 Route planning schedules and strategies

HWSTS established a highly detailed planning schedule at the outset of its efforts to fully prepare for the 2010-11 school year and evaluate opportunities for efficiency improvements. The schedule provides for an explicit definition of the tasks required, staff assignments, timelines, task dependencies and interdependencies, and identification of deadlines. The use of project planning software and the explicit definition of these task requirements are consistent with best practices of the E&E process.

The annual route planning process is a collaborative effort among the General Manager, the Coordinator of Transportation, the Transportation Officer (the HWDSB route planner) and the Transportation Planner (the HWCDSB route planner). These individuals evaluate the current routing scheme and previously identified concerns regarding specific runs or schools to assess what additional opportunities might be available to improve effectiveness and efficiency. When designing potential options, no specific restrictions on student, Board or grade mixing explicitly exist within policy. The policy actually encourages collaboration between the Member Boards. However, as noted in the Routing and Technology section of this report, no run level integration (where students from both Member Boards ride the same bus) currently occurs. The primary method of collaboration is where a bus services schools from either Board at different times. For example, the East Flamborough area has historically used route integration strategies. This was the primary efficiency effort used by HWSTS in the 2010-2011 school year. Of the 459 routes in the data provided, 117 (25 percent) were integrated.

The design and modification of the run scheme is the responsibility of the Transportation Officer and Transportation Coordinator. Neither HWSTS nor the Member Boards have established specific guidelines or training materials that guide route design. These individuals base the routing scheme design on historical practices, their previous experience at the Boards and as previous employees of bus operators in the area. Using their knowledge and experience, the planners have developed a routing scheme that primarily uses single runs dedicated to specific schools and some combination runs where the same bus services students from multiple schools at the same time. Additionally, a limited number of transfers or shuttle runs (where students come into one school and then are taken to another school) are also used in the system. The bus runs are then paired together into bus routes. When developing bus runs and routes the contract structure established with HWSTS operators does not play a major part in vehicle assignments. The General Manager oversees vehicle assignments and assesses the impact of the contract structure on the overall cost of operations.

4.2.1.8 Hazard transportation criteria

Allowances for students living in hazard areas have been established within Member Board transportation policies. HWDSB policy describes arterial roads as part of the criteria for reducing eligibility distances and the HWCDSB policy allows for hazard transportation without being specific about criteria. HWSTS has used previous practices to establish hazard areas within *Edulog* but there are no explicit criteria for the previously established hazards or for establishing new areas. This has created a situation where the established hazard areas may be specific to a single Board. Allowances for hazards that treat students from the same grades differently depending on Board are not documented as designated hazard criteria, and there is no formal acknowledgement by the Governance Committee that these differences are allowable.

4.2.1.9 Bus stop placement

No formal criteria have been developed to guide the placement of bus stops. HWSTS uses a combination of historical practices and operator feedback to assess the safety of individual stop locations. The lack of formal guidelines prevents a comparative assessment as to whether there are differences between the stop criteria across the Consortium.

4.2.1.10 Decision appeal process

The Consortium Agreement indicates that the HWSTS General Manager will oversee the appeals process as established in the job responsibilities section of the agreement. This process is particularly relevant to addressing parental concerns that cannot be addressed at the Transportation Officer or route planner level. In the event that a parent does not agree with HWSTS decisions, there is no designated process to specifically route an appeal out of the Consortium. However, while the Boards have their own internal review process that provides HWSTS with direction subsequent to a decision, the absence of a formal process fails to ensure clarity and equity in decision making across the Consortium.

4.2.1.11 Inclement weather procedures

HWSTS has established a procedure for inclement weather management. The process uses spotters designated by the operators who then coordinate with the HWSTS General Manager and Board staff to determine whether school closure and the subsequent cancellation of transportation is warranted. The procedure establishes the responsibilities for each party in the preamble to the procedure statement.

4.2.1.12 Accident and Incident procedures

HWSTS has established an Accident/Incident procedure that identifies responsibilities for operators and Consortium staff in the event that there is a bus accident or an incident with students. The procedure establishes the necessary notification and documentation requirements including notification of HWSTS. The procedure does not establish any mechanism to regularly review the submitted documents to determine if there are needed changes to HWSTS or operator practices.

4.2.2 Best Practices

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

Planning schedule

The planning schedule used by HWSTS provides outstanding guidance on process and also allows for an assessment of both available resources and any additional resources required. This allows for both strategic planning and a tactical assessment of the design of the system.

4.2.3 Recommendations

4.2.3.1 Enhance policy guidance and procedure manual

HWSTS and its Member Boards have established policies and procedures related to the expectations for transportation services. However, additional effort is necessary to ensure that the large differences in expected service levels are consistent with Board expectations. Analysis of actual differences in walk to stop distance, ride times and eligibility for services should be conducted to establish the baseline difference between policy expectations and actual service delivery.

As has been noted, in several cases the established policies lack specific details that would clarify expectations or enhance an understanding of the expected process. The following provides a partial list of the policies and/or procedures that could be enhanced.

- Alternate addressing – HWSTS should establish an operating practice that, at a minimum, documents the current approach to ensure that all stakeholders are aware of the application, approval and notification process. This documentation can then be used to determine if the Member Boards want to continue with using separate practices.
- Bell time management – Additional clarification should be provided to detail the process and clarify the timelines for requesting time changes and when schools and parents can expect to be notified of a potential change.
- Hazard detail – HWSTS should establish a procedure that provides guidance in the establishment of a hazard, documents the rationale for each specific hazard location, establishes a regular practice of review of hazards to determine if they have been mitigated, and reconciles any potential inconsistency between the Member Boards in the provision of transportation due to a hazard.
- Bus stop placement criteria – Establishing a procedure that guides both the placement of and the evaluation of existing stop locations for their appropriateness would clarify expectations for parents, operators, and HWSTS staff. The merging of staff from Boards with different operating practices dictates the need to establish a common HWSTS framework for stop placement.
- Appeals – The continued merging of operations will result in questions from parents regarding service delivery. In order to ensure equitable service delivery, HWSTS should collaborate with its Member Boards to establish a procedure and timeline for addressing concerns regarding HWSTS decisions.

HWSTS and its Member Boards should assess all existing documents for potential clarification and previous best practice information provided to determine if additional documentation is warranted. Additionally, the criteria established throughout the documents generally apply to an individual Board, which increases the operational complexity of managing the transportation system. Continued analyses should be conducted to determine the net cost difference of reconciling policies and its impact on both the planning process and the availability of efficiency opportunities.

4.3 Special Needs Transportation

4.3.1 Observations

Planning transportation for special needs students can present additional challenges as one must consider not only time and distant constraints, but also the physical and emotional needs of each individual student. Additional factors to consider include equipment needs such as wheelchair lifts, special restraints or harnesses, and medically fragile students who require assistance or medical intervention. Policies specific to the transportation of special needs students are essential to ensure that transportation meets each individual student's needs and is provided in the safest manner possible.

4.3.1.1 Special needs policies

Each of the Member Boards has established limited guidelines within their transportation policies. HWSTS has not developed any additional procedures associated with managing special needs students.

4.3.1.2 Special needs planning guidelines

The primary needs determination is the responsibility of the Member Boards. Each Member Board transmits information to HWSTS in a different format, but both generally have information regarding program location, required time of arrival, time of departure, and specialized equipment. The route planners are responsible for developing bus runs for students from their respective Boards given that there is little crossover in locations served or in run and route allocations. Issues associated with school site locations, program times, and ride time guidelines constrain the ability of HWSTS to consider

integration of these runs. Consideration is given to integrating students on regular education runs and to have regular home-to-school students ride special needs vehicles where possible. There are currently 113 regular stream students planned to ride on special needs vehicle routes and seven special needs students planned to ride on regular stream vehicles.

4.3.1.3 Driver Training

Driver training expectations are generally established in the operator agreement. The agreement establishes a one-time per year minimum requirement and outlines the minimum required curriculum. Several of the specific topics required are targeted at special needs students including: Awareness of Sensitivity for Special Needs Students; First Aid and EpiPen training; and Student Management.

4.3.2 Recommendations

4.3.2.1 Develop and clarify policies and procedures related to special needs students

As part of the policy and procedure enhancement recommendation made previously, HWSTS should develop a comprehensive set of policies and procedures relating to the transportation of special education students. Many examples of such policies exist throughout the Province, and the Consortium staff should adopt and modify examples of best practices from other locations to local conditions and requirements. The emphasis should be placed on documenting responsibilities for identifying individual student needs, and the procedures for ensuring that these needs are met. In addition, these policies and procedures should also include requirements for providing the proper equipment and training for the Consortium, Board, and operator staff that will be responsible for planning and implementing these services.

4.4 Safety policy

4.4.1 Observation

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

4.4.1.1 Student training

HWSTS has established a number of safety related programs that target students across a variety of grade ranges. Students are provided with a First Rider training program; Intertrain provides Buster the Bus training and provides Senior Safety programs (mentoring approach); and there is a Safety Patrol program with similar aims but different administration between Boards.

