



Ministry of Education Effectiveness & Efficiency Review

Toronto Transportation Group

E&E Phase 4 Review

December 2011

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 the Toronto Transportation Group (hereafter “TTG” 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, and Contracting – 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 review of the Toronto Transportation Group was conducted in two parts. Policies and Practices, Routing and Technology and Contracts were reviewed in December 2010 and Consortium Management in November 2011. A Membership Agreement was signed by the two school Boards to officially create the Consortium. When the Consortium was officially formed in September 2011, the name was changed from Toronto Transportation Group (TTG) to Toronto Student Transportation Group (TSTG). For consistency, this report uses TTG throughout.

The School Boards’ transportation departments have integrated some aspects of their operations and big steps have been taken in the formal creation of the Consortium. At the time of the Consortium Management review however, the Consortium was just a little under two months old with little evidence for the Review Team to assess. The School Boards should continue the transition, integrating the School Boards’ respective transportation departments into a single, coordinated unit.

While the TTG’s Policies and Practices are comprehensively documented and adhered to, each School Board independently maintains its own policy and operating procedures for transportation services. It is strongly recommended that the TTG focus on harmonizing these policies and practices. The absence of policy harmonization is exacerbated by very significant differences in, and the relative complexity of, the policies for the two School Boards. While the TTG’s documentation tries to highlight these differences, the manner in which this is done adds to the documentation’s complexity and increases policy duplication.

The review of the TTG’s Routing and Technology found that most of the systems and processes in place do a good job of managing the development and maintenance of effective and efficient bus routes and schedules. The TTG’s operating practices have evolved to address the School Boards’ unique operating environment, and achieve a reasonable level of efficiency while delivering an exceptional level of service quality. However, by increasing the level of cooperation between the School Boards and enhancing the integration of operations, there is room for further improvements to both processes and results. .

The transportation operations have complete, standardized contracts with all transportation operators and have been using competitive procurement for close to two decades. They should be commended for their environmental leadership, as demonstrated by operator requirements prescribing adherence to certain environmentally-friendly practices. There is also an effective and efficient program to monitor operator contract compliance and operator performance. Some areas of improvement include ensuring that all drivers receive safety training in a timely manner and that random route audits are conducted regularly.

As a result of this review of current performance, the Consortium has been rated **Moderate**. Based on this evaluation, the Ministry will provide transportation funding to narrow the 2010-2011 transportation funding gap for the TDSB and the TDCSB as determined by the formula in Table 1. The detailed calculations of disbursements are outlined in section seven of this report and summarized below.

Toronto District School Board	\$0
Toronto Catholic District School Board	\$1,596,051

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

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.

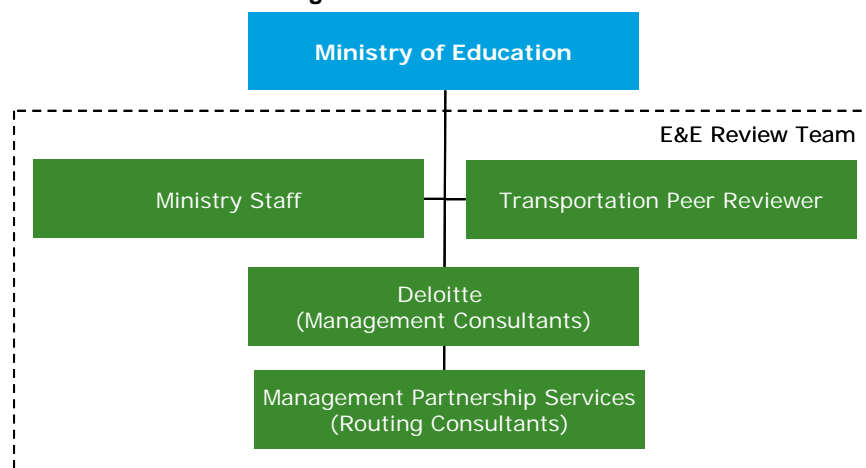
1.1.4 Effectiveness and Efficiency Review

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

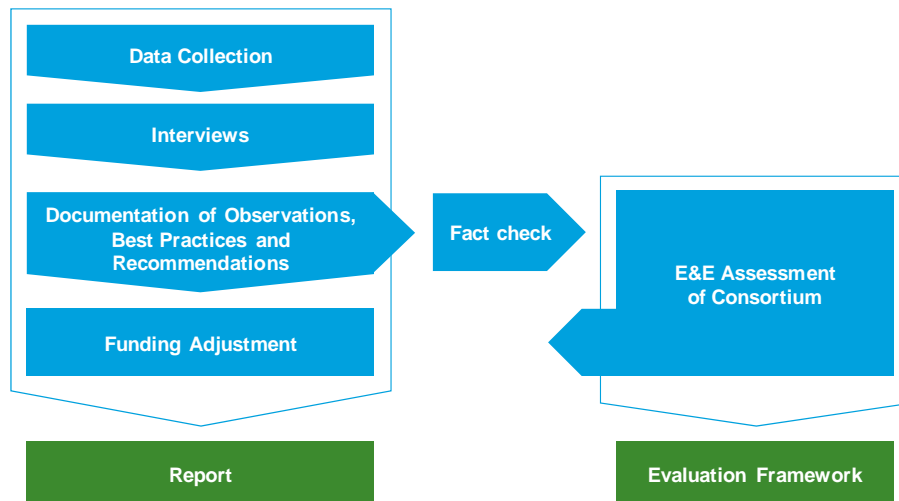
Deloitte was engaged to lead the Team and serve as the management consultants on the E&E Review Team. Deloitte's overall role is as follows:

- Lead the planning and execution of E&E Reviews for each of the 18 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 its 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 on 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.

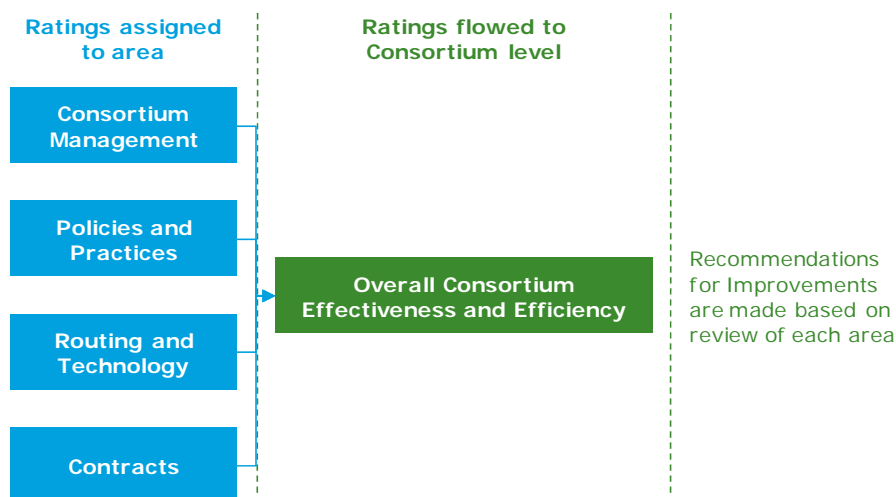
Figure 3: Criteria for an Effective and Efficient consortium

Consortium management	Policies and Practices	Routing and Technology	Contracts
<ul style="list-style-type: none"> 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 <i>Freedom of Information and Privacy</i> legislation 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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 December 13, 2010. The Consortium management section is based on the review conducted during the week of November 1, 2011.

1.3.7 Materials 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

A Membership Agreement was formally signed to create the Consortium, Toronto Student Transportation Group, on the 21st of September, 2011, and the Consortium is in the early stages of its implementation. The Consortium was formed from the transportation departments of the Toronto District School Board and the Toronto Catholic District School Board, which until recently were responsible for the management and facilitation of the student transportation services for their respective Boards.

The two transportation departments provide transportation services to approximately 45,000 students across about 800 schools and centres. These transportation services are provided by six different operators, who use over 1,500 vehicles to service more than 1,700 routes and 10,000 runs.

The service area covered encompasses the entire City of Toronto and is all urban; the two transportation departments also serve the largest number of special needs students in the Province of Ontario, and provide over 8,000 special needs students with transportation services.

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

Table 2: 2009-10 Transportation Survey Data²

	TCDSB	TDSB	Total
Number of schools served	208	574	782
Total general transported students	10,101	2,462	12,563
Total special needs ³ transported students	1,653	4,864	6,517
Total wheelchair accessible transportation	117	522	639
Total specialized program ⁴ transportation	867	4,993	5,860
Total courtesy riders	1,336	120	1,456
Total hazard riders	12,898	4,073	16,971
Total students transported daily	26,972	17,034	44,006
Total public transit riders	1,210	3,858	5,068
Total students transported including transit riders	28,182	20,892	49,074
Total contracted full and mid-sized buses ⁵	363	163	526
Total contracted mini buses	318	738	1,056
Total contracted school purpose vehicles ⁶	8	94	102
Total contracted PDPV	32	105	137
Total contracted taxis	1	0	1
Total number of contracted vehicles	722	1,100	1,822

Table 3: 2009-2010 Financial Data

	TCDSB	TDSB
Allocation	\$20,914,149	\$48,243,771
Net expenditures	\$23,574,234	\$47,431,855
Transportation surplus (deficit)	\$(2,660,085)	\$811,916

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

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

⁴ Includes students transported to French Immersion, magnet and gifted programs, students with special needs who are transported to specialized programs are captured as special needs transported students.

⁵ Includes full-sized buses, mid-sized buses, full-sized buses adapted for wheelchair use and mid-sized buses adapted for wheelchair use; all vehicle counts are rounded to the nearest whole number.

⁶ Includes school-purposed vans, mini-vans, and sedans.

3 Consortium Management

3.1 Introduction

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

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

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

Consortium Management – E&E Rating:	Low
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3.2 Overview

Until recently the transportation departments of the Toronto District School Board and the Toronto Catholic District School Board were responsible for managing and facilitating student transportation services for their respective Boards. The Membership Agreement to formally create the Consortium was signed on the 21st of September, 2011, and is presently in the early stages of its implementation.

Prior to the formal creation of the Consortium, the two transportation departments cooperated in the provision of student transportation services in a number of ways, such as joint route planning and operator services procurement. Both departments reside in the same location. The recently formed and formally integrated Consortium will help both Boards realize efficiencies by reducing the duplication of effort that existed under the two transportation department regimes, specifically within the management of operations and in policies and practices.

3.3 Governance

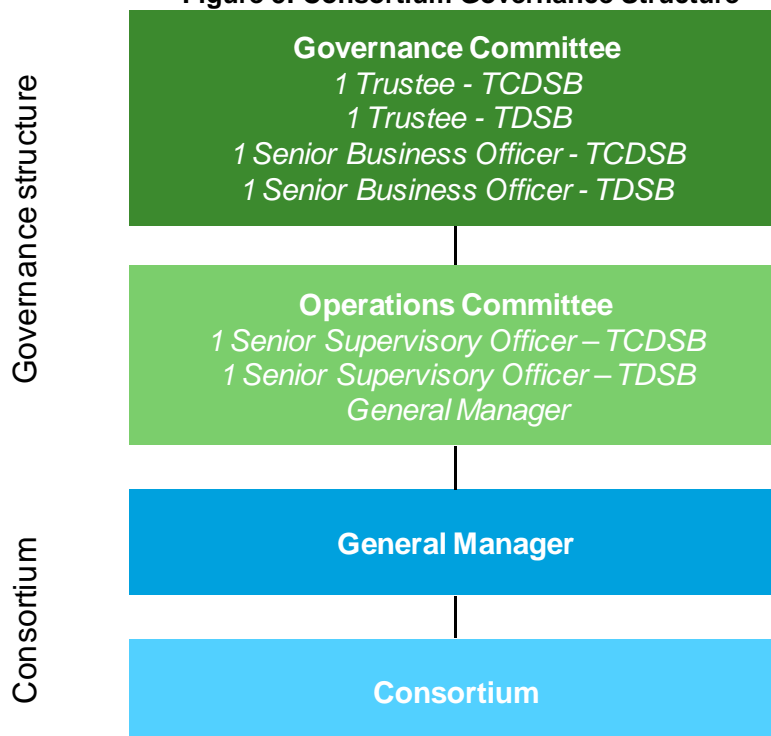
Governance refers to the way in which an organization is directed and controlled. Establishing administrative structures and processes that facilitate, monitor, measure and improve effective business management are primary responsibilities of a governance structure. Three key principles for an effective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

3.3.1 Observations

3.3.1.1 Governance structure

The Consortium governance structure for the TTG, as documented, is outlined in the Membership Agreement and is illustrated below:

Figure 5: Consortium Governance Structure



The Membership Agreement outlines the roles and responsibilities of the Governance Committee and the Operations Committee. The Governance Committee's purpose is to provide direction, oversight and advice to the Consortium. Its primary responsibilities are to:

- Review the Governance Committee's annual agenda of activities, mandate and terms of reference;
- Review and report to the Member Boards any proposed policy changes;
- Develop, in conjunction with the Operations Committee, a method for selecting the General Manager;
- Undertake an annual performance review of the General Manager;
- Review policies and procedures to ensure consistency with the Consortium's goals and priorities;
- Mediate and resolve any unresolved issues brought forward by the Operations Committee; and
- Approve and publish an annual report on the Consortium's performance and accomplishments.

The Operations Committee's purpose is to provide day to day operation of the Consortium through the actions of the General Manager. Its primary responsibilities are to:

- Make recommendations concerning the Consortium's financial planning, annual budgeting, and financial reporting;
- Deal with operator-related contract issues, including negotiations and dispute resolution;
- Identify and advise on policy and regulation matters;
- Deal with transportation issues including service levels and parent requests for exceptions to policies;
- Communicate and correspond with the various Provincial Ministries regarding policy direction and regulations; and
- Deal with staffing and safety issues from the employee unit.

The Governance Committee will be required to meet at least once every three months, and minutes will be taken, circulated to the Member Boards and posted for public review. The Chair of the Governance

Committee will be elected through consensus and will rotate yearly between the two Trustee members. The Operations Committee will be required to meet at least once every two months during the course of the school year, and minutes will be taken, circulated to the Member Boards and posted for public review.

Only one or two meetings have taken place for each Committee and meeting minutes were taken and documented. The Committees presently meet more frequently than planned as the Consortium is in the early stages of development.

Some discrepancies were noted during the interview between practice and documentation i.e the Transportation Operations Manager and Transportation Planning and Technology Officer participate as members in the Operations Committee.

The Governance Committee nominees report to the Board of Trustees at each Board, while the Operations Committee reports to the administration of the Board i.e. the Director of Education.

3.3.1.2 Board level governance and arbitration clause

The Membership Agreement includes a dispute resolution clause that states that disputes will first be referred to the General Manager for amicable resolution and then to the Senior Administrators responsible for transportation on the Operations Committee, and then to the School Boards' Directors of Education. If the dispute cannot be resolved, it will then be referred to a mediator jointly selected by the School Boards, and then to a single arbitrator selected by the Member Boards – all decisions of the arbitrator shall be final and binding.

3.3.1.3 Member Board Involvement

The Member Boards continue to maintain involvement in student transportation operations as follows:

- Both Boards are responsible for managing parent requests for exceptions to policies. The management of exceptions is handled administratively but when the parent does not agree with the decision, the appeal body is part of the Board.
- Each Board still has responsibility for setting Transportation Policy.
- Each Board still has a (partial) resource responsible for transportation matters that represents the Board on the Operations Committee as well as a (partial) resource that represents the Board on the Governance Committee.

3.3.2 Best Practices

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

3.3.2.1 Structure of the governance structures

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

3.3.2.2 Relationship with the Governance Committee

The Governance Committee works closely with the General Manager while at the same time respecting a clear delineation between the day to day management of the Consortium and high level policy and strategic matters that are handled at the Board level. The positive working relationship between the two Member Boards and the Consortium allows for open communication amongst all parties.

3.3.2.3 Meetings of the governance structures

The Consortium's governance structures are required to meet a minimum number of times per year and utilize formal agendas, and meeting minutes are taken, ratified and signed. This ensures that the Consortium is open, accountable and transparent to its stakeholders.

3.3.2.4 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. To date, the Member Boards have resolved all questions and issues without having to use this dispute mechanism policy.

3.3.3 Recommendations

3.3.3.1 Paperwork should be updated to reflect the actual practice for the Consortium

As the Consortium continues to evolve and practices are implemented, an effort should be made to ensure practices are implemented in compliance with policy, however, where necessary, policy and paperwork should be updated to reflect the practical lessons learned through implementation.

