2017-2018

Toronto Student Transportation Group



A Annual Report

Prepared by the Toronto Student Transportation Group.

Providing Student Transportation Services for the Toronto District School Board and the Toronto Catholic District School Board

November 2018

Blank

General Managers Report

It is with pleasure that I provide this annual report on the activities of the Toronto Student Transportation Group over the past school year. This report summarizes the activities and plans that the transportation consortium has undertaken over the past school year. The summary of data, activities, challenges, and successes is reflective of the joint transportation unit that has been supplying transportation services to the Boards for over a decade.

The Toronto Boards started the 2017-2018 school year on better footing then in 2016-2017 but a school bus driver shortage continued to plague not only the Toronto Board but many Boards throughout the Province. So much so that the Ministry of Education took to surveying consortia throughout the year to better gauge the breadth and scope of the problem. The Province went so far as to create an 'attendance' bonus for school bus drivers that was used to entice drivers to not take off days to keep drivers in the system and minimize the possibility of divisions running more buses then they had drivers.

Adding to the mix was the implementation of a new minimum wage in the Province. Although most school bus drivers in Toronto were receiving more than minimum wage prior to this introduction; it did create a smaller 'wage gap' and as such made other part time jobs more appealing than the split shift school bus driving job. Drivers leaving the system was challenging the pace of recruitment and making it extremely difficult for school bus operators to get ahead and ensure a healthy supply of school bus drivers.

With a new school year and the continued issues with securing and retaining school bus drivers the consortia worked with the member School Boards to allocate as many parking spaces in our schools as possible. One of the primary reasons why prospective drivers do not take on work is that they have no place to park their bus. Working together with our schools and business partners we were able to help secure a number of new parking spaces as a means to help keep and maintain many of our school bus drivers who may not have stayed otherwise.

This report highlights some of the issues, challenges, and successes that the Toronto Student Transportation Group has experienced over the past school year.

Sincerely,

Kevin Hodgkinson General Manger

Kein Hodyh

Mission and Vision Statement

Mission Statement

Service: To facilitate the provision of safe, secure, and consistently on-time delivery of student transportation services for those students entrusted in our care.

Cost Effective: To provide adequate, equitable, and fair services to those members that actively look for the best means to achieve cost effective transportation solutions.

Accountable: To provide effective, efficient, and accountable solutions that meets the needs of our stakeholders.

Communications: To actively pursue initiatives that will maximize the level of service provided to our stakeholders.

Responsibility: To actively pursue economic, environmental, and social initiatives that will allow us to lead the way in meeting public demand.

Human Resources: To actively pursue programming and training that will assist staff in delivering a level of service that exceeds our shareholder's expectations.

Vision Statement



To provide and facilitate intermodal transportation solutions so that all school aged children can equally access education.

Contents

INTRODUCTION	6
History	6
A Look Back	7
Ombudsman – 6 Month Follow Up	7
Call Centre	8
New Vision	8
A Look Ahead	9
Presto	9
Where's My Bus?	10
Seat Belts on School Buses	10
Student Transportation Services	12
Financial	12
Programming	15
Special Education	15
Operations	17
Level of Service	17
Operators	20
Fuel	21
Operator KPI	22
TSTG KPI	24
Transportation Planning	27
Bell Times	27
Change Summary	28
Safety	30
School Bus Safety Program	30
Accident Statistics	30
Incidents	33



Page 6 of 33

INTRODUCTION

The Toronto Student Transportation Group (TSTG) is a consortium formed to manage and facilitate the student transportation services for the Toronto Catholic District School Board (TCDSB) & Toronto District School Board (TDSB). The TSTG provides transportation services for approximately 50,000 students in more than 800 schools and centres throughout the City of Toronto. Six different school bus operators provide more than 1800 vehicles to provide transportation services for students with a budget of just over \$95,000,000.

The consortium is physically located at 2 Trethewey Dr with a staff of 28 individuals responsible for the operation, planning, technology, and safety of transported students.

History

The TDSB & TCDSB have been sharing transportation services since 1995. Laidlaw Planning Services was originally hired to implement a computerized routing solution that optimized the TCDSB regular home to school fleet and integrate the TCDSB and North York School Boards special education routes. These two routing solutions removed over 100 buses from the road and saved the Boards over \$3.2M in transportation expenditure. Over the next eight years, the former cities making up the current City of Toronto were systematically introduced into the combined routing solution removing an additional 38 buses from the system.

In 1998 the key planning staff from Laidlaw was recruited to form the nucleus of shared transportation services provided by the Boards. The introduction of new staff was complemented by an introduction of an upgraded transportation planning management software from Education Logistics. With staff and technology in place, the Boards had the key component to managing and maintaining transportation services. Transportation staff from both Boards relocated in 2005 to the TDSB's Trethewey facility where the operations, planning,



technology, and safety units work together to facilitate and deliver transportation services. In September of 2011, the two School Boards signed a membership agreement officially creating the 'Toronto Student Transportation Group'.



Page 7 of 33

A Look Back

The 2017 -2018 school year provided the Toronto Student Transportation Group with a number of challenges that not only provided obstacles but also opportunities to understand and improve the way we do business.

Ombudsman - 6 Month Follow Up

The Ontario Ombudsman office released their report 'The Route of the Problem' in the summer of 2017 that identified a number of issues in how student transportation services were delivered and recommendations to address. The consortia as part of their own systematic review had already addressed some of the 42 recommendations that were listed in the report. The final recommendation was that the consortia provide an update every six months until the Ombudsman office was satisfied that the consortia had sufficient practices and processes in place to mitigate any future issues around school bus driver supply.

Within the six-month time frame the consortia was able to act on and complete eleven of the forty-two recommendations. Another twenty-one are in progress. The remaining ten recommendations deal with contract issues that will be dealt with when a new 'request for proposal' is issued for student transportation services.

Some of the completed tasks included more regular meetings with carriers and Governance in a lead up to school start to ensure all stakeholders have the information they need to either address concerns or communicate out if there are issues. Communication in the form of the delay portal and a new call centre were activated to ensure stakeholders were provided better information or access to information about their child's transportation. A Transportation Advisory group was set up of various stakeholders to ensure that issues being discussed will have the perspectives of those being impacted included. The planning process was also moved ahead by a month with more emphasis placed on schools getting their information back to the consortium in a timely manner so that the routes can be generated and provided to the carriers in a timelier manner.