The bus patroller programs at both schools specifically target walking students. Additionally, some schools request evacuation training while all students are offered training on safely exiting a bus. Recently, all drivers from both Boards were provided with an in-service for the first time as an example of the evolution in integrating Consortium practices.

4.4.1.2 Driver training

As has been mentioned, driver training requirements are established in the operator agreement. The agreement establishes a once per year minimum requirement and outlines the minimum required curriculum.

4.4.1.3 Auditing procedures

HWSTS has not established formal operator audit procedures. Primary feedback on operator performance is received through calls from schools or parents. This approach does not ensure that services rendered are consistent with contractual requirements and that all administrative requirements have been addressed.

4.4.1.4 Maximum age of vehicles

The operator agreement dictates a maximum age of 11 years and an average of no greater than eight years for school buses and minivans/cars have a maximum age of eight years and average age of five years. The agreement also allows for one additional year for large buses in and after the 2008-2009 year. The inventory of units indicated a very limited number of vehicles out of compliance with the agreement.

Clarification provided by the Consortium indicated that management was aware of the issue and that it was associated with an operator awaiting delivery of ordered buses. Despite the lack of formal audit processes, this is an indication that contractual and more informal data submission requirements allow for the identification of potential concerns.

4.4.2 Best Practices

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

Student training

HWSTS has developed a broad array of safety training practices that focus on educating students throughout the early grades. Additionally, programs have been targeted to students who walk to school, a significant group of students across the service area.

4.4.3 Recommendations

4.4.3.1 Enhance route auditing procedures

HWSTS has a significant responsibility on overseeing transportation operations across a large service area. Establishing a formal and structured approach to ensuring that the services being paid for are rendered as expected will be an important operational component of future Consortium operations. The auditing program should include administrative and operational components.

4.5 Results of E&E Review

HWSTS has been rated as **Moderate-Low**. Critical planning policies have been developed at the Consortium, including walk-to-stop and walk-to-school distances and ride time expectations; planning guidelines have been implemented in practice. Efforts to fully assess the significant differences in policy expectations should be conducted to ensure equitable service delivery. In addition, limited integration of many planning activities between the Boards and the continued Board-centric nature of both staffing and planning assignments should be reconsidered. An additional key recommendation is for the enhancement of existing documentation to clarify responsibilities and timelines.

5 Routing and Technology

5.1 Introduction

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

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

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

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

5.2 Software and technology setup and use

Any large and complex transportation organization requires the use of a modern routing and student data management system to support effective and efficient route planning. Effective route planning not only ensures that services are delivered within established parameters but also helps to predict and control operational costs. Modern software systems have the ability to integrate and synchronize with student accounting, communications, and productivity software. The integration of these software systems allow for more effective use of staff time and supports timely communications, data analysis and reporting. Web-based communication tools in particular can provide stakeholders with real time and current information regarding their student's transportation including service or weather delays, the cancellation of transportation, or school closings. To derive the greatest benefit from these systems, it is imperative that the implementation includes an examination of the desired expectations and outputs of the system to support comprehensive analysis and reporting. This section of the evaluation evaluates the acquisition, setup, installation, and management of transportation related software.

5.2.1 Observations

5.2.1.1 Routing software & related technologies

HWSTS uses *Edulog* as its transportation management software. Significant effort has been invested to upgrade the product to the most recent version and to structure procedures and expectations to allow *Edulog* to serve as the primary source of routing information. This transition has required the conversion of transportation data from a previous product that was substantially completed at the time of the review.

The Consortium also uses *TRACS* as the primary means of distributing data to both schools and operators. *TRACS* is a web-based product that provides a user name and password combination for restricted access to student, bus route, and statistical data related to transportation. This includes issues related to delays or service cancellations that operators are required to record as part of their contractual agreement. Additionally, an issue tracking module has been added to *TRACS* for use at the start of school by the call centre contracted by HWSTS. This is an effective management practice because it reduces the disruptions to route planners and clerks as they are addressing issues associated with school start. In addition, this tool provides for analysis of the various frequencies of issues that will allow HWSTS to alter its future procedures to reduce school start call volume and route revisions. At the time of the review it was expected that the issue tracker would be taken off-line subsequent to the completion of start up.

TRACS serves as an excellent tool to communicate with stakeholder groups, but there are procedural concerns that should be addressed. For example, complaints to the call centre about vehicle lateness

were not readily identifiable from the operator entries in the delays and cancellations table. Discussions with HWSTS staff indicated that this is likely to be the result of a difference in interpretation about when operators need to enter delay or cancellation information. As understood at the time of the review, the delay or cancellation entry was required only at the beginning of a panel of runs (either morning or afternoon) and entry was not required if the delay or cancellation occurred while en route. This en route entry would allow for synchronization between the complaint log and the delays module.

HWSTS also uses a Voice Over Internet Protocol (VOIP) phone system that allows for advanced routing and management of phone calls. The telephone system provides voice and facsimile access to all stakeholders via a main telephone number plus extension system, a separate fax number, and a direct line "back door" number for direct access by bus operators and private callers. Additional supporting technologies also in use include email, project management software (that is used for comprehensive project planning and management of the Consortium such as for the annual route planning cycle), and a suite of office software available to all staff.

At the time of the review, HWSTS was in the process of developing a dedicated, branded web site. Currently, the HWSTS site provides summary background on the Consortium and offers links to the Member Board sites. The HWDSB web site offers an application that allows parents to find their school of assignment, school bus eligibility and stop locations. However, this information is not based on information currently in *Edulog* and as a result may not be consistent with actual stop or run assignments. HWCDSB offers a transportation and school finder that is updated by Board staff based on changes in *Edulog*. Each of the Board sites provides access to their individual transportation policies, but neither of the Member Board sites provides access to relevant HWSTS procedures.

5.2.1.2 Maintenance and service agreements

HWSTS has established service agreements with all of its technology suppliers including *Edulog*, Interlock (for *TRACS*), Answerplus (phone services), and the data centre that hosts mission critical applications. The *Edulog* agreement provides for an iterated list of services including technical support, program updates and patches, and revisions to program documentation. In addition, the agreement allows for 15 percent of the underlying geocode to be updated annually. HWSTS has used this aspect of the agreement to assist with required revisions that were identified during the annual planning process. The *TRACS* agreement provides for updates, patches, and documentation and also includes training on system use for school staff and operators. Additional technical support is available primarily via email with phone support used in the event that the issue cannot be remedied. These provisions are consistent with the expectations of the E&E process.

5.2.1.3 System backup and disaster recovery

Ensuring the availability and security of the various data elements captured in HWSTS systems is addressed through a formal service agreement with the hosting data centre that also services the Member Boards applications. The data centre includes a climate controlled, limited access facility with fire suppression technology and redundant power supply. The agreement provides for a structured backup program that includes daily, weekly and monthly backups, and provides for offsite storage in the event of an incident at the data centre. In the event of an incident at the HWSTS office location, the current data management approach would allow for remote access to the routing software from alternative locations and would continue to provide access to *TRACS* via the web. This approach to data management is consistent with best practices identified as part of the E&E Review process.

5.2.1.4 Staff training

HWSTS is in the process of finalizing its human resources plan. A component of this plan will include more detailed definition of staff training and position expectations. At the time of review, transportation staff had received training in *Edulog*. However, no ongoing structured training plan has been developed at the time of the review. This is somewhat mitigated by the relatively strong history of the Boards sharing the database and map in *Edulog,* and the significant amount of informal collaboration among staff.

5.2.2 Best Practices

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

Continuity of Service

HWSTS' use of a fully functional data centre with defined backup and recovery plans and business continuity planning ensures that services can continue to be provided in the event of an incident. This

approach has allowed HWSTS to focus on its core business of managing the transportation operation while having a high degree of confidence that the needed tools and technology will be available.

5.2.3 Recommendations

5.2.3.1 Ensure access to student information in a manner that is consistent across all media

Providing access to complete and accurate transportation information via the web is consistent with leading communications practices identified during the E&E Review process. Currently there is conflicting and inaccurate data available to parents and other stakeholders that has the potential to cause confusion and the misapplication and misinterpretation of agreed upon policy. The implementation of the HWSTS web site should include an assessment of what the primary source for transportation information will be, and the elimination of any potentially conflicting information provided on the Member Board sites. If it is determined that the HWSTS web site will be the primary source of transportation information, it would be possible to eliminate conflicts by removing the current transportation sections of Member Board sites and providing direct links to the HWSTS site. Alternatively, copies of HWSTS policies, procedures, and transportation data could be replicated to Board sites.

5.2.3.2 Consider using the issue tracking module throughout the year

HWSTS has made excellent use of the Issue Tracker module in *TRACS* to monitor and analyze both the source of concerns and the time required to remedy the issues. To this end, HWSTS should consider whether the issue tracking module would be a useful tool to retain throughout the school year. This would require HWSTS to enter data into the module and would provide an improved understanding of issues that occur throughout the school year and how they are remedied.