3.3.3.2 Delegation of authority to the Governance Committee

It is interesting and unique that the dispute resolution clause in the Membership Agreement and the parent requests for policy exemptions do not escalate to the Governance Committee but instead revert back to the Boards for resolution. For the Governance Committee to play a meaningful role in the oversight of the Consortium it needs to have an appropriate delegation of authority from Member Boards. We encourage the Boards and the Consortium to further define (given the newness of the Consortium) their role and delegated authority and ensure they have the “power” to provide appropriate and meaningful oversight and reduce the administrative burden of the Member Boards.

3.3.3.3 There should be a separation of the Operations Committee oversight from day to day operations

The implementation of the Membership Agreement as it pertains to the actual roles and responsibilities being undertaken by the Consortium, Operations and Governance Committee are still a work in progress. As such, it is difficult to comment on the role being executed by the Operations Committee. The Membership Agreement, however states that the Operations Committee is to provide day to day operation of the Consortium through the actions of the General Manager. There needs to be a clear separation of operations from governance in actual execution of roles and responsibilities as well as in the policies and procedures and we recommend documentation be updated to clarify the role of the operations committee as reviewing issues escalated by the manager and recommending potential resolutions.

3.3.3.4 Streamlined communication

Both the Governance and the Operations Committee have responsibility for communication back to the Boards – the Governance Committee to the Board of Trustees and the Operations Committee to the Board’s administrations. To ensure consistent messaging and streamlined reporting, the Consortium is encouraged to consider that reporting should be funnelled through the Governance Committee that has members from the Board of Trustees as well as the Board administration.

3.4 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.

3.4.1 Observations

3.4.1.1 Membership Agreement

The Membership Agreement delineates the relationship between the two School Boards and details aspects of the Consortium’s structure and operations. It speaks to, among other things:

- The Consortium’s objective: to manage and administer all home to school transportation (including late buses), school to school transportation, and special needs transportation in line with the School Boards’ policies and procedures;
- The Consortium’s governance structure: the Governance Committee’s composition, roles and responsibilities, and the Operations Committee’s composition, roles and responsibilities;
- The Consortium’s management structure: The management structure consists of the General Manager, Operations Manager and Technology & Planning Manager. The management structure is responsible for day to day operations and is supported by current staff (who shall remain employed by their respective School Boards) – new staff positions will be paid for by the School Board that requires that position;

- The Consortium's ability to execute contracts: the General Manager will be given the authority to enter into transportation-related contracts on behalf of the School Boards;
- The Consortium's administration of finances, operations, and cost-sharing;
- The Consortium's procurement policies;
- The Consortium's adherence to School Board policies and procedures and how changes in policies and procedures will be evaluated and addressed and how resultant costs / savings will be allocated;
- The term of the Membership Agreement, which was to be effective from December 1, 2010 to August 31, 2011, with renewal on an annual basis – termination will require notice of at least 180 days; and
- Other items related to: insurance, amalgamation, dispute resolution, termination, indemnification, and confidentiality provisions.

3.4.1.2 Separate Legal Entity

The Consortium is not a separate legal entity.

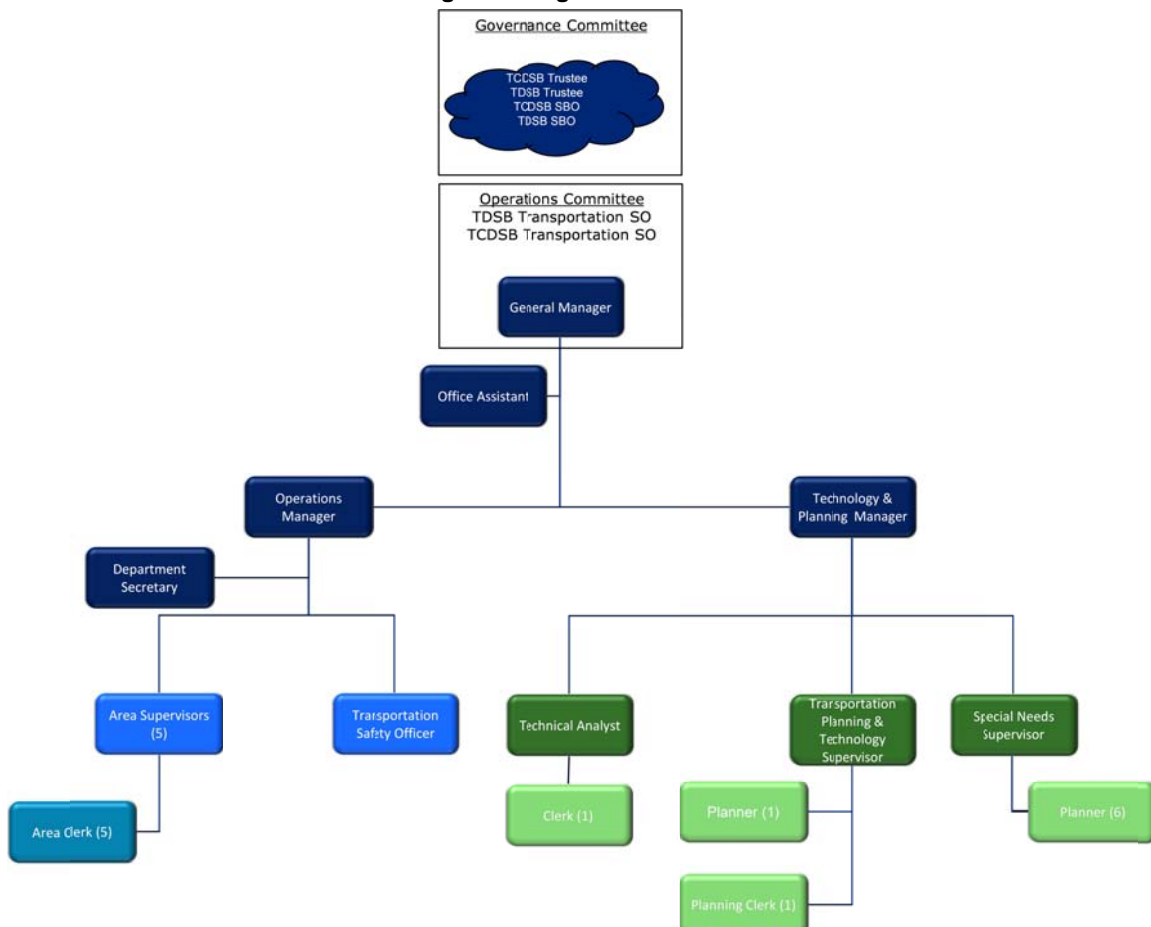
3.4.1.3 Secondment Agreement

There are no secondment agreements signed between Consortium staff and the School Boards.

3.4.1.4 Organization of entity

The Membership Agreement outlines the Consortium's organizational structure, as illustrated below:

Figure 6: Organization Chart



While not shown in the structure outlined above, each staff member is still directly reporting to someone from their own Board.

Job descriptions that outline each position's specific responsibilities, decision-making authorities, required qualifications, skills, and reporting / delegation authority are available.

Under this organizational structure, staff are employed by their respective School Boards and would be members of their respective School Boards' collective bargaining units. As a result of the collective bargaining process, employees can be moved in and out of their roles within the Consortium.

3.4.2 Best Practices

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

3.4.2.1 Membership Agreement Clauses

The Membership Agreement, which acts as the legal document governing the Consortium, contains sufficient detail on key provisions such as cost sharing, dispute resolutions, oversight, and the role of the Consortium. This is important in that it clearly defines the relationship between the Member Boards in the delivery of safe, effective and efficient student transportation services.

3.4.2.2 Job descriptions

Clear and detailed job descriptions are defined for all positions within the Consortium. The availability of job descriptions helps to ensure that staff can efficiently execute on their daily duties and helps to ensure a smooth transition in the event of staff turnover. We encourage the Consortium to continue reviewing and updating job descriptions on a regular basis. Job descriptions should be updated with reporting responsibilities.

3.4.3 Recommendations

3.4.3.1 Separate Legal Entity

We recommend that the Consortium be incorporated as a separate legal entity. This structure will provide the Consortium with independence in terms of managing its daily operations; ensures that the structure and mandate of the Consortium remain consistent despite potential changes at the Member Board level (i.e., changes in trustees, Board members, etc.); and also provides contractual benefits to the Consortium. As a separate legal entity, the Consortium can enter into binding legal contracts, for all services purchased, most importantly with bus operators, and as such is limiting liability to the Consortium and in turn, limiting liability to Member Boards.

3.4.3.2 Organization of Entity

Notwithstanding the requirement that those in "collective bargaining" positions report to a supervisor from their respective School Boards, the Consortium's organizational structure reflects clear lines of reporting between staff and Consortium management. This structure can help to increase effectiveness by creating an appropriate system by which issues can be escalated to Consortium management. The requirement however, that staff report to a supervisor from their respective school board creates a conflicting organization structure that has the potential to be confusing to staff in the execution of their positions, especially if contradictory information or requests are presented. We encourage the Consortium to work with the Boards and collective bargaining units to develop a functionally appropriate reporting structure, irrespective of Board affiliation.

3.4.3.3 Sign secondment agreements with the School Boards

Under this organizational structure, staff are expected to remain employed by their respective School Boards and would be members of their respective School Boards' collective bargaining unit. It is recommended that the Consortium sign appropriate secondment agreements with the Boards in order to document the relationship and in order to provide additional clarity with respect to the terms under which staff would be seconded to the Consortium. This is especially true for the General Manager and other management positions where salaries are paid fifty percent by each Member Board.

3.4.3.4 Discuss job rotation staff with collective bargaining units

It is also recommended that the Consortium and the Boards work with their collective bargaining units to determine solutions to agreements related to staff rotation. This is to ensure the retention of the investment made in specialized staff training.

3.5 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.

3.5.1 Observations

3.5.1.1 Declining Enrolment

Both Member Boards are expected to face some declining enrolment, which may impact their finances and operations. The planners review all relevant data, including the number of students, when planning routes annually.

There is no formal strategy on how declining enrolment will be addressed and incorporated in financial forecasts for the Consortium because the number of transported students continues to rise given Board programming choices and, at least in Toronto, the impact of declining enrolment on transportation is expected to be fairly immaterial.

3.5.1.2 Long Term and Short Term Planning

A formal strategic planning process that addresses long-term and short-term planning does not exist. A draft strategic plan template has been approved by the Governance Committee, and a draft strategic plan will be submitted in a few months.

Short-term goals and objectives for the current school year and long-term goals and objectives have been developed for the Consortium. However, these goals and objectives have not been operationalized (i.e., key activities have not been delineated, detailed timelines have not been established, and key personnel have not been identified).

3.5.1.3 Cost sharing

The Membership Agreement outlines the cost sharing mechanisms for the Consortium.

Each School Board is responsible for the processing and payment of transportation costs that are identified as belonging to that School Board.

For transportation costs related to buses being shared by the School Boards:

- The transportation management software is used to determine the number of buses that would be required to provide services to each School Board's students, independently;
- The transportation management software is used to determine the number of buses that would be required to provide services to each School Board's students, on an integrated basis; and
- The savings (i.e., the difference between the buses that would be required to provide services to each Board independently and the buses that are required to provide services to the Boards together) are allocated on an equal basis to each School Board.

The optimizations are conducted every four years – during interim years, any costs / savings arising from a change to the number of buses will be allocated to the School Board that is determined to have triggered the change.

This cost sharing process is undertaken on an annual basis for the special education routes.

Administration Costs: Each School Board is responsible for the processing and payment of administrative costs that are identified as belonging to that School Board. The Membership Agreement outlines that the administration costs (which include computers, office supplies, network equipment etc.) related to the operation of the Consortium will be borne by each Board for its respective employees.

Salaries: Each Board will pay 50% of all the costs associated with the base salary and benefits of the General Manager, Operations Manager and Technology & Planning Manager positions, which provide services exclusively to the Consortium.

Rent: The Board on whose premises the Consortium offices are located is responsible for paying all real estate related and facility maintenance costs associated with the operation of the Consortium.

Any administration expense not detailed in the membership agreement or outlined in a separate service agreement are to be shared between the Boards based on the number of students registered in each Board.

3.5.1.4 Transportation service agreements

The Membership Agreement outlines the category of service to be provided by the Consortium to the Boards, but does not address the terms of services or the expected service levels that will be required of the Consortium. The Consortium's high level scope of services includes:

- Management and administration of all home to school transportation (including late buses)
- School to school transportation; and
- Special needs transportation.

Charter transportation for school based activities will not be administered by the Consortium.

No proposed transportation service agreements are available for review.

3.5.1.5 Purchase of service agreements / support services

There are a number of areas that have been identified in regards to what service contracts are required for the Consortium. These include, Human Resources; Information & Technical Services; Computer Services; Material Management; Financial Services; Legal Services; Communications, Printing and Mail Services; and Corporate Services.

There is presently a draft purchase of support service agreement for Human Resource services for the Consortium. There will be no fees charged to the Consortium by the Boards for the provision of the Human Resources Services outlined in the draft agreement.

At the time of the review, no other purchase of service agreements had been drafted or signed.

The Governance Committee has identified Human Resource, Budgeting and Purchasing as being the priority agreements to put in place.

3.5.1.6 Procurement policies

The Consortium follows the procurement policies of the School Board that is executing the procurement. The Board selected to do the procurement is based on who the items are being procured for i.e. Catholic or Public employees. Where goods/services are to be purchased for the joint use of both School Boards/the Consortium, the School Boards' purchasing departments work together to identify the optimal procurement solution.

There is no procurement policy for the Consortium.

3.5.1.7 Banking

The Consortium will use the banking services of each of the respective School Boards for each Board's respective business.

3.5.1.8 Insurance

The Consortium has recently obtained independent insurance coverage through OSBIE. There is no internal procedure/policy as to when the sufficiency of the coverage will be reviewed.

3.5.1.9 Staff performance evaluation, training and management

Staff performance evaluations are currently conducted in line with the human resources policies of the School Boards (i.e., staff employed by the TCDSB are evaluated under the TCDSB's human resources policy, and staff employed by the TDSB are evaluated under the TDSB's human resources policy).

The performance appraisal of the General Manager is to be conducted by the Governance Committee. There is currently no framework outlined for undertaking this appraisal.

Internal staff training and job-related training is provided to staff on a regular basis, and staff training initiatives are planned, documented and tracked. Initiatives to promote cross-training are provided on an informal basis – the training is informal and dependent on circumstances (e.g., supervisor on vacation).

Staff meetings are used to communicate the goals and objectives of the Consortium and to gather the collective opinion concerning the direction of the Consortium.

3.5.1.10 Succession planning

The Consortium has not developed a formal succession plan and does not have a formal plan on cross-training their respective staff. However, informal cross-training and professional development does take place and staff have been able to fill in for personnel away on temporary leave. It is the opinion of the General Manager that succession planning is not required as no position is simply awarded to the next in line.

3.5.1.11 Key performance indicators (KPIs)

In developing the KPIs, the Consortium considers those factors that directly impact the planning and operation of transportation services. The Consortium will track and regularly review the following KPIs:

Consortium KPIs	
Cost per student	Average run length
Cost per kilometer	Bell time stratification
Cost per vehicle	Trip ratio
Buses per 100 students	Capacity utilization

It is the intention of the Consortium manager to produce an annual report for the Governance Committee that will include a reporting on KPI's.

Other data that would be indicated in this annual report are outlined in the table below:

Additional Data in Consortium Annual Report	
Transportation Grant vs. Expenditure	Breakdown of SPED routes
Transportation Expenditure by Area	Transportation Website visit monitor
Historical Summary of Transportation Expenditure	School Bus loading zones per type
Transportation of special needs students by programming type	Fuel Trends
Operator breakdown by vehicle type	Bell time summary
Summary of Transportation Change requests	School bus safety program summaries
School bus accidents by type	Historical accident statistics by operator

3.5.1.12 Board-leased school buses

The TDSB leases a number of school buses and employs a number of school bus drivers; they are deployed on a number of home-to-school bus routes, and serve both the School Boards. However, the TCDSB is not presently charged for the use of these buses. These buses are not part of the Consortium but will, going forward, provide services to the Consortium as if they were a vendor. No contract is currently in place that outlines the terms of services currently provided to the Consortium.