Page 8 of 33

Call Centre

One of the more important new features to student transportation this year was the establishment of a call centre during school start-up. Previously the consortium ran an inhouse call centre with limited staff but was also limited in the number of calls they could take meaning some parents were not able to get through when they needed to speak with



someone. A new external call centre had the flexibility to scale their staffing to match peak periods or down times. This meant that more parents were able to access information in a timelier manner.

The call centre was activated in early August to ensure that parents looking for information about September bus routes and times had a

means to get this information. The last week of August and first two weeks of school saw nearly 2000 calls each week into the call center. Call centre staff had access to transportation information but if they were unable to provide an answer for an inquiry a ticket was created and transportation staff would then review and address for the caller.

New Vision

Whether it was the Ombudsman report, Auditor General report or some other mechanism to drive change the Ministry of Education wanted to identify the 'new vision' for the student

transportation sector. The intent was to gather information from stakeholders on how the envisioned student transportation services being delivered in the future. Sessions were held throughout the province with specific workgroups for consortia, school bus operators, school administration, and the general public. All stakeholders were also requested to submit their thoughts via e-mail to ensure those that could attend meetings had a means to provide their feedback.

success of equity

Success of eq

The New Vision document wanted stakeholders to present their thoughts in four areas as starting points for discussion. This included 'Responsiveness', 'Equity',

Safety & Well Being', and' Accountability'. The findings were scheduled to be presented in the Fall with plans to help map out a new direction for student transportation services.



Page 9 of 33

A Look Ahead

While successfully transporting over 50,000 students to and from school safely each and every day for another year we look ahead to the challenges and opportunities that the upcoming school years will hold for us.

Presto

The Toronto Transit Commission has indicated that as part of the modernizing efforts they will be discontinuing the sale of tickets and tokens and replacing it with a card system from Metrolinx called Presto. Presto is currently in use in the GO Transit system, several other GTA transit agencies, and in Ottawa. Although details are still to be confirmed it is expected that all passengers on TTC vehicles will need to 'tap' their presto card to utilize the service. This will



include those students 12 and under even though there is no cost for the service for this group. Cards are required as the gates in the subway system will not open unless the card is presented.

The Consortia currently provides tickets for about 7000 students who meet our transportation guidelines. Additionally, some schools located near subway lines

use the TTC for field trips and School Board staff will often use the TTC to get to meetings throughout the city. At this time, it looks like there is two ways that the consortia will be able to continue to service our student population on public transit. One will be to add funds to the specific cards using the Metrolinx web interface. The second is to push vouchers to eligible students and allow them to add to their card.

Once more details are provided the consortia will invite stakeholders to comment on the process to be used for supply of funds for transit service. This will include school staff both union and non union and staff from business areas throughout the school boards to ensure all stakeholders needs are being met. The TTC has also indicated that to help facilitate the roll out of the presto system that they will provide on a one-time basis a free presto card for every student in each of the Toronto School Boards. Parents will have to take their children to a Shoppers Drug Mart near them or the Davisville station so that the concession can be set on the card so that fraudulent activity is minimized.



Page 10 of 33

Where's My Bus?

The consiortia looks forward to launching the 'Where's my Bus' utility in the 2018-2019 school year. Often times when buses may be running late, schools and parents are wondering how

long they should be waiting or what is happening. As an added advantage over and above the late bus notification that is generated, stakeholders will be able to log into their web profile and see the exact location of the school bus in real time.

With the late bus e-mail notification system used in conjunction with 'where's my bus' families can better plan when to leave to be at the stop in a timely manner so as not to delay the bus any further. Future enhancements will also inlcude an 'estimated time of



arrival' along with enhanced graphics and more iconology to better help orient the end user on where the bus is in relation to their stop and school.

Seat Belts on School Buses

One of the most common questions always asked of safety experts on school buses is why are there no seat belts on the buses? The common answer to date is that the school bus is built to a different standard then your average passenger vehicle. High back energy absorbing seats, shatterproof glass and compartmentalized seating are but a few of the safety features that help ensure students remain safe while on the school bus. New studies coming out are also



pointing to the benefits that seat belts may provide on a school bus. Although compartmentalization works well in rear or front end collisions there remain concerns that compartmentalization does not go far enough to protect students in side impacts and bus roll overs.

Before seat belts become a reality on school buses (the mini buses in Toronto are already equipped with lap belts) there are a

few considerations that need to be addressed. First and foremost is legislation that currently



Page **11** of **33**

requires the driver to ensure all passengers are buckled up. Not something easily viable for a driver who may have upwards to 60 students on their bus. Second is the possible reduction to seating capacity and as such the need for additional vehicles. With a school bus driver shortage simmering throughout the Province, the need to add additional vehicles may exasperate an even further service delivery issue then what is already taking place. Third is a better understanding and confirmation of how students in seat belts will significantly improve the level of safety for our students. More studies from Transport Canada will help provide all users with an informed decision on the use of seat belts in school buses.

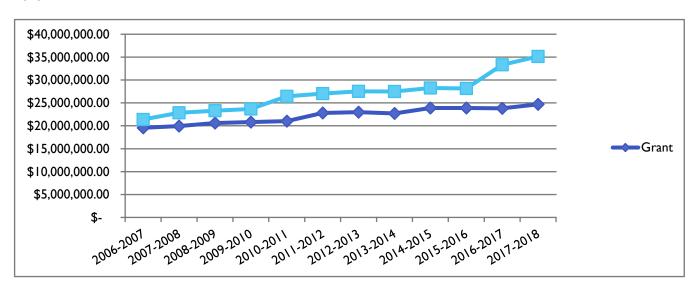
Student Transportation Services

Financial

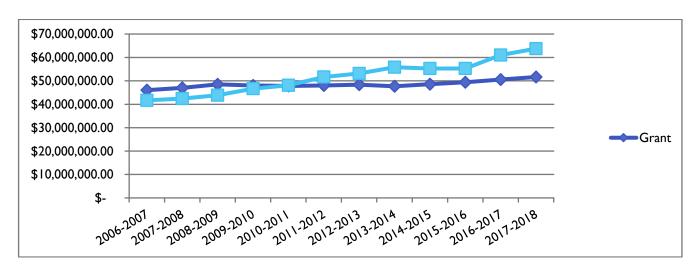
The Toronto Student Transportation Group currently spends about \$99,000,000 on transportation services for the TCDSB and TDSB. The Ministry of Education provided a transportation Grant in 2017-2018 of approximately \$24,600,000 for the TCDSB and \$51,600,000 for the TDSB. A breakdown of the transportation budget along with a historical summary of the Transportation Grant and Expenditure is displayed below:

