

Ministry of Education Effectiveness & Efficiency Review

Phase 1 Review

Wellington-Dufferin Student Transportation Services

April 2007

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Executive Summary

Introduction

This report details the findings and recommendations of an Effectiveness and Efficiency review (E&E Review) conducted on Wellington-Dufferin Student Transportation Services (Wellington-Dufferin) by a review team selected by the Ministry of Education. This E&E Review is the result of recent governmental initiatives to develop an equitable approach to funding across the province and minimize the administrative burden for non-transportation staff associated with providing safe, reliable, effective, and cost efficient transportation services. This section of the report is designed to provide an overall assessment of Wellington-Dufferin and detail the findings and recommendations that were particularly noteworthy. These major findings and recommendations are enhanced and supplemented by the specific findings and recommendations detailed in each section of the body of the report.

The E&E Review evaluated Wellington-Dufferin's performance in four specific areas of operation including consortium management; policies and practices; routing and technology use; and contracting practices. The purpose of reviewing each of these areas was to evaluate current practices to determine if they are reasonable and appropriate; identify whether the consortia has implemented any best practices; and provide recommendations on opportunities for improvement in each of the specific areas of operation. The evaluation of each area was then utilized to determine an overall rating for the Consortium that would be used by the Ministry to determine any in-year funding adjustments that would be provided.

Effectiveness and Efficiency Review Summary

Wellington-Dufferin was established in December 2006 as the Consortium serving the Partner Boards of Upper Grand District School Board (UG), Wellington Catholic District School Board (WC), Conseil scolaire de district catholique Centre-Sud (CSDCCS) and Conseil scolaire de district du Centre Sud-Ouest (CSDCSO). Dufferin-Peel Catholic District School Board (Dufferin-Peel) will be purchasing services beginning in September 2007 for its Dufferin County region. Prior to the creation of this Consortium, UG and WC existed as a Consortium providing joint student transportation services since 2001. During that time, CSDCCS was purchasing services from the Consortium and CSDCSO and Dufferin-Peel were providing their own transportation services in that district. The Consortium transports over 18,000 students to nearly 100 schools using approximately 450 different vehicles.

Given the Partner Board's history of working collectively in the provision of joint transportation services, Wellington-Dufferin has been able to make an effective transition to the use of a Consortium model for transportation services. Although the Consortium has only been established for a short time, significant progress has been made toward realizing the benefits of transportation Consortia. Specifically, Wellington-Dufferin and its Partner Boards have:

- Established a governance structure for the Consortium that promotes fairness and equity through representation on the Management Committee and creation of an organizational structure that properly allocates authority and accountability;
- Harmonized the most critical operating policies and created a policy and procedures manual that provides critical guidance on how the Consortium will deliver services;
- Implemented a new bus routing software application and utilized the application to distribute data to all stakeholders. Wellington-Dufferin has also implemented a routing network that incorporates a number of strategies designed to promote efficient and cost effective services; and
- Developed a standard contract document that includes key provisions such as Driver and vehicle requirements, payment terms, insurance requirements, and safety requirements that promote consistency in expectations and delivery of services amongst Operators, as well as ensuring that key legal provisions such as licensing and insurance are properly managed.

As Wellington-Dufferin continues to evolve from a joint transportation operation into a full Consortium, there are a number of challenges that must be addressed in order to ensure that services are provided

effectively and efficiently. These challenges include ensuring the independence of Consortium operations, formalizing Consortium operations, evaluating alternative bell time and routing options; and reconsidering the current method of acquiring services from its Operators. The most critical recommendations to be implemented include:

- Establishing the Consortium as a separate legal entity. This is a logical extension of the decision to move out of Board-based office space to an independent location to clearly establish its independence from the influence of any of the Partner Boards. If Wellington-Dufferin establishes itself as a legal entity it would allow the Consortium to employ its staff, serve as a party to contract with Operators, improve accounting for overhead costs, and increase flexibility in contracting for support services;
- Utilizing the routing software to analyze stop, run, and bell time optimization options. The Consortium has been, until just prior to the start of the review, short staffed due to employees on long term leave. Consequently, efforts have focused on implementing the software and not on utilizing more advanced functionality to evaluate alternative routing strategies. This analysis should focus on whether or not alternative routing strategies would provide more advantageous service or cost benefits to the students, Operators, and/or Partner Boards; and
- Revising the current contract process, which involves negotiating with the local Bus Operators Association, to include a competitive process that is based on detailed service requirements and market rates.

Wellington-Dufferin is well positioned to become a highly effective and efficient operation. The critical building blocks for this type of organization, including an effective governance and organizational structure; fully implemented, functionally advanced routing software; clear and concise policy and procedure statements; and cooperation with its Operators, have all been established. Continued evolution of the Consortium in combination with implementation of the proposed recommendations will result in continued improvements to service delivery and cost effectiveness.

Funding Adjustment

As a result of this review of current performance, Wellington-Dufferin has been rated as a **moderate** Consortium. Based on this evaluation, the Ministry will provide additional in-year transportation funding that will narrow the transportation gap by 60% for each of the Boards. The funding adjustments to be received are detailed below:

- Upper Grand District School Board: \$1,697,993;
- Wellington Catholic District School Board: \$57,982;
- Conseil scolaire de district catholique Centre-Sud: \$22,567;
- Conseil scolaire de district du Centre Sud-Ouest: \$5,862; and
- Dufferin-Peel Catholic District School Board: \$234,551.

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

1.1.2 Transportation Reform

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

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

1.1.3 The Formation of School Transportation Consortia

Ontario's 72 school boards operate within four independent systems:

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

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

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

Approximately 99% of student transportation service in Ontario is provided through contracts between school boards or transportation consortia and private transportation Operators. The remaining 1% of service is provided using board-owned vehicles used to complement services acquired through contracted private Operators.

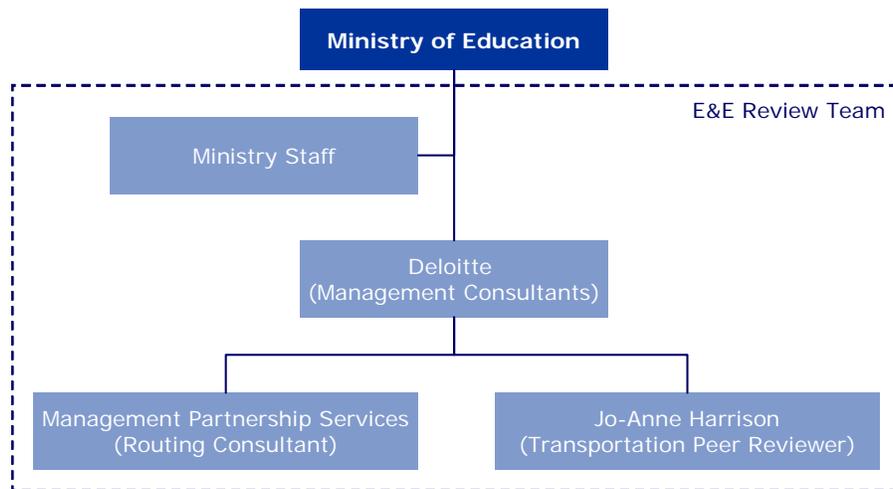
1.1.4 Effectiveness and Efficiency Review

According to the Ministry Consortium guidelines, once a Consortium has met the requirements outlined in memorandum SB:13, dated July 11, 2006, it will be eligible for an E&E Review. This review will be conducted by the E&E Review Team who will assist the Ministry in evaluating Consortium management, policies and practices, routing and technology, and contracts. These reviews will identify best practices and areas for improvement, and provide valuable information that can be used to inform future funding decisions. Over the next two years, the Ministry plans to perform three phases of reviews (collectively the “E&E Reviews”) on transportation sites across the province.

1.1.5 The E&E Review Team

To ensure that these reviews are conducted in an objective manner, the Ministry has formed a review team (the “E&E Review Team” as defined in Figure 1) to perform the E&E Reviews. The E&E Review Team was designed to leverage the expertise of industry professionals and consulting firms to evaluate specific aspects of each Consortium site. Management consultants were engaged to complete assessments on Consortium management, policies and practices, and contracts. A routing consultant was engaged to focus specifically on the acquisition, implementation, and use of routing software and related technologies. The Transportation Peer Reviewer has provided the E&E Review Team with valuable insight into student transportation delivery in Ontario.

Figure 1: E&E Review Team



1.1.6 The Role of the School Bus Cost Study

The Ministry has acquired the services of a consultant through a separate request for proposal process to conduct a detailed cost study on the cost of contracting and operating a 72 passenger school bus. The cost model will complement the findings of the E&E Reviews. At the time the E&E results from the Phase 1 review are released, the results of the cost study will still be unknown. Any additional funding adjustments resulting from the results of the cost study will be determined at a later date.

1.2 Scope of Deloitte Engagement

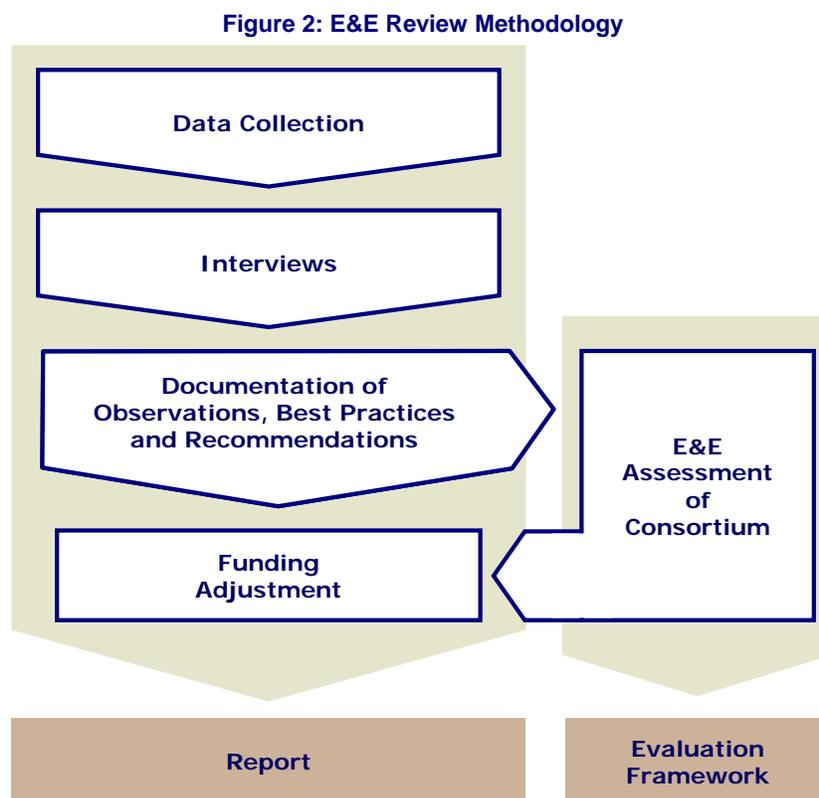
Deloitte was engaged to lead the Team and serve as the Management Consultants of the E&E Review Team, as follows:

- Lead the E&E Review for each of the four (4) transportation Consortium to be reviewed in Phase 1 (refer to Section 1.1.4);
- At the beginning of each E&E Review, convene and moderate planning meetings to determine data required and availability prior to the review;

- Lead the execution of each E&E Review. The Ministry facilitated the process by providing the Consortium with information required in advance so that preparation and collection of information would be done prior to the on-site review;
- Review Consortium arrangement and governance structures, policies and practices including specialized and special needs transportation, Partner Board transportation policies, and contracting procedures;
- Incorporate the results of the routing and technology review to be completed by MPS; and
- Prepare a report for each Consortium which has undergone an E&E Review in Phase One. The target audience for the report will be the Ministry, the Consortium and its Partner Boards. Once finalized, each report will be released to the Consortium and its Partner Boards.