3.5.1.13 Information management

Confidentiality agreements governing the use of student data exist, and have been signed by all operators – this complements the operator contract's "use of personal information" clause.

While employees of the TCDSB have signed confidentiality agreements governing the use of student data, employees of the TDSB have not signed confidentiality agreements.

3.5.2 Best practices

3.5.2.1 Insurance

The Consortium has purchased insurance coverage to reflect its new Consortium status. The Consortium is encouraged to develop a policy that will outline when and how coverage needs are to be assessed and reviewed.

3.5.2.2 Staff performance, evaluation and training

The Consortium does an excellent job of identifying and tracking staff training and professional development activities. Staff evaluations are carried out as per the policies and procedures of the Member Boards. We encourage the Governance Committee to identify the process as well as goals and objectives against which the performance of the general manager will be assessed. This will help to align the goals and objectives of the Consortium with the general manager's activities and establish performance expectations.

3.5.3 Recommendations

3.5.3.1 Develop a financial strategy for changing transportation requirements

School enrolment across Ontario has been in steady decline over the last decade. Given that the Consortium currently serves areas expected to be subject to declining enrolment, and 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 financial and strategic planning process.

In Toronto, the demographic change causing a decline in demand for transportation services is complicated as programming choices (French immersion and special education) are increasing transportation requirements. These changes should also be factored into the long term strategy and financial forecast of the Consortium.

While elements of this recommended planning process were implemented by each of the separate transportation departments, developing such a plan for the Consortium as a whole 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.

3.5.3.2 Develop succession planning document

Succession planning is the process of developing internal people so they have the potential to fill key leadership positions. We acknowledge that key positions will be filled through a competitive process however, we encourage the Consortium to develop a long term succession plan that outlines this requirement as well as the professional development opportunities that will be provided by the Consortium to enhance the potential progression of the careers of employees. Short term succession planning is required to cover sick days, vacation days and other unforeseen employee absence to ensure continuity in the operations of the Consortium. This includes ensuring coverage for the General Manager position should it be required.

3.5.3.3 Execute a formalized transportation service agreement

The Membership Agreement is primarily an agreement between School Boards that establishes the Consortium; it is an over-arching agreement that specifies the terms and structure of the cooperation to provide student transportation. Distinct from the Membership Agreement is the transportation services agreement, which articulates the service relationship between the Boards and the Consortium. In order to make the above distinction clearer, it is recommended that the Consortium develop and execute a joint transportation service agreement with the Member Boards. The transportation service agreement should include clauses that specify the scope of services to be provided, fees, insurance/liabilities, quality of service, dispute resolution and other terms that the member Boards deem to be appropriate.

3.5.3.4 Purchase of service agreements / support services

There is presently a draft purchase of support service agreement for human resource services for the Consortium. The Consortium is encouraged to get this agreement finalized and executed. It is further

recommended that all of the other services which the Consortium procures or provides are established via agreements or contracts where the mutual interests of the Consortium and each School Board or vendor are documented and agreed upon. Specially, these agreements should address services provided to the Consortium from its School Boards or vendors and should reflect appropriate fees for the provision of these services.

3.5.3.5 Procurement policies

It is recommended that the Consortium review and formalize its School Boards' policies for appropriateness in transportation procurement decisions, internal controls and work processes. Formalizing these policies will ensure standardization in the procurement methods of the Consortium. It will also allow the Consortium to harmonize each Board's purchasing policies and facilitate increased effectiveness and efficiency, as the Consortium will not need to liaise with both School Boards' purchasing departments whenever it procures a shared resource.

3.5.3.6 Information management

It is recommended that the Consortium ensure that confidentiality agreements are signed by all operators and all staff.

3.5.3.7 Key performance indicators

The Consortium is encouraged to execute on its plan to develop an annual report that includes reporting on key performance indicators for the Operations and Governance Committees. We further encourage the Consortium to work with the Operations and Governance Committees as well as staff to outline performance indicators to be reported on an interim basis (e.g. monthly or quarterly). Key performance indicators will allow the Operations and Governance Committees to assess the performance of the Consortium and make strategic decisions regarding the direction of the Consortium as required. They also allow the Consortium to highlight areas of strength and weakness and to measure the success of efforts expended.

3.5.3.8 Board owned vehicles

We encourage the Consortium to develop and execute an agreement with the TDSB that outlines the services to be provided to the Consortium through Board owned vehicles to ensure appropriate safety, training and other risk mitigation (insurance) measures are in place for all vehicles and drivers providing transportation services to students.

3.5.3.9 Long term and short term planning

The Consortium should establish a documented and inclusive long-term and short-term planning process with goals and objectives accompanied by specific timelines, tasks to be implemented and clear identification of responsible parties. The Consortium should also develop procedures to monitor and report on progress against these strategic goals and objectives at regular intervals. As the Consortium is developed and implemented, a clear and detailed short-term and long-term plan will help Consortium staff and stakeholders to understand the direction of the new organization, to recognize and celebrate accomplishments and to identify areas still to be addressed.

3.5.3.10 Cost Sharing mechanism

The Consortium has a cost sharing mechanism in place. As outlined in section 4.2.1.1 we encourage the Consortium to review the cost sharing mechanism for transportation costs to ensure that there is a fair and equitable distribution of costs between the Boards. The current cost sharing agreement neither encourages the Boards to optimize their policies, nor encourages cost optimization.

3.6 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.

3.6.1 Observations

3.6.1.1 Budget planning and monitoring

The development of the current budget followed the process outlined below:

Each transportation department works with its respective School Board to prepare a transportation budget. For each transportation department, the budgeting process is initiated by the respective School Board and the transportation department works with the School Board to:

- Forecast ridership numbers (with breakdowns by program);
- Forecast personnel numbers (based on expected needs / attrition);
- Forecast transportation costs based on the executed contracts; and
- Forecast other items, such as fuel cost increases or new programs, which may impact the budget.

Budget-to-actual reconciliations are done at the School Board-level on a monthly basis, and are formally compiled and reported on a quarterly and annual basis – if material variances arise, the transportation department works with its respective School Board to identify, understand and resolve the discrepancies.

Based on discussions with the Governance Committee members, it is their intention that for the next budget cycle, one budget will be prepared by the Consortium, reviewed and approved by the Operations and Governance Committee, divided by Board and submitted to each Board to be recorded in their system. There is no procedure documented that outlines the process to be followed.

The job description of the General Manager states he is to provide direction regarding budget control and recommend yearly budgets for Committee approval and prudently manage the organization's resources within those budget guidelines. It does not outline that he is responsible for the development of the budget.

3.6.1.2 Accounting practices and management

Each transportation department follows the accounting practices and policies of its respective School Board. The following procedure is used by the transportation departments to process operator payments:

- The operators prepare an invoice for each School Board, which are submitted via TRACS;
- The invoices are then reviewed by the Operations Manager and the General Manager; and
- The invoices are then processed and sent to the School Boards' respective accounting department for payment.

The School Boards process the invoices in accordance with their respective accounting practices and policies, and conduct monthly reviews to identify unexpected variances (from budget).

The General Manager is working with the accounting departments to set up Consortium only cost centres to track Consortium's expenses.

3.6.1.3 Audit

Each School Board is audited on an annual basis.

3.6.2 Best practices/Recommendations

As the Consortium has yet to undertake the development of a budget and does not have a documented policy or procedure as to the process that will be followed, there is insufficient evidence on which to identify best practices or recommendations.

3.7 Results of E&E Review

This Consortium has been assessed as **Low**. A Membership Agreement has recently been signed by the two School Boards and is in the process of being implemented. It is recognized that the School Boards' transportation departments have integrated some aspects of their operations and that they operate from the same physical location. . We acknowledge that big steps have been taken since the initial review and there are substantial efforts undertaken by all stakeholders to establish and commence the implementation of the Consortium. The rating in this section is reflective of the status of the Consortium as a little under two months old with little evidence for the Review Team to assess. We highly encourage the Consortium to continue to leverage the strengths evident in each of the individual School Board's transportation departments in the continued development of the Consortium.

The School Boards should continue to work towards ensuring that the Consortium's structure and operations reflect the best practices identified through the E&E Reviews. The transition involved in integrating the School Boards' respective transportation departments into a single, coordinated unit will require effort, dedication, and the support and cooperation of all stakeholders. In turn, this will facilitate the safer, more effective, more efficient and more equitable delivery of student transportation services that will help alleviate the administrative burden of delivering transportation from both the TDSB and the TCDSB.

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 operating practices are documented and supported. Well defined policies ensure that the levels of service to be provided are clearly established. Documented procedures and consistent operational practices determine whether services will actually be delivered within the constraints defined by each policy.

Two critical factors ensure that service will be delivered safely and equitably to each of the Member Boards: the degree that policies are harmonized; and the consistent application of all policies, procedures, and practices. This section examines these factors and evaluates the policies, procedures, and operational practices of the TTG. The focus is on determining the impact each element has on the delivery of effective and efficient transportation services.

4.2.1 Observations

4.2.1.1 General policy guidelines

The School Boards' policies have not been harmonized. When a single policy does not exist, the E&E Review Team expects the Consortium to explicitly document and identify the differences in policy or procedure between Boards. Also, either the Consortium Membership Agreement or the Consortium policy statements should provide a mechanism to account for the cost differences associated with providing services to the differing criteria.

The TTG has constructed four documents describing and governing its operations. Each is targeted at a different user group, and there is some duplication of content among these documents. The first document is titled "Operation Policy Manual" and is targeted for use by the TTG bus operators. It provides a description of all transportation policies and associated operational procedures. The School Boards' policies are each presented in their entirety within this manual, and a cross reference table is provided. In addition, the introductory section to this manual includes this statement in regards to harmonization: "*As the two Boards combined their transportation services there was a need to standardize operations and procedures as much as possible to help minimize any on road issues that may transpire as a result of the discontinuity of practices. Although the Boards maintain separate transportation policies, the procedures for the delivery of services provided are for the most part consistent and outlined in this manual.*" The second of the three core documents is titled "Toronto Transportation Group Standard Operating Procedures" which is targeted for use by TTG staff and provides all manner of internal operating practices

and procedures for the joint operations, including all of the forms and procedures associated with each of the School Boards' policies. The third document is titled "Toronto Transportation Group Special Needs Transportation Resource Manual" and is targeted for use by bus operators and TTG special needs planning staff. It provides comprehensive information concerning the special handling and service requirements for this high demand student population. The final of the four core documents is titled "Student Transportation Services Resource Manual" and is targeted for use by school building administrators. It provides all manner of information relevant to the schools, duplicating much of the content of the prior two documents.

While comprehensive, the resulting documentation is complex and difficult to maintain given the duplication of information in the four manuals and differences within School Board policies and procedures. While the documentation may technically meet the objective for explicit identification of policy differences, as a whole, it is not readily accessible to users of the transportation service or other stakeholders. Parents and other key stakeholders, for example, must still access transportation policy information through the School Boards' websites or by contacting TTG directly. Each manual on its own is a large document that requires intimate knowledge and regular use to serve as a useful reference. The review team did not, for example, note TTG staff making regular use of the Standard Operating Procedures manual during the interview phase of the E&E Review.

An example of the inconsistency that can arise in trying to maintain the same information in multiple locations exists within the TDSB eligibility documentation. The actual policy statement for the TDSB that is available as a Portable Document Format ("PDF") file via a website link provides the distances listed in the section below and qualifies this by indicating that for grades 9 and above "TTC tickets may be available depending on financial need". However, a statement in the body of the website indicates that transportation will be provided via TTC tickets for all students in grade 6 and higher. Meanwhile, the summary matrix in the TTG Operation Policy Manual indicates that the 1.6 km distance applies only from JK to Grade 3, and the 3.2 km distance from Grades 4 to 6.

The cost allocation mechanism described in the draft Membership Agreement (now implemented Membership Agreement) may also fail to adequately account for the policy differences. Schedule A of this draft agreement describes how operating costs will be shared between the Boards, and how only the savings resulting from combined operations, as realized through a periodic route optimization analysis, will be shared equally. All other costs associated with "the number of vehicles and/or students that each Board is required to transport" are assigned directly to each Board. This approach does not encourage an active policy of integration nor does it document a fair and equitable assignment of costs when routes are shared.

4.2.1.2 Eligibility and allowable walking distances

Each School Board's policy addresses service eligibility on a distance and program basis. The eligibility distances for each Board are as follows:

- TCDSB: 1.5 km for JK – Grade 8
- TDSB: 1.6km for JK – Grade 5, 3.2 km for Grades 6 – 8, and 4.8 km for Grades 9 – 12

The TDSB policy states that "Transportation is not provided for students attending any school or program at their request, even when distance is a factor". The TCDSB policy speaks to providing transportation for unique circumstances, but does not address specifics. The eligibility policy works by inclusion in that a designated transportation area is developed for each open enrolment school. Exceptions to the distance-based eligibility criteria nevertheless do exist, and program-based eligibility is provided to certain students in each School Board. For example, the TDCSB modifies its distance eligibility such that a minimum number of students must meet the eligibility criteria before transportation is provided. The policy also provides for TTC transit tickets to be provided under various circumstances for certain students. The TDSB, meanwhile, provides for a program-based exception to eligibility for French Immersion students. The combination of substantial differences in the base eligibility criteria and the addition of a number of exceptions to each individual policy greatly complicate any assessment of equity in the delivery of service or sharing of costs within the joint operations.

There are indeed unique circumstances creating a measurable difference in the nature of the transportation service requirement for each of the School Boards. The geographic service area is mostly the same, but the enrolled student population is substantially different between the two Boards. As a

result, the relative density is lower and dispersion of students and schools is higher for the TCDSB than for the TDSB. Given the extremely high density of schools and students within the TDSB, a harmonized transportation policy would likely create a proportionally higher demand for service within the TCDSB. Yet it is equally unclear what influence the current policies are having on transportation demand within each School Board. It is not possible to tell what level of constraint the current disparate policies are having on the ability to integrate and share buses and individual bus runs to a greater degree throughout the system. This, coupled with a cost allocation methodology that discourages or, at a minimum, fails to encourage, integration of bus routes serves as a difficult barrier to identifying further improvements in the effectiveness and efficiency of this transportation entity.

4.2.1.3 Placement of Bus Stops and Allowable Walk Distances to Bus Stops

The “Summary Comparison” matrix in the “Operation Policy Manual” includes an entry on walk to stop distance that states “Closest Stop” as the applicable allowable walking distance to a bus stop for both School Boards. However, the governing policy statements for both School Boards are silent on this subject. Similarly, there is no specific guidance provided for the placement of bus stops within the system. As a result, stop placement remains at the full operational discretion of TTG staff. Given the heavily urbanized service area, TTG managers report that this discretion is necessary to ensure the safe and equitable delivery of service. However, operational best practices identified by and for other transportation consortia that include service in urbanized areas shows that a documented set of criteria, which can include a statement of exception and discretion on the part of management, provides the most solid basis for ensuring safe and equitable service delivery.

4.2.1.4 Alternative service addresses

The “Summary Comparison” matrix in the Operation Policy Manual contains an entry on multiple pickups & drop-offs that states they are allowed for both Boards. However, neither School Board policy contains evidence supporting this as a policy. The TTG reports that alternative service addresses are allowed under a regular schedule only, and that this is provided as a standard (undocumented) operating practice. The current coding structure for the student database does not segregate students transported to multiple addresses, which precludes a simple analysis of the extent to which this operational practice is applied.

4.2.1.5 Courtesy transportation

The summary matrix of the Operation Policy Manual states that courtesy transportation is provided “By Boards Policy/Guidelines”. The TDSB has an “Empty Seats” administrative procedure within their overall transportation policy. This defines that school principals can develop a list of students who are eligible to fill empty seats but that these seats must be given up to eligible students and that no new routes will be developed to accommodate these students. The TCDSB does not have a directly related policy, but one of the exceptions provided under the basic eligibility policy states that “Home to school transportation shall be considered by the school principal for elementary level pupils as a temporary service where individual hardship exists and home to school transportation is the most appropriate response in accordance with the guidelines for extenuating circumstances as established by the Board from time to time”.