1. Historical Transportation Grant vs. Expenditure

TCDSB



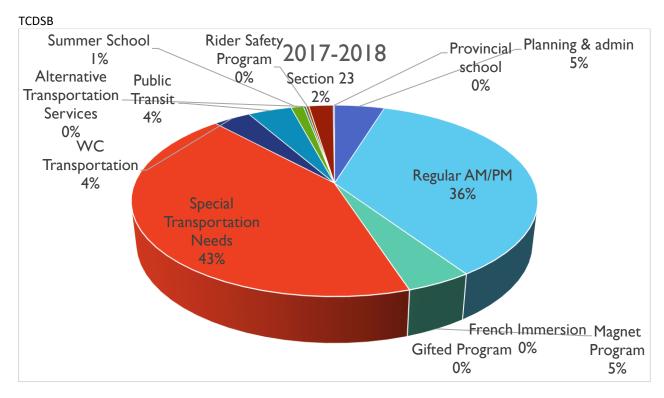
TDSB

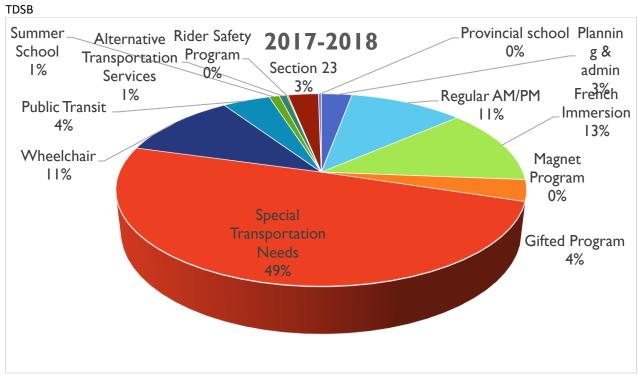




Page **13** of **33**

2. Transportation Expenditure by Area





14000000

16000000

1200000

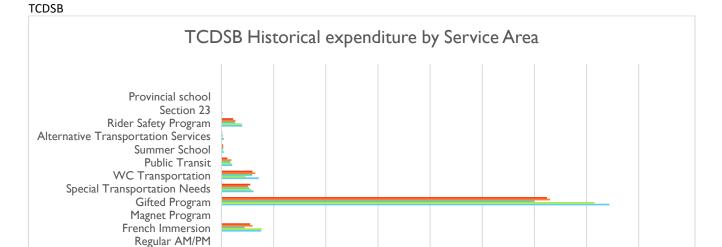
Planning & admin

Year

0

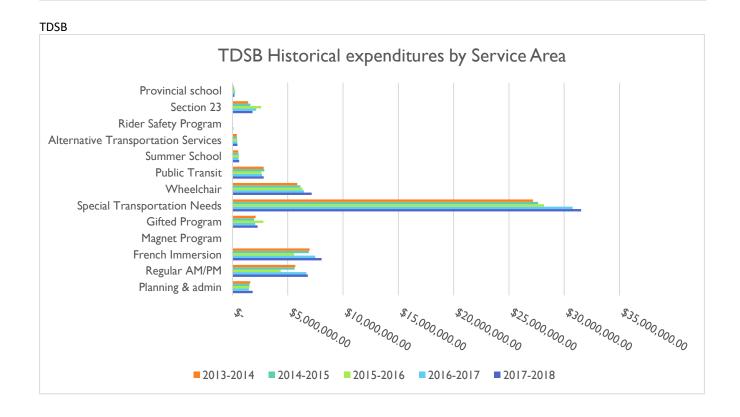
Page 14 of 33

3. Historical Summary of Transportation Expenditure 2013 - 2018



■2013-2014 ■2014-2015 ■2015-2016 ■2016-2017 ■2017-2018

10000000





Page 15 of 33

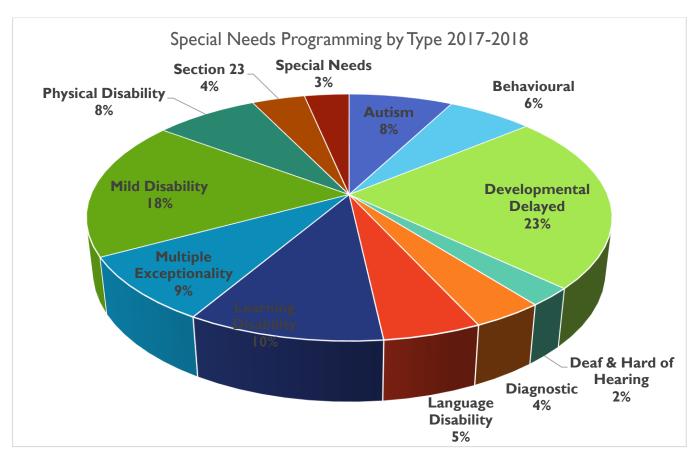
Programming

The TSTG services a large and dynamic student population within the City of Toronto. A majority of funding dollars is directed towards the student transportation services for students with special needs. Unique needs, geography, and modified program hours are just some of the factors impacting the delivery of transportation services for students with special needs. French Immersion, Gifted, and specialized withdrawal programs also contribute to the complexity involved in transporting students.

Special Education

Transportation for students with special needs has continued to grow from year to year. Given the geographic diverseness of this student population there is a significant expenditure required to ensure the safe and timely delivery of these students to their program locations. The following graph shows the percentage of students receiving transportation by program.