1.3 Methodology Used to Complete E&E Review

The methodology for the E&E Review is based on a 5 step approach, as summarized in the following sections.



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

1.3.1 Step 1 – Data Collection

Each Consortium under review is provided with the E&E Guide (refer to document 3 in Appendix 3) from the Ministry of Education. This guide provides details on the information and data needs that the E&E review team would require, and the E&E Guide will become the basis for the data collection.

Data is collected in four main areas:

1. Consortium Management;
2. Policies and Practices;

3. Routing and Technology; and
4. Contracts.

1.3.2 Step 2 – Interviews

The E&E Review Team will identify key Consortium staff, outside stakeholders and key policy makers with whom interviews will be conducted to further understand the operations and key issues impacting delivery of effective and efficient student transportation services.

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

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

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

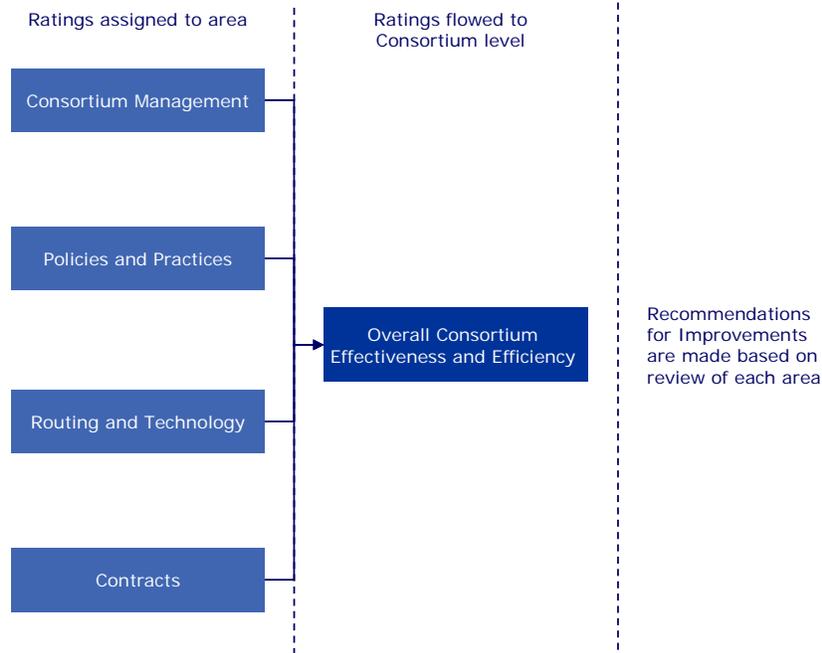
Figure 3: Criteria of an Effective and Efficient Consortium

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

1.3.4 Step 4 and 5 – E&E Assessment of Consortium and Site Report

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

Figure 4: Assessment of Consortium – Diagram Flow



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

1.3.5 Funding Adjustment

The Ministry will use the results of the E&E reviews and the cost benchmark study to inform any future funding adjustments. Only Boards that have undergone E&E Reviews are eligible for a funding adjustment. Figure 5 illustrates how the Overall Rating will affect a Board’s transportation expenditure-allocation gap.

Figure 5: Funding Adjustment Formula

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

1.3.6 Purpose of Report

This Report serves as the deliverable for the E&E Review conducted on Wellington-Dufferin by the E&E Review Team during the weeks of February 4 to February 16, 2007, inclusive.

1.3.7 Material Relied Upon

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

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

1.3.8 Limitations on Use of This Report

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

2. Overview of Consortium

2.1 Introduction to Wellington-Dufferin Student Transportation Services

Wellington-Dufferin Student Transportation Services (Wellington-Dufferin) was formed officially in December 2006 as the Consortium serving its four Partner Boards. The Partner Boards consist of Upper Grand District School Board (UG), Wellington Catholic District School Board (WC), Conseil scolaire de district catholique Centre-Sud (CSDCCS) and Conseil scolaire de district du Centre Sud-Ouest (CSDCSO). Dufferin-Peel Catholic District School Board (Dufferin-Peel) will be purchasing services beginning in September 2007 for its schools in Dufferin County.

Prior to the creation of this Consortium, UG and WC existed as a Consortium providing joint student transportation services since 2001. During that time, CSDCCS was purchasing services from the Consortium and CSDCSO and Dufferin-Peel were providing their own transportation services in that district.

Table 1 below provides a summary of the Partner Boards as reported in 2005-06. Note that since CSDCSO and Dufferin-Peel were not involved in the Consortium at that time, data for these boards is not available.

Table 1: 2005-06 Transportation Survey Data²

Item	Upper Grand	Wellington Catholic	CSDCCS	Total
Number of schools served	70	19	2	91
Total special needs ³ transported students	412	21	210	643
Total riders requiring wheelchair accessible transportation	35	7	8	50
Total specialized program ⁴ transportation	2017	0	0	2017
Total courtesy riders	145	21	0	166
Total hazard riders	1,185	647	0	1,832
Total students transported daily	14,356	3,822	218	18,396
Total contracted full- and mid-sized buses ⁵	236	69	7	312
Total contracted mini-buses	19	4	1	24
Total contracted school purpose vehicles ⁶	10	1	1	12
Total contracted physically disabled passenger vehicles (PDPV)	14	2	1	17
Total contracted taxis	82	2	0	84
Total Number of Contracted Vehicles	361	78	10	449

² In 2005/06, CSDCSO and Dufferin-Peel were providing their own student transportation services in this area. As such, the key statistics reported in the Ministry Survey reflect the entire Board and the specific information relating to the Consortium is not available.

³ Includes students requiring special transportation such as congregated and integrated special education students who require dedicated routes and/or vehicles; students that must ride alone; students that 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-purpose vans, mini-vans and sedans

Table 2: 2005-06 Financial Data⁷

Item	Upper Grand	Wellington Catholic	CSDCCS	CSDCSO	Dufferin-Peel
2005/2006 Allocation	\$10,993,812	\$3,550,319	\$13,363,914	\$8,497,859	\$16,459,877
2005/2006 Expenditure	\$13,500,378	\$3,547,836	\$14,857,246	\$9,003,618	\$21,303,755
2005/2006 Transportation Surplus (Deficit)	\$(2,506,566)	\$2,483	\$(1,493,332)	\$(505,759)	\$(4,843,878)
Percentage of transportation expenditure spent for WD services	100%	100%	2%	2%	6%

In 2005, after having implementation problems with a previous software, the Consortium purchased a new transportation software system, *Bus Planner*. Since that time, the Consortium has been working on the completeness and accuracy of the mapping, school and student data as well as in planning for and implementing the new Consortium serving four Partner Boards and one Service Purchasing Board.

In 2006, the Manager of Transportation was responsible for developing and implementing a Consortium Project Plan which specifically outlined goals and objectives to be achieved in 2007. Outlined in more detail in section 3.4.1, the goals and objectives for 2007 are primarily centered around the development of the Consortium to include two additional partners and moving the Consortium to an independent location.

The Manager of Transportation and staff have worked diligently to ensure that the Consortium is up and running as quickly as possible. Their efforts are commended.

The Consortium is making great strides to improve operations and take control of student transportation services. With problems in implementing a previous software, the Consortium relied heavily on local Operators to assist with maintaining student data and in planning routes. It is only now that a new software package is in place that staff can focus on performing their own reviews of efficiencies in routing and can take control of all aspects of student transportation.

⁷ Based on data submitted by boards to the Ministry – see Appendix 1.

3. Consortium Management

3.1 Introduction

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

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

Each component has been analysed based on 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 Consortium Management as shown below:

Consortium Management - E&E Rating:	Moderate-Low
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3.2 Governance

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

3.2.1 Observations

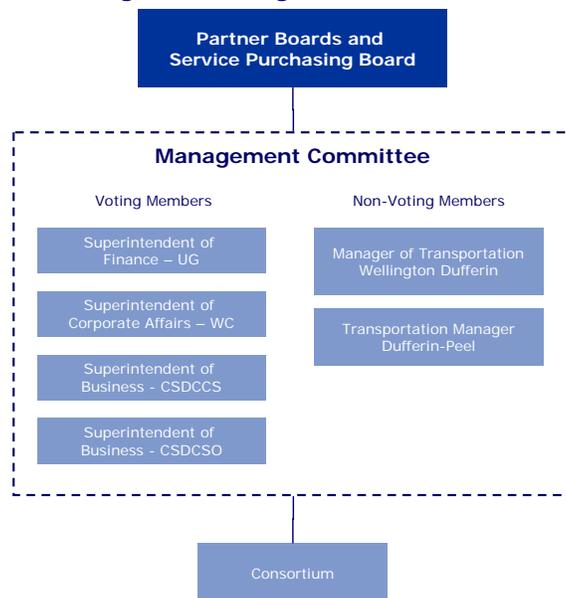
Governance Structure

Wellington-Dufferin is a very new Consortium with its Partner Boards having entered into a Memorandum of Agreement in December 2006. The Agreement dictates that the Consortium will be administered by a Management Committee that is composed of senior management from each Partner Board and transportation professionals from Wellington-Dufferin and Dufferin-Peel⁸. At the time of our review the Consortium had only been in place for four months and the Management Committee had not met formally. The Manager of Transportation is responsible for updating each of the Boards on activities of the Consortium until official meetings begin. However, no protocol or schedule for meetings has been established.

The Management Committee has authority over Consortium wide strategic direction and policies and will establish operating procedures for the Manager of Transportation, including evaluating the organizational structure to ensure efficiency in the administration of transportation services. The Management Committee will also set budgets for transportation and establish cost sharing formulae for services provided; periodically review administrative costs; monitor and report on the transportation implication of program priorities; and oversee the acquisition of transportation service providers. The Management Committee is responsible for reporting to each Board in the manner prescribed by each Board. The structure is shown in Figure 6.

⁸ Dufferin-Peel will be purchasing transportation services in September 2007 for their students located in the Dufferin County area. The Memorandum of Agreement includes Dufferin-Peel as a Consortium member under the terms of a Service Purchasing Board. The Transportation Manager at Dufferin-Peel will sit as a non-voting member on the Management Committee.

Figure 6: Management Committee



The Agreement established a dispute resolution process to be used in cases where there are disputes between Partner Boards, or with users of the service. Schools are provided with the name and contact information of the Transportation Technician who is responsible for their school. Schools are directed to forward questions or concerns directly to the Technician for resolution, rather than trying to address them at the school level. This is reasonable given Technician's broader understanding of the overall transportation network and the possible reason for disruptions to service. The process is escalated through the Consortium chain of command to the Manager of Transportation. The Management Committee will become involved if the Manager of Transportation is unable to resolve the issue.

3.2.2 Best Practices

It is recognized that Wellington-Dufferin has demonstrated best practices in the following areas:

- A Management Committee has been established to provide direction and oversight to the Consortium. The Management Committee is structured to act as a conduit of communication to the trustees of both member and service purchasing boards; and
- There is a clearly defined dispute resolution process for disputes amongst Partner Boards. This ensures consistency in resolving issues in a timely manner by clearly outlining how issues are escalated and who has final resolution authority.

3.2.3 Recommendations

Meetings of the Management Committee

The formation of any new Consortium presents a number of challenges that are best addressed through an established governance structure. Although the Manager of Transportation may be in close communication with each member of the Management Committee it is still important to ensure the members themselves are communicating through a formal meeting structure, including the recording of minutes. As important, is ensuring that members of the Management Committee are aware of their responsibilities in terms of meeting requirements. It is recommended that the Management Committee establish a schedule of official meeting dates. The Manager of Transportation should be responsible for ensuring minutes of each meeting are taken and that the Management Committee review and approve the minutes at the next meeting with action items appropriately followed up and resolutions documented.

3.3 Organizational Structure

An organizational structure can have the power to provide for effective communication and coordination which will enable operations to run efficiently. The roles and responsibilities within the organization should be well defined. This will lead to operational efficiencies by ensuring tasks are not

being duplicated and issues raised can be addressed effectively by managing up the chain of command. Ideally, the organization is divided functionally (by department and/or area) and all core business functions are identified.