An analysis of student data for all transported students indicates that approximately 2,100 students or nearly five percent of all transported students are coded as riding under the “Empty Seat” policy. An insignificant number of additional students (fewer than 40, or less than one-tenth of one percent) are coded as “Accommodation” or “Exception/Board Approved”. This indicates a high degree of compliance with established policies and practices, but still results in a relatively large number of students being transported who are not normally eligible for transportation. In addition, these are all TDCSB students. The impact of these courtesy riders all originating with one School Board on system wide efficiency cannot be known, but certainly serves as a deterrent to further integration of routes and runs. TDCSB students coded as riding under the “Empty Seat” policy are removed for rerouting the following year.

4.2.1.6 Hazardous transportation criteria

The summary comparison matrix in the Operation Policy Manual does not address hazards. The TDSB transportation policy also does not address hazards, although the subject is extensively covered by the TCDSB. The TCDSB transportation regulation 1 (d) states, in part, that transportation will be provided to elementary students where “...safety hazards, as defined, exist”. The document titled “Hazard Criteria” provided for review lists criteria for defining and applying hazard designations. It was reported that this document has been approved by the TCDSB. The definitions include “Major”, “Moderate”, and “Minor”

hazards, and define the circumstances that must be encountered for the hazard to comply with “Transportation Regulation 1(ii)”. Designated hazards are noted as such through the provision of hazard boundaries on the electronic map within the *Edulog* routing software.

The TCDSB treatment of hazards is in keeping with the expectations of the E&E process. The extreme density of schools and students within the TDSB, meanwhile, results in a unique situation whereby school attendance boundaries themselves are likely to address most hazardous walking conditions. For example, in a less dense environment the placement of a school and the associated attendance boundary may inevitably incorporate a major arterial roadway. Within the TDSB, it is most likely that such a roadway would form one of the boundaries for the subject school. This level of density and the manner in which it affects the drawing of school boundaries is unique to the TDSB among all other Boards in the Province, including the TCDSB. The absence of a hazardous walking condition policy is therefore explainable, and according to TTG management, has not presented any concerns in the past.

4.2.1.7 Student ride times

The summary comparison matrix in the Operation Policy Manual addresses this subject and provides the following criteria:

- TDSB: 75 minutes, may be longer with Board approval
- TCDSB: 60 minutes, may be longer with Board approval

However, neither of the School Boards’ policy statements contains specific language establishing these parameters. The Policy Operation Manual, which describes operator compliance requirements, states that the criterion is 75 minutes.

Regardless of the source for the criteria, current ride time performance is exceptional relative to either of these standards. Fewer than 100 of more than 30,000 regular education students, on average, have ride times exceeding 60 minutes and the majority of all students enjoy ride times under 20 minutes. Ride times for special education students are not as favourable, but still excellent with approximately five percent of all students exceeding 60 minutes and a majority of students having ride times below 30 minutes.

4.2.1.8 Designation of responsibilities

While there is no policy document that specifically addresses or describes the responsibilities for each stakeholder group in the delivery of safe and effective services, this subject is covered in various parts of the three core manuals described above. In particular, the Policy Operation Manual incorporates several sections on the contractual responsibilities of the bus operators, and includes copies of various brochures that address the responsibilities of students and parents, as well as other members of the community. The Transportation Services Resource Manual contains detailed and extensive information regarding the responsibilities of school administrators and others.

The summary comparison matrix in the Operation Policy Manual requires all noon hour kindergarten and all special education students to be met at the stop by a parent or guardian. Additional parental responsibilities are mentioned in the “Contractual Requirements” section of the Policy Operations Manual that speaks to encouragement of walking and alternatives to riding the school bus, and under the “72 Passenger Drop-Off” procedural protocol that speaks to the requirement for parents to meet the afternoon drop-off of students. There is also a section of the Transportation Resource manual that describes a citywide program called the Parent Safety program, but this is not specific to parental responsibilities in student transportation. These responsibilities are also covered in the brochures available to parents and included in the Transportation Resource Manual and outlined on the School Boards’ websites.

4.2.1.9 Decision appeal processes

The TDSB policy contains a detailed administrative procedure describing the appeals process to be followed for this Board’s students. It includes a designated appeals committee, and a defined and progressive process that starts with the transportation office, and then (if not satisfied) includes the submission of an appeals form and action by the committee. A final appeal may be made to the TDSB’s Comptroller-Administrative Services. A unique aspect of the appeals process is the ability of the appealing parent to add a fourth member to the appeals committee that “has no vested interest in the outcome of the appeal”. The TCDSB policy includes a more general statement that “anyone wishing to

appeal a decision or recommendation made by staff can appear in person at the Board's Administrative and Corporate Services Committee to present their case to the Board of Trustees."

In both cases these processes are Board-centric. There is no common dispute resolution process that is specific to, or administered by the TTG itself. This runs counter to the intent of the E&E process in that there is no common appeals process which increases the likelihood of inconsistent results and inconsistent application of standard operating practices, if not the policies themselves.

4.2.1.10 Bell time management

There is no information presented in the three core TTG manuals described above that speaks directly to the subject of school bell time management. The TDSB transportation policy, however, does incorporate an administrative procedure on "Staggered School Hours". Key elements of this procedure include:

- Transportation staff suggests groups of school;
- Consultation required with all key stakeholders;
- Consultation ends by March for September implementation;
- Times not to be altered by more than 30 minutes;
- Once part of a stagger, times can only be changed by a Superintendent; and
- Changes only implemented if bus reduction(s) can be achieved.

The TCDSB policy does not address this subject. A separate document titled "Bell Time Workflow" provides a process describing how TTG actually manages the process. This is an internal document that is not currently incorporated into policy, although operationally the TTG staff manages bell times in accordance with the Bell Time Workflow document for both School Boards.

This workflow diagram indicates that bell time changes originate with a request from the school, and pass through a "stakeholder input" phase before reaching TTG for action. If TTG approves of the change the request then passes through a Superintendent review before being implemented by TTG. If TTG does not recommend implementation, the request goes through a "director's council", which can either accept the TTG conclusion or approve the change.

TTG-originated requests do not appear in this workflow. This contradicts the TDSB administrative procedure referenced above, and runs counter to best practices identified during past E&E Reviews.

4.2.1.11 Route planning schedules and strategies

The TTG runs a unique operation in that a relatively high proportion of transported students are special needs. Also unique is the dense urban environment, whereby only approximately 10 percent of all enrolled students receive transportation services. The different demographics for the two School Boards also results in a situation whereby the regular education transportation requirements are proportionally concentrated with one of the School Boards (the TCDSB). This combination of factors results in a unique set of circumstances and a different approach to route planning and management than is typical for other transportation consortia.

While policies have not been harmonized, and many operational procedures and practices continue to be separate for each of the School Boards, the route planning function has been combined. This function is provided by a team of six planners responsible for all route maintenance and route planning across both School Boards.

Day-to-day route changes, such as moving a student from one stop to another after an address change, are handled by the day to day operations team. Operationally, transportation request forms are filled out by the parent at the school and transmitted to TTG for action. The Transportation Change Notification System (see description in the Routing and Technology section) creates an email notification back to the school once the change is completed, and maintains a history of the changes made and their effective date. TRACS information is updated overnight using the most current Edulog data. Parents may also contact the TTG directly and the information is provided via telephone. The TCDSB only takes requests from the school; no information is taken directly from the parent.

Anything that requires a significant route change, such as the addition of a new bus stop, is generally sent to the planning team for action. As discussed further in the Routing and Technology section, this approach creates a duplicative function that relies on the processing of paper forms. The separation of the operations team by School Board also results in operational practices that vary from one Board's team to the other. This structure is largely the result of managing the transported student population separately within the transportation routing database, and the preponderance of special needs transportation within the system. Taken together, these operational practices rely more heavily on manual processes than is typical in other transportation consortia.

Given that more than 80 percent of all bus runs and bus routes in the system are coded as special needs, the effectiveness and efficiency of the system is heavily influenced by this high-need service, and much of the planning activity is dedicated to this aspect of the system. Annual planning and maintenance of special needs routes is conducted in accordance with the procedure defined in the Standard Operating Procedures manual, and is discussed further in the Special Needs Transportation section below.

The TTG maintains a comprehensive planning calendar that establishes milestone dates and timelines for key annual recurring activities such as completion of the annual Ministry of Education survey, student data rollover, and route planning. In addition, the Operating Procedures Manual contains instructions on establishing a planning database in preparation for the following school year. Taken together, this provides an appropriate framework for meeting the cyclical planning requirements of the transportation system.

Bus operators conduct annual self-audits for each route. These are supplemented by random audits conducted by Consortium staff throughout the school year. The results of these audits are utilized in conjunction with an evaluation of changing demographic data by planning staff in advance of each school year to evaluate the effectiveness and efficiency of the regular transportation portion of the system. An overall bell time coordination strategy was implemented soon after the joint operations were started. It was implemented in two phases, and TTG management reports that significant efficiencies were realized. Since that time regular education routes have been generally static. Tactical changes do occur on a regular basis and during the annual planning cycle. In particular, the dense urban environment leads to constant challenges in accommodating changes to heavy traffic patterns as they occur from year to year.

The "Startup Planning" section of the Standard Operating Procedures manual contains specific instructions on how to build runs and routes that incorporate standard routing techniques such as combination runs and route tiering. Other routing types (e.g., feeders, shuttles, transfers, loops or run doubling) are not covered, nor are specific route efficiency improvement techniques. Nevertheless, there are no explicit restrictions on the mixing of students from the School Boards on the same bus, nor are there any restrictions on utilizing these or other routing strategies in the development of the system.

A system of standardized vehicle sizes is used throughout the route network. The stated purpose is to minimize disruptions when individual runs are moved or reallocated to different carriers. Time, distance, policy, and operating conditions also impact vehicle assignment to individual routes. Minivans, for example, are used when travelling long distances with a small student load whereas 19 passenger buses are preferred in the downtown core in order to more effectively navigate traffic.

Overall, the planning process for regular education routes is well conceived and supported by appropriate procedural documentation. However, there have been few comprehensive or large scale efforts to evaluate or improve overall effectiveness and efficiency since the initial analysis that was conducted when joint planning was initiated. Planning efforts for regular transportation are focused more on the maintenance and tactical improvements to the current structure of routes and schedules. The implications of this approach are discussed further in the Routing and Technology section. Further evidence of the generally static nature of the regular education portion of the system is provided in how information flows to and from the operators and users of the system.

Operators receive route information for the upcoming school year only two weeks prior to the start of school. The contract requires that the operators perform a dry run, and route errors are fed back to the TTG for correction after the dry runs and then on an ongoing basis throughout the school year. Operators are not consulted prior to the creation or modification of routes, however, and few substantive changes are possible before the start of the school year. All communication regarding routes and schedules to parents is transmitted through the school. Each school has access to its run and route data via TRACS. In combination, this approach works only as long as bus routes are relatively static from year to year. Any

major change to the structure of routes and schedules would require significantly more notice and a higher degree of information dissemination in advance of the school year's start.

4.2.2 Recommendations

4.2.2.1 Simplify guiding documents

While the purpose and structure of the Operation Policy Manual, Toronto Transportation Group Standard Operating Procedures, and Student Transportation Resource Manual are laudable their size, complexity, and duplication of information can lead to misinterpretation, misuse, and lack of utility as reference documents. The TTG should consider trimming their size and complexity and reorganizing the information such that each element of information is presented only once. The TTG should consider creating a common policy and procedure manual accessible to, and for use by all stakeholder groups. This can be supplemented by an internal procedures manual that provides additional information relevant only to the TTG staff, and a contractor reference guide that contains information relevant only to the operators and not already incorporated into the operators' contractual agreements.

4.2.2.2 Enhance policy documentation and work toward policy harmonization

The current School Board transportation policies contain significant differences that greatly complicate the regular assessment and improvement of system wide effectiveness and efficiency. Greater standardization of service delivery standards would promote greater cooperation, further integration of TTG operational practices, and facilitation of increased route sharing and integration between the School Boards.

A logical starting point for harmonization is to focus on developing a common TTG policy in areas not currently covered by either School Board's transportation policy. Examples of these could include the addition of a common policy for allowable walk distance to bus stops, supplemented by an operational procedure defining criteria for the safe placement of bus stops. Also, operational practices would benefit from a common policy regarding the protocol for allowing multiple service addresses for eligible students.

4.2.2.3 Develop an enhanced bell time management policy

The current protocol does not clearly facilitate TTG's initiation of proposed bell time changes for the purpose of improving transportation effectiveness and efficiency. A critical best practice identified in prior E&E Reviews is an expectation that transportation consortia initiate and evaluate school bell time structures, with final approval of any recommended changes contingent on demonstrated savings and at the discretion of the School Boards. The TTG should consider adopting a similar policy and operational expectation in order to infuse a culture of continuous improvement in the route planning function.

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 distance 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 School Board's transportation policy specifically establishes eligibility for transportation for all students with identified special needs. The actual and specific requirements are determined as part of the IPRC process, recorded on the transportation request form (unique to each School Board), and executed by TTG. Staff are not generally involved in making these determinations. Each of the four core guiding documents addresses unique aspects of special needs transportation. For example, the Operation Policy Manual includes separate sections describing operator responsibilities for wheelchair service and developmentally delayed students. A separate public brochure describing special needs transportation is also included in this manual. The comprehensive Toronto Transportation Group Special Needs Transportation Resource Manual does provide a one-source detailed instruction manual for bus operators and planning staff. Collectively, the guidance provided by the various documentation meets the expectations of the E&E process, although the issues of complexity and utility for daily use by staff noted earlier also apply to the special needs documentation.

4.3.1.2 Special needs planning guidelines and practices

The Standard Operating Procedures manual covers the operational procedures for adding and changing a special needs student route assignment. In addition, Section 5.2 covers “Startup Planning”, and includes a text-based outline of the tasks to be performed and the timeline for route planning for the following year. 33 unique steps are included, and this section also covers elements on how to plan specific bus routes. Special needs bus drivers inform families of daily changes. Parents who subscribe also receive TCNS e-mail notifications when there are changes to their children’s transportation schedule.

4.3.1.3 Driver Training

The Drivers’ Qualifications and Responsibilities section of the Operation Policy Manual and certain subsequent sections cover driver training requirements and schedules in detail. Included are the basic licensing requirements as well as specific requirements for first aid training, among others. While this manual includes several references to the requirements of special needs students, such as sections on wheelchair services and transportation of developmentally disabled students, there is no specific reference to extra training requirements for drivers of special needs vehicles.

4.4 Safety policy

4.4.1 Observations

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

4.4.1.1 General safety policies and guidelines

The TTG employs a full time Safety Officer whose sole responsibility is to administer the TTG’s safety and contractor compliance programs. Operator and bus driver safety and safety training requirements are detailed in the Operation Policy Manual. Operator requirements include bus evacuation drills for students. Safety programs for schools and students are provided under a separate contract with one of the bus operators. These programs include, among others:

- Buster the Bus First Rider program
- Back to school safely program

The Safety Officer conducts operator site audits for every operator every year.

The TTG is also a recipient on a number of distribution lists from the municipality for safety related items. Examples include maps regarding snow removal and road closures. The TTG has specific contacts within various departments of the municipality to deal with issues as they arise. The TTG’s overall safety program is in keeping with the expectations of the E&E Review process.

4.4.1.2 Use of cameras

The TTG does not currently utilize any cameras on buses.

4.4.1.3 Inclement weather procedures

An inclement weather protocol is included in the Policy Operations Manual. This document establishes a clear and concise eight-step protocol describing when and how inclement weather related service cancellations are determined and processed. The School Boards do not currently allow for system-wide early dismissal in Toronto.

4.4.1.4 Accident and incident procedures

A TRACS reporting tool has been implemented in the current school year for the self-reporting of all accidents and incidents by carriers, regardless of severity, when students are on board the bus. This requirement includes reporting of accidents, behavioural incidents, vandalism, or any other type of incident. The operator compliance requirements are outlined in the Operation Policy Manual. The process for accidents, incidents, and missing children is also documented in the Standard Operating Procedures Manual.

The operator is contractually obligated to notify the School Boards when buses are running more than 15 minutes behind schedule. The contractual requirements, as outlined in the Policy Operation Manual, require that “Operators are required to provide a tracking mechanism to capture and report performance data to be made available to the Boards.”

4.4.1.5 Maximum age of vehicles

By contract, the maximum allowable vehicle age is 12 years.

4.4.2 Best Practices

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

4.4.2.1 Safety Officer

The assignment of a regular full-time Safety Officer responsible for all safety and operator compliance functions represents a best practice that provides for an appropriate level of attention and focus on this critical aspect of transportation operations.

