Routing Simulation Input

Student data inputs will be the current 2022-23 school year as of October 31, 2022.

The eligible enrolment in the system is similar to the Grants for Student Needs for the purpose of the routing simulation, which includes all day school pupils of the board under the age of 21. Note that the following students should be excluded from the simulation:

- Students enrolled in a provincial or demonstration school, or the Center Jules-Léger Consortium.
- Students enrolled in Education Community Partnership Programs (Care and/or Treatment, Custody and Correctional (CTCC) Facilities formerly s23).
- Indigenous students attending DSB school via tuition/fee agreement.
- International students paying tuition to attend public school.
- Students in continuing education, high credit, summer school and adult day school.
- Students who do not utilize transportation services or have opted out of transportation services.

General Definitions

Rider: a student assigned to one run. Student assigned to multiple runs (e.g., transfers) for one-way travel (e.g., home-to-school or school-to-home) should be counted multiple times.

Student: each individual student is to be counted once - even if the student is assigned to multiple runs for one-way travel (e.g., home-to-school or school-to-home).

Deadhead: the distance and time of a route from first student pick-up to the last student dropoff. It's the red line in Figure 1.

Run/Load: the actual distance and time of a route with students riding on the vehicle. This should be the total distance or time for all runs in each route. It's total of black lines in Figure 1.

Slack/Link: distance and time of a route that are neither deadhead nor run/load. It's the blue line in Figure 1.

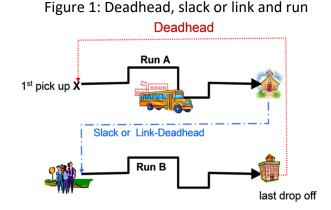


Table 1: Vehicle size

Vehicle Size	Definition	
Full-Size	Chrome yellow or MFSAB, weighted passenger seating capacity 48 plus	
Full-Size-Adapt	Chrome yellow or MFSAB, can include wheelchair, weighted passenger	
	seating capacity 48 plus	
Mid-Size	Chrome yellow or MFSAB, weighted passenger seating capacity of more	
10110-5120	than 30 to 48	
Mid-Size-Adapt	Chrome yellow or MFSAB, can include wheelchair, weighted passenger	
	seating capacity of more than 30 to 48.	
Mini-Size	Chrome yellow or MFSAB, weighted passenger seating capacity up to	
101111-5120	30.	
Mini-Size-Adapt	Chrome yellow or MFSAB, can include wheelchair, passenger seating	
Willi-Size-Adapt	capacity up to 30.	
Passenger-Vehicle	Passenger vehicles including sedans, vans, and mini-vans, where	
rassenger-venicie	passenger seating capacity may be up to 7. Exclude taxis.	
Van-Accessible	Physically disabled passenger vehicle, carries both w/c and ambulatory.	
Vall-Accessible	Exclude Taxis.	
Тахі	Taxi service for full year daily home to school transportation with a	
	route assigned and a contract in place. Exclude ad-hoc taxi service.	
Taxi-Accessible	Taxi service for full year daily home to school transportation for	
I GAI-ACCESSIDIE	accessible purpose. Exclude ad-hoc taxi service.	

Table 2: Transportation mode for students eligible based on criteria noted in the Students**Transportation – Proposed Reference Standard Guidelines**.

Mode	Definition
Yellow Bus	Student assigned to the following vehicle types: Full-size, Full-size
reliuw bus	adapt, Mid-size, Mid-size Adapt, Mini-size, Mini-size adapt.
Transit	Student assigned to public transit for daily home to school
Transit	transportation for full school year.
Тахі	Student assigned to taxi service for daily home to school transportation
IdXI	for full school year.
Other Vehicle	Student assigned to the following vehicle types: Passenger Vehicle,
Other vehicle	Van-Accessible.
	Students eligible based on criteria noted in the Student Transportation
Not Transported	– Proposed Reference Standard Guidelines. However, these students
	are not assigned to mode of transportation noted above.