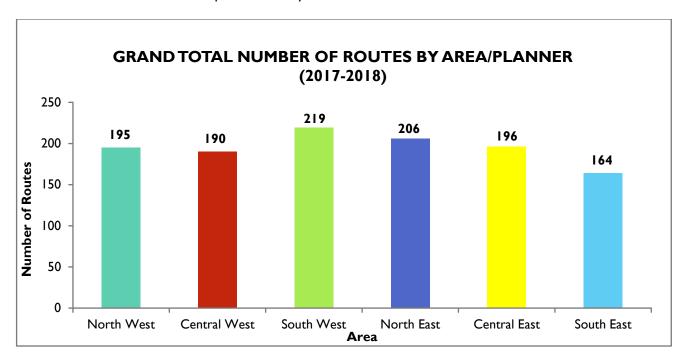
4. Transportation of special needs students by programming type



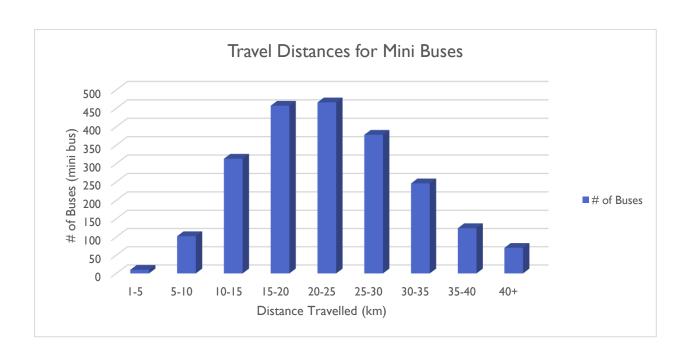


Page 16 of 33

5. Breakdown of Sped routes by Area



6. Travel Distances for Mini Buses





Page 17 of 33

Operations

The transportation operations unit is responsible for the on-road delivery of transportation services. Staff facilitates the communication of planning changes, monitors school bus operations, evaluate operator qualifications and performance, and resolve operational problems. Operational staff uses a number of resources to help monitor the integrity of the transportation system and our performance.

Level of Service

As part of the Consortiums annual review of routes, statistics are collected that identify trends in terms of how well services are provided. The most direct information is from schools and parents through surveys but there are also indicators that can be used to better understand service levels.

7. GIS Mapping of student distribution

The consortium uses three strategies to generate the most efficient and effective bus routes. The 'coupling' of buses is used when there is a large concentrated number of students in a small geographical area. When used with staggered bell times you allow the bus to pick up and drop off students at a number of schools extending the amount of work the bus can do during that time of day. The students are mixed from different schools on any one run but the various runs that make up the route can have any number of combinations of schools regardless of Board affiliation. The second strategy 'one bus one road' is used when you have a dispersed population scattered over a large geographical area. In this case the bus will pick up students from various schools as the bus proceeds from its outermost stop in towards the school. In this solution students from different schools will be on the same bus at the same time given the distance the students have to travel. The third solution is simply a hybrid solution of the first two. In a few instances you may have student populations that overlap in the same area in a small geographical area so all students would be on the same bus at the same time. Given that they are in that small geographical area it allows us to reuse the bus again and couple it with another run to maximize its use.

For illustration purposes two plots of student distribution are highlighted below. One school with a tightly knit group of students in small geographical area with a few outliers. The second school a congregated program school where all students are dispersed throughout the city.

Page **18** of **33**

Regular School Catchment Student Distribution



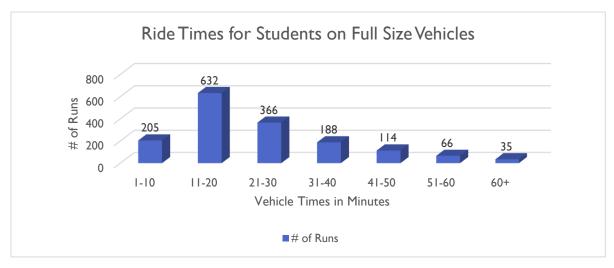
Congregated Program Student Distribution

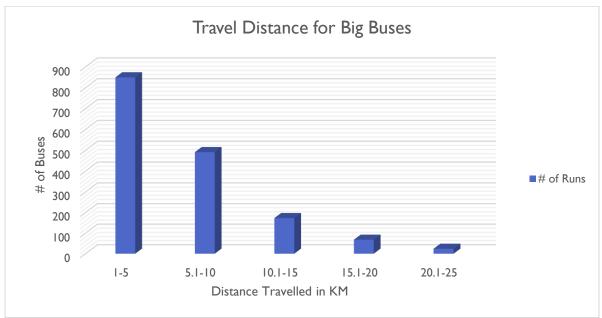


Page 19 of 33

8. Service Level Indicators

As mentioned above, for large capacity buses the routing methodology that provides the most cost effective solution given the geography and student density is the coupling of runs. This means that bus runs will service one school community and then proceed out again to service another school community. This maximizes the use of the bus while improving the level of service for students.





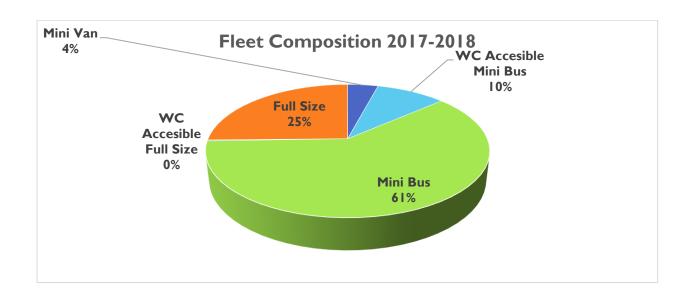


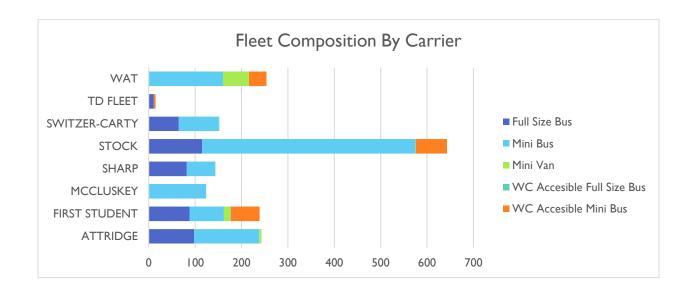
Page 20 of 33

Operators

The Toronto Student Transportation Group secures transportation through a competitive procurement process. The 2016-2017 school year was the first year of a new contract with a term of six years plus two one-year options. The following chart highlights the number of Operators by division that are providing service for the TSTG in 2017-2018.