4.5 Results of E&E Review

Policies and Practices development and implementation has been rated as **Moderate-Low**. The TTG provides a comprehensive set of policy and procedural documentation that addresses all aspects of transportation operations. The E&E Review also indicates a high degree of compliance with the policies and procedures as currently documented. However, a key aspect requiring further attention is the absence of policy harmonization which is exacerbated by very significant differences in, and the relative complexity of, the policies for the two School Boards. The documentation does a good job of eliciting these differences, but the documentation itself adds to the complexity in the way in which the information is presented and duplicated among the various manuals.

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-High
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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 allows 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

The TTG uses the *Edulog* routing software application, which has been in place for the entire history of joint planning between the School Boards, and individually for a number of years with the individual School Board prior to the initiation of joint planning. The TTG also utilizes several supporting technologies and software applications:

TTG and School Board Websites – The “schoolbus.to” web link serves as a portal to the individual School Boards’ websites, each of which includes a section focused on transportation services. These sites contain the following features and information:

- TCDSB: links to all transportation policy documents and safety program information; a link to *WebQuery*, an *Edulog* add-on tool that allows a user to determine the schools a student is eligible to attend and the available bus stops; and links to route maps and stop information for all bus routes, listed by school.
- TDSB: links to all transportation policies and related safety and regulatory documents; and links to transportation related forms.

TRACS – A web-based software program available to schools and bus operators that provides customized and targeted information extracted from *EduLog* daily, including route data and forms.

TCNS – An internally developed, web-based system to manage the flow of information related to transportation changes for students; it facilitates notification and status reporting.

WATS – A web-based software utility of the TCDSB used for managing the provision of TTC passes. WATS is also used to track and manage taxi use and limited field trip service (for TCDSB) for trips requiring Wheelchair services. Schools manage their own field trip services for all other students.

ArcGIS – A GIS software application used internally at TTG for modeling, reporting, and analysis in support of school boundary changes and other ongoing analyses.

Telephone, fax, email – The TTG has a telephone system that directs calls to the appropriate operational team and allows for voicemail messages to be left for specific staff members. This is supported by a general fax number, which is utilized for the receipt of transportation request forms, and individual email addresses for each staff member.

This mix of software and technology tools is appropriate to the needs of the TTG given current operational practices. A heavy reliance is placed on the manual management of data and information throughout the TTG, with a heavy paperwork flow of transportation request forms and outgoing route information for carriers. Information is “pushed” to carriers and users of the system electronically via TRACS, the various websites, and *WebQuery*, but manual processes and supporting technology such as telephone, fax, email, and TCNS still predominate throughout TTG’s operations.

5.2.1.2 System backup and disaster recovery

All related processes and procedures are contained within a document titled “Toronto Transportation Group Disaster Recovery & Business Continuity Plan”. This document provides a background discussion, contact information for each staff member involved with ensuring business continuity at the TTG and service providers and School Boards, a chronology for data backup processes for each system in use by TTG, and a cross-reference for potential failures to each recovery protocol that should be followed, including protocols to be followed for each of the following failures:

- Primary server failure;
- Site failure;
- TTG staff incapacitated;
- School bus operations incapacitated; and
- TTG relocation.

This is an excellent document, and the processes it communicates are in keeping with the expectations of the E&E Review.

5.2.1.3 Staff training

Training on the TTG’s software and related technologies is largely an internal function. Many of the staff members have been long time users of the software and additional on-the-job training, as required, is generally provided by these staff to other staff. The TTG also participates in regular monthly *EduLog* webinars, and hosts an annual workshop for *EduLog* users from TTG and other consortia that brings *EduLog* training staff onsite. TTG staff also participates in periodic *EduLog* user conferences. Additional training support is available via the documentation provided in the Standard Operating Procedures manual.

This approach is a relatively informal but generally effective approach to staff training. It is effective largely because of the long tenure and low turnover in staff. A more rigid skills-based and documented training program would be required if the TTG experienced higher staff turnover.

5.2.2 Best Practices

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

5.2.2.1 The Toronto Transportation Group Disaster Recovery & Business Continuity Plan

This document is an excellent document that is broad in scope and application. Not limited to just data backup and recovery, this document covers all eventualities and provides clear guidance for the organization to adapt to and recover from all manner of service continuity disruptions. As such it serves as an excellent model to be emulated by other transportation consortia.

5.2.3 Recommendations

5.2.3.1 Develop an enhanced skills-based training program

The TTG benefits from a staff of relatively long tenure and experience, particularly in supervisory and management positions. On the expectation that staff turnover will occur, the TTG should consider enhancements to the current training approach. These enhancements should focus on identifying skills and requisite training needs for each individual in the organization. The focus should be on developing the skills required to master individual jobs, but also to ensure an adequate amount of cross-training to mitigate the risk associated with unexpected absences or staff turnover. Documentation should be provided including an individualized training agenda and record of completion.

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 and map accuracy

There is one consolidated digital map for the entire service area. The original map is based on GIS source data provided by the City of Toronto, with basic setup characteristics (e.g., road speeds) calibrated by *Edulog* during the setup process. The map contains additional layers of information, such as parks and bodies of water, and is coded to visually highlight certain characteristics, such as one-way streets. All relevant boundaries are contained within the map, and overall accuracy is reported to be high. However, maintaining the map is a challenge given its size and the large amount of construction and ongoing change occurring within the municipality.

Hazard boundaries within *Edulog* have been established for the TCDSB but not the TDSB as described in the Policies and Practices section. Additionally, certain road characteristics have been established where necessary to restrict safe walking paths (e.g., “no cross” or “no travel”). The density of students and schools for the TDSB largely negates the utility of hazard boundaries, as described in the Policies and Practices section.

Roughly 400,000 student records are contained within the *Edulog* database. Only a small fraction of these receive transportation services, and efforts at maintaining accuracy are focused on the transported student records. At the time of the review, 1,568 records had no associated address, 3,858 addresses fall outside city limits, and 3,842 addresses (or less than one percent) were unmatched to the map. This is still a relatively high proportion of errors and it is somewhat unclear as to the cause. Most likely, the errors are the result of data entry inaccuracies resulting from the data management protocol discussed below, and are not reflective of a problem with the accuracy of the underlying digital map.

5.3.1.2 Default values

On a tactical day-by-day basis, identified errors in calibration are handled by forcing bus route timing with manual adjustments to the routes themselves. Given the size and complexity of the map, TTG has determined that making ongoing changes to the calibration of road speeds and the like without a clear understanding of how these changes will impact the entire system is unwise. In a subsequent effort, a limited number of TTG staff are provided with access and tasked with determining whether the accumulated errors are due to a temporary consideration (e.g., construction) or a more permanent factor. In the latter instance the underlying map characteristics will be updated. While somewhat ad hoc, this approach is suitable to the unique needs and operating conditions of the TTG.

Feedback from bus operators is solicited in the form of an annual self-audit for each route. Additional inaccuracies are determined by the operators and communicated to the TTG on an as-needed basis. When received, the route planners investigate the error and correct the route direction and/or timing as

per the description above. Operators reported during the E&E Review that this process does not always result in the timely correction of route errors. Regular live route audits are also conducted by operational staff.

5.3.1.3 Student data management

There is a single student database within *Edulog*, and it contains all student records from both School Boards. The student database contains approximately 400,000 student records attending more than 850 distinct programs at almost 800 individual school buildings. The size of this database coupled with the fact that only about 10 percent of all enrolled students receive transportation services creates a unique environment and unique data management challenges for the TTG.

The relatively high number of unmatched student records illustrated earlier provides one example that helps define the nature of this problem. To maintain the accuracy and integrity of all student records as the data gets passed electronically to *Edulog* implies that TTG data entry at all schools must be accurate for all 400,000 students. This represents a complex undertaking where even in the best of circumstances a small rate of error can be expected. This is typical in all transportation consortia and exacerbated in the TTG. A unique circumstance arises for the TTG in that, not only is the quantity of data so much greater, but managing and correcting errors on all student records results in much effort being expended on maintaining nine out of ten student records for students that are not even eligible for transportation. A natural conclusion, therefore, is to focus on maintaining the accuracy and integrity of the 10 percent of eligible student records. Many of the “unmatched” students and other errors are likely attributable to ineligible students, and therefore of marginal relevance to the TTG.

Much of the maintenance activity to ensure the record accuracy of the approximately 42,000 transported students therefore occurs within *Edulog*. There is a weekly download of “adds, changes, and deletes” data from the SIS of both School Boards (Trillium), but a transportation request form is still submitted for each change directly to TTG from the receiving school for all special needs, alternative address, or program related requests. In the case of the TDSB, a paper form is submitted for all transportation requests. This produces a significant flow of paper and results in a heavy reliance on manual processes in comparison with other transportation consortia. The electronic data exchange is utilized to update the records for regular transportation students automatically, but a manual review of the change is still performed in most cases.

Forms for special education and program related transportation are initiated by the receiving school, and the TTG has a turnaround time standard of four business days to establish service changes. The form is sent to the operations staff of TTG responsible for the school where any errors or initial communication with the school is handled. These processes are still largely segregated between the School Boards, with operations staff performing these functions for each individual Board using forms that are also unique to each Board. All required data is extracted from the form and verified or manually entered in *Edulog*. Assuming the change does not disturb the bus route or run (e.g., no new bus stop is needed and an overload condition is not created), the operations staff completes the change and the TCNS system is used to provide notification to the school that the change is completed. If more detailed planning is required, the form is passed on to the TTG planning staff for action. In all cases, once the changes are complete, updated route information is also available to the schools via the TRACS system.

The weekly download of student data is administered by one TTG staff member, who executes the upload into *Edulog*, runs various exception reports, investigates, and cleans up the resulting errors. There is also a single complete download of student data that occurs in September of each year. An annual upload of pre-registration data occurs as part of the annual route planning cycle, but the grade rollover for other students occurs within *Edulog*. The annual planning cycle occurs on the rolled-over data, inclusive of the pre-registration data.

Overall, the current student data management processes are functional and meet the operational needs of the TTG as currently constructed. The processes result in a reasonably accurate and complete database for route management purposes, and are appropriate given the size and complexity of the School Boards’ enrolment relative to that of the transportation operation. However, the processes rely heavily on a flow of paper request forms and a redundant notification system. The processes are also largely segregated by School Board. While TTG’s operating environment is unique among consortia, current processes do not encourage integration of services and rely heavily on a robust operational staff and manual, paper-based processes. This largely runs counter to the intent of the E&E assessment.

5.3.1.4 Coding structures

Student records within Edulog are identified using a hierarchical series of system-generated, and manually entered codes. The key elements of the coding structure include:

- *School of attendance* – This is either a four letter, or a four digit code, the difference making the school identifiable by School Board.
- *Program* – This identifies any of 41 unique assigned educational programs.
- *System Eligibility Code* – This is an automatically generated code that is assigned by *Edulog* to a student record based on the eligibility criteria established for a school-program-grade combination. These are restricted to those defined within the system, and include: eligible; eligible due to hazard or Board approval (as defined by an established boundary within the system); ineligible – outside attendance area; and ineligible – within walk distance.
- *User Eligibility Code* – Within the TTG, this manually entered code is used as an “Assignment Criteria” to refine and/or redefine a student’s baseline eligibility as calculated by the system or to identify a specific type of service (e.g. morning only). TTG has limited these to a total of 11 relevant codes, as outlined in Table 1 below.
- *Special Needs Flag* – This is a binary (yes/no) code that identifies a student as special needs and enables the use of the supplementary special needs codes.
- *Special Needs Codes* – A series of 11 supplementary codes are provided that are used singly or in any combination to identify a special needs student’s particular equipment or service needs. Each code is coupled to a visual icon that prints on route forms for easy identification by bus drivers.
- *Transportation Mode* – This is a series of six codes that describe the type of vehicle or transportation mode to which an eligible student is assigned. These include: TTC (transit), Van (small 19 passenger Bus), Big (large 72 passenger bus), Mini (mini van), WC (wheelchair accessible vehicle), and Taxi.

This is an appropriate, relevant, and logical coding structure that provides most of the information required for the day-to-day management of the transportation system. It also provides the ability to rationally analyze and report on system-wide trends and performance without becoming burdensome to maintain. The linking of special needs codes to visual icons for ease of identification is a particularly noteworthy addition to the coding structure. Table 4 provides a summary cross-reference for the system eligibility and user eligibility codes for all eligible students in the database.

Table 4: Coding for Eligible Students

User Code	User Code Description	System Code					Total
		0	1	12	13	93	
0	Eligible	683	214	94	142	7	1,140
1	Hazard	64	287	4	10	1	366
10	To school transportation only	48	18	60	63	13	202
12	Outside attendance area	83	13	26	23	65	210
13	Within walking distance	67	21	35	18	34	175
20	From school transportation only	82	34	119	152	14	401
25	Eligible but no transportation required	40	45	15	29	2	131
30	Accommodation	0	1	13	10	2	26
40	Sibling travelling with student in SpEd	361	194	229	739	1	1,524
50	Alternate address	5,861	1262	3901	1993	241	13,258
55	All Eastern Rite students	712	13	72	32	0	829
60	Grandfathered students	19	2	46	2	0	69
70	Empty seat students	219	160	450	1255	25	2109
80	Exception with Board approval	0	3	7	2	0	12
93	No code (default)	24	10	4	5	8	51
99	No code (default)	8,638	5,527	3,987	2,469	8,69	21,490
Total		16,901	7,804	9,062	6,944	1,282	41,993

Bus routes are coded in the system to indicate the geographic area of origination within the service area, the operator assigned, and which School Board pays for the route. Bus runs are coded to indicate the “anchor school” (generally the last school served on the run), and the type of run (morning or afternoon, special needs or regular, noon). Runs are not coded to indicate whether they are part of a tiered route or whether the run serves multiple schools. There are no transfers currently in use within the system, so this coding is not currently required. Overall, the coding of runs and routes is functional and suited to the operational needs of the TTG, but somewhat limited for analytical and performance reporting purposes.

5.3.2 Best Practices

5.3.2.1 Special needs coding icons

The use of unique icons to identify special equipment needs is an excellent enhancement of the baseline coding structure that provides a fast, visually distinct identifier for bus drivers and other stakeholders to easily track these requirements. This represents a best practice to be emulated by other transportation consortia.

5.3.3 Recommendations

5.3.3.1 Reengineer student data management processes

There are unique data management challenges faced by the TTG. Manual processes have evolved to ensure that the volume of daily changes and preponderance of special needs transportation requests are accurately handled. This has nevertheless increased staffing and record keeping requirements with requests passed between the operations and planning functions, a heavy reliance on paper forms, and duplicative notification systems. The TTG should strongly consider undertaking an effort to streamline these processes and introducing a heavier reliance on automation and automated processes. This should include full integration of the operations function between the School Boards, a more distinct separation of the responsibilities for route changes between planning and operations, and a movement toward more robust use of *TRACS* for distributing change notifications and updated route information to schools and operators.

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 cost 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, data analysis, and performance measurement

The TTG runs numerous work lists within *Edulog* for various operational purposes on an ongoing basis. There is no regular program of data reporting to the School Boards. However, there is a record of various reports that have been produced for the School Boards to analyze and or address specific issues and concerns over the years. The TTG has also begun to develop a set of KPIs for this purpose. These metrics are calculated on a monthly basis and are tracked for trend analysis. This program began with the start of the current school year, and data has been accumulated for three consecutive months as of the time of the E&E Review.

TRACS has also been set up to provide end users (schools and operators) with a host of customized and customizable reports that provide information targeted to the specific user. TTG staff is also skilled at creating data extracts and reports, and has worked with senior *Edulog* to create other regular reports, such as monthly mileage reports. Overall, the use of reporting for operational and internal purposes is appropriate. The use of KPIs beginning with the current year is an excellent addition.

5.4.2 Recommendations

5.4.2.1 Enhanced reporting and performance measurement

The TTG should strongly consider enhancing and expanding the creation and reporting of KPIs. The addition of a regular program of summary reporting to the envisioned Consortium's governance structures and the tracking of trends over time will provide an excellent foundation from which to build a culture of continuous improvement in the delivery of transportation services with the TTG service area.

