TAS 171 Sully's Trail, Pittsford, NY 14534

# STUDENT TRANSPORTATION EFFICIENCY STUDY

## FINAL REPORT


## OSWEGO CITY SCHOOL DISTRICT

**April, 2022**

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# INTRODUCTION

Transportation Advisory Services (TAS) was engaged to perform a review of the student transportation program of the Oswego City School District (hereinafter referred to as "District"). The purpose of this Study is to provide a third-party perspective on the efficiency/effectiveness of transportation services.

The District's liaison for the project was Nancy Squairs, Executive Director of Business and Finance. The Transportation contact was Thomas Gunn, Transportation Supervisor. Christopher Andrews served as the Project Consultant for TAS.

**STUDY PROFILE**

The District operates on a two tier system, transporting approximately 2,796 students to 7 in-District campuses:

| School | Morning Bell | Afternoon Bell |
|---|---|---|
| Oswego HS<br>*Grades 9-12* | 7:15a.m. | 2:35p.m. |
| Oswego MS<br>*Grades 7-8* | 7:15a.m. | 2:35p.m. |
| Fitzhugh Park ES<br>*Grades PreK-6* | 8:30a.m. | 3:40p.m. |
| Kingsford Park ES<br>*Grades PreK-6* | 8:30a.m. | 3:40p.m. |
| Leighton ES<br>*Grades PreK-6* | 8:30a.m. | 3:40p.m. |
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*The District also transports 41 students from both districts to 2 non-public schools, and 43 students to 5 Special Education locations. Transportation is also provided for approximately 385 sports and field trips during a typical school year. The students are transported on 47 District owned and operated route vehicles, for a total 2020-21 transportation operating expenditure of $3,212,512.*

We commend the District for their willingness to conduct a third-party review of the program. We often caution districts… *"Don't ask the question if you don't want to hear the answer"*. The District has been willing to be open and cooperative in our review of the District's transportation services. Throughout this report we have provided

insights and opinions based upon our experience and perspectives. Overall, it appears that the District is providing a responsive, high quality student transportation service to the community. Everyone involved was extremely cooperative and provided us with everything we requested, despite the challenges faced by the pandemic. We would like to thank those individuals for their assistance in this study process.

# METHODOLOGY

Upon the request of the District, **TAS** submitted a detailed proposal for a Transportation Efficiency Study. Subsequent to the proposal's authorization the following activities were undertaken as part of our analysis:

1) **TAS** submitted to the District a request for certain background information and program details in order to form a basis for the review.

2) The District provided the requested data via email.

3) The **TAS** Consultant met with the Superintendent and the Executive Director of Business and Finance on November 17, 2021 to gain their input and perspectives on the transportation program. Due to pandemic safeguards/restrictions, the on-site visit to the Transportation Department was cancelled and rescheduled for March 21, 2022. On that date the Consultant met with the Supervisor, Office Staff, Head Mechanic and a Mechanic, and a group of Drivers. He also toured the District, visiting all of the campuses and observing drop-off procedures at two of the elementary schools.

4) Numerous additional documents and analyses were provided by the District in response to questions raised during the analysis process. Throughout the review process numerous items were discussed or provided via telephone conversations and email.

5) This document constitutes our written report to the District. It was presented to the Board of Education on April 18th. A hard copy with the complete Appendix has been provided, along with a digital copy of the report for submittal to SED. This report is intended to serve as an advisory document and resource for the District, and as such it should be reviewed and evaluated by the District for its applicability to the circumstances at the time of review.

6) The following information was utilized as a part of our analysis of the District's transportation program:

- Routing data
- Fleet information
- NYS DOT Bus Operator Profile
- Labor Agreements
- Administrative Staff Surveys
- Financial reports
- Miscellaneous District-prepared analyses and reports

***TAS*** *uses available information and its experience and knowledge to estimate the potential costs and/or savings of particular transportation service arrangements described in this study. Although past experience can be an excellent basis for projections,* ***TAS*** *does not warrant that the costs or savings estimated herein will be realized if implemented. Due to the operational and economic impact related to the Covid19 response, any projections and cost estimates will need to be revisited post-Covid.*

# EXECUTIVE SUMMARY

As stated in the Introduction section of this report, the comments contained herein pertain to those aspects of the engagement that are within the scope of the study as determined by the District. Within this report we have made recommendations geared towards further improving the effectiveness and/or efficiency of the Transportation Department. Each recommendation ends with a code: "ST" and/or "LT". ST represents those Short-Term changes that we believe can be made within 90 days, while LT represents those Long-Term changes that will take longer to implement. In some cases, both codes will appear, indicating that there may be some short and long term implementation.