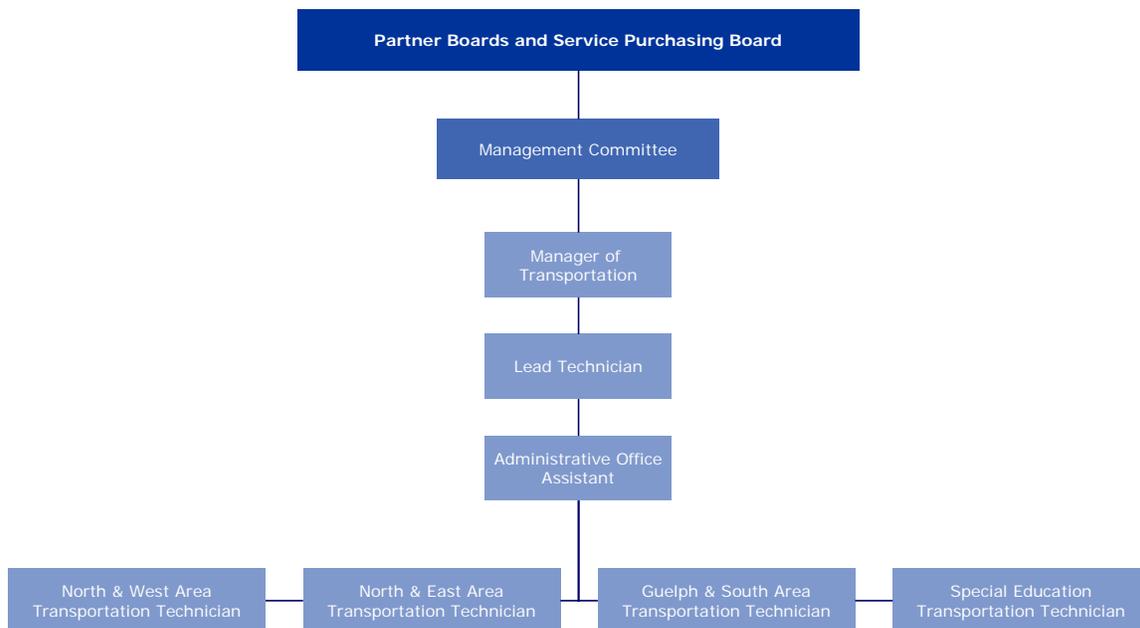
3.3.1 Observations

Structure

The Consortium is a department within UG that is operating under the Memorandum of Agreement for all Partner Boards and the Service Purchasing Board. All Consortium staff are employees of UG and as such are governed by that Board’s administrative and operating policies and procedures. At the time of the review the offices for Consortium staff were located within the Upper Grand District School Board offices with an expectation that movement to an independent location would occur shortly following the review. Independence is important to ensure the transparency of decision making and to show that the Consortium is acting in the best interest of all Partner Boards. It also helps to avoid the perception that the Consortium may be influenced by its location within the Board. Therefore, the movement to an independent location is supported by the E&E Review Team.

The organizational structure of the Consortium is logical and appropriate for the operation. The specific functions of the operation (e.g., management, administration, technical support, and operations) have been appropriately separated and clearly defined through job descriptions. Management responsibilities are vested in the Manager of Transportation and the Lead Technician in the Manager’s absence. The Lead Technician is responsible for the maintenance of the mapping and student data and has additional technical support requirements to manage the routing software. The Transportation Technicians are divided by area for general needs transportation and there is one Transportation Technician who is responsible for special needs transportation. The Transportation Technicians are responsible for planning routes and maintaining all data for their area. See Figure 7 for diagram of the organizational structure.

Figure 7: Consortium Organizational Structure



3.3.2 Best Practices

It is recognized that Wellington-Dufferin has demonstrated a best practice in the following area:

- The roles and responsibilities of staff are clearly defined in job descriptions. Defining roles within the organization is important in ensuring that staff focus on their duties and should they have issues, they know how to escalate issues and who they are accountable to.

3.3.3 Recommendations

Entity Status

It is recommended that the Partner Boards explore the creation of Wellington-Dufferin as a separate legal entity. Independence, in the form of a separate legal entity, is another important step in providing transparency and autonomy to the Consortium in decision making. Although it is recognized that the Consortium has only been established for a short period of time and introducing additional obligations may complicate operations, it is ultimately worthwhile to ensure that the organization is structured such that it can withstand changing political environments and potential disputes amongst the Partner Boards that could cause the structure to destabilize. The formalization (through incorporation or legal partnership) of Wellington-Dufferin would provide benefits from an organizational perspective, and in particular, allow staff to address some of the issues relating to funding, liability, personnel management and contracts outlined in this report.

3.4 Consortium Management

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

3.4.1 Observations

Consortium Agreement

The Memorandum of Agreement governing the Consortium is well structured and contains key provisions on management structure, budgeting, insurance, dispute resolution, policy establishment, and withdrawal from the Agreement. Direction is also provided on how staffing levels will be determined and promotes clarity and understanding between all Partner and Service Purchasing Boards by requiring all documents to be available in both French and English.

Operational Plans and Key Service Indicators

There is no formal operational plan in place though the Consortium has indicated that the Transportation Technicians will be focusing area by area to try to optimize routing and gain efficiencies. The Consortium's goals and objectives for the short term have been to focus on implementing, in full, their Consortium Plan. Completing the implementation has been difficult as a result of a staffing shortage due to multiple employees requiring long term leave. Consequently the focus of the organization has been on minimizing the disruption to ongoing operations and on acquiring, implementing, and integrating new routing software. At the time of our review, one employee had returned from long term leave and Consortium staff were beginning to focus on efforts to identify and implement efficiencies in routing.

The Manager of Transportation was responsible for developing and implementing a Consortium Project Plan which specifically identified the following goals for 2007:

- Provide routing solutions for the new members (CSDCSO and Dufferin-Peel);
- Recommend common protocols to Partners Boards for inclement weather, accidents and bus/student safety;
- Re-locate to a non-Board office location;
- Enhance software to include accounting tools and automated invoicing and cost analysis during optimization testing; and
- Introduce transportation websites to provide parents with eligibility information.

It is expected that as the staffing concerns begin to subside, more strategic goals and objectives will be established that focus on operational efficiency and operating procedures.

Cost Sharing Mechanism

The Partner Boards will incur a one-time start up cost for the Consortium. The start up cost is capped at \$100,000 and is split between the Boards as follows: 12.5% for CSDCCS and CSDCSO and 37.5%

for UG and WC. Start up costs include the cost of software, computers, server, technical assistance, furniture, fixtures and office machines.

Administrative expenses will be shared between the four Partner Boards based on the unweighted total student count on October 31st. The student count for administrative costs is based on total student population, not just transported students. This is in recognition of the fact that there is a cost associated with administering student data even if that student is not eligible for transportation. A 3% fixed administrative fee will be charged to Dufferin-Peel as a Service Purchasing Board. Operator costs will be split amongst all Boards based on the unweighted transported student count based on eligible riders including courtesy riders at October 31st. A mechanism has also been established to account for mid-day, transit, and specialized program transportation.

Support services

The Consortium has a contract in place for software support services with GeoRef Systems, Ltd., who is the developer of the Bus Planner software. Other support services such as IT, Accounting, and HR are provided by UG. The cost of providing these services are not identified as administrative costs for transportation and therefore are not charged back to the Partner Boards. Additionally, other administrative/overhead expenses such as the Consortium's proportional share of rent is not being allocated to the Consortium and therefore not charged back to Boards. This will change once the Consortium moves to an independent location.

Starting in 2007-08, UG will continue to provide HR and accounting support while WC will provide IT support and the French Language boards will be responsible for translation costs. The costs associated with providing these services will be absorbed within the provider's general operating budget.

Insurance

The Agreement contains a clause requiring that the Consortium maintain appropriate liability insurance either directly or as an extension of the Partner Board's insurance. The Consortium is currently insured under UG's insurance with the Ontario School Board Insurance Exchange (OSBIE). Additionally, each Partner Board is properly insured. The Consortium is currently in discussions with OSBIE to acquire their own insurance.

3.4.2 Best Practices

It is recognized that Wellington-Dufferin has demonstrated a best practice in the following area:

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

3.4.3 Recommendations

Operational Planning

It is recommended that the Consortium, with oversight from the Management Committee, develop an operational plan that clearly identifies procedures and steps that the Consortium will follow to achieve both short term and long term goals. A sound operational plan will not only identify goals and objectives for the Consortium, it will also describe how these goals and objectives will be achieved. If a detailed plan is in place, the Consortium can measure its performance against tangible steps and stages of progress and reallocate resources to address areas of need and unanticipated events.

Support Services

The Partner Boards are currently, and will continue to, provide support services to the Consortium. The cost of these services is being absorbed by each of the Boards as overhead. By not allocating a cost for these services to the Consortium as administrative costs the true cost of providing transportation services is being understated and costs are not being fully recovered. It is recommended that Wellington-Dufferin, along with its Partner Boards, revisit the provision of support services to ensure it is equitable and that costs are fairly captured as an administrative and

operational cost of providing student transportation. In particular, these expenses would include accounting, payroll administrative costs, IT support, and HR support.

3.5 Financial Management

A sound Financial Management process ensures the integrity and accuracy of financial information. This includes the internal controls that exist in the accounting process and ensuring that a robust budgeting process is in place which provides for accountability in decision making. This section will also review past financial performance of the Consortium over a minimum of 3 years to gain an understanding of any major variances year over year with the goal of understanding what decisions the Consortium has made which have either increased or decreased transportation expenditures.

3.5.1 Observations

Budget Planning

The Manager of Transportation is responsible for providing each Board with budgeted costs for administration only. The budgeted amount is based on 3% of expected transportation costs. The Manager of Transportation will submit this estimate for administrative costs by March 31st annually to each Partner Board and the Service Purchasing Board.

The Manager of Transportation is also involved in the budgeting process for UG. The Manager of Transportation prepares a spreadsheet showing expected transportation costs including year over year changes by account and explanations as to why these increases and/or decreases are occurring. This is presented to the UG Board for approval.

As per the Consortium Plan and the Memorandum of Agreement, beginning in 2007-08 school year, the Manager of Transportation will be taking over responsibility for preparing the transportation budget for all Consortium members. The Consortium Plan and the Memorandum of Agreement state the specific responsibilities of the Manager of Transportation around the budgeting process. At the time of our review, this process was not yet implemented.

Accounting – Operator Costs

During the 2006-07 school year, the accounting functions were performed by each individual Board. Operator invoices are sent to the Board whose students represent the majority of the riders on the bus. This is also the Board with whom the Operator holds the contract. Operators submit monthly invoices detailing the routes driven and calculating the total fee in line with the terms of the contract. There is no verification of the calculations by the Consortium, additionally, there are known issues with the routing information in that the kilometres for a particular route as posted in the system, are not completely accurate.

On an annual basis, the Manager of Transportation will prepare a reconciliation of amounts owing between Boards based on the October 31st student count. This is performed in July.

Accounting – Administrative Costs

The Partner Boards pay UG a monthly administrative cost based on budgeted amount. At year end, the Manager of Transportation prepares a reconciliation showing the actual administrative costs incurred by UG. The true costs are then allocated amongst the Partner Boards and the difference between the administrative fees collected from each Board and the true cost owed is either charged or refunded to each Board. The 3% administrative charge to Dufferin-Peel will not fluctuate based on actual costs, and as a result may not reflect actual costs associated with administering transportation for the Board.

The chart of accounts used at the Boards is not very detailed. Boards are required to split out costs each year for the Ministry's student transportation survey.