5.5 Regular and special needs transportation planning and routing

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

5.5.1 Observations

5.5.1.1 Bus route planning and management

Route planning is a centralized, consolidated, and specialized function within the TTG organization structure. There is a team of five planners that report to a single supervisor responsible for special needs route planning. This function consumes the majority of planning resources due to the disproportionate number of special needs students relative to regular students when compared to other consortia in the Province. Special needs route planning is conducted on a global basis once annually, with as-needed updates and changes on a regular basis throughout the school year. A separate and smaller team is responsible for regular education route planning, which is generally more static than special needs and focuses primarily on program transportation, although an annual review of these routes is also undertaken during the planning cycle.

The senior planning staff of the TTG are highly capable users of the system and its advanced functionality. In addition to regular route maintenance activities, periodic analyses are conducted in support of various School Board initiatives. Examples include the integration of bus routing on the creation of the joint operations discussed in the Policies and Practices section, and a high school and school relocation transportation analysis performed for the TCDSB since that time. A route optimization was conducted for the high school study to identify the number of additional buses required.

Special needs route planning is fully integrated between the School Boards. Special needs and regular bus routes are mostly operated as separate systems. There are currently 399 students who have some form of special needs identification that ride on a 72-passenger vehicle. There is an effort to allow for

siblings of special needs students to ride on special needs vehicles, and a user eligibility code is assigned to these students. The data indicates a total of 1,524 students with this code.

5.5.1.2 Analysis of system effectiveness⁷

Current route, run, student, and bell time data was extracted from the *Edulog* system to analyze system effectiveness. Given the disproportionate impact of special needs transportation requirements within the TTG system, the regular and special needs components were evaluated separately. Each of these components has very different demand and service delivery patterns.

The regular transportation component of service delivery is based on a two-tier system, with service provided by a fleet of large buses each with a nominal rated capacity of 72 seats. These buses generally provide four bus runs each day, two in the morning and two in the afternoon, with each individual run designed to service the population of one school. Runs from both School Boards are then combined together to create the daily route for each bus.

Figure 7 displays the number of students transported to schools starting at each of the time periods indicated. For clarity, this presentation is restricted to schools and programs where transportation is provided to 50 or more students. We see from this chart that there are clusters of students transported to schools starting at 8:30, and again between 8:45 and 9:00. This separation, coupled with relatively short run times and the ability to drop students off at school in advance of the starting bell time facilitates the tiering of bus runs.

Figure 7: Transported students by school start time (schools with 50+ transported students)

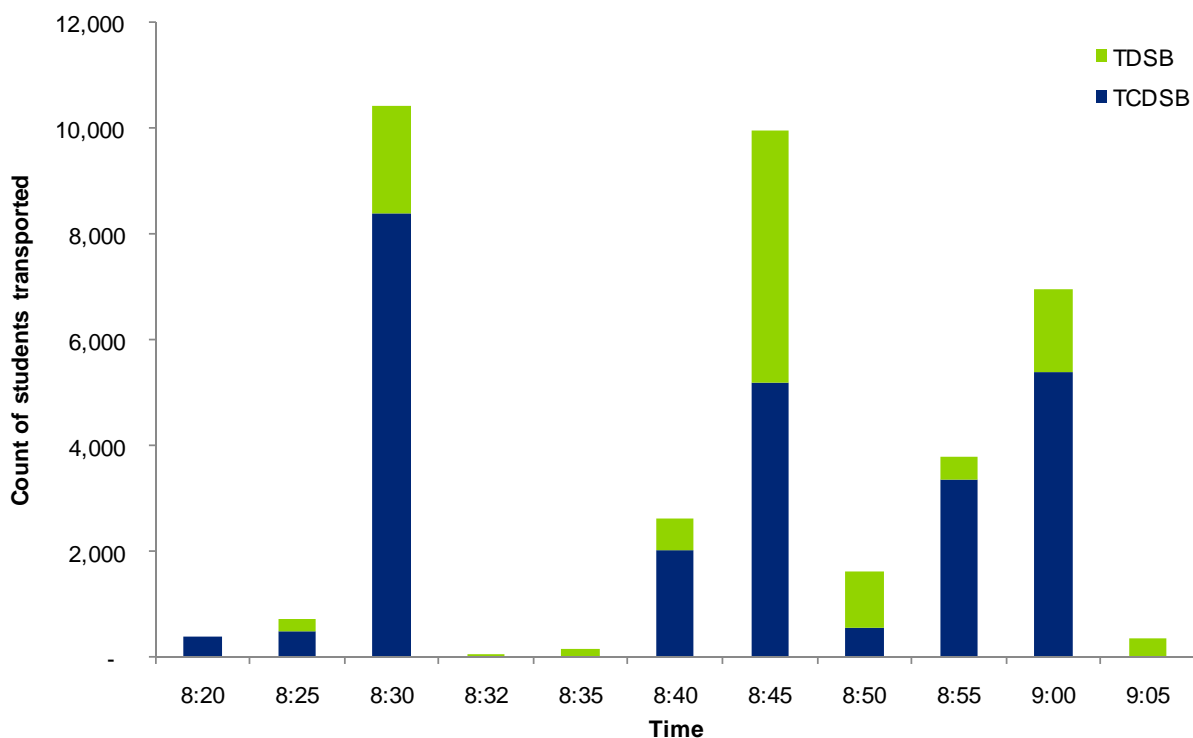
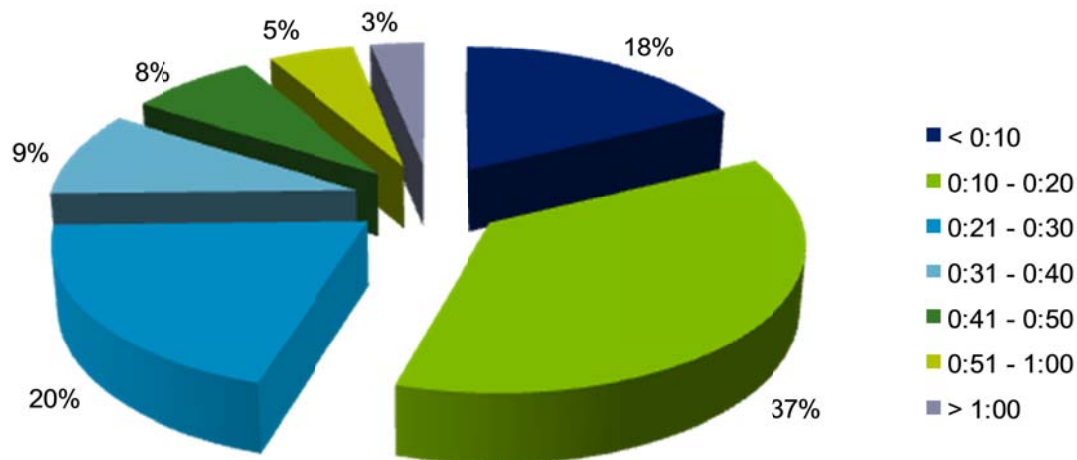


Figure 8 illustrates the relatively short run times by taking all 1,454 morning and afternoon regular bus runs (this analysis ignores midday runs) and grouping them into 10 minute time ranges. We see from this illustration that 18 percent of all to and from bus runs are under 10 minutes in length, and that fully 75 percent are less than 30 minutes. Just eight percent of all regular home to school bus runs exceed 40

⁷ 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 the different timing of the data collection.

minutes with students on board. This is very telling, particularly given the dense urban environment and traffic considerations that go into bus run design in the TTG.

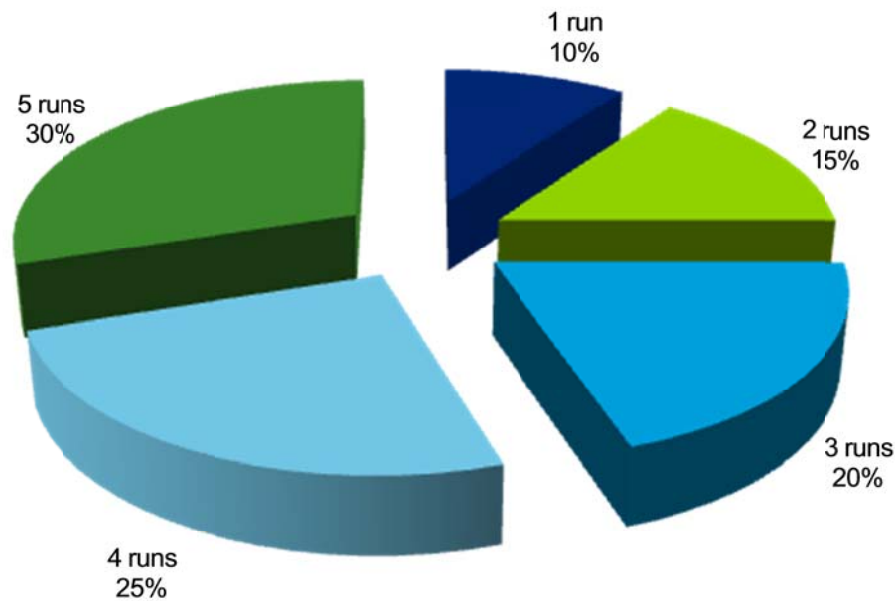
Figure 8: Percent of runs, by run time



Run times also provide a surrogate for understanding student ride times, a key measure of overall system effectiveness. The TTG reports fewer than three and a half percent of all regular education students have morning or afternoon ride times that exceed 40 minutes, with an extraordinary 80 percent having morning and afternoon ride time of 20 minutes or less. An independent calculation completed as part of the E&E Review reveals slightly different results, but largely in line with these reported numbers. In both cases, and even adjusting for an urban environment where we expect relatively short ride times, this represents a very high level of service delivery.

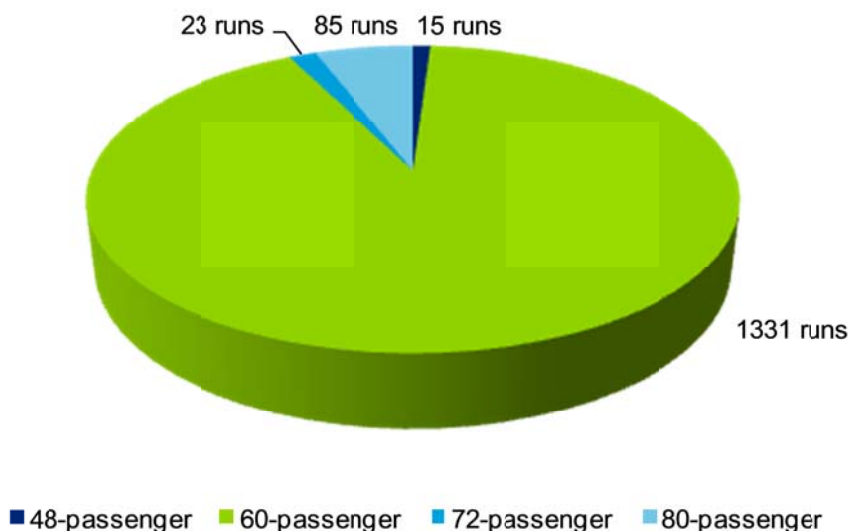
The efficiency of TTG regular transportation routes are built on the premise of reusing each bus multiple times over the course of the service day. The 1,454 individual daily home to school bus runs are serviced by 395 school buses, each of which performs a minimum of two (one morning and one afternoon) runs, with most however serving either four or five daily runs. This provides for a reasonably high level of asset utilization. However, when considered in the context of the school start times illustrated in Figure 7, it appears that further improvements to asset reuse and overall efficiency would be possible with a further reallocation of school bell times into additional time tiers or with greater separation between the existing tiers.

Figure 9: Regular routes by count of daily runs



The level of asset utilization must be balanced against that of capacity utilization on each individual bus run. As mentioned earlier, the regular transportation component of the TTG system is operated with a fleet of buses each of which has a nominal capacity of 72 seats. The actual size of the buses used on each route can vary, however, as does the planned maximum capacity used by TTG staff in constructing each bus run. As illustrated in Figure 10, the preponderance of runs have a maximum planned load in the *Edulog* system of 60.

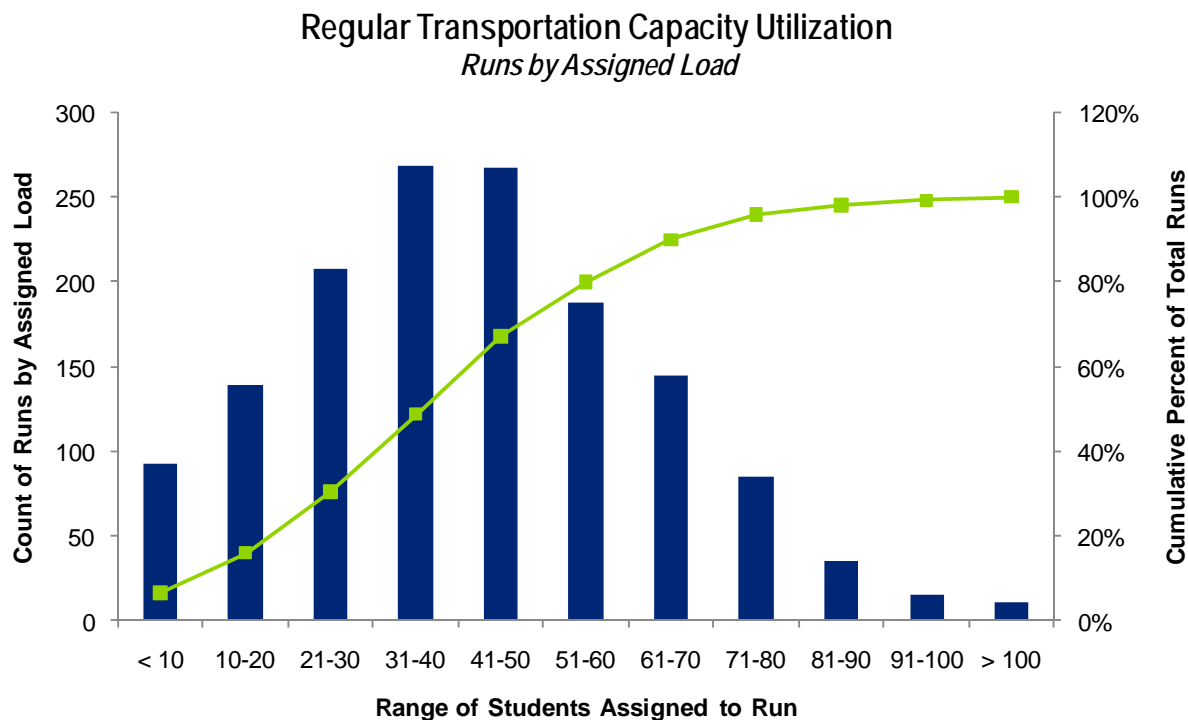
Figure 10: Edulog's reported bus capacity (regular home-to-school bus runs)



When measured against the standard established by TTG within the planning software, the average capacity utilization across all morning and afternoon home to school bus runs is 70 percent, which is within the expected range. However, when we instead examine the number of students assigned to each bus run, a somewhat different picture emerges. We see from this presentation that a significant number of the system's regular bus runs are lightly loaded, with nearly a third of all runs having fewer than 30 students assigned. Given the dense urban operating environment, this may point toward an opportunity to

improve overall efficiency further through increased capacity utilization, or at least through focused attention on those runs that are particularly lightly loaded.

Figure 11: Regular transportation capacity utilization (runs by assigned load)



The system described above provides for some sharing between the School Boards, although this is largely limited to the sharing of buses on routes rather than students on runs. The system's 1,454 daily home to school runs include just 69 combination runs where students from multiple schools are picked up and delivered to each school in sequence. Of these, only one is readily identifiable as including students from both School Boards. Of the 395 daily bus routes, 94 (24 percent) perform runs serving schools of both Boards. In these cases a bus may perform a run to a TDSB school followed by one to a TCDSB school, but there is no mixing of students on the bus. Given the differing characteristics of attendance for each Board, and the relative density that results in small school boundaries across the service area, this represents a reasonable level of sharing.

When considered as a whole, the regular transportation component of the TTG network is a reasonably efficient and highly effective transportation system. There are certainly unique demographic and topographic conditions that influence the design and operation of the system, such as system-wide density and unpredictable traffic challenges. These challenges also, however, create unique opportunities available only to the TTG. Additional route tiering with judicious bell time coordination and improving the capacity utilization of runs currently on the low end of the utilization range are likely to yield additional efficiencies in the regular transportation component of the system.