Recommendations pertaining to each section of this report are embodied in those sections. They are also included here in summary for easy reference. For a more definitive discussion of each topic, please refer to the section itself.

**Section 4 – OPERATIONAL/ FINANCIAL**

- Annually review TRA Lines 98-101. ST/LT

**Section 5 – FLEET/FACILITY**

- Maintain the present spare ratio. LT

- Trade in some 2017 buses each replacement cycle to prevent age "bubble" impacting the cycle. LT

- Train a staff member to review bus videos. ST

- Install security cameras on facilities and refueling area as a precaution against theft and/or fleet vandalism. LT

**Section 6 – LABOR**

- Utilize the "ABC's of Driver Recruitment" found in the Appendix to help address the Driver shortage. ST/LT

- Temporarily offer a training rate plus retention bonus to alleviate the Driver shortage. ST

- Utilize the "Monthly Operations Report" provided in the Appendix. ST

● Encourage ASE School Bus Mechanic Certification. LT

● Utilize the "Monthly Maintenance Report" provided in the Appendix. ST

● Seek out additional Driver training programs. LT

● Continue to move towards a more equitable allocation of benefit costs when the Drivers shortage abates. LT

● Consider implementing an Attendance Incentive plan to reduce absenteeism. LT

● Consider the use of tablets for Substitute Drivers. LT

● Be more aggressive in presenting the wage and benefits package to prospective employees. ST

**Section 7 – ROUTING**

● Record actual ridership post-Covid. ST

● If ridership is found to be significantly less, modify routes accordingly. LT

● Utilize the OTR fleet-wide capability of the routing software to establish routes under various triple-tripped scenarios. LT

**Section 8 – MANAGEMENT OPTIONS**

● Continue to operate the program in-house, while pursuing partial contracting opportunities. LT

# OPERATIONAL/FINANCIAL

## OPERATIONAL

Within this report we have made specific recommendations where applicable. In general, we found the District to be sincerely interested in the quality and efficiency of the transportation program, and eager to implement any changes that would improve either of these areas.

As a means of evaluating the performance of the Department, we surveyed the Building Principals as they experience the services of the Department on a daily basis, and as such their feedback is important; we had six responses. The number preceding the answer box indicates how the respondents answered each particular question:

1. Regarding the morning delivery of students to your building:
   - 2 Always on time
   - 4 Usually on time
   - Regularly late

2. Regarding the afternoon pick-up of students at your building:
   - 3 Always on time
   - 3 Usually on time
   - Regularly late

3. Regarding mid-day transportation (shuttles, field trips, etc.):
   - 2 Always on time
   - 2 Usually on time
   - Regularly late
   - 2 NA

4. Regarding the Department's handling of student discipline:
   - 2 Always reliable information and communication
   - 3 Usually reliable information and communication
   - 1 Too much misinformation and poor communication

5. Regarding general lines of communication with the Department:
   - 5 Always available and great to work with
   - Usually available and good to work with
   - 1 Hard to reach, but good to work with
   - Hard to reach and hard to work with

6. Are you provided with bus lists and student lists prior to the first day of school, and updated versions during the year?

6 Always
Usually
We get them, but they are late/inaccurate
No - we don't get them

7. Which of the following best describes the overall attitudes of the transportation employees with whom you have contact?

5 Positive
1 Ambivalent
Negative

8. In general, how would you rate the transportation services that you have experienced in the last 18 months:

5 Great
Good
1 Average
Poor

We also surveyed two other departments that regularly utilize transportation. The Special Education Department reports that the Transportation Department is always available and great to work with, major staffing shortages are always communicated, employee attitudes are positive, and Drivers/Attendants should receive continuous and ongoing training in de-escalation strategies and implementing IEP's and behavior plans. The Athletic Department reports that buses are regularly late, Drivers rarely are knowledgeable about directions to events, updates are provided late, and employees seem overwhelmed.

As is evidenced by the responses to these questions, the majority of students usually get delivered to and from school on schedule. Department Staff are almost always available and great to work with. All schools receive their bus and student lists in a timely fashion. Employee attitudes are mostly positive, and the services are considered great by most of the schools. The Special Education and Athletic Departments noted issues specific to their programs and will be addressed in the related sections of this report. Copies of the survey can be found in the Appendix.