Financial Performance Review

A review of the financial information of each Partner Board was conducted. The following provides some description as to the cost drivers for each Board that have contributed to their current deficit position. See Appendix 1 for summary of financial data.

WC

In 2004-05 and 2006-07 this Board reported a deficit of between 2-3% of total funds allocated while in 2005-06 there was a slight surplus. In reviewing the financial information provided it appears as though the majority of their costs are in regular home to school transportation. There did not appear to be significant spending in special needs transportation due to the limited number of students requiring special services, generally a high cost item.

UG

This Board is the largest Board in the Consortium in terms of students transported. They have been operating in a transportation deficit of approximately 22-25% of total funds allocated for the past three years. The main drivers of this deficit were attributed, per the Manager of Transportation, to historical under funding, special education transportation costs and increased fuel prices. UG uses taxis to transport its special needs students; this can be a costly method of transportation. Also, the current contracts include a fuel payment which provides the Operators with current fuel charges for all kilometres travelled plus an embedded profit of 20%.

CSDCCS

This Board has been operating in a deficit position for transportation for the past three years. The area covered by this Board is extensive. As such, the Board has been purchasing services from many coterminous Boards over the last number of years. The main driver of the deficit is the fact that there are fewer students requiring transportation but these students are travelling further, on average, because of the proximity of schools and the low density of students.

This Board has been able to split out the cost of transportation for the Wellington-Dufferin Consortium however it is our understanding that all transportation costs are coded to the same account and retrieving this information is not easy.

CSDCSO

This Board covers much of South-Western Ontario and has been operating in a deficit position for transportation for the past 3 years. Similar to CSDCCS, the main cost drivers for this Board are the fact that their students and schools are widely disbursed and the cost per student for transportation generally exceeds that of their coterminous English Boards.

3.5.2 Recommendations

Accounting and Budget Management

Currently, there is no centralized accounting for the Consortium. The Consortium assists with the reconciliation of amounts owed between Boards based on ridership, however, is not overseeing the payments to Operators and invoices charged to Boards. By not centralizing the accounting and accounts payable process, the Consortium has no control over one of the most important functions of providing a joint service. Additionally, the current process requires an excess of administrative tasks to be performed. One of the Ministry's main goals with the transportation reforms is to promote the Consortium method of delivery of service to reduce the administrative burden to Boards especially in areas not directly related to operations, such as financial management, that are vital components of providing transportation services.

It is understood that one of the Consortium's goals in the near term is to centralize the accounting function for all Boards. It is recommended that the Consortium move ahead with such plans and ensure that it includes the following:

- The Consortium should be responsible for receiving, processing and approving or paying (if it is a separate entity) all transportation costs. As a result, appropriate internal controls and policies will need to be put in place to ensure the safeguarding of assets; and
- The Consortium should set up a chart of accounts which includes separate accounts for each type of service provided (in line with the Ministry survey categories at least) and which also splits out the accounts by Board. This way, when the invoice is received, the Consortium can verify the invoice details against what they have in the *Bus Planner* system and determine immediately what the split between Boards is. The costs can be accurately captured and

invoices to the Boards can be generated appropriately. A well defined chart of accounts will also improve the budgeting and tracking process (see below).

By centralizing this function, the Consortium will have greater control over the delivery of student transportation services. The Consortium will be able to more accurately keep track of the types of expenses by Board through the proper use of account codes. Additionally, the Consortium can verify invoices generated by Operators against their own data to ensure its accuracy.

Along with centralizing the accounting function, the Consortium should also have a robust budgeting process in place which considers the costs for all Partner Boards. The Consortium should be held accountable for all operations surrounding transportation including financial management. In order to implement accountability at the Consortium level, it is recommended that the Manager of Transportation prepare a detailed budget providing an expected cost by Board for each type of transportation and administrative cost. Once this budget has been approved by all Partner Boards, the Manager of Transportation should regularly monitor actual expenses and perform a review of significant variances between actual and budgeted amounts. The Manager of Transportation should present the results of this variance analysis, including explanations for overspending, to the Management Committee on a regular basis.

3.6 Results of E&E Review

Consortium Management has been assessed as moderate-low. The Consortium has developed a comprehensive Memorandum of Agreement and has implemented appropriate oversight structures. Since this Consortium is still very new, they have not had the time to fully implement all proposed structures and processes for the management of the Consortium. At the time of our review, it was evident that management's intentions and direction are clear and would represent good practices, however in practice the Consortium has not fully implemented their plan. By continuing to implement all proposed management structures, the Consortium will undoubtedly improve the effectiveness of operations.

The Consortium's financial processes could be enhanced to provide more accountability to the Consortium rather than placing the onus on each of the Partner Boards for processing of Operator invoices and budgeting. Additionally, the Consortium should explore the creation of a separate legal entity, as this would provide more autonomy and transparency in decision making and add to the independence of the operation.

4. Policies and Practices

4.1 Introduction

The policies and practices review area focuses on the Consortium and Partner Board's transportation policies that are in place as well as how they translate into practice on the ground. The analysis will focus on four key areas:

- Transportation Policies;
- Route Planning;
- Safety Programs; and
- Special Needs and Specialized Programs.

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 overall E&E assessment of Policies and Practices as shown below:

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

4.2 Transportation Policies

Transportation planning policies establish the foundation for the provision of transportation services and establish the parameters for the overall effectiveness and efficiency of the system. The key areas of assessment in this section are the completeness of established policies and the degree of policy harmonization between Boards.

4.2.1 Observations

Policy Infrastructure

Transportation policies form the foundation of the operating structure of every transportation operation. Key aspects of service provision, including eligibility requirements; student rules and disciplinary procedures; bus stop location and review criteria; desired ride length; and special education transportation procedures should be considered and defined. The Consortium and its Partner Boards have developed a comprehensive array of harmonized policies. The policies and procedures have been documented in a manual that addresses:

- Eligibility standards, pick up, delivery, and ride times;
- Stop distance and placement, seating guidelines, and transferring;
- Integration of students from all Boards on any bus;
- Transport of equipment on the bus; and
- Driver and student expectations and requirements.

This manual is well constructed and provides clear guidance on how transportation services will be provided by the Consortium. The manual provides a concise reference point for parents, Board staff, students, and Operators to refer to as questions arise and reduces the possibility of inconsistent management of common and exceptional circumstances (i.e. hazards and courtesy riders).

Communications

The Consortium utilizes a number of tools to distribute data to all transportation stakeholders. Emphasis is placed on ensuring that JK/SK students receive complete routing information through the use of a direct mail containing relevant stop, bus, and route information sent prior to the start of school. For other students, routing information can be obtained via website access and school

postings. Using data extracted from the routing software, the Consortium has developed a secure website that can be accessed by parents and students to obtain bus stop and bus route information. Additionally, the Operators have access to the site to generate necessary route lists for their Drivers. One historical practice that presents a concern is the posting of student specific stop and route information in school offices. The general availability of student information presents both privacy and security concerns that should be reviewed and addressed immediately. Information on route assignments is delivered to the schools and Operators; posted in the main office of each school; and posted on the Web-based query tool by the third week in August.

Exceptional Circumstance Trips

Courtesy transportation is addressed on an exception basis following a determination of available seating capacity on runs. Parents must formally request transportation services and those requests are approved or denied by the Manager of Transportation within three working days. Decisions are based on the respective Partner Board's policy. The Consortium will notify the parent, school and Operators of the approved courtesy transportation requests via a letter to include all route information. The parent is notified directly by the Consortium if their courtesy transportation request has not been approved. Overall the process is generally sound due to the extensive involvement of transportation personnel and the management of student data by the Consortium staff.

Public Transportation

The Consortium provides transit passes and bus tickets to students from UG and WC in urban areas where public transit is an economical means of transportation. In the City of Guelph, bus tickets are provided to grade 7 and 8 students who reside between 4 and 4.8 kilometres from the school during the winter months only. The cost of transit tickets will be invoiced as a pass through cost to each partner board with a descriptor of usage.

4.2.2 Best Practices

It is recognized that Wellington-Dufferin has demonstrated a best practice in the following area:

- The development of a comprehensive and appropriate policy infrastructure that provides a framework for how transportation services will be provided and the expectations of both system users and service providers.

4.2.3 Recommendations

Communications

The Consortium has made a significant effort to make student route data available as widely as possible. However, the practice of posting student data in generally accessible space presents both privacy and safety concerns, and should be discontinued given the ready availability of the data through the web query tool. However, if the practice is to continue procedures should be implemented to assure that appropriate safeguards are established to protect student data and limit access to the lists.

Exceptional Circumstance Trips

Wellington-Dufferin provides service to a significant number of students through its courtesy and hazard area transportation policies. Management of these exceptional circumstances requires particular vigilance to ensure that they do not adversely impact either the cost or availability of transportation to students who are eligible through established policy. In addition, the staff time required to incorporate these students on to existing bus runs may be better spent in developing and evaluating other alternative routing scenarios that may increase the overall effectiveness and efficiency of the routing scheme. Wellington-Dufferin should thoroughly evaluate the provision of these exceptional circumstance trips and determine if it is still necessary to continue to provide services to students who are otherwise ineligible for service.

4.3 Route Planning

The ability to maximize the use of each school bus is the foundation of effective and efficient transportation services. Proper consideration of all of the elements required to deliver high quality and cost effective services can only occur if the transportation operation has established a planning cycle that is sufficiently forward looking. During the planning cycle, transportation managers are

constantly trying to strike a balance between two opposing constraints, time and distance, to maximize asset utilization.

4.3.1 Observations

Planning Cycle

The planning cycle for Wellington-Dufferin is designed to ensure that the Consortium has complete and accurate data on students in time to properly plan routes for the coming school year. The design of the organization is such that authority for route design is placed at the lowest reasonable position in the organization with the Transportation Technicians. Consortium managers have also established a culture where regular review of established routes should occur by the Transportation Technicians and this idea is reinforced by the responsibilities identified in the annual planning cycle.

This planning process begins with an evaluation of the existing system and the establishment of goals and objectives for the upcoming school year. From January through June the Consortium is collecting information on school assignments, special education program assignments, and changes to program locations. Throughout July and August, Technicians develop the proposed bus runs and routes with final review and approval completed by the first week in August. Transportation Technicians and the Lead Technician are knowledgeable about the principles of efficient route design, including the use of combination and transfer runs where appropriate. The established annual route planning process is well designed and documented and should allow the Consortium to be able to identify opportunities to improve service and cost effectiveness.

Routing

A variety of techniques are being used to promote effective and efficient routes. Routing effectiveness and efficiency requires matching the technique used to collect and disperse students with the wide variety of logistical challenges presented by geography, topography, and educational programming decisions. The most useful approach is to utilize tiered runs and combination runs to maximize the use of available capacity. Both of these strategies have been implemented effectively by Wellington-Dufferin to promote cost control.

Two primary and two secondary planning techniques are being utilized:

- Capacity utilization, or the number of students in available seats, is consistent with industry best practices of 80 percent or higher.
- The second technique is to utilize combination runs where a single bus visits multiple schools. Route analysis indicates that 45 percent of the runs in the morning and the afternoon serve multiple school sites. The ability to implement these sorts of strategies is greatly enhanced by Board policies, in that they do not restrict which students can ride on any specific bus.
- Two other techniques utilized are transfer runs and tiering. Transfers are used extensively throughout the system and are well designed to meet the needs of servicing remote areas. The routing software is highly effective at supporting this strategy. The use of tiering is also fairly prevalent with nearly 25 percent of runs in the afternoon and 29 percent of morning runs being assigned to runs across multiple tiers.

Overall, these techniques/practices are a very effective approach to routing and result in generally efficient services.