5.2.3.3 Finalize a staff training plan

The finalization of the staff training plan should incorporate a detailed short and medium term plan to ensure that staff are skilled in the relevant *Edulog* modules. To the extent that primary routing responsibility will remain with the Transportation Officer and Transportation Planner, it will be necessary to establish targeted training routines on basic system use (e.g. key data search parameters; stop placement and movement; and data extraction) and more advanced system use (e.g. stop, run, and route optimization; data extraction and analysis; and continued cross training on map management).

5.3 Digital map and student database management

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

5.3.1 Observations

5.3.1.1 Digital map

HWSTS uses a single digital map for all planning activities. The map was originally established during the HWCDSB implementation of *Edulog* and has been revised as the two systems were being merged into a single application. Management of the underlying geocode had previously been the responsibility of one individual who had previously specialized in planning from each of the respective Boards. This proved to be an unworkable situation as it became increasingly difficult to ensure that changes were made in a systematic manner. Consequently, revisions to, and management of the street network has recently been assigned to a single planner within the organization. This assignment will clarify responsibility for establishment of new subdivisions or revisions to the street paths or address ranges. This reassignment of responsibility will be an important component of both short and long-term efforts to improve the accuracy of both the map and the routing solutions developed in *Edulog*.

5.3.1.2 Map accuracy

Address information within the map was reported as accurate, and a review of exception reports indicates that the predominance of errors were associated with student data entered at the school sites. However, recent efforts to increase the efficiency of the routing scheme indicated that efforts were necessary to improve the accuracy of underlying default values related particularly to road speeds. Additionally, there are efforts underway to ensure the accuracy of school, walk and hazard boundaries to ensure that eligibility criteria are properly assessed. A total of 154 students were identified as being eligible for service

due to boundary discrepancies. Interviews indicated that efforts to improve map accuracy would be part of the overall planning effort.

5.3.1.3 Default values

There is an array of default values that require consideration as part of a comprehensive map management program. Street addressing, road speeds, travel characteristics (including no travel roads, no left or right turns, no winter travel, etc), and default loading times are all characteristics that must be managed. HWSTS has not formally documented the requirements or expectations for management of the default values within the routing software, but responsibility for management has recently been clarified. However, as was mentioned previously, a significant effort is underway to review and revise road speed characteristics to ensure accuracy of run and route data provided to operators. Planners are also assessing load time values in conjunction with the road speed review to increase the accuracy of planned and actual run times. Formalization of the process for managing critical planning values and the continued assessment of existing values will be an important component of the continued efforts underway at the Consortium.

5.3.1.4 Student data management

Responsibility for student data accuracy resides with the schools as detailed in the responsibilities section of HWSTS' "New Student Transportation", "Changes to Student Data" and "Management of Data" procedure statements. Efforts to clarify for all stakeholders why the data must be complete and accurate are ongoing between the Consortium and the Member Boards. Clearly identifying responsibility for data accuracy is consistent with the expectations of the E&E Review process. One measure of data accuracy, returned letters due to improper addressing, demonstrates an improving trend due to increases in the accuracy of student data. However, addressing issues within *Edulog* have been identified due to the lack of structured data entry required in one of the student information systems. This effort will require continued coordination with the Member Board and may require intervention of Governance Committee members to ensure the issue is fully addressed.

Two primary activities require management of student data. The first is a daily operational requirement where additions, changes or deletions of particular students are necessary to update route information. HWSTS has established a daily electronic transfer of student information from each of the Member Board's student information systems. The HWDSB Transportation Officer and the HWCDSB Transportation Coordinator are responsible for obtaining the necessary student file from each of the respective Boards. A nightly batch updating process then transfers the data to routing software. The HWDSB Transportation Officer reviews the updates each morning to ensure the processes ran properly.

The second activity requiring complete and accurate student data is the annual planning cycle. Full copies of the student database are extracted from each Board in May. Prior to the extract each of the Member Boards has performed a "roll over" of the student data where students are promoted to the next grade and school where appropriate. HWSTS then uses this data set to develop efficiency scenarios for the following school year. Throughout the planning process the daily update process (i.e. the first primary activity) allows HWSTS to identify students who have a change in record, including those who may not have been promoted or may have been promoted out of the system but have actually remained in school. Protocols have been established that assign the HWDSB Transportation Officer and the HWCDSB Transportation Coordinator to review the daily lists in order to ensure proper assignment of stop locations.

5.3.1.5 Coding structures

The coding structures available within *Edulog* include student codes, run coding, route coding, stop coding, and map data. HWSTS has undertaken a significant effort to restructure the disparate coding structures used by the respective Boards and established a single, HWSTS devised structure. The intent of these changes is to both standardize the nomenclature and to establish a more meaningful structure. This began with changes to the student eligibility coding, run coding and route coding.

The purpose of the eligibility coding structure is to establish a framework to understand why a student is either eligible or ineligible for transportation. The eligibility coding structure within *Edulog* includes two primary fields: Eligibility and User Eligibility. The eligibility code is established automatically based on established policy criteria. The following table summarizes the eligibility code information in the student database provided:

Table 6: Eligibility Code Summary

Eligibility Code	Description	Count
0	Eligible	24,805
1	Eligible due to hazard	187
12	Outside of attendance area	11,487
13	Within walk distance of school	44,492
93	No attendance boundary	562

This coding structure allows for a high-level understanding of the demands on the Consortium. Most of the codes are easily understandable with the exception of code 93 – No attendance boundary. In order to clarify why particular students are transported, the manually established User Eligibility code provides increased detail regarding the rationale for transportation. The table overleaf summarizes why students are being transported using the combination of Eligibility and User Eligibility coding.

Table 8: Eligibility and User Eligibility Combinations

		0	1	12	13	93	Total
		Eligible	Eligible due to hazard	Outside of attendance area	Within walk distance of school	No attendance boundary	
0	Eligible	6,541	3	579	1,446	7	8,576
1	Hazard	11	1		9		21
12	Outside attendance area	352		1,814	565	17	2,748
13	Within Walk distance	995	4	768	8,386	1	10,154
14	HSR Passes	1,260		90	66	6	1,422
15	HSR Tickets	174		4	15	1	194
16	Senior Administration exception	5		102	26		133
17	Eligible/Not Riding	238	3	17	25	1	284
18	Empty Seat/Courtesy	3		110	59		172
21	FI Student Sibling	1		23			24
22	Hamilton Cab	29		136	27	40	232
23	Blue Line cab	1		1			2
24	Hamilton Cab Lone rider	2		27	6	4	39
25	Blue Line Cab Lone Rider			1			1
26	ESL HSR Pass			2			2
28	ESL Hamilton Cab			4			4
30	Gifted HSR pass	92		6	1		99
34	Grandfathered eligibility	3		63	15		81
35	Special needs sibling	25		5	25		55
36	Geographical	36		2	162		200
37	Program			36	2		38
38	Boundary discrepancy	1		4	72		77
39	Physical disability regular stream	28		21	57		106
40	Van lone rider	1		2		4	7
41	Out of district transported			2			2
42	Walk boundary transfers			2	190		192
91	Student address unmatched	130	1	80	112		323
92	Invalid school/grade/program combination	1		1	1		3
93	No attendance boundary	6	1	4	24	59	94
99	No Eligibility code	14,870	174	7,580	33,201	422	56,247
118	Not defined			1			1
Total		24,805	187	11,487	44,492	562	81,533

Using this structure it is possible to see that of the students eligible for service, nearly eight percent of students are eligible for circumstances that do not relate to their distance from school, including issues such as hazards, courtesy, grandfathering, and exceptions made by senior administrators, among others. It is further possible to identify that nearly 2,000 students are riding due to previous operational or policy related concerns, including grandfathered, Board directed, and boundary issue students. Actual reasons aside, overall this structure provides a useful mechanism to assess the rationale for service.

Of particular note is the potential discrepancy associated with courtesy or empty seat students. A total of 172 students are actually coded as courtesy or empty seat. However, an additional 1,446 students are identified as Within the Walking Distance of the school but are eligible. The lack of distinction or indication as to why this is the case is not apparent through the coding structure. HWSTS has identified specific scenarios including special needs students riding regular education buses, temporary transportation due to school closures or construction and boundary issues. Additionally, the timing of the review occurred as HWSTS was processing all Empty Seat/Courtesy applications. This may have resulted in the students being placed on runs in order to provide service without updating the code. Regardless of the specific reason for courtesy students, the coding structure as established does not provide clarity on why and how a student is being transported.

HWSTS has also recently revised its school coding structure in order to establish a single framework for use by the consolidated organization. The school coding structure will allow for identification of the school name. While there is no specific value that also identifies the Board with which the school is associated, this information is generally known by current staff. The experience of existing staff and current analytical expectations allow the school coding structure to adequately address the needs of HWSTS. However, plans to expand the analytical capabilities of the organization will require reconsideration of the usefulness of the current structure.