To further evaluate the program, we first established the operating conditions. The District operates on a two tier system, transporting approximately 2,796 students to 7 in-District campuses:

| School | Morning Bell | Afternoon Bell |
|---|---|---|
| Oswego HS<br>*Grades 9-12* | 7:15a.m. | 2:35p.m. |
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*The District also transports 41 students from both districts to 2 non-public schools, and 43 students to 5 Special Education locations. Transportation is also provided for approximately 385 sports and field trips during a typical school year.*

To provide these services, the District utilizes 47 District-owned and operated route vehicles and 8 spare vehicles. The District-owned fleet is parked, maintained and refueled at the District garage. The Department is staffed with 64 employees:

| | |
|---|---|
| 1 | Supervisor |
| 2 | Dispatchers |
| 1 | Clerk |
| 3 | Mechanics |
| 1 | Head Mechanic |
| 1 | Driver/Trainer |
| 31 | Bus Drivers |
| 12 | Substitute Bus Drivers |
| 7 | Bus Attendants |
| 4 | Substitute Bus Attendants |
| 1 | Custodian/Substitute Bus Attendant |
| 64 | |

**FINANCIAL**

As part of our study of the District's program, we reviewed the expenditures listed on the *Transportation Aid Output Report* (TRA) issued by the State Education Department. The report for 2021-2022

reflects expenses incurred during the 2020-2021 school year. This detailed report identifies transportation related expenses, and is used as the basis for the calculation of transportation aid to the District. *(Note: Although the data provided reflects actual costs, they are skewed by the impact of the pandemic on transportation. As an example, the mileage reported for the 2018-2019 school year, the last full year of operation before the pandemic, was 759,909 compared to the mileage reported for 2020-2021 of 441,229.)*

Transportation aid is payable in the school year following the actual expense. Therefore, the transportation aid payable to the District during the 2021-2022 school year is based on actual expenses occurred the previous school year. A copy of the referenced *TRA* is included in the Appendix to this report.

According to that report, the District had a transportation aid ratio of 89.9%; aid ranges Statewide go from the minimum of 6.5% to the maximum of 90%. This means that "eligible" transportation expenses are reimbursed by the State on the basis of up to ninety cents on the dollar. This reimbursement rate is determined by the State based on either a Resident Wealth Index calculation (line 18 RWADA – 81.4%), a formula based on a multiple of basic operating aid and Adjusted Sharing Aid (line 20 – 89.9%), or the enrollment wealth ratio (line 25 EWR – 80.2%). The District was determined to be eligible for 89.9% (Line 32).

Certain expenses are not "eligible" expenses under the reimbursement guidelines and are considered to be local taxpayer costs. For example, common non-allowable transportation expenses include premiums for drivers family health insurance, athletic trips (known as "other purpose" miles), non-educational late buses and services provided to students who reside less than 1.5 miles from school, or are transported more than 15 miles (known as non-allowable miles).

According to the 2021-2022 Transportation Aid Output (TRA) Report (the most current report), the total operating cost (exclusive of vehicle purchases) for the Transportation Department the previous year (it uses previous year data to estimate current year aid) was $3,212,512 detailed as follows:

| | | |
|---|---|---|
| Line 80 | Personal Services (labor) | $1,781,643 |
| Line 81 | Employee Benefits | 672,729 |

| | | |
|---|---|---|
| Line 82 | Supplies/Materials (fuel, etc) | 200,962 |
| Line 83 | Contractual Expenses (ins, maint, etc) | 204,658 |
| Line 112 | Reg Routes Chapter 173 | 105 |
| Line 145 | Transportation Office | 352,415 |
| Line 177 | Grand Total Trans. Expenses | $3,212,512 |

From this total, the deductions are calculated as follows:

| | | |
|---|---|---|
| Line 90 | Other Purpose Miles (OPM) | $99,241 |
| Line 106 | SED Calculation lines 93,100&103 | 163,936 |
| Line 129 | Non-allowable Contract | 4 |
| Line 155 | SED Calculation lines 145-line155 | 43,533 |
| Total Operating Cost Deductions | | $306,714 |

By subtracting the deductions of $306,714 from the expenses of $3,212,512 we arrive at Total Non-Capital Expenses Approved for Aid of $2,905,798 (Line 157). Applying 89.9% to this number yields Transportation Aid of $2,612,312. Dividing that by the Operating Expenses of $3,212,512 yields an effective operating aid of 81.3%.