Bell Times

An annual review of bell times is performed to evaluate opportunities to improve service. The planning process generally begins in February, with resolution in place by the end of March. The Consortium discusses the feasibility of implementing the change with each of the schools and provides data and analysis where required. In instances where the schools and the Consortium cannot reach an agreement on bell time changes, the Superintendent of the school(s) and the Senior Business Official at the affected school board will make the final decision. There has been a limited focus on performing detailed analysis of system wide bell time change possibilities. Given the organizational focus on implementing the *Bus Planner* software, this limited focus is reasonable. However, long term cost control efforts will be driven by a focus on the service improvements possible with bell time changes.

4.3.2 Best Practices

It is recognized that Wellington-Dufferin has demonstrated best practices in the following areas:

- The annual planning process is well designed to support a regular review of routing strategies; and
- Wellington-Dufferin has implemented a number of industry leading routing strategies to improve the control of operations.

4.3.3 Recommendations

Route Analysis and Review

Review of existing routes and schedules indicates an opportunity to realize efficiencies through structural changes to bell times. Given that *Bus Planner* is now fully implemented and integrated into the operation, staff should be trained on the use of the bell time optimization function that is available to evaluate the feasibility and service impact of operational changes. Given the routing strategies in place, significant disruptions to the current level of service may occur where radical changes to bell schedules are made. Therefore, any changes must be thoroughly analyzed prior to implementation to prevent significant service disruptions for limited to marginal cost reductions.

4.4 Safety Programs

The safety of transported students is paramount in any school transportation system. Developing a culture of safety requires that transportation personnel work closely with students, schools, service providers, and the community to establish specialized programs targeted to the needs of each specific group. Additionally, Driver training and student management procedures must be aligned to reinforce behaviour expectations and consequences for failure to comply with the expectations.

4.4.1 Observations

Driver Training

All Drivers are required through their Operator contracts to be trained in first aid and the use of Epipens. Drivers who transport students with special needs take additional specialized training. The Operators also offer their Drivers additional specialized training on topics of their own design.

Student Training

The Consortium has established a safety training program for students that is designed to introduce safety as an important element early in a student's tenure and reinforce the message throughout their time in school. Working in conjunction with the Operators, a 'First Rider' program is offered to all kindergarten students that is designed to introduce both the students and parents to school bus safety rules. School bus evacuation training is offered annually for students to maintain awareness of safety procedures. Additionally, Principals work with Consortium staff to devise, implement and enforce safe procedures for the unloading, loading and transfer of students on school property. Elementary Principals also work with Operators and Drivers to establish and maintain a school bus safety patrol program in accordance with the Boards' School Bus Safety Patrol Manual.

Student Identification

In the third week of August, the Consortium's Administrative Assistant distributes, to the Partner Boards' schools, identification badges for JK/SK students. The badges include the student's name, address, route, number, bus stop location and pick up time. This allows Drivers to match students with guardians or caregivers who meet the students at their assigned bus stops. Overall these badges are useful for ensuring that younger students who may become confused in the activities surrounding a loading and unloading zone can be properly routed to their destination.

4.4.2 Best Practices

It is recognized that Wellington-Dufferin has demonstrated a best practice in the following area:

- The importance of safety is introduced immediately upon attendance at school with the First Rider program and is reinforced as students progress through the system via regular evacuation drills. In addition, the involvement of school staff promotes safety on the bus as an extension of the

classroom and provides additional opportunities to reinforce the importance of safety to bus riders and participants in safety patrols.

4.4.3 Recommendations

Student Training

Continued emphasis should be placed on expanding training opportunities where available. By working with Operators to develop training programs, and having Drivers and students participate in those programs, the Consortium will ensure that safety continues to be the primary consideration for users, providers, and managers of the transportation system.

Student Identification

The use of identification tags for JK/SK students was identified as a good practice, however, it was noted that the inclusion of the child's name on the tag is a safety concern. As recommended by Child Find Canada, Boards and parents should, "avoid clothing and toys with a child's name on it. A child is less likely to fear someone that knows his/her name."⁹

4.5 Special Needs and Specialized Programs

Effective school transportation includes transporting students with special needs (mobility restrictions or behavioural issues due to cognitive conditions, attachment requirements and such) as well as transportation to specialized programs, which often involves transporting students from diverse locations to centralized program schools. Both of these types of transportation can put pressure on the efficiency of the system since they involve longer distances, lower demand densities, longer passenger dwell times, and in the case of special needs transportation, accessible vehicles.

Transportation consortia face a challenge in maximizing the efficiency of these systems in addition to attempts to integrate students and avoid having separate transportation systems. This section examines the policy approach to special needs and specialized transportation, and how well practice conforms to established policies.

4.5.1 Observations

Eligibility for special needs transportation

Special needs transportation is provided to students who have a medically verified condition and is ultimately determined by the Board's Special Education Department and the school principal. Transportation arrangements are made in consultation with the Consortium on the type of vehicle and safety equipment that may be required.

Medical transportation

The Consortium will provide students with short and medium term transportation for verifiable medical conditions. After receiving a request for service from the parent, doctor, and school principal, the Consortium will review and approve or deny services within three working days based on the respective partner board's policy. The Consortium will then notify the parent, school, and bus Operator if services have been approved of both the requirements and the term of the service. Parents will be notified directly by the Consortium if their medical transportation request has not been granted.

4.5.2 Best Practices

It is recognized that Wellington-Dufferin has demonstrated a best practice in the following area:

- Special needs transportation is provided only to students with a verified medical condition ensuring that resources are allocated to provide the appropriate level of service in terms of monitors and vehicle type. By understanding and assessing the mobility restrictions of students, more efficient transportation planning can take place.

⁹ Child Find Canada. "30 Ways to Help Prevent Child Abduction." Retrieved April 23, 2007, from <http://www.childfind.ca/safety.php>.

4.6 Results of E&E Review

The Consortium has been assessed as being moderate–high in the area of policies and practices. The policies are well-communicated, concise and are followed in practice. The majority of policies have been harmonized amongst Partner Boards, and consideration has been given to accommodate boards which will join the Consortium in the future. In addition, a number of routing strategies designed to increase efficiency have been implemented.

To attain a rating of high for both effectiveness and efficiency, Wellington-Dufferin should leverage the functionality of its routing software to undertake a comprehensive review of bus runs and routes. The goal of this review would be to identify additional reductions in resource requirements that could be realized through changes to bell times and/or run design. A systemic review of this nature will provide further validation of the combination, transfer, and tiering strategy or provide guidance on alternatives that may be available to improve service levels. In addition, the Consortium should review its distribution of route data to ensure that appropriate safeguards are in place to protect student data.

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 five key components of:

- Software and Technology Use;
- Digital Map and Student Database Management;
- System Setup and Use;
- System Reporting; 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

5.2 Software and Technology Use

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

5.2.1 Observations

Routing Software

Wellington-Dufferin has recently (within the previous two years) transitioned to the use of *Bus Planner* from GeoRef Systems, Ltd. *Bus Planner* is a geographic information systems-based (GIS) routing application. The previous vendor had been unable to supply the functionality that Consortium management believed was both necessary and appropriate for an operation of the size and complexity of Wellington-Dufferin. Interviews with Consortium staff indicate that changing providers was a rational and well reasoned business decision that has led to greater control over operations.

Following the change in vendors, implementation of the *Bus Planner* software was completed very quickly and Wellington-Dufferin has made *integration* of the software into daily business practices a significant focus for the previous 18 months. A well designed process was established that has allowed the Consortium to begin utilizing the increasingly sophisticated functionality of the software, while at the same time validating the key underlying elements including map data, student information download, stop locations, contractor information, and segment address ranges. An additional benefit of this approach has been the development of a highly collaborative interaction with the software vendor that has resulted in modifications to the software to better meet requirements at the site. Overall the implementation process was described as smooth and the end result is a highly functional application.

Bus Planner is fully implemented and is updated on a regular basis. The vendor generally provides two releases annually, one in spring and one in fall, to update and enhance system functionality. Map data is updated at least quarterly with minor revisions made on a regular basis by both transportation and vendor staff. Student data is updated on an alternating, every other week basis for each English

Board. In the case of students from the French Boards, data is generally entered and updated manually given the limited volume of students.

The site has established a web-based query system that allows parents, school staff, and Operators to print relevant reports. For example, parents can utilize the site to determine home school assignments and bus assignments; schools and Operators can print rider lists; and those with appropriate permissions can view certain operating performance statistics to evaluate service levels. The site is secured via a username and password scheme. A highly useful feature is the ability for a school to print the students who are transferring at their school and the run they are transferring to so that students can be placed on the proper route if confusion were to occur.

While the overall acquisition and implementation of the system has been very effective, a key future consideration will be ensuring on going staff competency in the management and administration of the system. Currently, the software vendor is extremely responsive to Wellington-Dufferin concerns and is clearly an integral part of system management and maintenance. This is due to the proximity of the vendor and the beta-site nature of the relationship. As the client base for the vendor continues to grow it will be imperative that Board staff become more knowledgeable in many of the tasks that are currently handled on a collaborative basis because it can be expected that vendor resources will be stretched due to the larger client base.

Maintenance and Service Agreements

As part of the *Bus Planner* licensing agreement, Wellington-Dufferin is provided with regular updates to the software. As was previously mentioned, there are generally two updates provided annually and other patches are provided when appropriate. Interviews with staff and on-site observations indicated a very high level of vendor responsiveness.

System maintenance is generally performed by both Wellington-Dufferin staff and the vendor. The organizational structure includes a Lead Technician who is responsible for most system administration and maintenance activities. This is an excellent practice because it allows for a separation of system management and system use and allows the Transportation Technicians responsible for routing to focus on ensuring high levels of functional proficiency without having to be concerned about system management. The Lead Technician is responsible for performing all technical updates and system management procedures. Automated procedures have been established for system backup and include offsite storage of daily backups of both data and map information. Established data management procedures, including both backup and student data management procedures, limit the potential operational downtime were Wellington-Dufferin to experience a hardware or software failure.

Distributing Data

Significant efforts are being made to provide as much remote access to data as is feasible and prudent. The web-based query functionality described earlier allows consumers of the data (Parents, Partner Boards, Schools, and Operators) to have access to key information needed to ensure the majority of their routing questions can be answered. The ability to provide this data in a web-based application is an important benefit of the current system. These efforts demonstrate that the Manager of Transportation has developed a logical and rational approach to using technology to minimize the disruption to Transportation Technicians. Questions regarding daily operations (e.g., answering of phones for basic routing questions) can be answered via the web-tool and administrative staff are trained to increase awareness of the product as part of the approach to customer service.

Training

Training has generally been provided in an on-going manner given the beta-site nature of the installation. The vendor provides regular updates to the software and concurrently provides training on the use of the functionality. Additionally, there are several highly skilled users of the application that are used to provide in-service training where required. The design of the product also promotes ease of use through a logical menu structure and a simple, yet highly effective, user interface. Overall this has resulted in a relatively high level of competence across the organization.

5.2.2 Best Practices

It is recognized that Wellington-Dufferin has demonstrated best practices in the following areas:

- Wellington-Dufferin uses a fully implemented and highly functional transportation software application that allows for the development, review, and analysis of existing and alternative routing strategies;
- Wellington-Dufferin utilizes the functionality of its routing software and associated technologies to push information to interested stakeholders, including parents, schools, and bus companies thereby minimizing the staff workload associated with generating basic informational reports and focusing efforts on route management;
- Wellington-Dufferin has developed a highly effective map management process that should allow for a minimum expenditure of effort on data clean up and promotes the use of the software to identify opportunities for increasing service levels and/or controlling costs; and
- Wellington-Dufferin has established an effective approach to data storage that will allow for limited downtime in the event of a system failure.

5.2.3 Recommendations

Training

Wellington-Dufferin is fortunate to have a highly responsive vendor in the local area that provides a high level of support. However, it is imperative that, given the system maintenance and management requirements associated with the Lead Technician position, Wellington-Dufferin regularly invest in the requisite technical training required to manage the system. Specific training will be required in the areas of maintenance of the geocode (e.g., map addressing, boundary areas, and revision/addition to established developments); database management; installation of upgrades to the routing software; and management and administration of the student data uploads from the respective Boards. Proficiency in all of these skills will ensure that the Consortium is fully self sustaining in the event of reduced availability of vendor services.