9. Breakdown of contracted fleet





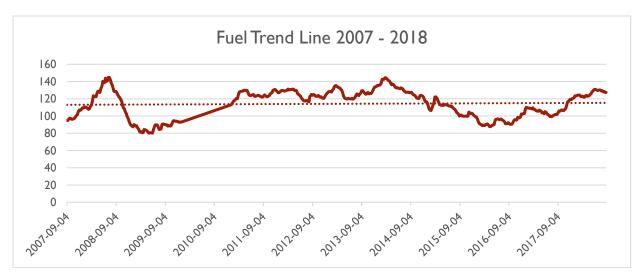


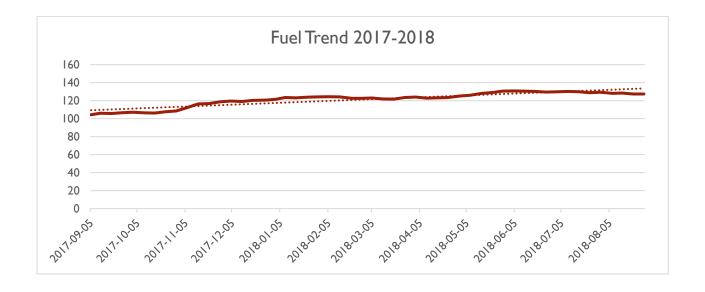
Page 21 of 33

Fuel

One of the most volatile and unpredictable elements to funding transportation services is the costing for fuel. Both gas and diesel type vehicles using various engines with different fuel economy travelling varying distances generate different costs to be funded. Although the trend over the last 5 years has shown a slow and steady increase, the yearly variances have been dramatic. Specifically, the fuel prices from January of 2016 are trending higher after a steady decrease the previous two years. The following chart highlights the fuel costs over the years.

10. Fuel Trend over the last 10 years







Page 22 of 33

Operator KPI

As a means to monitor school bus operator performance a key performance indicator package is submitted by the operators to the Consortium each week. The statistics provide an overview of how well operations are proceeding at each individual division. In cases like below where 'open coverage' is positive, the department is aware of operational deficiencies at the division and can take steps to address the situation.

1. Key Performance Indicators used to track Operator contract compliance and performance

Open Routes and Open Coverage provide us a snapshot view of our Operators ability to provide the service they have been contracted to provide. Although Open Routes refers to how many routes do not have a permanent driver the Operators are able to use spare drivers, as required by the contract, to cover off routes that are open due to driver illness or on a leave. Open Coverage is indicative of how well an Operator can provide services since it shows how many routes are run without a driver since the spare complement and driver book-off exceed the company's ability to cover the route. Anything positive in this area indicates a concern that the TSTG would need to address with the Operator. In these cases, some options include the removal of bus routes from an operator and/or additional financial penalties to ensure that service is provided as contracted or that the Boards receive remuneration for services that are not rendered.

Items highlighted in Orange and Blue indicated values that fell outside a standard deviation either above or below the average. Consortium staff use the information collected from the 'Key performance Indicators' to work with the carriers to address those concerns or where in a positive situation try to transfer the best practices to those carriers that may have struggled in these particular areas.



Page **23** of **33**

Weekly Operator Status	FX	AT	FM	MC	SH	SC	SN	ST	SW	TD	FT	WA	Sys Avg
Total Number of Routes Servicing Toronto (AM/PM)	17	240	67	123	144	253	177	217	152	15	153	246	150.2
Total Number of Routes Servicing Toronto (Noon)	0	29	0	22	17	10	3	8	0	1	8	48	12.0
Grand Total Of Routes (Sum of two above)	17	268	67	144	161	262	180	224	152	16	161	294	162.2
Open Routes - Yellow	0	0	0.6	2.1	2.1	5.0	8.1	9.9	0.7	0	0.6	3.6	2.7
Open Routes - Wheelchair	0	0	0.0	0.0	0.0	3.6	0.0	0.0	0.0	0	6.7	0.2	0.9
Open Routes - Mini Van	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.2	0.0
Open Routes - (please specify each individual route below)	0	0	0.6	2.2	2.0	8.6	8.1	9.9	0.7	0	7.2	3.7	3.6
Open Routes (percentage of AM/PM routes)	0.0%	0.0%	0.9%	1.8%	1.4%	3.4%	4.6%	4.6%	0.5%	0.0%	4.7%	1.5%	2.0%
Number of drivers in training this week	0.95	5	3.0	3.3	7.1	5.8	4.3	5.2	1.7	0	3.8	3.3	3.6
Number of additional licensed drivers this week	0.33	1	0.5	0.2	1.0	1.1	0.8	1.4	0.5	0	1.2	1.2	0.8
Number of drivers who have left company this week	0.10	1	0.1	0.4	0.9	0.8	1.1	1.5	0.4	0	0.5	1.4	0.7
Driver Turnover Accumulated	4	32	5.0	15.0	35.0	28.0	42.0	58.0	16.0	0	18.0	53.0	
Driver Turnover weekly (percentage of am/pm routes)	1%	0.3%	0.2%	0.3%	0.6%	0.3%	0.6%	0.7%	0.3%	0.0%	0.3%	0.6%	0.4%
Driver Turnover Accumulated Annual %	23.5%	13.7%	7%	12.3%	24%	11%	24%	27%	11%	0.0%	12%	22%	
Number of Collisions	0.1	0.67	0.4	0.3	1.5	0.8	0.6	0.9	0.8	0.2	0.66	0.8	0.6
Number of Collisions - Accumulated	3	26	16	11	60	29	22	36	32	0	25	33	24.4
Number of Collisions reported in TRACS													
Collisions (as a percentage of am/pm routes)	0.5%	0.3%	0.6%	0.2%	0.2%	0.3%	0.3%	0.4%	0.5%	1.1%	0.4%	0.3%	0.4%
Number of 'Missing Students' Reported	0.00	0	0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Number of 'Returned Students' (no supervision at stop)	0.28	1	21.1	0.1	6.8	0.4	0.1	0.0	6.6	0.3	0.7	0.0	3.2
Number of 'Incidents' (other then bill157)	0.00	0	0.0	0.0	2.7	1.9	0.0	0.0	0.0	0.0	0.1	0.2	0.4
Number of 'Bill 157 Incidents'	0.00	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Number of Late Routes - Weather/traffic related	2.62	59	25.3	4.4	22.8	20.9	28.7	25.4	4.9	0.0	28.1	12.3	19.5
Number of Late Routes - Operational related	0.15	27	4.3	2.1	9.3	19.5	8.8	15.7	1.0	0.0	8.9	2.2	8.2
Number of Late Routes - Planning related	0.05	0	0.2	0.0	0.4	0.0	0.6	0.0	0.2	0.0	1.7	1.1	0.4
Number of Late Routes - School related	0.38	9	7.3	0.8	11.9	2.9	4.4	3.4	0.9	0.0	5.1	1.1	3.9
Late Routes (as a percentage of am/pm routes)	16.6%	35.7%	44.5%	5.3%	4.5%	16.0%	21.5%	19.0%	4.1%	0.0%	25.3%	6.3%	16.6%
Number of Breakdowns	0.51	4	2.5	0.2	4.1	9.5	8.7	8.9	0.3	0.0	4.7	0.7	3.7
Number of Breakdowns - Accumulated	20	157	95	10	159	352	340	348	12	0	177	29	
Number of Breakdowns (percentage of am/pm routes)	3.0%	1.7%	3.7%	0.2%	0.6%	3.8%	4.9%	4.1%	0.2%	0.0%	3.0%	0.3%	2.1%
Number of spare drivers	2.00	10	4	8.0	7.7	9.8	10.6	10.9	6.0	2.9	8.8	14.0	7.9
Number of routes covered by taxi/subcontract	0.00	0	0	0.0	3.6	0.9	4.1	0.0	1.2	0.0	2.8	2.1	1.2
Number of other available drivers (only days when spare < routes)	0.00	5	15.5	0.0	0.0	27.6	0.1	26.2	13.7	0.0	9.8	2.0	8.3
Number of Split Routes Am	0.00	4	0	0.0	7.5	25.1	8.1	23.3	5.2	0.1	0.7	1.1	6.3
Number of Split Routes Pm	0.00	4	0	0.0	7.6	29.4	7.5	25.1	5.3	0.1	0.7	1.4	6.8
Total Number of Split Routes	0.00	9	0	0.0	15.1	54.5	15.6	48.4	10.5	0.3	1.2	2.5	13.0
Number of charters performed with school route buses	0.00	2	48.9	0.0	17.3	0.3	0.4	27.7	98.2	31.0	5.1	1.3	19.4
Number of spare vehicles	2.00	18	15.0	15.0	7.6	25.2	16.0	13.0	16.0	3.9	17.0	14.0	13.6
Number of book offs (last week total) AM	0.00	24	5.7	2.1	34.3	38.7	20.4	12.4	9.8	9.2	9.6	3.2	14.1
Number of book offs (last week total) Noon	0.00	3	0	0.8	0.6	0.0	0.4	0.9	0.0	0.0	0.1	1.4	0.6
Number of book offs (last week total) PM	0.00	27	6.9	2.2	35.1	43.6	20.0	11.8	9.9	9.4	12.1	3.0	15.1
Book Offs as a % of total routes	0.0%	2.8%	2.6%	0.5%	4.9%	4.3%	2.8%	1.4%	1.6%	15.7%	2.0%	0.3%	3.2%
Percentage of Spares (5% contract minimum)	11.8%	4.2%	6.0%	6.5%	5.3%	3.9%	6.0%	5.0%	4.0%	19.5%	5.8%	5.7%	7.0%
Open Coverage	-10	-28	-25.4	-26.6	-11.2	5.9	-13.3	-19.1	-36.1	-2.3	-19.8	-61.2	-20.6