Bus stops are coded similar to schools using the school identifier and a sequential three digit number. In instances where a transfer bus stop is established, the letter T is included in the sequential number to indicate a transfer. There is significance in the school assignment portion of the coding, but limited additional information on the stop location can be identified through the current structure. As with the school coding structure, the current system does not have a significant impact on the functionality of the system, but it does limit the analytical usefulness of stop level data.

Bus runs are indentified using a combination of school code and a numerical sequence that indicates the morning or afternoon panel. For example, run 002.002 indicates that this bus services Crestwood school (code 002) and is a morning run (as indicated by the first zero after the decimal point). In instances where a bus run services a single school (44 percent of all runs) this coding structure proves to be adequate in its ability to simply communicate the activities of the bus. However, if students from multiple schools are picked up on the same bus run (14.5 percent of all runs), the current coding convention does not convey that information. For example, run 002.001 services both Crestwood and Woodward schools but the service to Woodward is not readily apparent. This is somewhat addressed through the run description field that allows both schools to be identified. Additionally, if two runs are connected together into a route that information is not conveyed through the run coding structure and can only be identified through the commonality of the route code. Finally, there is no differentiation at the run coding level between regular home-to-school runs and special needs runs.

Several of the concerns related to run coding are reconciled in the route coding that has recently been established. HWSTS has established a structure that uses a four digit code to identify the type of vehicle and route. The table below provides the structure.

Table 7: Route coding summary

Range	Service Description
1000-1999	Special Needs All bus routes in this range are school-purpose mini-vans
2000-2999	Special Needs All bus routes in this range are mini-buses
3000-3999	Special Needs All bus routes in this range are wheelchair-accessible mini-buses
4000-4999	Regular Needs All bus routes in this range are school-purpose mini-vans
5000-5999	Regular Needs All bus routes in this range are mini-buses
6000-6999	Regular Needs All bus routes in this range are full size school buses

Consequently, the combination of run and route coding does provide an indication of unit type and run type (i.e., regular home-to-school or special needs). The transition to this route coding structure is complete and represents an excellent example of how the coding schema can provide a simple and meaningful way to convey a significant amount of information regarding a bus route.

5.3.2 Best Practices

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

Route coding structure

The implementation of a highly meaningful route coding structure identifies both the purpose and methods of providing services. The codes are brief and targeted, which promotes the accurate assignment of codes while also offering an appropriate level of detail to support the analytical and reporting requirements. This produces a highly useful database of information that will support future analyses focused on the continuous improvement of effectiveness and efficiency.

5.3.3 Recommendations

5.3.3.1 Continue to review default values to enhance map accuracy

Current efforts by HWSTS to enhance map accuracy through updating road speed values and reconcile differences between the two Boards must continue to be a focus. HWSTS has recognized the importance of this requirement and designated it as part of the planning process for the 2011 school year. This effort should be supported an enhanced.

5.3.3.2 Enhance other coding structures

HWSTS has already undertaken a revision to the run coding structure that will standardize the approach to identifying schools and run panels. As part of this effort, consideration should be given to enhancing the usefulness of the structure using the existing format and data types. Identification of analytical concerns such as run type (e.g., combination, tiered, integrated, etc) for stop locations and run types would provide useful information when assessing efficiency opportunities. Additionally, the user eligibility coding scheme should be assessed to ensure that overlapping or inconsistent coding (such as that associated with courtesy students in Section 5.3.1.5) is minimized or eliminated. Finally, consideration could be given to expanding to the school coding structure to incorporate additional informational elements such as Board assignment, geographic type (e.g., rural, urban), and school type (e.g., elementary, secondary, intermediate).

5.4 System reporting

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

5.4.1 Observations

5.4.1.1 Reporting and data analysis

The primary reporting mechanism used by HWSTS is *TRACS*. *TRACS* provides an opportunity for schools, operators, and HWSTS to view and extract a variety of different reports that are targeted at their particular areas of concern. In addition, a selection of custom reports developed within *Edulog* provides data for the annual planning process and daily operations management. The primary reports used by operators and schools are lists related to student assignments and run and route manifests. The distribution of this information using web-based media like *TRACS* allows HWSTS to provide information without having the responsibility for production and distribution. This approach is consistent with the expectations of the E&E Review process.

HWSTS has access to a different array of reports from *TRACS* that facilitates measurement and analysis of system performance. Statistics related to vehicle runs and routes assigned to operators; students transported by carrier; per student and mile costs; and efficiency measures such as capacity utilization and ride time. Data captured from operators regarding incidents or lateness and an “Issue Tracker” module used during school start to record calls and requests are also available for review and download. The data is made available in both a printed format and a format that is downloadable to third party productivity tools to allow for additional analysis.

No formal reporting schedule is established, but the data is regularly used by the General Manager to calculate and assess selected performance indicators. In addition, several staff members use these reports to perform ad hoc analyses or investigations of particular concerns that occur in daily operations or throughout the planning process. As continued efforts are made to improve the efficiency of operations, additional use of the reporting modules will be necessary.

TRACS is also used to manage the invoicing process by HWSTS. The reporting module allows operators to review and revise invoices and submit them electronically to HWSTS. Additional discussion of this process is included in Section 3.5.1 of this report.

5.4.2 Recommendations

5.4.2.1 Data analysis and reporting

HWSTS has begun to establish a culture of data analysis by expanding its data capture efforts to areas beyond just the transportation software. Expanded use of the call centre data, data on school and operator access to *TRACS*, and financial data will allow for continued improvements in both the understanding of transportation costs and the identification of efficiency opportunities. In order to fully realize these benefits it will be necessary to more fully assess the data needs and analytical expectations of each position in the organization and establish a reporting scheme that recognizes the timing and type of data required. Examples of the types of reports could include:

- Special education seating capacity available by program site (in order to encourage the sharing of trips rather than the use of additional taxis for special needs students, where possible);
- A summary of map updates performed over a designated time frame for the route planners and General Manager that could be used to identify more systemic problems associated with default values or other map characteristics; and
- An enhanced performance report for the General Manager and other key staff that provides summary statistics and detailed data on issues like capacity utilization, route pairing, average run times, and lateness.

The goal of this structure is to maximize the use and value of the data retained in *Edulog* and *TRACS,* and to promote and reinforce the expectation of continued analysis and improvement that has been established by Consortium management.

5.5 Regular and special needs transportation planning and routing

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

5.5.1 Observations

5.5.1.1 Bus route management

The organizational structure at HWSTS has been recently revised to establish two functional groups of employees. The first group of employees are front line staff responsible for addressing daily questions related to issues of stop locations, run questions, special needs assignments, etc. There are no formal guidelines separating responsibility for answering questions but, in practice, staff generally respond to issues related to the Boards from which they came. These individuals have the limited authority to make changes to bus stop assignments and student data, but any substantive changes to runs are passed to route planners.

The change to the organizational structure was designed to allow route planners to focus almost entirely on managing and assessing the routing scheme. The structure has established two primary route planners: the Transportation Officer from HWDSB and Transportation Coordinator from HWCDSB. Key responsibilities include evaluating stop locations and run design, addressing issues of route times, and evaluating overall effectiveness and efficiency. The responsibility for run design is almost completely separated by Board and results in runs that are overwhelmingly Board-centric. The route planners also play a critical role in the annual planning process working with the General Manager and the Coordinator of Transportation. In addition to their planning responsibilities, each route planner has other administrative responsibilities related to map maintenance and student data management. As is detailed in Section 5.3, the Transportation Coordinator oversees the management of daily student uploads and the Transportation Officer manages the underlying geocode and map values.

The functional organization of HWSTS is appropriate to respond to the daily operational demands of the Member Boards while also providing the capacity to strategically assess routing options. The primary concern with the structure is the continued Board-centric nature of the assigned responsibilities. Of particular concern is the inability of the Coordinator of Transportation to oversee all employees rather than just employees from the Board from which he came. Interviews with all staff indicated that there is a desire to look at the system as a single entity and reduce the Board-specific nature of the current process. In addition, it was clear from on site observations that the employees already collaborate well but do not believe they have the authority or depth of understanding to make revisions to runs that service schools in the Board they did not come from.