5.3 Digital Map and Student Database Management

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

5.3.1 Observations

Digital Accuracy

The procedures established for managing the digital map are an effective approach to support efficient routing. The current digital map includes the entire coverage area and is sufficient to allow for one map to be used for all routing. The original map was acquired from the UG planning department and has since been updated and modified to reflect changes to the road network by both Consortium staff and through map updates supplied by the planning department and municipalities. The use of a GIS-based application allows for regular updates of the map as changes are made by other entities using similar applications. This technology provides one of the most simple and cost effective methods to ensure that map data is current. Formal map updates are undertaken on a quarterly basis. Additionally, a joint review of changes made by transportation staff is conducted with the vendor. Map addressing is reported to be nearly 100 percent for students within the district boundaries and nearly 95 percent for out of boundary students. A review of geocode errors in a recent update of student data indicated an error rate of less than one percent.

Map Management

Wellington-Dufferin has established an effective organizational structure that separates system management from use of the system. The Lead Technician is responsible for the majority of system management requirements. Recently these efforts have included a substantial effort to update and verify many of the default road speed and travel characteristics. Generally, this is a highly effective structure and approach for an operation of this size and scope. However, recommendations regarding increased training for the Lead Technician should be implemented.

Default Values

Management of default values helps promote accurate route timings and increases the usefulness of the system for evaluating alternative routing strategies. Default road speed and travel characteristic values have recently been updated and interviews suggest these changes have improved the accuracy of system generated route times.

Staff have also established default loading times, seating criteria, and travel restrictions for both the street network and for specific students. A useful feature of the software that promotes more accurate route timing is the ability to adjust loading times at the student level to reflect requirements such as wheelchair loading. Rights and permissions have been established for specific types of users that limit authority to make changes to certain default values. This approach helps to ensure that any changes that are made to a part of the system that will affect all areas (e.g., changes to a default travel speed in the street network) are in the best interest of the entire system rather than one specific component. Individual Transportation Technicians can adjust certain characteristics of specific data elements in order to improve the synchronicity between actual operations and the data maintained in the routing software.

Data Management

Wellington-Dufferin has worked with the software vendor to design a student data update process that ensures necessary changes to student data are regularly received, updated, and reflected in changes to routing requirements where appropriate. As discussed previously, student data is uploaded on a biweekly basis from each of the Boards via an email or from a direct download dependant on the Board. French Board students are entered manually where necessary due to the relatively small number of students. Software functionality allows for a review of geocode errors and maintains a temporary table in the database of the errors for review and analysis to determine if additional training is required at the school level to improve data entry. Efforts have been made between site and school staff that has led to a dramatic reduction in the number of geocode errors.

As part of regular student count efforts, Operators submit updated run times and stop load counts to the Consortium to verify and update system data. The Lead Technician has the authority to make large scale system changes where necessary and technicians also have authority to modify stop time and stop order to ensure that actual time and route of travel are consistent with data maintained in the routing software. This is an effective approach because it forces accountability and responsibility for ensuring system accuracy to the lowest, most appropriate level in the organization and allows those individuals most familiar with each specific area to evaluate what factors may be influencing the need for edits to the system.

Coding Structures

Establishing effective coding structures begins at system setup and requires a comprehensive understanding of what organization processes the software will be designed to support. For example, Wellington-Dufferin utilizes a significant number of transfer sites to promote the efficient use of seating capacity. Stop location coding structures have been established that identify the location and destination of transfer points. When a Transportation Technician assigns a student to a designated transfer stop the student is automatically placed on the required transfer run, thus ensuring that students are not left stranded at a transfer site.

Wellington-Dufferin has established a number of different codes to classify students that are separated into two primary code types. The first type is an eligibility code that determines whether a student is eligible to be bussed. The second code is a travel code that identifies the mode and rationale for transport. For example, a courtesy student would have an eligibility code of C to designate courtesy and may have a travel code of BD indicating a Board Directed transport area. Through the coding structure the transportation department has developed an innovative method to identify the specific rationale for designated transport areas, particularly for areas that would otherwise be ineligible for transport. This is a sound strategy because it allows for the analysis of the cost and operational impact of the transport of otherwise ineligible students.

The large number of travel codes allows for detailed analysis of operations. A concern with this strategy is that as the number of codes proliferates, the distinction between the codes becomes more and more difficult to determine. This *could* result in confusion on the part of Transportation Technicians about which code is appropriate and consequently would result in an incomplete and potentially inaccurate analysis.

Also noted during the review of the travel codes were a substantial number of students being transported as a result of a Board directive. Board directive codes refer to instances where transportation is provided to a student, or students, who may not be eligible according to the Boards' policy. The provision of this service outside of the Boards policy is directed and approved by the requesting Board. At least 650 of these students were identified, and this has a significant impact on the overall design of the route network, particularly if runs have to be diverted to pick these students up or additional buses must be added to accommodate these students.

5.3.2 Best Practices

It is recognized that Wellington-Dufferin has demonstrated best practices in the following areas:

- Wellington-Dufferin has recognized the importance of complete and accurate map data through its organizational design and choice of software application; by designating accountability for map management to the Lead Technician and by choosing a type of application that allows for regular map updates with limited impact on map attributes and student data elements; and
- Wellington-Dufferin has implemented a process that utilizes regular input from Drivers to validate the condition of the map and allows for the calibration of road speeds, travel times, and distances between stops.

5.3.3 Recommendations

Coding Structure

The current coding array is highly detailed and specific. This allows for a detailed analysis of very specific aspects of service provision. Consideration should be given to whether continued expansion of this fine level of detail will result in categories that are so narrow as to be confusing to staff, or which could result in categories with limited numbers, or even individual, students within them.

In combination with the recommendations regarding route analysis provided in 4.3.3, the Boards should reconsider the current provision of Board-directed transportation. After the service is rationalized, the Consortium should evaluate how best to reallocate or eliminate the resources currently being utilized to transport these students.

5.4 System Setup and Use

The goal of every organization that acquires transportation software is to use it to better manage the vehicles and students within their charge. Accomplishing this requires an understanding of the functionality of the software and how it can support the administration of existing operations and the evaluation of new and different approaches that may reduce cost or improve service. This aspect of the review was designed to evaluate staff competencies using the software, the use and understanding of ancillary modules or third party tools, and whether the functionality of the chosen application is used to improve effectiveness and/or efficiency.

5.4.1 Observations

System Use

Transportation Technicians, Lead Technicians, and Administrative staff are all very well versed in the available functionality and use of the system to meet the specific requirements of their positions. The Transportation Technicians and Lead Technician are highly knowledgeable in how to manipulate system data and perform both tactical and strategic route analysis using the software functionality. While additional refresher training on new functionality and more extensive use of the software for strategic planning will be an ongoing requirement, Wellington-Dufferin staff are well positioned to effectively use the system to identify opportunities for cost control and service improvements in the future.

5.4.2 Best Practices

It is recognized that Wellington-Dufferin has demonstrated a best practice in the following area:

- Staff are well trained and skilled at utilizing the bus routing software. Management has also developed a highly effective approach to designating job responsibilities and requirements.

5.5 System Reporting

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

5.5.1 Observations

Reporting

The features and functionality of the reporting module of *Bus Planner* are highly effective and allow for easy export to productivity software. Reporting mechanisms can be customized to support a wide variety of operational and analytical processes. Reports are regularly generated in an ad hoc manner for internal review and analysis and data is regularly distributed to the schools and bus companies via the web interface described previously. Additionally, the web interface is designed with basic performance measurement queries that allow managers to obtain regular updates of key route performance metrics on utilized capacity, run length in distance, and run length in time.

5.5.2 Best Practices

It is recognized that Wellington-Dufferin has demonstrated a best practice in the following area:

- Wellington-Dufferin has developed internal and external reporting mechanisms to distribute data to all interested stakeholders. The web-based reporting mechanism is consistent with industry best practices across Ontario and North America.

5.6 Special Needs Transportation Planning and Routing

Special education presents unique challenges that often require operational strategies well outside the normal practices of any organization. This portion of the review was designed to evaluate the strategies and approaches used to provide transportation to special education students and the approaches used to minimize the cost and operational disruption associated with this type of transportation.

5.6.1 Observations

Coding of Special Education Students

Special education students are categorized using a specific system flag that allows the students to be quickly identified and included or excluded from specific analytical activities. In addition, travel codes and record notes are utilized to ensure that specific characteristics or exceptionalities are identified and can be transmitted to the individuals most in need of the information through the route reporting mechanism. Appropriate controls have been established to ensure the confidentiality of necessary data.

Management of Routes

Responsibility for management of special education student data and routing is vested in a specific Transportation Technician who has the authority to make determinations regarding stop locations, route assignments, run combinations, and all other routing aspects consistent with both policy and individual education plans. The Transportation Technicians and Lead Technician work in conjunction with Board special education staff to integrate special education students on regular buses when and where appropriate. Data provided as part of the analysis indicated that 164 special education students had been mainstreamed at the time of our review. In addition, consideration is given to placing regular education students on special education buses if it will reduce ride times or promote greater cost control for the operation. Data provided during the review indicated that 91 regular education students were riding on a special education bus for some or all portions of their trip. Overall, these two strategies are consistent with best practices.

5.6.2 Best Practices

It is recognized that Wellington-Dufferin has demonstrated a best practice in the following area:

- Wellington-Dufferin has implemented two highly progressive routing strategies that promote efficiency and effectiveness in managing low density highly specialized transportation. Of particular note is the inclusion of regular education students on special education buses.

5.7 Results of E&E Review

Routing and Technology use has been rated as moderate-high. Wellington-Dufferin developed a highly rational process for changing software providers and then established a highly effective approach to implementing the new software. Staff have been well trained on the application and have been cross trained to work in multiple service areas. The use and development of web-based technologies to distribute data to interested stakeholders is also consistent with best practices. Efforts have been made to establish an organizational structure that effectively supports the use of the applications without burdening operational staff with technical system management requirements. Finally, efforts have been made to evaluate and implement alternative routing strategies that minimize the impact of the unique requirements of special education routing.

Opportunities exist for reviewing coding structures and bell time schedules to determine if changes can be made to improve long term analytical capabilities and service levels. As was mentioned previously, these efforts should be undertaken with caution in order to not significantly disrupt a system that is operating effectively. Ongoing staff training on use of available software features, particularly for targeted analytical reviews of specific route clusters, will be important to ensure that an appropriate balance between the use of shuttle, combination, and transfer routing strategies continues to be evaluated for their impact on service quality as well as cost control.

6. Contracts

6.1 Introduction

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

- Contract Structure;
- Contract Negotiations; and
- Contract Management.

Each component has been analysed based on observations from 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 Contracts as shown below:

Contracts – E&E Rating:	Moderate-Low
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6.2 Contract Structure

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

6.2.1 Observations

Contract Clauses

Wellington-Dufferin has established standard service agreements with the Operators. The agreements include relevant service provisions such as a requirement to comply with Board policies and defined procedures and requirements to comply with other motor vehicle regulations. The standard agreements include provisions on the vehicle specification requirements; insurance requirements; vehicle age requirements; safety requirements for all buses and training for Drivers. In addition, the agreements define the term of the contract as a one year agreement with specific compensation clauses (described below in more detail).

Wellington-Dufferin has also established standard contracts for taxi operators who generally provide services for special education students. The standard contract includes provisions for vehicle standards, insurance, licenses, driver responsibilities, confidentiality of student information and expected level of service. Drivers are also required to follow the Boards' procedures for transporting special needs students, however no other safety or first aid training is specifically required. In addition, the contract states that the maximum age of taxi vehicles that can be used is 8 years.