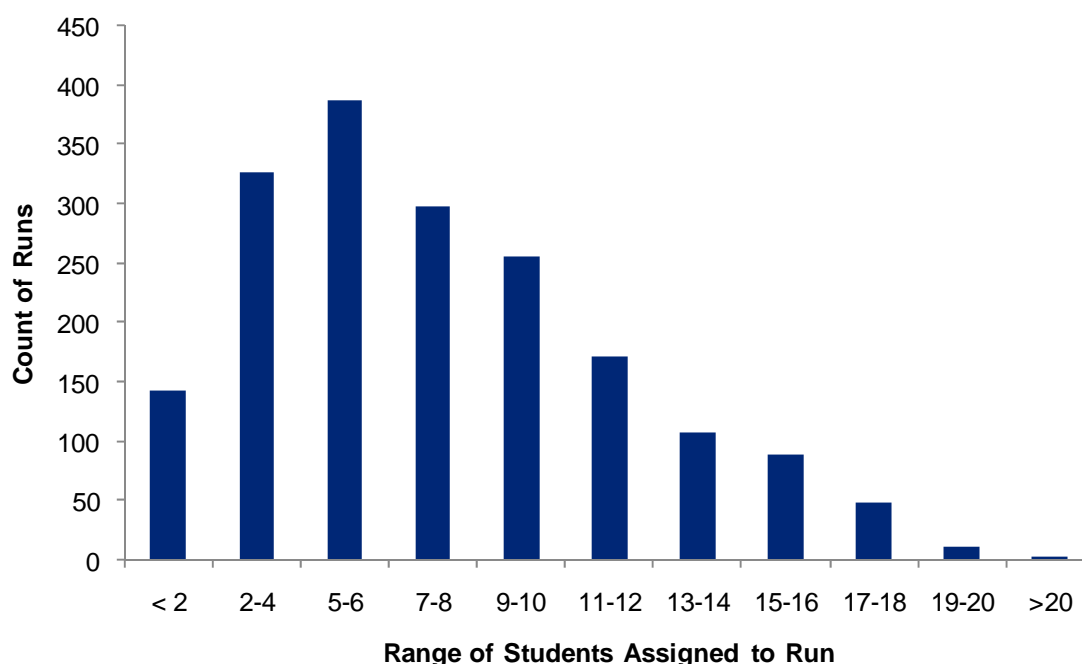
The special needs component of the system operates as a largely separate transportation network, although there are some examples of regular students riding on special needs buses (such as siblings of special needs students) and special needs students riding on regular buses, when their exceptionalities permit this mainstreaming. These are largely exceptions, however, and represent a small percentage of all students. Special needs transportation is generally provided on small 19 passenger school vehicles. 1,803 of 1,840 daily special needs bus runs are identified in *Edulog* as being operated by this capacity vehicle type.

Unlike with the regular transportation component, route planning is fully integrated between the two School Boards. The placement of students at multiple center-based programs throughout the service area, the numerous unique program bell times, and the many unique circumstances and requirements of

the students themselves facilitates a much higher degree of sharing on the individual bus runs. A heavy reliance is placed on the use of combination runs in this component of the system, with 1,581 of 1,840 runs (86 percent) serving more than one school or program. Many of these runs serve schools or programs of both Boards.

Average capacity utilization across all morning, midday, and afternoon special needs bus runs is 40 percent. Given that these services are provided on relatively high capacity vehicles (for special needs), this is an excellent result. Figure 12 shows that most special needs runs have between four and ten students assigned, with a relatively small number below or above this range.

Figure 12: Special needs transportation capacity utilization (runs by assigned load)



5.5.2 Recommendations

5.5.2.1 Further analyze the regular transportation system for possible efficiencies

The TTG improved overall efficiency when the joint operations were first initiated by implementing a bell time coordination strategy together with the sharing of buses between Boards on daily routes. An examination of the data indicates a reasonable level of efficiency, but also illustrates that further gains are possible in the areas of asset and capacity utilization without dramatically curtailing service quality or service effectiveness. The TTG should consider undertaking an analysis to evaluate the costs and benefits of further system-wide bell time coordination while also examining individual bus runs for possible consolidation.

5.6 Results of E&E Review

Routing and technology has been rated as **Moderate-High**. Most of the systems and processes are in place to successfully manage the development and maintenance of effective and efficient bus routes and schedules. Many of the operating practices in use have evolved to address circumstances that are truly unique to the operating environment of the TTG, and the analysis of system effectiveness indicates that a reasonable level of efficiency has been achieved while delivering an exceptional level of service quality. This does not diminish the opportunity for further improvements to both processes and results that may be possible with further analysis by TTG staff and cooperation between the School Boards.

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;
- Goods and services procurement; 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:

High

6.2 Contract Structure

An effective contract⁸ 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

There are executed contracts with all bus operators. While the contracts are standardized, each School Board has individually signed contracts with each of the bus operators (all operators service both Boards).

The contracts are valid from September 1, 2007 to August 31, 2012, with two one-year renewals that will automatically extend the term unless the School Board(s) choose not to extend the term.

The contracts outline appropriate legal, safety and other non-monetary terms, including:

- The nature of the transportation services to be provided, including the number of vehicles that will need to be used, the size of the vehicles, and other aspects of the services to be provided;
- The term of the contract and the conditions under which the School Board can terminate and/or alter the contract;
- Fee structures, payment schedules, and other invoicing / payment provisions such as fuel escalation;
- The operator's performance requirements and the School Board's right to verify contract compliance;

⁸ 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.

- Performance requirements address: routes, transportation services and rates, pickups / drop-offs, travel time, school year, student lists, transportation requirements, administration, vehicle requirements, driver qualifications and responsibilities, wheelchair service, developmental delayed service, first aid training, and safety requirements.
- All drivers are expected to be trained in school bus safety programs – new drivers have two weeks to receive initial training (which includes first aid and EpiPen training), and experienced drivers get annual refreshers on EpiPen training.
- All operators are expected to perform an evacuation drill with students on their “to school” trip by the end of October, and to work with each school to identify the best time to conduct these drills.
- The use of personal information and compliance with applicable legislation (e.g., PIPEDA), as well as confidentiality and privacy provisions;
- The School Board's right to determine route design, pickup locations, and drop-off locations;
- Vehicle requirements (e.g., maximum age of 12 years, average fleet age of 7 years, etc);
- Driver requirements (e.g., licensing and insurance requirements, vulnerable sector checks, etc);
- Driving requirements (e.g., speed limits, parking provisions, how vehicles should be reversed, etc);
- Assignment and subcontract rights, including the requirement that the operator seek the Board's written consent prior to assigning the contract and that every subcontract entered into by the operator must adopt all of the terms and conditions of the contract, as applicable to the subcontractor's work;
- Other provisions, including: operator representation and warranties; indemnification and insurance requirements; worker's compensation and health and safety, audit and bookkeeping requirements; administration requirements; incident reporting; and dispute resolution, amongst others.

The executed contracts also contain a “Healthy School Bus Plan.” This plan is intended to address concerns with respect to children's exposure to vehicle exhaust, allergens, and other chemicals associated with the use of school buses. Among other things, the requirements address:

- Fleet deployment (80% of operator vehicles are to be deployed on the basis of route length, with newer vehicles assigned to the longest routes and older vehicles assigned to the shortest routes);
- Conditions inside the bus (e.g., cleanliness levels, eating policies, etc);
- Bus maintenance;
- Idling practices (e.g., follow the City of Toronto's idling by-laws, minimize idling, etc);
- Fuel technologies;
- Bus equipment; and
- Board practices that will encourage healthy alternatives to school bus transportation.

The executed contracts detail the School Board's right to reallocate routes or to allocate new routes, but do not explicitly state how the School Board would reallocate routes or allocate new routes. Reallocation of existing routes and allocation of new routes are primarily based on level of service issues, as determined by KPI analysis, input from operational staff, and feedback from schools and principals.

6.2.1.2 Bus operator compensation

Bus operator compensation is based upon:

- A per diem rate, which varies according to the size of the vehicle and time of day (i.e., morning, afternoon, noon, etc);
- A variable rate, is utilized if a route exceeds the standard per diem time for the route; and
- A fuel compensation factor that is determined using a fixed fuel rate, monthly kilometers, and a fuel efficiency factor that varies according to the size of the vehicle.

- For bus operators transporting wheelchair students, a fixed fee per student is paid – this covers costs associated with routing and transporting these students.

For cancellations arising from inclement weather and/or School Board labour disputes, the operators receive 70% of the per diem rate conditional upon paying their drivers their full normal per diem wages. This will be honoured for 15 days, after which the Board may reduce or stop continued payments.

6.2.1.3 Taxi operator contract clauses

While the School Boards do not directly contract with taxi operators, some of its bus operators ask or are requested to subcontract to taxis companies – these taxi operators must abide by the same terms and conditions of the bus operator contracts discussed above.

The School Boards' procurement departments have also set up a Vendor of Record for taxis. When the transportation departments need taxis on an ad-hoc basis, they use their School Boards' preferred taxi vendors.

6.2.1.4 Parent drivers

Neither of the two School Boards use parent drivers.

6.2.1.5 Public transit operator contract clauses

Both School Boards' transportation departments provide eligible students with public transit tickets where it is deemed to be more cost-effective or where it is required by School Board policy. However, the cost-benefit analyses are not regularly reviewed to ensure that cost-benefit analyses conducted in the past to justify public transit use are still valid.

The TDSB's transportation department orders the transit tickets for special needs students through the School Board's procurement system. Individual schools order the transit tickets for regular needs students and are then reimbursed annually by the transportation department. There is no formal contract between the TDSB and the TTC.

The TCDSB's transportation department orders and distributes transit tickets for all eligible students; it has a volume discount and there is a normal, executed consignment agreement in place with the TTC.

6.2.2 Best Practices

It is recognized that the transportation operations have demonstrated best practice in the following areas:

Standard contracts and contract clauses

The transportation departments have standard contracts in place for operators that outline appropriate legal, safety and other non-monetary terms. This ensures the contractual relationship between transportation service providers and the School Board is defined and enforceable. Bus contract wording automatically extends the contract into the next year based on the terms and conditions from the previous year. This ensures that a contract is in place at the start of the school year.

Vehicle age

The transportation departments' requirements for maximum and average vehicle ages are aligned with the provincial best practices.

Insurance

The transportation departments require operators to provide proof of insurance prior to the start of the school year. This ensures that this important legal requirement is met prior to providing any services.

Environmentally-friendly practices

The executed contracts include a section tailored to address health and environmental concerns. This section prescribes environmentally-friendly requirements such as fleet deployment practices, anti-idling policies, and bus cleanliness standards, amongst others. These requirements help address concerns raised by parents and health professionals, while allowing the Boards to pursue sustainable business practices and to display environmental leadership.

6.2.3 Recommendations

6.2.3.1 Mandate that safety training be provided prior to the start of the school year

It is recognized that all drivers are to be trained in school bus safety programs, and that new drivers have two weeks to receive the initial training (which includes first aid and EpiPen training). It is recommended that all drivers be qualified to manage emergency situations before they start transporting students.

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 transportation departments worked together to develop and issue an RFP for bus operator services, and used competitive procurement to procure all bus operator services.

The transportation departments have also developed a procurement calendar that is used to guide the RFP process and ensure that successful vendors have sufficient time to secure vehicles and drivers.

6.3.1.2 Special needs transportation

As discussed above, the transportation departments used competitive procurement to procure all bus operator services, including special needs transportation.

The transportation departments also rely on the operators to provide routing services for some special needs students, and this requirement was embedded in the RFP for bus operator services.

6.3.1.3 Other procurement

The transportation departments worked together to develop and issue an RFP for the delivery of the student bussing safety programs, including the First Rider program and the Ambassador program. Competitive procurement was used to select an operator to provide these services.

6.3.2 Best Practices

Competitive procurement

The transportation departments' current operator contracts were all competitively procured and the transportation departments expect to continue competitively procuring operator contracts. Competitive procurement processes are recognized as the best means to ensure market rate pricing as they allow the purchaser to obtain the best value for money given a defined set of service expectations. The use of a competitive procurement process introduces the business opportunity to a competitive market. Based on the operator's submission, the transportation departments are able to identify the most qualified transportation service operators that offer the best prices for the level of services provided. The School Boards' transportation departments should be commended for their strong and historical commitment to competitive procurement of transportation services.

Procurement calendar

The transportation departments have a governance-approved operator procurement calendar in place which mandates that operator procurement be completed well before the start of the school year. This calendar is also communicated to operators.

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 contracted levels of service. Effective contract management practices focus on four key areas:

- Administrative contract compliance to ensure that operators meet the requirements set out in the contract;

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

6.4.1 Observations

The Consortium has recently developed a process to ensure operator compliance with the terms of the operator contracts; the basis for this compliance program is not delineated in the operator contracts.

6.4.1.1 Bus operator administrative, contract compliance, facility and maintenance monitoring

Evaluation forms for bus operator administrative, contract compliance, facility and maintenance monitoring exist and are used to evaluate operators' compliance with administrative requirements, contract provisions, facility performance standards, and maintenance requirements.

The evaluation form addresses operations, planning, safety, technology, communication, and financial / accounting criteria; the evaluator is also required to review documents such as the commercial vehicle operator record, driver and vehicle records, safety records, and evidence of compliance with "green" requirements, amongst other requirements.

These audits are conducted annually by supervisory staff, with weekly reviews of the operator KPIs that were detailed in Section 3.5.1.11 **Error! Reference source not found.** The operators are provided with notice that the transportation departments will be visiting to conduct the annual audit in order to ensure the availability of operator staff. Issues are documented and communicated back to the operators, and the transportation departments will work with operators to ensure that issues are appropriately addressed (e.g., development of a five-step plan to ensure that an operator with performance issues is able to meet the required performance standards). The policies associated with conducting these audits are not formally codified.

6.4.1.2 Operator safety and service monitoring

The transportation departments evaluate operator safety through its annual operator audits, which include reviewing the operators' internal route audit documentation. Operator service levels are also monitored through the weekly review of operators' KPIs, as discussed in Section 3.5.1.11.

The transportation departments conduct route audits annually, but this process is not codified and there are no guidelines on how regularly such route audits should be conducted. In addition, while some of these route audits are conducted on a random basis, for the most part, the route audits conducted by the transportation departments are typically in response to an issue (e.g., complaints are received, survey results indicate potential issues, etc).

6.4.1.3 Performance monitoring

The transportation departments conduct regular surveys by querying schools on service levels, customer service, etc – for both operator and transportation departments performance. Results are tracked year over year, and are reviewed by the transportation operations managers to identify areas for improvement.

The transportation departments also monitor operator performance through the weekly review of operators' KPI packages, and are empowered by the operator contracts to take corrective actions if certain performance standards are not met (e.g., a penalty if insufficient drivers are available).

6.4.2 Best Practices

Operator administrative, contract, facility and maintenance compliance

The transportation departments ensure that the information, facility and vehicle requirements outlined in the operator contracts are verified in a timely manner and tracks the performance of operators over time. Such efforts to ensure operator compliance help the transportation departments measure whether the operators are complying with stated contract clauses and, ultimately, if they are providing safe and reliable service. However, it is recommended that the transportation departments work to document the policies associated with conducting its facility audits.

Performance monitoring and surveys

The transportation departments conduct regular surveys by querying schools on service levels, customer service. The surveys address both operator and transportation departments' performance, and results are tracked year over year and are regularly reviewed by the transportation managers. This ensures that the level of service being provided by the transportation departments and the operators is consistent and matches key stakeholders' expectations.

6.4.3 Recommendations

6.4.3.1 Modify the operator safety and service monitoring process

It is recognized that the transportation departments regularly monitor operator service levels by reviewing operator KPIs on a regular basis and that route audits are conducted. While some route audits are conducted randomly, route audits are generally used in response to an issue (i.e., a complaint). It is recommended that the transportation department move towards conducting random route audits more frequently and strive to audit a fixed percentage of its routes annually. This will allow the transportation departments to gain a clearer view of the service standards maintained by operators on a typical, day-by-day basis and to take a more proactive approach in ensuring operators are providing safe and reliable service. This policy should also be documented appropriately.

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 **High**. Positive elements include the execution of standardized, comprehensive operator contracts through competitive procurement, the implementation of environmentally-friendly practices in operator contracts, and an effective and efficient program to monitor operator contract compliance and operator performance. However, the transportation departments should work towards ensuring that all drivers have appropriate safety training prior to beginning their routes and that random route audits are conducted on a more regular basis.