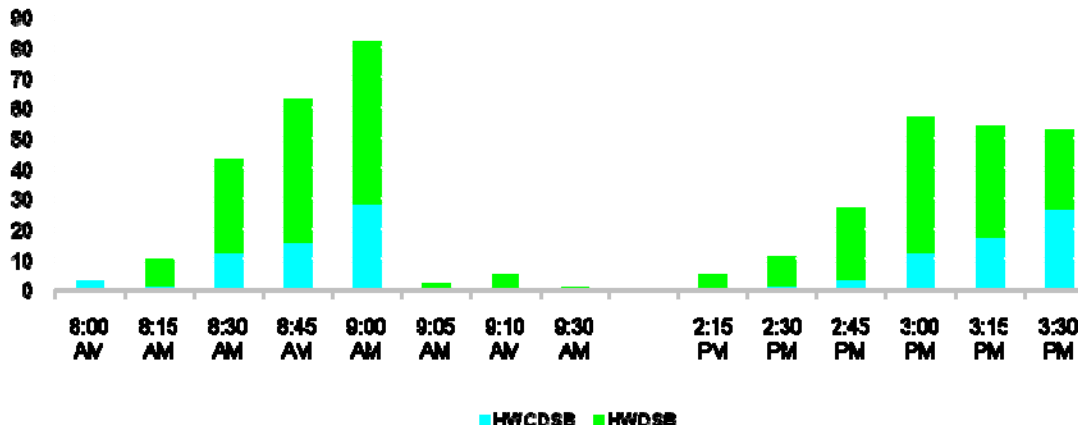
5.5.1.2 Analysis of system effectiveness[9]

Using data from *Edulog* provided during the site visit, a series of analysis were conducted to assess system performance. The analyses were designed to evaluate how policy and procedure infrastructure established by HWSTS and its Member Boards impacts the effectiveness and efficiency of the routing scheme. The goal of each Consortium is to provide as much service as required using the fewest number of resources possible. In order to accomplish this, it is necessary for the planners to consider two critical factors: available time and available resources. All of the routing strategies used reflect some effort to balance these two concerns.

Given the significant influence of time, a primary concern is the start and end times of the schools and locations that must be serviced. Routing techniques such as shuttles and tiered runs are dependent on having sufficient time to collect an adequate number of students. As is clear from the chart below, there are significant constraints on the re-use of assets due to bell times.

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

Figure 7: Bell time distribution



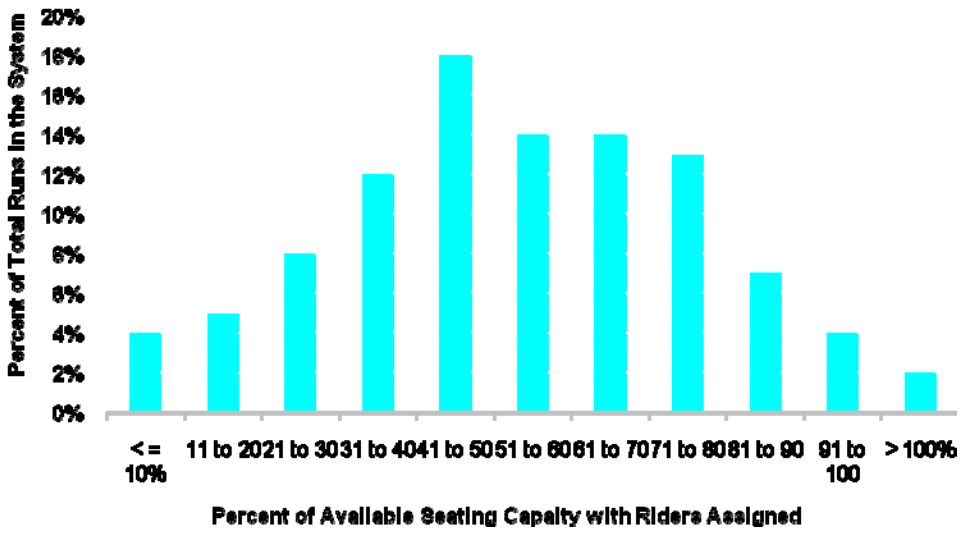
The issue is particularly acute in the morning, with almost 70 percent of the schools starting between 8:45 and 9:00. The afternoon, while less dramatic, shows 53 percent of the schools dismissing between 3:00 and 3:15 and 80 percent of the schools dismissing between 3:00 and 3:30. HWSTS is able to manage these tight bell times using the flexibility provided within its arrival and departure window procedure that allows for drop-offs and pickups up to 45 minutes before the morning bell and after the afternoon bell for HWDSB secondary schools and 15 minute allowances at the elementary level. HWCDSB schools allow a 20 minute window morning and afternoon.

The influence of the bell times can be further seen in how many times each bus is used throughout the day. Of the 459 home-to-school routes, 200 (44 percent) serve only one run in the morning and one in the afternoon. Of these 200 routes that have only single runs, 75 morning runs and 79 afternoon runs are carrying students from multiple schools on the same bus. This results in 125 morning and 121 afternoon buses that service one school morning and afternoon. This data demonstrates that if greater efficiencies are to be achieved it will be necessary for the Boards to consider changes to school bell times.

An assessment of the 259 routes that serve multiple schools, 117 (45 percent) provide services to both Boards. None of the runs in the system (more than 1,500) indicate that students from both Boards are riding on the same bus. Most of the service area is relatively compact in nature, leaving opportunities for sharing across the Consortium in a manner consistent with the goals of the policy statements of both Boards. However, the separate planning practices and the highly constrained bell schedule have limited run sharing opportunities. Coupled with the capacity indicators identified below, it is clear that bell time considerations will be a major component of future efficiency efforts.

Given the constraints related to time, and that nearly 28 percent of all buses are servicing a single school in the morning or afternoon, the use of available seating capacity becomes a critical factor. Overall capacity use system-wide is 58 percent, with a range of 3 percent to 115 percent. It is important to note that the capacity use calculations presented throughout this section is based on simple capacity use. This calculation compares the number of individual students riding the bus to the number of seats available. HWSTS uses loading factors in its planning efforts that effectively reduce the available capacity of the bus to account for students of different grade levels riding together. For example, the loading factors utilized for a 72-passenger bus during the 2010-11 school year planning allowed no more than 66 kindergarten through grade 6 students to be assigned to a bus; no more than 54 grades 7 through 12 students to be assigned to the bus; and no more than 60 kindergarten through grade 12 students to be assigned to a bus. While these values are part of the overall planning process, at the time of the review these loading factors were not stored in the routing software and consequently were not available to be included as part of the analysis. The following chart summarizes the use of seating capacity in 10 percent increments.

Figure 8: Capacity Use Chart - System-wide



Further analysis indicates that special needs runs are marginally reducing overall capacity rates. The table below shows capacity use rates using the route coding structure established by HWSTS.

Table 8: Capacity Use by Route Type

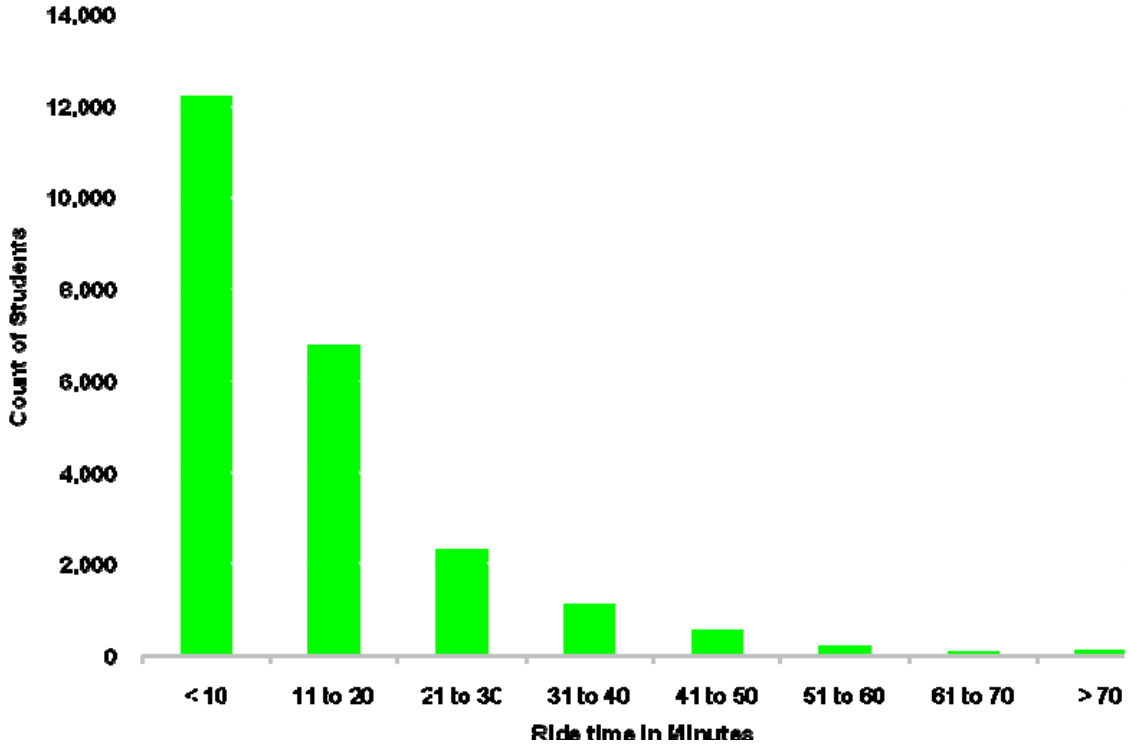
Route Type	Capacity Use
Regular Education Mini-Bus	64%
Regular Education Large Bus	60%
Special Education Van	60%
Special Education Wheelchair accessible Mini-bus	43%
Special Education Mini Bus	36%

While 60 percent capacity use can generally be considered adequate (but not outstanding), the significant presence of single runs requires further analysis of the capacity use of regular education runs in particular. This group was chosen for analysis because it does not have the volatility inherent in special needs runs. There are 85 regular education runs in the morning and afternoon that service a single school. These runs have an overall capacity use of just 47 percent. This result implies that more than one of every two available seats is empty. Given the long run times for these runs, it is likely that the schools serviced are more rural, but that is not clear from any of the coding structures. Additionally, the use of the loading factors described above would impact the actual number of available seats depending on the mix of students on any given run. HWSTS planning efforts should focus on attempting to minimize the number of single run units because for each of these single runs that could be paired with any other run it could be possible to eliminate the need for a bus from the fleet.