Finally, there are some parents who are reimbursed by the Consortium to transport their children to and from school. Although there are various reasons these arrangements might be made, it was noted that student behaviour and the location of the home seem to be the most common. Parents are paid a standard per kilometre rate by the Board, but there are no contracts in place with paid parent drivers.

Contractor Compensation

The fee structure for the standard contract is complex and includes a number of cost components that provide incentives to Operators to improve the safety of their vehicles such as mechanical fitness, maintenance and video monitor allowances. The base contract rate includes all fixed cost components, such as capital costs, licensing fees, insurance, maintenance, and Driver wages. Also included are allowances for bus washes and mechanical inspections that address the cost of yearly brake

inspections and semi-annual inspections. Fuel costs are also included in the contract based on a kilometres per litre rate with an additional allowance of one cent per kilometre to cover profit and overhead. The amount of fuel paid is based on the kilometres travelled on each route – a conversion from kilometres travelled to litres used is included in the contract. Finally, there is a 20% allowance for overhead and profit that is applied to all cost elements, including fuel. While many of these provisions are reasonable and appropriate, providing for a fixed 20% profit and overhead margin provides little incentive for the Operators to ensure that their operations are managed as efficiently as possible.

A provision in the contract provides the Operator with the base rate for service plus 50 percent of the variable rate for each route if routes are not completed due to inclement weather. This provision is intended to recognize the costs incurred by the Operators in the event routes are started but cannot be completed.

The contract also provides for additional costs eligible for compensation that significantly increase the complexity and management requirements associated with the contracts. These provisions include: a premium paid on a per kilometre basis for routes in excess of 130 kilometres; a fixed fee allowance for the installation of a video monitor box upon proof of payment and a fixed fee per monitor per vehicle; an allowance for crossing arms; a fixed fee to generate a student list by route; a fixed allowance to cover cost of the Drive Clean Program paid on vehicles over 3 years old; a provision for bus monitors who are paid 80% of the Driver's daily wage with a 3 hour per day minimum; overtime allowances for work in excess of 3.25 hrs per day; and a fixed rate student return fee for when an Operator may have to return a child to school because the parent or guardian was not at the bus stop to receive their child.

6.2.2 Best Practices

It is recognized that Wellington-Dufferin has demonstrated a best practice in the following area:

- The standard contract includes key provisions such as Driver and vehicle requirements, payment terms, insurance requirements, and safety requirements. It is important that standard contracts are used to ensure consistency in expectations and delivery of services amongst Operators as well as ensuring key legal provisions are included such as license and insurance requirements.

6.2.3 Recommendations

Standard Contracts

Consistent with the recommendation for establishment of the Consortium as a legal entity in Section 3.3.3, it is recommended that contracts be held between Operators and the Consortium (being the body representing all Partner Boards and Service Purchasing Boards). This cannot occur until the Consortium has the legal authority to sign contracts, which will require it to be a legal entity.

Rates- Operators

The Consortium should review its current contract structure of providing a 20% overhead and profit component to the Operators. The current contract rate structure of including a fixed margin for overhead and profit may provide Operators with an incentive to negotiate higher costs in order to profit from the base rates negotiated. Additionally, the 20% profit component is being paid on the cost of fuel, therefore when fuel costs rise, the Operators may be compensated twice as the 20% is added on top of the additional funds received for the rise in fuel costs. If a competitive negotiation process is implemented, the contract rates would be reflective of market prices.

Additionally, the current provision for inclement weather should be reviewed. While incorporating some protection for Operators is reasonable, particularly in capital intensive business like school bus operations, it is unreasonable to expect payment for variable expenses on days when services are not rendered. Therefore, consideration should be given to eliminating the variable component of the rate when services are cancelled due to inclement weather.

Paid Parent Drivers

Wellington-Dufferin has chosen to pay a limited number of parents a per diem rate to drive their children to school as it was found to be more effective than other means of transportation. Although the Consortium does require parents to demonstrate proof of insurance (see Section 6.4.1), there are

no contracts in place with parents who are providing this transportation. It is recommended that Wellington-Dufferin seek legal advice in order to determine if there are any risks associated with this process, and whether formal contracts are required.

6.3 Contract Negotiations

Contract negotiations are intended to provide an avenue by which the purchaser can ultimately obtain the best value for money for services purchased. The purchaser's goal is to obtain high quality service at market prices.

6.3.1 Observations

Bus Operator Contracts

The Boards, through the Manager of Transportation, negotiate for services annually with the Bus Operators Association (BOA). The process is scheduled to begin in March and be completed by June to ensure that schools can open without undue concern for having sufficient resources in place. Following the negotiations, contracts and routes are generally awarded to Operators based on historic service, and if reductions in routes are needed efforts are made to limit the impact on any one Operator. Should disagreements arise, the issues will be brought to the Management Committee for resolution using the standard method of resolution described in Section 3.2.1.

In the 2006/07 school year, the contract negotiations were not completed until December 2006. Additionally, the terms and rates were not agreed upon with Operators until well into the school year. At the time of our review, the contracts had not yet received final approval by the Boards. It is important that contracts are negotiated and approved prior to the start of the school year so that both Operators and the Consortium are able to open school with a firm understanding of service expectations and compensation. A more timely negotiation process that includes approved contracts prior to the start of the school year will minimize the possibility of any service disruptions.

The acquisition of taxi services is not negotiated in the same manner as bus contracts. The Consortium (through each Board requiring the service) has agreements in place with all taxi companies they use. These agreements were not arrived at through a competitive process as the companies were selected for their ability to provide service in a specific area. The rates paid for taxi services are at the standard meter rate.

6.3.2 Recommendations

Negotiation Process

It is recommended that, in order to ensure that market prices are being paid to Operators, a competitive contracting process be used for awarding contracts. The current process of negotiation with the Bus Operators Association does not allow for an establishment of market based rates and limits flexibility in the definition of detailed service standards. By moving towards a competitive process (either through tendering or an RFP), Wellington-Dufferin could define its service level and expectations and the local Operators could bid on the contracts based on their ability to provide the desired level of service. It is recognized that this does not necessarily mean that the cost will decrease, in fact, the cost may increase depending on the specifications within the contract. The advantage however is that the Consortium can be sure they are getting the best value for money and Operators can ensure they are receiving fair pay for the quality of service they provide. Additionally, it is also recommended that the Consortium retain their current restriction on Operator services by limiting total business held by any one Operator. This limitation will ensure that Wellington-Dufferin minimizes its sole source exposure to any one Operator. Retaining this provision will require some flexibility be built into the process in the event of acquisitions and industry consolidation.

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 value for money that was agreed upon. Monitoring should be performed proactively and on a regular and ongoing basis in order to be effective.

6.4.1 Observations

Monitoring

The Consortium currently concentrates its contract monitoring efforts on verifying that legal and regulatory requirements are met. The Administrative Office Assistant performs a check of the Driver's legal requirements including proof of license, insurance and CVOR rating. Taxi companies are required to provide the Consortium with proof of insurance and licenses prior to beginning service. Parent paid Drivers are required to show proof of insurance to the Consortium prior to the start of the school year. The current routing software also allows the Consortium to keep track of specific information on each Driver to ensure required training has been completed in a timely manner. Compliance with contractual requirements regarding fleet age is also performed.

Ongoing monitoring of service provision through regular route audits is not performed proactively. If the Consortium is made aware of a problem, they will react by investigating the issue. Regular monitoring and evaluation is a key element of any consumer/provider service relationship. Establishing a route auditing program that includes both legal and operational requirements provides for empirical and documented assurance that service standards are being met. These route audits can then be used to provide both incentives and penalties to high and substandard performing Operators, respectively.

Bus Industry

All Operators in the area are members of the BOA. The Operators have expressed that they have a strong working relationship with the Consortium and through collaboration are able to work through routing issues and work together to find efficiencies. The Operators indicated that the major issue affecting service in their area is Driver retention. Operators have been experiencing 25-30% Driver turnover mainly in the urban areas. Drivers are being expected to perform a job that holds a significant amount of responsibility for minimal wages. In addition, most Drivers do not get benefits and are being asked to work less than a full day split between morning and evening. The amount of training required also may act as a deterrent. The E&E Review Team were advised by both Operators and Wellington-Dufferin that many new Drivers move to local transit companies, where the benefits of employment are greater than those of a school bus driver.

6.4.2 Best Practices

It is recognized that Wellington-Dufferin has demonstrated a best practice in the following area:

- The Consortium requires Operators, taxi companies and parent paid Drivers to demonstrate certain legal requirements prior to the start of the school year. These oversight roles ensure that legal obligations are being met by all service providers.

6.4.3 Recommendations

Ongoing Monitoring

It is recommended that the Consortium establish a rigorous program of contract monitoring and enforcement. The key elements to this plan should be:

- Operators should be required to demonstrate that they have provided their Drivers appropriate safety and first aid training prior to the start of the school year. Operators can provide copies of certifications or proof of training for each Driver to the Consortium with regular updates as additional training is received;
- Consortium staff should take a proactive approach and perform random audits to ensure:
 - Routes are being followed appropriately;
 - Buses being operated meet safety requirements as stated in contracts; and
 - Only assigned students utilize bus services.
- Records of these random audits and monitoring activities should be maintained by the Consortium as evidence that monitoring does occur.

6.5 Results of E&E Review

Contracting practices have been assessed as moderate-low. The Consortium's current contracting process is such that contracts for transportation services are not procured using a competitive process. By not using a competitive process, the Consortium cannot know whether they are paying market rates for services provided. Additionally, their current rate structure has a 20% profit built in which appears to be high for the industry.

If a competitive process is used for contract negotiations, the Consortium can clearly state all service requirements in either a tender or request for proposal and can be sure that it will obtain best value for money as Operators will compete to provide the required service levels at prices that ensure they earn a return for the provided services. This may not mean that rates will decline, in fact, rates for services may increase; however the concern for the Consortium should be value for money. A competitive process will improve the efficiency of the contracting practices. This should be done, however, with certain safeguards in place to protect the delivery of service. Limits should be placed on the amount of business any one Operator can hold to avoid a monopoly situation. Additionally, in evaluating the successful bidders, cost should not be the overriding factor as that will encourage low cost bidders to enter the market while not necessarily ensuring that the same or improved levels of service are being provided.

Once a transparent and efficient contracting process and contract structure is in place, the Consortium should focus on improving the effectiveness of their contracting practices through continued improvements to the monitoring of its contracts. It is understood that the Consortium does provide some degree of oversight in reviewing the legal compliance of service providers. Additional monitoring in the form of route audits is an important oversight role to ensure the delivery of safe transportation services and to ensure that the Operators are providing the services in accordance with their contracts.

7. Funding Adjustment

The Ministry has asked the E&E Review Team to apply the Funding Adjustment Formula to each Board that was subject to an E&E Review in Phase 1. Note that where Boards are incurring transportation expenses in multiple Consortia sites, the Board's adjustment will be prorated for the portion attributed to the Consortium under review. For example, if 90% of Board A's expenditures are attributed to Consortium A, and 10% of expenditures are attributed to Consortium B, the funding adjustment resulting from Consortium A's review will be applied to 90% of Board A's deficit or surplus position.

The Ministry's funding formula is as follows:

Overall Rating	Effect on deficit boards ¹⁰	Effect on surplus boards ¹⁰
High	Reduce the gap by 100% (i.e. eliminate the gap)	No in-year funding impact; out-year changes are to be determined
Moderate-High	Reduce the gap by 90%	Same as above
Moderate	Reduce the gap by 60%	Same as above
Moderate-Low	Reduce the gap by 30%	Same as above
Low	Reduce the gap in the range of 0% to 30%	Same as above

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

Upper Grand District School Board

Item	2006/2007 ¹¹
Transportation Surplus (Deficit)	\$(2,829,989)
E&E Rating	Moderate
Funding Adjustment based on Ministry's Funding Adjustment Formula	Increase by 60% of deficit
Total Funding adjustment	\$1,697,993

Wellington Catholic District School Board

Item	2006/2007
Transportation Surplus (Deficit)	\$(96,637)
E&E Rating	Moderate
Funding Adjustment based on Ministry's Funding Adjustment Formula	Increase by 60% of deficit
Total Funding adjustment	\$57,982

¹⁰ Refers to boards with a transportation surplus/deficit.