Similar calculations are performed for Assumed Capital Expenses Aidable of $644,628 (Line 158). The two combined totals (Lines 157 & 158) are shown on Line 159 - $3,550,426. Applying 89.9% to this number yields your Transportation Aid Eligible of $3,191,833 (Line 162 and 174).

When annually reviewing the TRA, **we recommend that particular attention be paid to lines 98, 99, 100 and 101.** The State calculates the deduction for revenue based upon mileage. For the pre-Covid year of 2018-19 (2019-2020 TRA) the revenue and deduction matched at $48,887. But for the 2020-2021 year (2021-2022 TRA), the revenue was $4,459 and the deduction was $28,885. While it's after the fact, the information can be factored into the current year service – should prices remain the same, be increased, or service be terminated.

Although the focus of this study is not just about costs, this information can be useful when attempting to isolate costs of operation. In the remaining sections of this report we will discuss what is driving District costs and what can be done to control them.

# FLEET/FACILITY

**FLEET**

The District reports that it currently has 58 DOT inspected vehicles – 47 on routes, 8 spares, 1 emergency w/c bus, and 2 out-of-service buses. It also maintains 1 service truck and 3 SUV's not used to transport students. We have included in this section a Fleet Profile which shows the vehicles by age, and the number of vehicles per model year, with the oldest vehicle being 10 years old (2012), the youngest vehicle being 1 year old (2021), and an average fleet age of 5 years.

Spare vehicles are used as replacements during maintenance down time, and as supplemental vehicles when additional program demands occur (sports and field trips). Industry standards would typically have a spare ratio of approximately 10% to 20% of the route vehicles (5-9 vehicles). The ratio can vary depending on extra-curricular demands, specialized vehicle requirements (lift equipped), seating capacities, and the age/mileage of the fleet (older/higher mileage fleets need more spare buses due to maintenance issues). The District currently maintains 8 spare vehicles and an emergency bus, primarily due to holding onto extra w/c vehicles to meet unpredictable demand. **We recommend maintaining this spare ratio.**

**FLEET REPLACEMENT**

The District has been fairly inconsistent in its replacement of vehicles, replacing none one year and as many as 16 in another year. This creates age "bubbles" that can result in an aging fleet and the need for occasional large fleet purchases. Although there is no written replacement policy in place, the goal has been towards a 5-year cycle to coincide with bus warrantees.

There is no industry formula for replacement; we conducted an informal poll of national contractors several years ago and found that their preference was for replacing vans/small buses every 5 years, and big buses every 8 years, with the reason given that this is when they felt the breakeven point was reached on repairs versus replacement. They also felt that trade-in value diminished quickly after this point.

Most school districts we've reviewed in the Northeast tend to keep route buses 10-12 years and spares 12-15 years. Those 12-15 year old buses are usually ones that have had major components replaced in the 8-12 year old time frame, and are typically used as route spares

when the route bus is in for maintenance. New York is the exception to this trend due to the higher transportation aid rate in some schools. At the current size of the fleet, **we recommend that the District trade in some of the 2017 buses each year to prevent the "bubble" from hitting as they age.**

We typically suggest that districts consider the purchase of alternative fuel buses. For informational purposes we are providing these resources: as of this writing there is a federal tax subsidy on the cost of propane that makes it even more attractive. *School Transportation News* magazine has an article entitled "Consuming Greens", which can be viewed digitally at www.stnonline.com. *School Bus Fleet Newsline* has also featured a white paper entitled "The Growing Presence of Propane in Pupil Transportation" which can be viewed digitally at www.schoolbusfleet.com. Propane buses have become more cost competitive in recent years. Electric buses are also gaining in popularity but require a bigger initial investment, although the State does aid the purchase at your bus aid ratio provided you don't exceed State contract pricing. Infrastructure update costs need also be considered as they can be quite extensive. Pay close attention to the State's focus on fleet electrification as it will impact both State and local costs. Gas powered buses have become popular recently due to the cost of diesel fuel. When alternative fueled buses are purchased, diesel and/or gas buses should still be used for out-of-district trips to ensure readily available refueling capability.

Fleet purchases have been standardized to reduce the need for an extensive collection of dedicated parts inventory necessary for a varied fleet. The District has done a good job in this regard. We will discuss associated fleet maintenance issues in that Section.