Maximizing the combination of capacity utilization and asset utilization (the number of runs performed each day) dictates overall system efficiency. The data analysis indicates an opportunity to make additional improvements to efficiency through bell time changes and increasing capacity utilization. Realizing these efficiency benefits must be considered relative to the impacts on service effectiveness. The primary indicator considered is student ride times.

Stop and run data indicates that average student ride time is 22 minutes with a median of 17 minutes. This is well within established planning guidelines mentioned in Section 4.2.1.6. The following chart shows the distribution of ride times in 10 minute increments for afternoon runs.

Figure 9: Student ride time distribution in the afternoon panel



The relatively short ride times for most students and the capacity use considerations identified earlier would be highly indicative of a system where bell time changes will increase efficiency. Given the short runs, the ability to change bells to increase the average number of runs completed by a bus per day would reduce the total count of buses required with only limited impacts to the overall quality of service provided to students.

5.5.2 Recommendations

5.5.2.1 Conduct an analysis of bell time changes and the impact on efficiency

All of the data provided during the review indicates that a significant opportunity for increased efficiency exists through greater coordination of bell times. This coordination would allow for increased capacity use and asset use through greater integration of the systems at the run and route level. HWSTS should conduct a comprehensive review of existing bell times that considers both the school times and the routing strategies used to transport students. This effort will require a highly integrated approach within HWSTS and among the Boards to establish a schedule that best balances efficiency gains and educational requirements. Additionally, this effort should be coordinated with the previous recommendation to more clearly articulate the timelines and expectations of the Bell Time Spread procedure.

5.6 Results of E&E Review

Routing and technology has been rated as **Moderate-Low**. Recent efforts to create more fully integrated planning between the Boards and to increase the accuracy of student and map data, particularly the efforts associated with providing daily student data downloads, have yielded positive results. These efforts contributed to HWSTS' ability to better integrate bus routes between Boards and reduced the number of assets required. Additionally, the administrative and management structures established for managing data and distribution of the data through web-based media are consistent with the expectations of the E&E Review.

The recommendations presented throughout this section indicate that opportunities exist to further increase the efficiency of operations. Continued efforts to solidify the revised administrative structure that centralizes routing responsibility coupled with the intricacies and complexities associated with revising the routing scheme will be neither simple nor quick. The major effort will be associated with the comprehensive analysis of bell time options and routing strategies. Assessing additional opportunities to integrate bus runs, similar to the process started by HWSTS, will be critical given presence of single runs

with limited capacity use in the system. Efforts related to data distribution and coding structures should also be incorporated as part of an integrated approach to realizing efficiency improvements. Finally, the continued evolution of route planning staff from their current Board-centric assignments to more universal planning responsibilities will be an important aspect of improving organizational efficiency.

6 Contracts

6.1 Introduction

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

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

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

Contracts – E&E Rating:	Moderate-Low

6.2 Contract Structure

An effective contract[10] establishes a clear point of reference that defines the roles, requirements, and expectations of each party involved and details the compensation for providing the designated service. Effective contracts also provide penalties for failure to meet established service parameters and may provide incentives for exceeding service requirements. Contract analysis includes a review of the clauses contained in the contract to ensure that the terms are clearly articulated, and a review of the fee structure is conducted to enable comparison of its components to best practice.

6.2.1 Observations

6.2.1.1 Bus operator contract clauses

The Consortium has standardized, executed contracts with all of its bus operators. The current contract was executed in September, 2010 and is valid through August, 2012. The contract includes a clause that extends the contract at the sole discretion of the Consortium subject to rate adjustments. Noteworthy clauses in the contract outline, among other things:

- Training requirements for drivers: The Consortium mandates that operators provide one annual safety training meeting for every driver and, upon request, provide the Consortium with an outline of the agenda for their training programs. Operators are not directly compensated for providing this training to their drivers. A schedule to the agreement requires operators to provide First Aid, CPR and EpiPen training, although operators are not required to provide EpiPen training prior to them beginning their duties;
- Details related to driver, vehicle and operator performance, communication, and operational expectations;

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

- Compliance requirements with respect to the contract, Consortium policies, and provincial and federal regulations;
- Vehicle age requirements. The contract mandates a maximum vehicle age of 11 years and an average fleet age of 8 years for 72-passenger school buses;
- Fee structures and payment schedules, including information on adjustments due to inclement weather and fuel cost; and
- Other terms related to insurance coverage requirements; dispute resolution, termination and confidentiality.

The Consortium reserves the right to re-allocate routes among operators. Discussions with Consortium management indicated that route reallocations and reductions for this year were based on operator performance in the previous year using measures that included incident and late bus reports. Reallocations in future years will be based on performance as determined by a comprehensive operator performance measurement process that is yet to be developed.

Safety training for drivers is supplemented by additional in-house driver training provided by the Consortium. The Consortium provided three such driver training sessions in the last year. Topics included Consortium policies, the management of students with special needs, and safety training.

The in-house driver training sessions are also used as a platform to encourage / promote driver recognition within the Member Boards. Such recognition includes annual awards for drivers who have provided service to the Member Boards for five years, and for drivers that have provided outstanding service. Awards for outstanding service are provided through a structured nomination process that includes school administrators. Both groups are publically recognized at an annual driver in-service event.

6.2.1.2 Bus operator compensation

The rate schedule included in the 2010-2012 contracts refers to rates that were to be provided in the previous years' contract, i.e. there is currently no 2010-2012 rate schedule and 2009-2010 rates are currently being paid to the operators. Consortium management indicated that the rationale underlying these back-dated rate schedules is driven by the need for Member Boards to have a clear understanding of their costs and revised estimates in the current year before committing to rate increases. Rates for the 2009-2010 year were finalized in the spring with retroactive payments and fuel de-escalator amounts being issued to operators over the summer months.

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

- a fixed fee per vehicle, per day, up to a minimum number of kilometers travelled; plus
- A per kilometre rate for mileage travelled above the minimum; plus
- Adjustments for fuel escalators, late runs, shuttles, early dismissals, and special needs transportation.

Inclement weather days are paid using a separate, lower fixed rate that is delineated by vehicle. There is no variable component to the inclement weather rate. Discussions with Consortium management indicated that the use of a lower fixed rate for inclement weather has been a longstanding practice at the Member Boards and is intended to cover capital costs, administrative expenses and driver wages.

6.2.1.3 Taxi operator contract clauses

The Consortium utilizes taxi operators primarily to transport special education students. The Consortium has executed a standard contract with its taxi operator. This contract was executed in September, 2010 and is valid for two years. Noteworthy clauses included in the taxi operator contract include, among other things:

- Services to be provided by the taxi operators;
- Obligations of the Consortium with respect to routing and student information;
- Driver training requirements: operators are required to provide drivers with a safety program that includes, at minimum, training in the use of First Aid and EpiPen, among other things;
- Clauses related to driver, vehicle and operator performance;

- Clauses related to compliance with appropriate legislation and Consortium policies; and
- Other terms related to insurance coverage requirements, termination and confidentiality.

The taxi operator contract does not currently include a clause related to dispute resolution.

The contract requires operators to conduct driver background reviews. While the Consortium reserves the right to collect this information under the contract, Consortium management indicated that such information is verified as part of the implementation of municipal taxi regulations and is not usually collected by the Consortium. Safety training requirements imposed on taxi operators are self administered and also addressed through the Consortium's in-house safety training programs.

Taxi operators are compensated based on a flat rate per rider with a premium for designated "lone riders".

6.2.1.4 Parent Drivers

There are no parent drivers.

6.2.1.5 Public transit operator contract clauses

The Consortium provides public transit passes primarily to students enlisted in particular programs offered at the HWDSB. A standard contract between the Consortium and the municipal transit operator is currently in place pending sign-off by the Mayor of the City of Hamilton. The contract is valid until August, 2011. Noteworthy clauses included in the public transit operator contract include, among other things:

- The scope of services provided, including restrictions on pass eligibility and transferability;
- Procedural items related to the passes,
- Rate information: rates charged to the Consortium vary based on the number of students being transported. In addition, the Consortium is charged a fee by the transit operator for passes distributed. The contract also allows students to upgrade their passes at a discount;
- Administrative items such as invoicing and inquiry management,
- Adjustments for operator service interruptions; and
- Other terms related to termination, renewal and severability and confidentiality.