¹¹ Based on budgeted figures received by the Ministry- Revised Estimates- source: Data form D 208C

Conseil scolaire de district catholique Centre-Sud

Item	2006/2007 ¹²
Transportation Surplus (Deficit)	\$(1,524,904)
% of Surplus attributed to Wellington-Dufferin (rounded)	2%
Revised Surplus (Deficit) to be assessed under Wellington-Dufferin	(\$37,612)
E&E Rating	Moderate
Funding Adjustment based on Ministry's Funding Adjustment Formula	Increase by 60% of deficit
Total Funding adjustment	\$22,567

Conseil scolaire de district du Centre-Sud-Ouest

Item	2006/2007
Transportation Surplus (Deficit)	\$(516,040)
% of Surplus attributed to Wellington-Dufferin (rounded)	2%
Revised Surplus (Deficit) to be assessed under Wellington-Dufferin	(\$9,770)
E&E Rating	Moderate
Funding Adjustment based on Ministry's Funding Adjustment Formula	Increase by 60% of deficit
Total Funding adjustment	\$5,862

Dufferin-Peel Catholic District School Board

Item	2006/2007
Transportation Surplus (Deficit)	\$(6,662,430)
% of Surplus attributed to Wellington-Dufferin (rounded)	6%
Revised Surplus (Deficit) to be assessed under Wellington-Dufferin	\$(390,918)
E&E Rating	Moderate
Funding Adjustment based on Ministry's Funding Adjustment Formula	Increase by 60% of deficit
Total Funding adjustment	\$234,551

¹² Based on budgeted figures received by the Ministry - source: Data form D 208C

Glossary of Terms

Act	<i>Education Act</i>
Administrative Office Assistant	As shown in Figure 7
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
Bus Planner	Routing software used by Wellington-Dufferin.
CEO	Chief Executive Officer
Common Practices	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	As defined in the Ministry of Education's numbered memorandum 2006: SB13, dated July 11
CPR	Cardiopulmonary Resuscitation
CSA	Canadian Standards Act
CSDCCS	Conseil scolaire de district catholique Centre-Sud
CSDCSO	Conseil scolaire de district du Centre Sud-Ouest
CVOR	Commercial Vehicle Operator's Registration
Deloitte	Deloitte & Touche LLP (Canada)
Driver	Refers to Bus Drivers, see also Operators
Dufferin-Peel	The Dufferin-Peel Catholic District School Board
E&E	Effectiveness and efficiency
E&E Reviews	As defined in Section 1.1.3
E&E Review Team	As defined in Section 1.1.4
Evaluation Framework	The document, titled "Evaluation Framework For Wellington Dufferin Student Transportation Services" which supports the E&E Review Team's Assessment; this document is not a public document
Evaluation Work Sheets	As defined in Appendix 2 of the Evaluation Framework
Funding Adjustment Formula	As described in Section 1.3.6
GeoRef	Transportation routing software used by the Consortium
GIS	Geographic Information Systems
HR	Human Resources
IT	Information Technology
JK/SK	Junior Kindergarten/Senior Kindergarten
Lead Technician	As shown in Figure 7
Management Committee	The oversight body of the Consortium
Management Consultants	As defined in Section 1.1.4
Manager of Transportation	As shown in Figure 7
Memo	Memorandum SB: 13 issued by the Ministry on July 11, 2006

Memorandum of Agreement or Agreement	As defined in Section 3.2.1
Ministry	The Ontario Ministry of Education
MPS	Management Partnership Services Inc., the routing consultant, as defined in Section 1.1.5
MTO	The Ontario Ministry of Transportation
Operators	Bus Drivers
OSBA	Ontario School Bus Association, the provincial Association to which some Operators may be affiliated
OSBIE	Ontario School Boards' Insurance Exchange
Overall Rating	As Defined in Section 3.2 of the Evaluation Framework
Partner Boards or Boards	The school boards that have participated as full partners in the Consortium
Rating	The E&E Assessment score on a scale of High to Low, see Section 1.3.4
Report	The report prepared by the E&E Review Team for each Consortium that has undergone an E&E Review (i.e. this document)
RFP	Request for Proposal
Service Purchasing Board	Refers to School Boards who purchase student transportation services for their students through Wellington-Dufferin
Transportation Peer Reviewer	As defined in Section 1.1.4
Transportation Technician or Area Transportation Technician	As shown in Figure 7
UG	Upper Grand District School Board
WC	Wellington Catholic District School Board
Wellington-Dufferin	The Wellington Dufferin Student Transportation Services Consortium

Appendix 1: Financial Review – by School Board

Upper Grand District School Board

Item	2004/2005	2005/2006	2006/2007
Allocation ¹³	\$10,457,881	\$10,993,812	\$11,290,544
Expenditure ¹⁴	\$12,806,551	\$13,500,378	\$14,120,533
Transportation Surplus (Deficit)	\$(2,348,670)	\$(2,506,566)	\$(2,829,989)

Wellington Catholic District School Board

Item	2004/2005	2005/2006	2006/2007
Allocation ¹³	\$3,393,592	\$3,550,319	\$3,618,363
Expenditure ¹⁴	\$3,466,467	\$3,547,836	\$3,715,000
Transportation Surplus (Deficit)	\$(72,875)	\$2,483	\$(96,637)

Conseil scolaire de district catholique Centre-Sud

Item	2004/2005	2005/2006	2006/2007
Allocation ¹³	\$12,630,012	\$13,363,914	\$13,676,051
Expenditure ¹⁴	\$13,724,837	\$14,857,246	\$15,200,955
Transportation Surplus (Deficit)	\$(1,094,825)	\$(1,493,332)	\$(1,524,904)
Total Expenditures to Wellington-Dufferin Consortium	\$344,835	\$366,448	N/A
As % of total Expenditures of Board ¹⁵	3%	2%	N/A

Conseil scolaire de district du Centre-Sud-Ouest

Item	2004/2005	2005/2006	2006/2007
Allocation ¹³	\$7,785,949	\$8,497,859	\$8,701,458
Expenditure ¹⁴	\$8,675,037	\$9,003,618	\$9,217,498
Transportation Surplus (Deficit)	\$(889,088)	\$(505,759)	\$(516,040)
Total Expenditures to Wellington-Dufferin Consortium	\$167,660	\$170,448	N/A
As % of total Expenditures of Board ¹⁵	2%	2%	N/A

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

¹⁴ Expenditure based on Ministry data – taken from Data Form D: 730C (Adjusted expenditures for compliance) + 212C (Other revenues) + 798C (Capital expenditures funded from operating)

¹⁵ Rounded to nearest whole number

Dufferin-Peel Catholic District School Board

Item	2004/2005	2005/2006	2006/2007
Allocation ¹⁶	\$15,536,409	\$16,459,877	\$16,878,655
Expenditure ¹⁷	\$20,135,917	\$21,303,755	\$23,541,085
Transportation Surplus (Deficit)	\$(4,599,508)	\$(4,843,878)	\$(6,662,430)
Total Expenditures related to Dufferin County	N/A	\$1,250,000	N/A
As % of total Expenditures of Board ¹⁸	N/A	6%	N/A

¹⁶ Allocations based on Ministry data – includes all grant allocations for transportation (Section 9 0008C, Section 13 00006C, Section 13 000012C)

¹⁷ Expenditure based on Ministry data – taken from Data Form D: 730C (Adjusted expenditures for compliance) +212C (Other revenues) + 798C (Capital expenditures funded from operating)

¹⁸ Rounded to nearest whole number

Appendix 2: Common Practices

	JK/SK	Elementary			Secondary
		Gr. 1-3	Gr. 4-6	Gr. 7-8	Gr. 9-12
Home to School Distance					
Common Practice	1.0	1.6	1.6	2.4	4.0
Policy & Practice – WC	1.6	NOTE 1	2.4	3.2	3.2
Policy & Practice – UG	1.6	NOTE 1	2.4	4.8	4.8
Policy & Practice – CSDCCS	1.6	1.6	1.6	1.6	3.2
Policy & Practice – CSDCSO	0.8	1.6	1.6	1.6	3.2
Home to Bus Stop Distance					
Common Practice	0.8	0.8	0.8	1.0	1.6
Policy & Practice – WC/CSDCCS	1.2	1.2	1.2	1.2	1.2
Policy & Practice – UG	0.8	0.8	1.2	1.2	1.2
Policy & Practice – CSDCSO	0.4	0.8	0.8	0.8	1.6
Arrival Window					
Common Practice	18	18	18	18	25
Policy & Practice – UG/WC	30	30	30	30	30
Policy & Practice – CSDCCS	15	15	15	15	15
Policy & Practice – CSDCSO	15	15	15	15	15
Departure Window					
Common Practice	16	16	16	16	18
Policy & Practice – UG/WC	30	30	30	30	30
Policy & Practice – CSDCCS	15	15	15	15	15
Policy & Practice – CSDCSO	15	15	15	15	15

Note 1: Grade 1 policy and practice is 1.6 kms while grades 2 and 3 are 2.4 kms.

	JK/SK	Gr. 1-3	Elementary		Secondary
			Gr. 4-6	Gr. 7-8	Gr. 9-12
Earliest Pick Up Time					
Common Practice	7:30	7:30	7:30	7:30	7:00
Practice – WC	6:45	6:45	6:45	6:45	6:45
Practice – UG	6:50	6:50	6:50	6:50	6:50
Practice – CSDCCS	7:10	7:10	7:10	7:10	7:10
Practice – CSDCSO	7:00	7:00	7:00	6:20	6:20
Latest Drop Off Time					
Common Practice	5:30	5:30	5:30	5:30	6:00
Practice – WC	4:55	4:55	4:55	4:55	4:55
Practice – UG	5:05	5:05	5:05	5:05	5:05
Practice – CSDCCS	4:20	4:20	4:20	4:20	4:20
Practice – CSDCSO	5:25	5:25	5:25	5:45	5:45
Maximum Ride Time					
Common Practice	60	60	60	60	75
Policy & Practice – UG/WC/CSDCCS	45	45	45	60	60
Policy & Practice – CSDCSO	60	60	60	60	60
Seated Students per Vehicle					
Common Practice	69	69	69	52	52
Policy – UG/WC	72	72	72	48	48
Policy – CSDCCS	72	72	72	72	48
Policy & Practice – CSDCSO	69	69	69	48	48
Practice – UG	78	78	78	78	58
Practice – WC/CSDCCS	78	78	78	78	56

Appendix 3: Document List

1	Ministry of Education Board Profile
2	2005/2006 Ministry of Education Survey Results
3	Transportation Effectiveness and Efficiency Review Guide
4	Consortia Plan Submission Template, November 15, 2006
5	Wellington-Dufferin Student Transportation Services Organizational Chart
6	Consortium Organizational Partnership and Staff Responsibilities
7	Memorandum of Agreement – December 1, 2006
8	Example of shared administrative costs 2005/06 school year
9	Sample Bus Operator Contract
10	Sample Taxi Statement of Understanding
11	Sample letter to parent paid drivers
12	Sample reports and graph book as provided. Includes 15 different sample outputs from Bus Planner
13	Customer Contact Information Report
14	Transportation Procedures manual
15	Specialized Education Transportation Request Form
16	Annual cycle of events for developing school bus routes
17	Bell time, run data, and route data electronic files from Bus Planner
18	List of Operators and Vehicle age
19	Financial information – transportation account system information for WC and UG
20	Financial breakout of Wellington-Dufferin Consortium costs for CSDCCS and CSDCSO
21	Budget preparation reports
22	Board transportation policies and procedures

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