All vehicles are equipped with digital cameras. Having access to digital recordings of bus incidents protects both drivers and innocent students. Be aware that the newer model buses have higher seat backs to meet Federal Standards, which has resulted in the need for multiple camera heads to allow for improved video coverage. At the present time the videos are viewed by the Supervisor when needed for disciplinary issues. This is a time-consuming process, and not the best use of supervisory time. **We recommend that another staff member – perhaps a Driver or Substitute Driver – sign a confidentiality agreement and be trained in the review process.** GPS devices are gaining in popularity, due to their ability to track engine performance,

idling practices, and route adherence. The newer buses/cameras come equipped with GPS, which when tied to your routing software can enhance routing capabilities.

**FACILITIES**

The fleet is maintained in the District-owned garage having 8 work bays, 6 lifts, a bus wash, and parking for the majority of the fleet. There is only one security camera on-site, and it is in the entrance to the office.

The fleet is refueled at the garage utilizing automated pumps for gas and diesel. **We recommend that the District install security cameras on the exterior of the facilities and at the fuel pumps as a precaution against theft and/or fleet vandalism.**

**OSWEGO FLEET PROFILE**

| Year | Route | Spares |
|---|---|---|
| 2012 | | 1 |
| 2013 | 5 | 2 |
| 2014 | 4 | 1 |
| 2015 | 1 | 1 |
| 2016 | - | - |
| 2017 | 16 | |
| 2018 | 5 | |
| 2019 | 4 | 2 |
| 2020 | 5 | 1 |
| 2021 | 6 | |
| 2022 | 1 | |
| Total | 47 | 8 |

| | |
|---|---|
| Route Vehicles | 47 |
| Spare Vehicles | 8 |
| Emergency Bus (2014) | 1 |
| Out-of-service (2013, 2014) | 2 |
| Total | 58 |

# LABOR

As with any District operation, labor plays a vital role in the success or failure of the transportation program. There are three areas of importance – Supervision, Maintenance, and Driving, as detailed below.

## SUPERVISION

Given the limited time frame that studies such as this work within, it was not intended that individuals be evaluated, but rather the positions themselves be studied, with recommendations made wherever improvements appeared possible. To that end, positions were reviewed, procedures were evaluated, and individuals were surveyed within the Department, and at the District level.

The transportation office is currently staffed by a Supervisor, 2 Dispatchers and 1 Clerk. Routing is performed utilizing VersaTrans by Tyler Technologies. It enables user to build and audit routes, evaluate stops, and employ "what if" capabilities. The Department is familiar with the OTR function of the software (One Touch Routing) and its capabilities and utilize it to evaluate the route structure.

Although there are down times at certain periods throughout the year, for the most part the transportation office is quite busy with routing changes, parent calls, sports and field trip assignments, covering driver absences, training drivers, maintaining driver files, viewing bus camera videos, reports, etc. Given the challenges presented by the pandemic and the national Driver shortage, the office has been hard pressed to meet the daily needs of the program. Working 10-12 hour days has become the norm… working in "crisis mode" for a long period of time leads to staff burnout. Options to correct this situation are detailed below and in the Routing Section of this report.

To help address the Driver shortage **we recommend that the District utilize the *ABC's of Driver Recruitment and Retention* provided in the Appendix**. Some of the "ABC's" may require Board/Administrative funding support, while others simply require a creative mind set. Recruitment is an on-going activity, as opposed to a one-shot endeavor. Many schools are finding success with referral fees and signing bonuses – much like sports teams, but without as many dollars. See the "ABC's" for more information.

The hiring, training, testing, licensing, approval process can sometimes take 8-12 weeks. Since most applicants can't wait that long for a payday, **we recommend offering a "training rate" – say ½ of the substitute rate – plus a retention bonus paid when they start driving and at 90 and 180 days.** This can be a temporary measure until full staffing is reached.

An event quite popular in most schools is an annual safety awards dinner, which is typically sponsored by the company that provides the District fleet insurance. Drivers want to work, and they want to be proud of where they work, so creating this type of work environment will foster improved recruitment/retention.

In order to provide the Board and Administration with a monthly recap of the transportation operation, **we recommend that the Supervisor complete a "Monthly Operations Report"** – similar to the sample provided in the Appendix. (It has also been emailed to the District for customization.)