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 ⁹	Effect on surplus Board
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:

Toronto Catholic District School Board

Item	
2009-2010 Transportation Surplus (Deficit)	(\$2,660,085)
% of Surplus (Deficit) attributed to the Consortium	100%
Revised amount to be assessed under the Consortium	(\$2,660,085)
E&E Rating	Moderate
Funding Adjustment based on Ministry's Funding Adjustment Formula	60%
2010-2011 Total Funding adjustment	\$1,596,051

Toronto District School Board

Item	
2009-2010 Transportation Surplus (Deficit)	\$ 811,916
% of Surplus (Deficit) attributed to the Consortium	100%
Revised amount to be assessed under the Consortium	\$811,916
E&E Rating	Moderate
Funding Adjustment based on Ministry's Funding Adjustment Formula	No adjustment
2010-2011 Total Funding adjustment	No adjustment

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

⁹ This refers to Boards that have a deficit/surplus on student transportation

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 TTG	Toronto Transportation Group
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 Toronto Transportation Group” 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
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
Member Boards, School Boards or Boards	The school boards that have participated as full partners or members in the Consortium; the TCDSB and the TDSB
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
TCDSB	Toronto Catholic District School Board
TDSB	Toronto District School Board

Appendix 2: Financial Review – by School Board

Toronto Catholic District School Board

Item	2006-2007	2007-2008	2008-2009	2009-2010 ⁹	2010-2011 ¹⁰
Allocation ¹¹	\$19,658,105	\$20,034,471,	\$20,693,598	\$20,914,149	\$20,925,650
Expenditure ¹²	\$21,078,954	\$22,221,932	\$23,195,154	\$23,574,234	\$25,235,829
Transportation Surplus (Deficit)	(\$1,420,849)	(\$2,187,461)	(\$2,501,556)	(\$2,660,085)	(\$4,310,179)

Toronto District School Board

Item	2006-2007	2007-2008	2008-2009	2009-2010 ¹⁰	2010-2011 ¹¹
Allocation ¹²	\$46,226,510	\$47,282,866	\$48,753,019	\$48,243,771	\$47,650,600
Expenditure ¹³	\$41,945,280	\$42,638,051	\$46,200,094	\$47,431,855	\$50,333,357
Transportation Surplus (Deficit)	\$4,281,230	\$4,644,815	\$2,552,925	\$811,916	(\$2,682,757)

¹⁰ 2009-2010 allocations and expenditures based on Ministry data – Financials for 2009-2010

¹¹ 2010-2011 allocations and expenditures based on Ministry data – Revised Estimates for 2010-2011

¹² Allocation based on Ministry data – includes all grant allocations for transportation (Section 9 00008C, Section 13 00006C, Section 13 00012C)

¹³ 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. AA 10 Ministry Survey.pdf
2. AA 11 Road Restrictions.PDF
3. AA 12 Traffic Volume.pdf
4. AA 13 Toronto Road construction.pdf
5. AA 14 2006_ethnic_origin_visible_minorities_backgrounder.pdf
6. AA 15 2006_income_and_shelter_costs_briefingnote.pdf
7. AA 15 2006_lang_imm_citizenship_mobility_backgrounder.pdf
8. AA 16 2006_population_and_dwelling_count_backgrounder.pdf
9. AA 17 2006_aboriginal_identity_backgrounder.pdf
10. AA 18 Religious Holy Days 2010-2011.pdf
11. AA 19 Toronto Crossroads Report.pdf
12. AA 2 Budget Workflow.PDF
13. AA 20 Variety Village annual_report_2009.pdf
14. AA 21 Languages.PDF
15. AA 22 Student Transportation Timeline.xls
16. AA 23 TTC Removal at Secondary Level.pdf
17. AA 24 Toronto Student Transportation Services - 2010.pdf
18. AA 25 - General Agreement for Cotermious Route Planning Between TCDSB & TDSB.pdf
19. AA 29 Minutes of Transportation Meeting April 20, 2010.doc
20. AA 29 Minutes of Transportation Meeting Nov 16, 2010.doc
21. AA 29 Minutes of Transportation Meeting November 2010 Management.doc
22. AA 29 Minutes of Transportation Meeting October 26th, 2009.doc
23. AA 3 Data Workflow.PDF
24. AA 30 TTC Contract.pdf
25. AA 31 Subcontract Letters with Taxi Operators.pdf
26. AA 32 RFP - TAXI 2007.pdf
27. AA 33 Level of Service 2006 Operator.PDF
28. AA 33 Level of Service 2006 STS.PDF
29. AA 33 Level Of Service 2007 Operator.PDF
30. AA 33 Level of Service 2007 STS.PDF
31. AA 33 Level Of Service 2008 Operator.PDF

32. AA 33 Level of Service 2008 STS.PDF
33. AA 33 Level Of Service 2009 Operator.PDF
34. AA 33 Level of Service 2009 STS.PDF
35. AA 33 Level Of Service 2010 Operator.PDF
36. AA 33 Level of Service 2010 STS.PDF
37. AA 33 Year over Year External Survey Comparisons.xls
38. AA 33 Year over Year Internal Survey Comparisons.xls
39. AA 34 field trip RFP 2009.pdf
40. AA 35 Organization Chart.doc
41. AA 36 Staff Roles &Responsibilities Dec 2010 (2).pdf
42. AA 36 Staff Roles &Responsibilities Dec 2010.pdf
43. AA 37 TTG Unincorporated December 2010.doc
44. AA 38 Reasons for increase bussing (TC) 2010.pdf
45. AA 39 Interlock Systems (TRACS) - Service, Licence and Support Agreement - Feb 16 2004.pdf
46. AA 4 Incident Reporting Workflow.pdf
47. AA 40 Safety Program Submission.pdf
48. AA 41 Toronto Edulog, ON.pdf
49. AA 41 Toronto Public, ON.pdf
50. AA 42 TCDSB letter re safety officer costs.doc
51. AA 43 Agenda - Coterminous Transportation June 1,2007.doc
52. AA 43 Agenda - Coterminous Transportation June 20 2005.doc
53. AA 43 Agenda - Coterminous Transportation.doc
54. AA 43 Minutes of Coterminous Transportation Meeting June 30th, 2005.doc
55. AA 43 Minutes of Coterminous Transportation Meeting May3rd, 2005.doc
56. AA 44 Manual Chapter 1.pdf
57. AA 44 Manual Chapter 10.pdf
58. AA 44 Manual Chapter 11.pdf
59. AA 44 Manual Chapter 12.pdf
60. AA 44 Manual Chapter 13.pdf
61. AA 44 Manual Chapter 14.pdf
62. AA 44 Manual Chapter 15.pdf
63. AA 44 Manual Chapter 16.pdf
64. AA 44 Manual Chapter 17.pdf

65. AA 44 Manual Chapter 18.pdf
66. AA 44 Manual Chapter 19.pdf
67. AA 44 Manual Chapter 19b.pdf
68. AA 44 Manual Chapter 19c.pdf
69. AA 44 Manual Chapter 2.pdf
70. AA 44 Manual Chapter 3.pdf
71. AA 44 Manual Chapter 4.pdf
72. AA 44 Manual Chapter 5.pdf
73. AA 44 Manual Chapter 6.pdf
74. AA 44 Manual Chapter 7.pdf
75. AA 44 Manual Chapter 8.pdf
76. AA 44 Manual Chapter 9.pdf
77. AA 5 Route Audit.pdf
78. AA 6 School Profiles.xls
79. AA 7 System-wide Transported_Programmes_All_Schls_June_07_Cost.xls
80. AA 8 Healthy School Bus Plan- Final.PDF
81. AA 9 Student Transportation Services Resource Manual 2010.pdf
82. AA1 Bell Time Workflow.PDF
83. AA27 Toronto Transportation Group Scan.doc
84. AA28 E&E Review - TTG presentation.PDF
85. C 1 A 1056405_2_Student Transportation Agreement - FINAL - STOCK.pdf
86. C 10 Costs-Fleet Drivers-October 2010.xls
87. C 11 Joint RFP for Student Bussing Safety Program.doc
88. C 12 Angelo Goal and Objectives Sept 14 2010.doc
89. C 13 Route Audits - Memo.pdf
90. C 14 09-10 Minutes Staff Meeting Jan20-10.doc
91. C 14 09-10 Minutes Staff Meeting Mar31-10.doc
92. C 14 09-10 Minutes Staff Meeting May26-10.doc
93. C 14 09-10 Minutes Staff Meeting Oct21-09.doc
94. C 14 10-11 Minutes Staff Meeting Nov17-10.doc
95. C 14 10-11 Minutes Staff Meeting Oct20-10.doc
96. C 1b Contract Signature Sheets.pdf
97. C 2 TTG Special Needs Manual.doc

98. C 3a Contracted Operators.pdf
99. C 3b Student Transportation Services Agreement _FINAL Template.PDF
100. C 3c Signature sheet TTC.pdf
101. C 5 Contracted Fleet Info.xls
102. C 6a TTC Eligibility.pdf
103. C 6b eligibility policy via mode.pdf
104. C 7 C Communication.docx
105. C 7b Collection of Operator Information.pdf
106. C 8 A Toronto Transportation Group Procurement Calendar.doc
107. C 8 B Transportation RFP Final November 22.doc
108. C 8c RFP Correspondance.pdf
109. C 9 a-f Audit Function.pdf
110. C 9 F KPI Weekly Status Template1011.xls
111. C 9b Operator Audit Forms.pdf
112. C 9e Documented route audits.pdf
113. C 9g Communication with Operator regarding performance.pdf
114. CM 10a STRATEGIC PLAN TEMPLATE.doc
115. CM 10b Toronto Transportation Group Goals & Objectives.doc
116. CM 10c Evidence of tracked objectives.pdf
117. CM 11a KPI Process.doc
118. CM 11b TTG KPI Weekly Status Template1011.xls
119. CM 11c Brief - Transportation Level of Service.pdf
120. CM 11c Metrics for stakeholders.pdf
121. CM 11d Evidence of changed metrics.PDF
122. CM 12a FOI Info and process.pdf
123. CM 12c evidence of FOI review.pdf
124. CM 12e Driver Confidentiality Agreements.pdf
125. CM 12f Staff Confidentiality.pdf
126. CM 13a Budget Estimates timeline.pdf
127. CM 13b Budget Allocation Formula.pdf
128. CM 13C Expenditure Summary - 1st Qtr (30Nov09).pdf
129. CM 13d Board Rpt - 1st Qtrly Rpt (3Mar10).pdf
130. CM 13d Board Rpt - 2nd Qtrly Rpt (24Mar10).pdf

131. CM 13d Board Rpt - 3rd Qtrly Rpt (16Jun10).pdf
132. CM 13e TRANSPORTATION BUDGET 0708 0809 Comparison Budget Control.pdf
133. CM 14b Financial Statement TCDSB_08-09.pdf
134. CM 14c Purchasing Procedures - SCG 2010.Version 11.pdf
135. CM 14d Budget Impact Initiative (Blank Form) (Version Excel 97-2003).pdf
136. CM 14f Sample Billing proof verify.pdf
137. CM 1a TTG Unincorporated October 2010.docx
138. CM 2a Consortium Reporting Structure.pdf
139. CM 3A1 TTG Organizational Chart Oct 2010 - Stage I 85x11.doc
140. CM 3a2 TTG Organizational Chart Oct 2010 - Stage IIColour 85x11.docx
141. CM 3b Transportation Roles &Responsibilities.doc
142. CM 7a Insurance reviewed.pdf
143. CM 7b Confirmation of Coverage Certificate 2010.pdf
144. CM 7B1Insurance.pdf
145. CM 8 Purchasing Policy TCDSB.PDF
146. CM 8 Purchasing Policy TDSB.PDF
147. CM 9b Final - Performance Mgmt Process - SII Levels 1-6 (updated Sept 2008).pdf
148. CM 9b Final - Performance Mgmt Process - SII Levels 7-12 (updated Sept 2008).pdf
149. CM 9c JB TTG STAFF PROGRAMS LIST.xls
150. CM 9c Toronto Transportation Group Staff Training and Improvement.doc
151. CM 9d JB Staff PD Scheduling.xls
152. CM 9e Succession Plans.pdf
153. CM 9f evidence of goals and performance related to staff.pdf
154. PP 1 Hazard Criteria.doc
155. PP 1 Issues with Harmonization of Policies in Toronto with maps.doc
156. PP 1 TTG Policy Operation Manual.doc
157. PP 10 License plates 2010-2011.xls
158. PP 11 Bus Stop Check List (2).doc
159. PP 11.doc
160. PP 2 Transportation Timelines.xls
161. PP 3 Student Transportation Services - Standard Operating Procedures TTG update.doc
162. PP 4 TRACS Benchmark Reports.PDF
163. PP 5 Purple equals Parents Program TTG Oct 2010.pdf

164. PP 5 Safety Programs.pdf
165. PP 6 School Bus Safety Programs and Orientation.doc
166. PP 8 Specialized Programs.pdf
167. PP 9 No Early Dismissal Communication.doc
168. R T4 Confirming Bell Times for Students.doc
169. R T4 Notes for SPED Data Inputting.doc
170. R T4 Notes to Add a Bell Time.doc
171. R T4 Notes to Delete a Bell Time.doc
172. R T4 Procedures to Edit bell time.doc
173. R T4 TCNS procedure.doc
174. R T4 TCNS Recipient.doc
175. RE Observations.msg
176. RT 1 Bell Time Stratification Summary.xlsx
177. RT 1 TTG Coding Structure.doc
178. RT 1 TTG Disaster Recovery.docx
179. RT 10 Capital Program - Relocation costs - October 2009.xls
180. Rt 11 Student Travel-Safety Assistant-Job Ad.doc
181. RT 2 Data Workflow.PDF
182. RT 3 Toronto Catholic District L&M.doc
183. RT 3 Web Communication Solutions (execution copy - Interlock)may 1, 2004.doc
184. RT 4 Edulog.nt Run Optimization Guide.pdf
185. RT 4 Elementary_Schools_Student_Demographics_User_Manual__Feb_.pdf
186. RT 4 ELT Overview.pdf
187. RT 4 Geoprocessing_Quick_Guide.pdf
188. RT 4 Gismo Boundary Planning.pdf
189. RT 4 SAP FINAL PROC BKLT.docx
190. RT 4 SAP QUICK REFERENCE CARD.pdf
191. RT 4 TCNS Procedure - Version3.docx
192. RT 4 Transportation Carrier Schedule Services.docx
193. RT 4 Transportation Schedule and Ticket Services 2.docx
194. RT 4 Welcome to TRACS.pdf
195. RT 4 What_is_ArcGIS.pdf
196. RT 5 Supplemental Technology.pdf

- 197. RT 5 Symposium.doc
- 198. RT 6 ridetime.xls
- 199. RT 7 Regualr Reporting to Board.xls
- 200. RT 8 Sped on Big Bus.xls
- 201. RT 9 HS Scenario.xls

Appendix 4: Common Practices

			Elementary	Secondary
		JK/SK	Gr. 1 – 8	GR. 9 – 12
Home to School Distance				
Common Practice		0.8 km	1.2 km	3.2 km
Policy - TCDSB		1.5	1.5	No Service
Policy - TDSB		1.6	1.6 1 – 3 3.2 4 – 8	4.8
Home to Bus Stop Distance				
Common Practice		0.5 km	0.8 km	0.8 km
Policy - TCDSB		No policy	No policy	No policy
Policy - TDSB		No policy	No poicy	No policy
Arrival Window				
Common Practice		18	18	25
Policy - TCDSB		30	30	30
Policy - TDSB		30	30	30
Departure Window				
Common Practice		16	16	18
Policy - TCDSB		20	20	20
Policy - TDSB		20	20	20
Earliest Pick Up Time				
Common Practice		6:30	6:30	6:00
Policy - TCDSB		[7:22 AM is the earliest pick-up time in the database]		
Policy - TDSB				
Latest Drop Off Time				
Common Practice		5:30	5:30	6:00
Policy - TCDSB		[4:51 PM is the latest drop-off time in the database]		
Policy - TDSB				
Maximum Ride Time				
Common Practice		75	75	90
Procedure - TCDSB		60	60	60
Procedure - TDSB		75	75	75
Seated Students Per Vehicle				
		JK/SK	Gr. 1 - 6	GR. 9 - 12
Common Practice		69	69	52
Procedure - TCDSB		No policy	No Policy	no policy
Procedure - TDSB		No policy	No policy	No policy

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