Table 3: Student type

To ensure that students are captured consistently in the routing simulation the following hierarchy should be followed when identifying eligible students: Pag October 2022

- Eligible by Distance

 a)Special Transportation Needs (STN)
 b)General
 c)Program
- 2. Special Transportation Needs (STN)
- 3. Hazard

Student Type Definition	
	Student is eligible for transportation based on the <u>distance eligibility</u> <u>criteria noted in the Student Transportation – Proposed Reference</u> <u>Standard Guidelines</u> .
STN Distance	In addition to being eligible, the student has been identified by school board as requiring special transportation (e.g., through IPRC or IEP process). Student has a medical condition requiring special transportation and has provided approved documentation such as an application/request form and/or medical note.
Program Distance	Student is eligible for transportation based on the <u>distance eligibility</u> <u>criteria noted in the Student Transportation – Proposed Reference</u> <u>Standard Guidelines.</u> In addition to being eligible, the student does NOT have special transportation needs; and the student is attending a program school such as French Immersion (includes extended French), Gifted, and Magnet (arts, technical, International Baccalaureate etc.) programs.
General Distance	Student is eligible for transportation based on the <u>distance eligibility</u> <u>criteria noted in the Student Transportation – Proposed Reference</u> <u>Standard Guidelines.</u> In addition to being eligible, the student does NOT have special transportation needs; and the student is NOT attending a program school such as French Immersion (includes extended French), Gifted, and Magnet (arts, technical, International Baccalaureate etc.) programs.
Student is NOT eligible for transportation based on the distance eligitic STN STN Student is eligible under Criteria 2a noted in Student However, the student is eligible under Criteria 2a noted in Student Transportation – Proposed Reference Standard Guidelines.	
Hazard	Student is NOT eligible for transportation based on the <u>distance eligibility</u> criteria noted in the Student Transportation – Proposed Reference <u>Standard Guidelines.</u>

However, the student is eligible under Criteria 2b noted in <u>Student</u> <u>Transportation – Proposed Reference Standard Guidelines</u>.

2022 Routing Simulation Output Reports

Report 1- ROUTE	Report vehicle size, running distance and running time for each route
Report 2- RUN	Report the # of riders and the school board and schools the riders are attending
Report 3- STUDENT	Report # of students that are eligible for transportation, the transportation mode to be assigned and the student type identified by eligibility criteria noted in <u>Student Transportation</u> – Proposed Reference Standard Guidelines
Report 4- SERVICE_INDICATOR_AVG_MAX	Report the average and maximum ride time and home to stop distance

All the reports could be generated from your existing software by upgrading the system to the latest version. Please review to ensure the completeness and accuracy.

If you would like to complete the reports manually, please refer to the "Data Entry Instruction" section.

Submission Instructions

How to name the reports

 For consortia that generate the reports using upgraded software, four CSV files will need to be submitted. Please follow the following filename format includes the consortium site number (XX) and date (YYYY-MM-DD) ROUTE_XX_YYYY-MM-DD.CSV RUN_XX_YYYY-MM-DD.CSV STUDENT_XX_YYYY-MM-DD.CSV SERVICE_INDICATOR_AVG_MAX_XX_YYYY-MM-DD.CSV

Example of file names: Niagara Students Transportation Services (Consortium Site Number 8) on September 29, 2022 ROUTE_08_2022-09-29.CSV RUN_08_2022-09-29.CSV STUDENT_08_2022-09-29.CSV SERVICE_INDICATOR_AVG_MAX_08_2022-09-29.CSV

2. For consortia that would manually complete the reports, please fill the four tabs in the Routing Simulation template and submit the completed templates back with the following name:

XX_YYYY-MM-DD.xls

Note: 'XX' is the 2-digit consortium site number assigned by the ministry followed by the DATE (YYY-MM-DD) when the report was completed.

Submission of the reports to Ministry's SharePoint site

Completed reports are to be submitted to the SharePoint site. Follow the step by step instruction for the submission of the reports.

- 1. Click the link of the SharePoint site: <u>Student Transportation Unit SharePoint site</u>
- 2. Click the folder of your consortium site
- 3. Click the folder named Routing Simulation
- 4. Upload the reports under the folder.