Page 24 of 33

TSTG KPI

In order to address the performance of the Toronto Student Transportation Group a number of key performance indicators have also been identified as a means to track how well the organization is doing. Over time a historical trend can be identified that will show areas of strength and weakness. Of the data below the capacity utilization of 90% is significant considering a majority of the transportation provided in Toronto is for special needs students who typically have longer trips and lower loads.

Number of Changes: Of significant impact to the level of service that the TSTG offers its Board members is the number of changes received in late August and into September. Looking at the data below you can see that over 4500 changes are processed in Transportation during the month of September alone. This equates to 9% of all students being impacted during the start up. Consistency is the backbone to better levels of service and it is difficult to deliver this service when the system is in such a state of flux during this time period. By prohibiting the addition of new students to routes or changes to planned routes for the first two week of school and establishing a weekly change schedule that would increase stability for students and drivers along with providing better service for all involved. Accurate and timely delivery of student data is paramount to building good transportation routes that are more resilient to change and providing minimal impacts to our student population.

Web Site Visits: Communication is one of the key tools to ensure our stakeholders have accurate and timely information. The introduction of the delay portal saw access numbers to the web site reach over 20,000 hits in September alone. Spikes in accessing data in January indicate that families are looking for updates to transportation status, especially during the cold and stormy weather to confirm if buses were cancelled or not. Of primary concern is to ensure that our Operators have the necessary tools and means to minimize school bus delays and as a secondary measure to ensure that we have the communication tools available to notify our communities when those delays are unavoidable.