6.2.2 Best Practices

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

Insurance

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

6.2.3 Recommendations

6.2.3.1 Include additional clauses in the bus operator contract

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

6.2.3.2 Include a dispute resolution clause in the taxi operator contract

It is recommended that a clause related to dispute resolution be included in the taxi operator contract in order to ensure that there is a formal system by which disputes can be settled without the need for a reduction in service levels or litigation. This process should be neutral and transparent.

6.2.3.3 Execute the contract with transit operators

While it is recognized that the current draft contract with transit operators is complete with respect to its monetary and non-monetary terms and offers an exemplary template that can be used by other Consortia

across the province, it is critical that that Consortium make all efforts necessary in order to ensure that this contract is executed without delay in order to ensure that its terms are enforceable and can be referred to in the event of a dispute.

6.3 Goods and Services Procurement

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

6.3.1 Observations

6.3.1.1 Operator procurement

The process used by the Consortium to negotiate the operator contract is not currently documented in a governance approved procedure related to operator service procurement. The Consortium's annual negotiation process begins with the announcement of the Ministry's revised estimates. Upon receiving these allocations, the General Manager conducts scenario analyses of the financial implications on the Member Boards of various rate increases and adjustments. These findings are then presented to the Administrative Team, who provide input and make recommendations on the terms to be targeted by the Consortium. These recommendations are then forwarded to the Governance Committee, which provides the Consortium with a mandate outlining the conditions under which the current year's rates are to be negotiated. Negotiations are tentatively scheduled to occur in January or February. The Consortium is represented during negotiations by the General Manager and two designates from the Administration Team (one from each Member Board).

Non-monetary aspects (e.g. operator information submission requirements, safety training requirements and procedural elements, among other things) of the operator contracts were signed-off prior to the start of the school year through the latest round of negotiations; however, as outlined in the above section on bus operator compensation, negotiations with respect to the 2010-2011 and 2011-2012 rates have not yet been completed since the rate schedule being used to compensate operators in the 2010-2011 year is the rate schedule that would have been used to compensate operators in the 2009-2010 school year. As such, the 2010-2012 bus operator contract rate negotiations have not yet been completed.

The Consortium does not currently have a documented, governance approved procurement calendar that sets formal deadlines for all procurement/negotiations.

6.3.1.2 Special needs transportation

Discussions with Consortium management indicated that Special Needs Transportation is procured through the same process used to procure regular operator services.

6.3.2 Recommendations

6.3.2.1 Develop and communicate a procurement calendar

The Consortium should develop and document a procurement calendar and format and communicate key dates, milestones and expectations to operators and members of the Consortium governance. A calendar of key dates, milestones and responsibilities will help to ensure that the Consortium and operators can reach agreement on next year's contract prior the start of the school year.

6.3.2.2 Align the timing of the bus operator contract and rate schedule

The rate schedule included in the Consortium's contracts refers to rates that were to be provided in the previous years' contract, with adjustments such as fuel escalation amounts accounted for during the summer months. As such, negotiations for the current year's operator contract are not yet complete. While it is recognized that the current year's contract clearly states that rates to be paid for this year are based on last year's rates until such time as current years negotiations are complete, in order to increase transparency and ease the contract's implementation, the Consortium should consider modifying its rate negotiation process (until such time as a competitive process can be implemented) to ensure that the timing of the rate schedules and contracts is aligned. An aligned process will also help the Operators as they will know the value of their contracts prior to the school year and can as such make more informed investment decisions.

6.3.2.3 Develop plans for the implementation of competitive procurement for bus operator services

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

A competitive process can be used with certain safeguards in place to protect the standards of service. The Consortium should continue to enforce limits placed on the amount of business any one operator can hold to avoid a monopoly situation. Additionally, in evaluating the successful proponents, cost should not be the overriding factor as that will encourage low cost proponents to enter the market while not necessarily ensuring that the same or improved levels of service are being provided. Local market conditions should be considered at all points in the development and evaluation of any service proposal. For example, local operators can be encouraged to participate in this process by placing a value on having local experience as part of the evaluation criteria; however, this specific criterion for local experience should also not be an overriding factor in the proposal evaluation process.

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

6.4 Contract Management

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

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

6.4.1 Observations

The basis for the implementation of contract management processes at the Consortium is included in the Consortium Agreement, which assigns responsibility for the administration of operator contracts to the Consortium. In addition, both the bus and taxi operator contract reserve the Consortium's right to collect information and conduct audits of the operator's on-the-road performance. However, the Consortium does not currently have a documented, governance approved policy that outlines the timing, rationale, methodologies, documentation and follow up requirements associated with its contract management practices.

6.4.1.1 Bus operator administrative and legal compliance

Discussions with Consortium management indicated that, while the Consortium reserves the right to collect the compliance and safety documentation required in the contract, in practice, the Consortium currently only verifies fleet vehicle age information and the sufficiency of the operator's insurance coverage.

6.4.1.2 Facility, maintenance, safety and service performance monitoring

The Consortium does not currently have a formal, documented process in place to ensure that the on-the-road performance of operators is in line with expectations and requirements outlined in the contracts. Discussions with Consortium management indicated that, in particular, service performance monitoring activities (such as route audits) are not currently being performed.

6.4.1.3 Performance monitoring

While the Consortium does not have a formal contract management process in place, it has used service complaints and negative input received from parents and schools to assess operator performance in the past. The Consortium has leveraged the TRACS system as a tool for tracking late bus service issues with bus operators. Information pertaining to late service is keyed directly into the system by bus operators and the system then issues a notification to Consortium staff and bus operator management. TRACS is then used to collect and report on this data through the performance monitoring process. Through the use of these tools, and where necessary, the Consortium has reduced routes from particular operators as a result of non-compliance.

6.4.2 Recommendations

6.4.2.1 Implement a comprehensive operator administrative and legal compliance monitoring process

It is acknowledged that the Consortium checks fleet age and insurance however, it is encouraged the Consortium develop and implement a documented process by which it can ensure that all the information, facility and vehicle requirements outlined in the operator contracts are verified. Such efforts to ensure operator compliance will help the Consortium to measure whether the operators are complying with stated contract clauses and, ultimately, if they are providing safe and reliable service.

6.4.2.2 Implement a random facility, maintenance, safety and service performance monitoring process

An operator auditing system should be implemented by the Consortium to monitor the performance of its operators. One option available to the Consortium could involve Consortium staff visiting operator facilities and riding on selected buses to monitor compliance with contractual requirements such as adherence to the stated bus route, authorized pickup or drop off points, and proper use of the student list.

Operator audits should be conducted on a random but regular basis and should be supported with appropriate documentation summarizing the results. Operator audits should also be supported by an appropriate policy or procedural framework that outlines the procedure to be used, the frequency of monitoring, and the follow-up activities required of the Consortium. 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 that serve the Consortium. The results of these audits should be tracked over time by the Consortium and communicated back to the operators to assist them in managing their drivers, facilities and improving overall service quality. Albeit limited, the Consortium is commended for using the performance information it has available in communicating performance feedback to operators.

6.5 Results of E&E Review

The process by which the Consortium negotiates, structures, and manages its contracts for transportation services has been assessed as **Moderate-Low**. Significant changes to the Consortium's procurement and contract management processes are recommended, including the development of an implementation plan for competitive procurement and the alignment of the timing of the bus operator contract and the rate schedule. The implementation of a comprehensive, documented, governance approved process for ensuring compliance with the administrative, vehicle and facility maintenance, and on-the-road performance expectations outlined in the contracts is also recommended. While the Consortium has generally complete bus, taxi and public transit operator contracts, minor modifications to these documents are also required.