Data Entry Instruction

Report 1- ROUTE

Col #	Column Title	Column Notes
1	Consortia #	Consortia ID (1 to 34) assigned by the Ministry
2	School Year	Value should be "2022-23"
3	Reporting Date	Date report was generated (format should be YYYY-MM-DD)
4	Route ID	Unique reference number for each route - assigned by the Consortium
5	Designated Vehicle Size	See Table 1 in General Definition section.
6	Vehicle Size used (if different from designated)	Optional - leave blank
7	Deadhead (Km)	Kilometres from the first student pick-up to the last student drop- off. (see the <u>General Definition</u> section)
8	Slack/Link (Km)	Kilometres that are neither deadhead nor run/load (e.g., kilometres between two runs or two schools). (see <u>General Definition</u> section)
9	Run/Load (Km)	Kilometres operated with students riding on the vehicle. This should be the total number of kilometres for all runs in each route ID. (see <u>General Definition</u> section)
10	Deadhead (min)	Time (in minutes) from first student pick-up to the last student drop-off. (see General Definition section)
11	Slack/Link (min)	Time (in minutes) that is neither deadhead nor run/load (e.g., kilometres between two runs or two schools). (see <u>General</u> <u>Definition</u> section)
12	Run/Load (min)	Time (in minutes) with students riding on the vehicle. This should be the total number of hours for all runs in the route ID. (see <u>General</u> <u>Definition</u> section)
13	Operator ID	Optional - leave blank
14	Start Running Date	Optional - leave blank
15	End Running Date	Optional - leave blank

Col #	Field	Notes
1	Consortia #	Consortia ID (1 to 34) assigned by the Ministry
2	School Year	Value should be "2022-23"
3	Reporting Date	Date report was generated (format should be YYYY-MM-DD)
4	Route ID	Reference number for each route - assigned by the Consortium
5	Run ID	Reference number for each RUN - assigned by the Consortium
6	Schedule	AM, PM, NOON
7	Board ID	Five-digit school board ID. Please contact the Ministry for board ID reference.
8	School BSID	Six-digit school ID assigned by the ministry. Please contact the Ministry for BSID reference.
9	# of Riders weighted at 1.0	Number of Riders assigned a weight of 1.0 on the run.
10	# of Riders weighted at 1.5	Number of Riders assigned a weight of 1.5 on the run.
11	# of Riders for Special Transportation Needs	Number of Riders with Special Transportation Needs (STN) on the run.
12	# of Transfer Riders Weighted at 1.0	Riders transferring from previous run ID to a new run ID. Riders who transfer to multiple run IDs may need to be reported in more than one row.
13	# of Transfer Riders Weighted at 1.5	Riders transferring from previous run ID to a new run ID. Riders who transfer to multiple run IDs may need to be reported in more than one row.
14	# of Transfer Riders for Special Transportation Needs	STN Riders who are transferring from previous run ID to a new run ID. Riders who transfer to multiple run IDs may need to be reported in more than one row.

Report 3- STUDENT

Col #	Field	Notes
1	Consortia #	Consortia ID (1 to 34) assigned by the Ministry
2	School Year	Value should be "2022-23"
3	Reporting Date	Date report was generated (format should be YYYY-MM-DD)
4	Board ID	Five-digit school board ID. Please contact the Ministry for board ID reference.
5	Transportation Mode	Mode of Transportation assigned to a student - Options are: Yellow-Bus, Other Vehicle, Taxi, Transit, or-Not Transported. See Table 2 in <u>General Definition</u> section.
6	Student Type	See Table 3 in General Definition section.
7	Grade	JK,SK,1,2,3,4,5,6,7,8,9,10,11,12
8	# of Students	Students should be from live database and represent the 2022-23 school year. Specific student inclusions and exclusions are listed in <u>Routing Simulation Input</u> section.

9	# of Students Out of District	Optional - leave blank

Report 4- SERVICE_INDICATOR_AVG_MAX

Col #	Field	Notes
1	Consortia #	Consortia ID (1 to 34) assigned by the Ministry
2	School Year	Value should be "2022-23"
3	Reporting Date	Date report was generated (format should be YYYY-MM-DD)
4	Board ID	Five-digit school board ID. Please contact the Ministry for board ID reference.
5	Grade	JK,SK,1,2,3,4,5,6,7,8,9,10,11,12
6	AM Average Ride-Time (in minutes)	morning average ride time for all eligible students
7	AM Max Ride Time (in minutes)	morning maximum ride time for all eligible students
8	PM Average Ride-Time (in minutes)	afternoon average ride time for all eligible students
9	PM Max Ride Time(in minutes)	afternoon maximum ride time for all eligible students
10	Full Day Average Ride-Time (in minutes)	daily average ride time for all eligible students
11	Full Day Max Ride Time (in minutes)	daily maximum ride time for all eligible students
12	Average distance between home to stop (in km)	average distance between home to stop (in km) for all eligible students

Contact Information:

If you have any questions, please contact student.transportation@ontario.ca