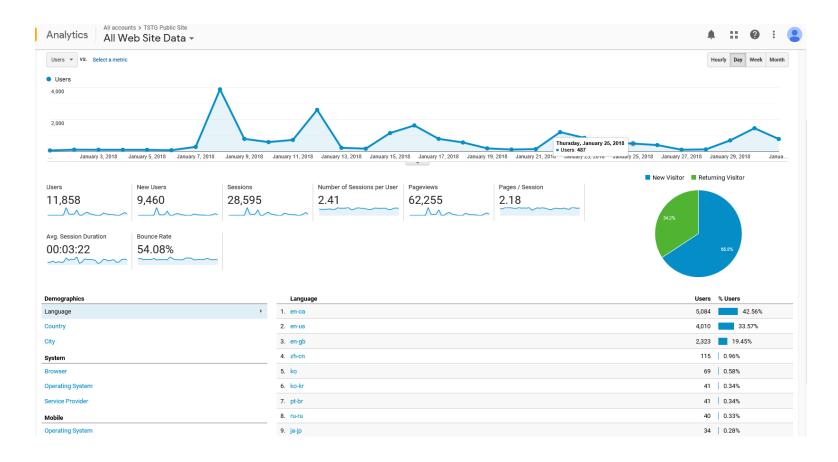
Page **25** of **33**

TSTG Status	August	September	November	January	March	May	June
Grand Total Of Routes (AM/PM TOTAL ONLY)	1778	1779	1812	1813	1813	1814	1814
Monthly Change (# of routes)		0.1%	0.1%	-0.1%	0.0%	0.1%	0.0%
Number of students transported (bus)	46051	48525	49956	49927	49890	49891	49842
Number of students transported (TTC)		3611	6313	5595	6698	7058	6915
Number of students transported (Taxi)	61	79	93	101	107	109	97
Number of students transported (All)	46112	52215	56362	55623	56695	57058	56854
Student per vehicle	25.9	27.3	27.6	27.5	27.5	27.5	27.5
Number of Changes		5267	1955	1836	1593	1507	982
Total Kilomtres	63527	67940	70171	70878	72265	72601	71821
Available Capacity	53716	53640	54208	54280	54280	54285	54285
Capacity Utilization	85.7%	90.5%	92.2%	92%	92%	92%	92%
Tot Cost/month (not incl utiliz, taxi, ttc)		\$7,931,558.55	\$8,920,683.87	\$6,800,955.36	\$7,651,074.78	\$9,355,679.74	\$8,505,163.40
Tot Cost/Day		\$ 417,450.45	\$ 424,794.47	\$ 425,059.71	\$ 425,059.71	\$ 425,258.17	\$ 425,258.17
Monthly Variant		0.00%	0.09%	-0.05%	0.00%	0.05%	0.00%
Cost per Student/month		\$ 163.45	\$ 178.57	\$ 136.22	\$ 153.36	\$ 187.52	\$ 170.64
Cost per Bus/month		\$ 4,458.44	\$ 4,923.11	\$ 3,751.22	\$ 4,220.12	\$ 5,157.49	\$ 4,688.62
Cost per Kilometre/month		\$ 116.74	\$ 127.13	\$ 95.95	\$ 105.88	\$ 128.86	\$ 118.42
Average run length (km)	14.9	15.4	15.7	15.9	15.9	16.1	16
Average run time (min)	49.9	51.7	53.2	53.8	54.1	54.6	54.1
Average # stops	8.7	9	9.1	9.1	9.1	9.1	9.1
Web Visits [Google Analyics](Total Visits/Sessions)	12806	36863	10732	28595	8801	7824	7472
Phone Call Answer Rate	97%	93%	78%	70%	80%	75%	74%



Page 26 of 33

1. The TSTG uses Google Analytics to monitor and track web site performance. The tool also helps identify how our stakeholders are using our system so that we can be more responsive the changing trends. The below snapshot shows the daily hits to the TSTG website along with other perte4inent information including the type of device they are using, the browser, operating system, and service provider to name a few.





Page 27 of 33

Transportation Planning

The transportation-planning unit is responsible for the design and maintenance of the school bus routes. As a means to create an effective and efficient transportation system staff utilize GIS based technology to schedule and move students and buses throughout the City of Toronto. The strategic stratification of bell times in conjunction with the optimization of bus runs lays the foundation to increase the level of service provided to our families while minimizing costs.

Bell Times

One of the core planning attributes to creating a successful transportation system is the ability to manage and stagger school bell times. The staggering of bell times allows for the coupling of bus runs thereby reducing the number of buses required. The TSTG has input on school bell times, however, the ultimate decision rests with the school/senior management team. A snapshot of bell times highlighted below shows the current am staggering of buses throughout the city. Clearly, strategic staggering of bell times would offer further savings to the Schools Boards as the current times are closely clustered together.

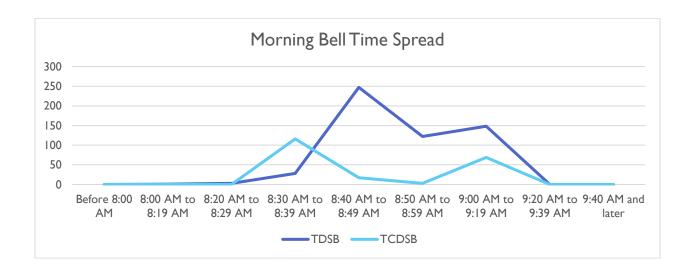
2. Bell time stratification for Toronto schools

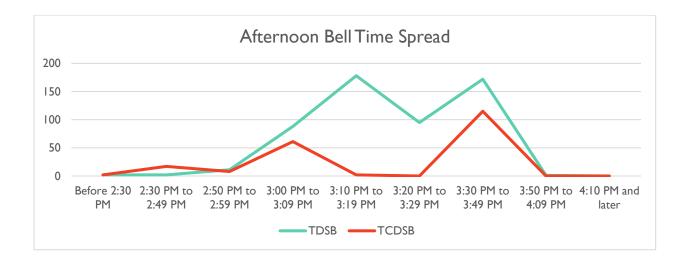
Morning Bell Time			Afternoon Bell Time		
AM Range	TDSB	TCDSB	PM Range	TDSB	TCDSB
Before 8:00 AM	0	0	Before 2:30 PM	2	2
8:00 AM to 8:19 AM	1	0	2:30 PM to 2:49 PM	2	17
8:20 AM to 8:29 AM	3	0	2:50 PM to 2:59 PM	11	8
8:30 AM to 8:39 AM	28	116	3:00 PM to 3:09 PM	88	61
8:40 AM to 8:49 AM	247	17	3:10 PM to 3:19 PM	178	2
8:50 AM to 8:59 AM	122	3	3:20 PM to 3:29 PM	95	0
9:00 AM to 9:19 AM	148	69	3:30 PM to 3:49 PM	172	115
9:20 AM to 9:39 AM	0	0	3:50 PM to 4:09 PM	1	0
9:40 AM and later	0	0	4:10 PM and later	0	0
Total # of Schools	549	205	Total # of Schools	549	205