7 Funding Adjustment

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

The Ministry's funding formula is as follows:

Table 7: Funding Adjustment Formula

Overall Rating	Effect on deficit Board[11]	Effect on surplus Board[11]
High	Reduce the gap by 100% (i.e. eliminate the gap)	No in-year funding impact; out-year changes are to be determined
Moderate-High	Reduce the gap by 90%	Same as above
Moderate	Reduce the gap by 60%	Same as above
Moderate-Low	Reduce the gap by 0%	Same as above
Low	Reduce the gap by 0%	Same as above

Based on the Ministry's funding formula, in conjunction with our E&E assessment of the Consortium, it is anticipated that the following funding adjustments will be made for each Board[12]:

Hamilton-Wentworth District School Board

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

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

[12] 2009-2010 allocations and expenditures based on Ministry data – Revised Estimates for 2009-2010

Hamilton-Wentworth Catholic District School Board

Item	
2009-2010 Transportation Surplus (Deficit)[13]	$TBD
% of Surplus (Deficit) attributed to the Consortium	100%
Revised amount to be assessed under the Consortium	$TBD
E&E Rating	Moderate-Low
Funding Adjustment based on Ministry's Funding Adjustment Formula	0%
2010-2011 Total Funding adjustment	TBD

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

[13] 2009-2010 allocations and expenditures based on Ministry data – Revised Estimates for 2009-2010

Appendix 1: Glossary of Terms

Act	Education Act
Assessment Guide	The guide prepared by the E&E Review Team and the Ministry of Education which will be used as the basis for determining the overall effectiveness and efficiency of each Consortium
Common Practice	Refers to a set of planning parameters that have been reported by Ontario school boards as the most commonly adopted planning policies and practices. These are used as references in the assessment of the relative level of service and efficiency.
Consortium, the; or HWSTS	Hamilton-Wentworth Student Transportation Services
Deloitte	Deloitte & Touche LLP (Canada)
Driver	Refers to bus Drivers, see also operators
E&E	Effectiveness and Efficiency
E&E Review Team	As defined in Section 1.1.5
E&E Reviews	As defined in Section 1.1.4
Effective	Having an intended or expected effect; the ability to deliver intended service
Efficient	Performing or functioning in the best possible manner with the least waste of time and effort; the ability to achieve cost savings without compromising safety
Evaluation Framework	The document, titled “Evaluation Framework for Hamilton-Wentworth Student Transportation Services” which supports the E&E Review Team’s Assessment; this document is not a public document
Funding Adjustment Formula	As described in Section 1.3.5
HR	Human Resources
HWDSB	Hamilton-Wentworth District School Board
HWCDSB	Hamilton-Wentworth Catholic District School Board
IT	Information Technology
JK/SK	Junior Kindergarten/Senior Kindergarten
KPI	Key Performance Indicators
Management Consultants	As defined in Section 1.1.5
Memo	Memorandum 2006: SB13, dated July 11 issued by the Ministry
Ministry	The Ministry of Education of Ontario
MPS	Management Partnership Services Inc., the routing consultant, as defined in Section 1.1.5

MTO	The Ministry of Transportation of Ontario
operators	Refers to companies that operate school buses, boats or taxis and the individuals who run those companies. In some instances, an operator may also be a Driver.
Overall Rating	As Defined in Section 3.2 of the Evaluation Framework
Partner Boards, Member Boards, School Boards or Boards	The School Boards that have participated as full partners or members in the Consortium; the HWDSB and HWCDSB
Rating	The E&E Assessment score on a scale of High to Low, see Section 1.3.4
Report	The report prepared by the E&E Review Team for each Consortium that has undergone an E&E Review (i.e. this document)
Separate Legal Entity	Incorporation
Type A school bus	A smaller asset, typically with a 20 passenger capacity, oftentimes used to transport special needs students

Appendix 2: Financial Review – by School Board

Hamilton-Wentworth District School Board

Item	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010[14]
Allocation[15]	$12,173,584	$12,395,926	$13,401,057	$13,824,493	$13,866,815
Expenditure[16]	$12,069,325	$12,683,233	$13,486,799	$13,891,393	$13,882,874
Transportation Surplus (Deficit)	$104,259	$(287,307)	$(85,742)	$(66,900)	$(16,059)
Total Expenditures paid to the Consortium	$12,069,325	$12,683,233	$13,486,799	$13,891,393	$13,882,874
As % of total Expenditures of Board	100%	100%	100%	100%	100%

Hamilton-Wentworth Catholic District School Board

Item	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010
Allocation	$6,138,935	$6,245,620	$6,986,523	$7,213,657	$7,175,116
Expenditure	$6,641,742	$6,525,938	$6,545,493	$6,925,230	$7,174,007
Transportation Surplus (Deficit)	$(502,807)	$(280,318)	$441,030	$288,427	$1,109
Total Expenditures paid to the Consortium	$6,641,742	$6,525,938	$6,545,493	$6,925,230	$7,174,007
As % of total Expenditures of Board	100%	100%	100%	100%	100%

[14] 2009-2010 allocations and expenditures based on Ministry data – Revised Estimates for 2009-2010

[15] Allocation based on Ministry data – includes all grant allocations for transportation (Section 9 00008C, Section 13 00006C, Section 13 00012C)

[16] Expenditure based on Ministry data - taken from Data Form D:730C (Adjusted expenditures for compliance) - 212C (Other Revenues) + Schedule 10:620C (Transportation Amortization)

Appendix 3: Document List

1	C10.doc
2	C1a1.pdf
3	C1a2.pdf
4	C1a3.pdf
5	C1b1.pdf
6	C1b2.pdf
7	C1b3.pdf
8	C1c.doc
9	C2.doc
10	C3a1.pdf
11	C3b1.pdf
12	C3c1.pdf
13	C41.pdf
14	C42.pdf
15	C43.pdf
16	C44.pdf
17	C51.pdf
18	C6a.doc
19	C6b.doc
20	C7a.doc
21	C7b1.pdf
22	C7c.doc
23	C8a.doc
24	C8b.doc
25	C8c.doc
26	C9a.doc
27	C9b.doc
28	C9c.doc
29	C9d.doc
30	C9e.doc
31	C9f1.pdf
32	C9g1.pdf
33	C9g2.pdf
34	CM10a.doc
35	CM10b.doc

36 CM10c.doc
37 CM11a.doc
38 CM11b1.pdf
39 CM11b2.pdf
40 CM11c.doc
41 CM11dc.doc
42 CM12a1.pdf
43 CM12a2.pdf
44 CM12b.doc
45 CM12c.doc
46 CM12d.doc
47 CM12e1.pdf
48 CM12f1.pdf
49 CM13a1.pdf
50 CM13b1.pdf
51 CM13b2.pdf
52 CM13b3.pdf
53 CM13b4.pdf
54 CM13c1.pdf
55 CM13d.doc
56 CM13e.doc
57 CM14a1.doc
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62 CM14c2.pdf
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67 CM14f3.pdf
68 CM14f4.pdf
69 CM14f5.pdf
70 CM1a1.pdf
71 CM1a2.pdf
72 CM1a3.pdf
73 Cm1b.doc

74 CM1c.doc

75 CM2a1.pdf

76 CM2b1.pdf

77 CM2b2.pdf

78 CM2c.doc

79 CM3a1.pdf

80 CM3b1.pdf

81 CM4.doc

82 CM5.doc

83 CM61.pdf

84 CM62.pdf

85 CM7a1.pdf

86 CM7a2.pdf

87 CM7a3.pdf

88 CM7b.doc

89 CM8.doc

90 CM9a.doc

91 CM9b1.pdf

92 CM9b2.pdf

93 CM9b3.pdf

94 CM9b4.pdf

95 CM9c1.pdf

96 CM9d.doc

97 CM9e.doc

98 CM9f1.pdf

99 PP11.pdf

100 PP110.pdf

101 PP111.doc

102 PP12.pdf

103 PP13.pdf

104 PP14.pdf

105 PP15.pdf

106 PP16.pdf

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122 PP56.pdf
123 PP6.doc
124 PP71.pdf
125 RT11.pdf
126 RT12.pdf
127 RT13.pdf
128 RT14.pdf
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131 RT17.doc
132 RT21.pdf
133 RT31.pdf
134 RT32.pdf
135 RT33.pdf
136 RT34.pdf
137 RT35.pdf
138 RT4.doc
139 RT51.pdf
140 RT52.pdf
141 RT6.doc

Appendix 4: Common Practices

		Elementary		Secondary
		JK/SK	Gr. 1 – 8	GR. 9 - 12
Home to School Distance				
Common Practice		0.8	1.2	3.2
Policy -	HWDSB	1.0	1.6 Gr 1-6 2.4 Gr 6 to 8	3.2
Policy -	HWCDSB	1.2	1.6	1.6
Home to Bus Stop Distance				
Common Practice		0.5	0.8	0.8
Policy -	HWDSB	0.4	0.6	1.6
Policy -	HWCDSB	0.8	0.8	0.8
Arrival Window				
Common Practice		18	18	25
Policy -	HWDSB	15	15	45
Policy -	HWCDSB	20	20	20
Departure Window				
Common Practice		16	16	18
Policy -	HWDSB	15	15	45
Policy -	HWCDSB	20	20	20
Earliest Pick Up Time				
Common Practice		6:30	6:30	6:00
Policy -	HWDSB	6:49 AM is the earliest pick-up time in the database		
Policy -	HWCDSB			
Latest Drop Off Time				
Common Practice		5:30	5:30	6:00
Policy -	HWDSB	4:40 PM is the latest drop-off time in the database		
Policy -	HWCDSB			
Maximum Ride Time				
Common Practice		75	75	90
Procedure -	HWDSB	60	60	60
Procedure -	HWCDSB	70	70	70
Seated Students Per Vehicle				
Common Practice		69	69	52
Procedure -	HWDSB	66	66 Gr K-6 54 Gr. 7-12	54
Procedure -	HWCDSB	66	66 Gr K-6 54 Gr. 7-12	54
For runs with students from K-12 grades a loading value of 60 is used.				

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