Page 28 of 33

3. Bell Time Distribution



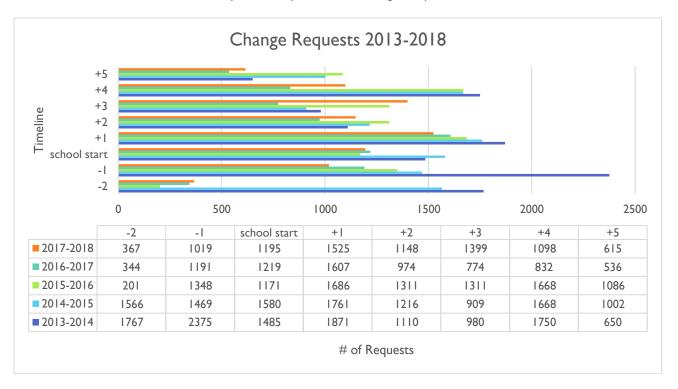


Change Summary

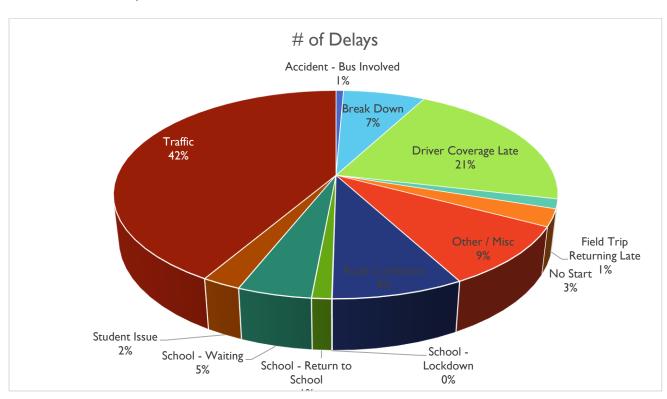
Student transportation services will process over 1000 requests each week during September start-up. Tracking the volume of changes allows staff the opportunity ensures that resources are in place to maintain a consistent level of service. Started in the 2016-2017 school year, the introduction of the delay portal was intended to help families get notification of school bus delays to minimize their time waiting outdoors.

Page 29 of 33

4. Historical Summary of transportation change requests 2013 - 2016



5. Delay Portal





Page 30 of 33

Safety

One of the primary conditions for the transportation of students is that they are provided a safe trip to and from school. A dedicated safety officer oversees the deployment of various school bus safety programs, ensures schools and bus operators are following proper school bus safety practices, and audits runs and routes to ensure drivers have the proper qualifications and are following routes as planned.

School Bus Safety Program



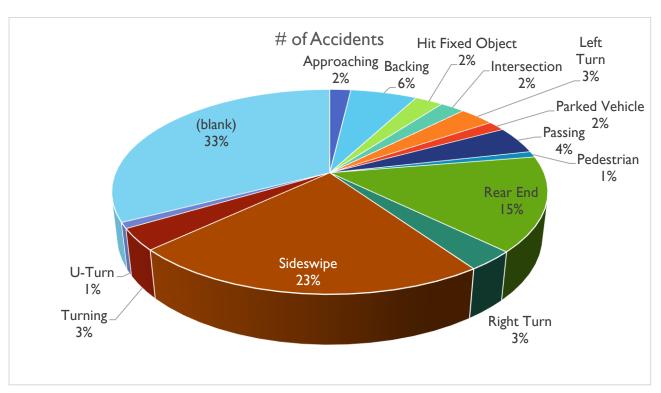
The Toronto Student Transportation Group provides a number of transportation safety programs in order to educate our students, families and the general motoring public. The in-school program has been in place since 1993 and services approximately 20,000 students each year.

Accident Statistics

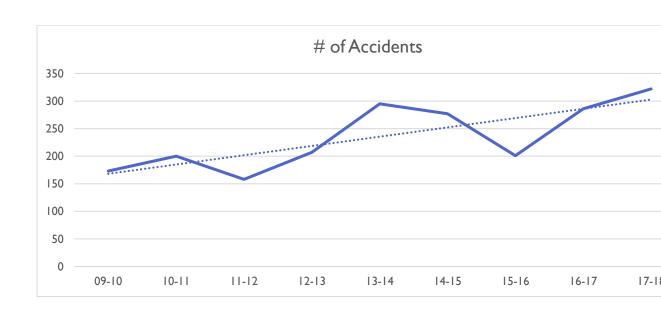
School bus accident statistics provide an insight into the type of accidents taking place on the road along with the conditions from which these accidents take place. The reduction of accidents and improving the safety of students in and around the school bus can be achieved through the review of accident statistics.

• Based on data highlighted below the trend for school bus accidents is on the rise; however, over the last three years it has seen an up and down variance year over year. The majority of accidents can be attributed to 'rear ends' and 'sideswiping' based on conditions reported in 17-18. Although school bus carriers cannot control non-preventable accidents, training can be tailored to address the factors contributing to preventable accidents. The 'blank' condition has been removed as an option so there is more clarity to the reason behind accidents going forward.

6. Conditions impacting school bus accidents



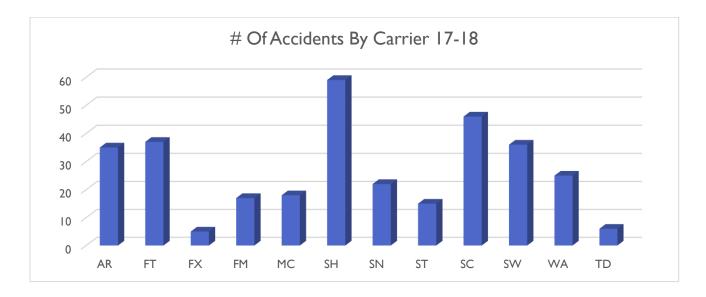
7. Year over year summary of accident statistics

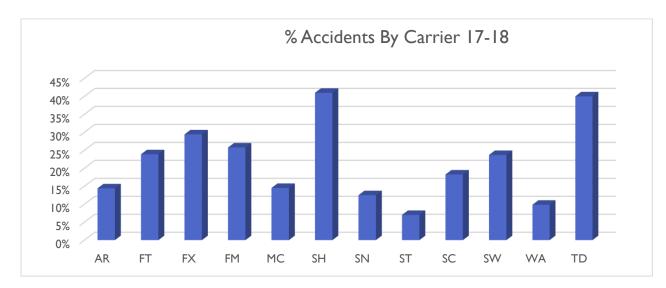




Page **32** of **33**

8. Accident Statistics by division







Page 33 of 33

Incidents

In terms of dealing with behavioural or other small incidents on the school bus, a 'pink slip' system is used to communicate these issues to the school Principal so that they can be addressed. If a student continues to misbehave on the bus and they receive multiple pink slips the school Principal may remove the student from transportation for a defined period of time.

When something happens on the bus that is not considered a minor incident then the bus company will document the issue as an incident. This may include a number of issues including violence, vandalism, or some other act that needs immediate attention. Incidents on the school bus are trending higher as per the graph below and one of the reasons why recruitment of school bus drivers is becoming increasingly harder. Data in the 2014-2015 school year as reported by two carriers has created an anomaly within the dataset. It is likely that all incidents regardless of severity were reported in that year by these two carriers.