**MAINTENANCE**

The most recent NYSDOT Operator Profile indicates that less than 1% of the vehicles inspected in the last reported inspection cycle (4/1/20-3/31/21) were placed out of service, indicating that a commendable 99+% of the vehicles passed inspection (copy in the Appendix). The fleet is maintained by 3 Mechanics and a Head Mechanic. Together these 4 individuals maintain 58 DOT inspected vehicles and 4 other District vehicles. We count the non-DOT vehicles as ½ school bus for maintenance purposes, meaning they are maintaining 60 vehicles for a bus to mechanic ratio of 15:1, which is what we tend to find Statewide. In addition to his regular duties, the Head Mechanic is called upon to drive a bus on an almost daily basis.

Although it appears that the Mechanics have a good knowledge of the school bus fleet, none of them are ASE Certified Bus Mechanics. Within the transportation industry, this certification is highly regarded as a method for ensuring that the individual is knowledgeable about the type of vehicles he works on and is current in the latest technology for maintaining and repairing these vehicles. A well-trained ASE certified bus mechanic can more accurately diagnose problems and can positively impact the vehicle repair and replacement program. The school bus technician certification process tests in seven areas: body systems, diesel engines, drive train, brakes, suspension/steering, electrical/electronic systems, and air conditioning systems. The National Institute for Automotive Service Excellence is based in Virginia but has 700 test sites nationally. At the present time, registration is $36.00, and each test is

$41.00. To maintain their certification, mechanics are recertified every five years to ensure that they are staying current. The Head Mechanic is an ASE Certified Mechanic, and **we recommend that he obtain the school bus certification and be reimbursed by the District for the costs associated with the process.** Some districts offer an additional incentive of $.50-$1.00/hour for keeping the certification active. The other mechanics should be offered the same incentives. For more information, contact the program at ASE.com or (703) 669-6600.

The cost of bus parts during the 2020-21 school year was $52,090. According to mileage information found on the Transportation Aid Report (copy in the Appendix), the mileage for the same period was 441,229 miles, for a maintenance cost of $.12 cents per mile, below the average of $.15-$.30/mile cost we see nationally for a fleet of this size. This indicates good controls of purchasing and inventory levels. The shop tracks parts cost, maintenance and scheduling using Fleetvision maintenance software by Tyler Technologies.

In order to provide the Board and Administration with a monthly recap of transportation maintenance, we **recommend that the Head Mechanic complete a "Monthly Maintenance Report"** – similar to the sample provided in the Appendix. (It has also been emailed to the District for customization.)

**DRIVERS & ATTENDANTS**

It is important to note the perspective that we take toward these positions. It is essential that a District employ highly qualified personnel in sufficient numbers to meet the on-going needs of the District. At the same time, it is important that any agreements or procedures provide the District with the flexibility needed to adjust programs to change service levels with an accompanying change in labor costs. Most significantly, any employment agreement should support and facilitate the provision of quality services to the students and the education community.

Student discipline is always an important issue. Most school districts report that discipline is best when the standards are similar for the classroom and the bus. Specialized training for students with IEP's is provided by the Special Education Department. The District also has digital cameras on all buses. To stay on top of training issues, **we recommend that the District seek out additional training programs** from organizations such as PTSI.org, SchoolBusSafetyCo.com and NHTSA.dot.gov. These programs can be adapted to the on-going driver training program to enhance student management. There is also an affordable DVD training package entitled *The Peaceful Bus Program*

available at Hazelden.org. Adding to the difficulty in recruiting new Drivers is the newly required Entry Level Driver Training (ELDT) mandated by the Federal Motor Carrier Safety Administration (FMCSA).

We have reviewed the Agreement between the District and the CSEA for the period of July 1, 2017 – June 30, 2021. It was being renegotiated at the time of this study. Following are our perspectives from a transportation viewpoint. We understand the critical and important nature of such agreements, and the difficulty to all parties in making changes to historical practices, yet we strongly believe that the wage and benefits package needs to be consistent with the goal of providing quality, affordable transportation services, while providing the District's Administration with the flexibility to modify assignments and costs to reflect the realities of program demands, student enrollment, and economic conditions. The District has endeavored to enhance the compensation package with additional benefits such as longevity pay and educational incentives.

1) Health Insurance – this is one of the fastest growing transportation costs in many districts, and Oswego is no exception. The District currently provides this benefit for employees scheduled to work 30 hours or more per week. At the present time the District pays 85% of the premium for health insurance, contributes to major medical costs and dental costs, and offers a prescription plan and a flexible spending plan.

Upon retirement the District continues to provide health benefits for drivers/spouses at the contribution rate at retirement, and accumulated sick pay can be used to offset the Drivers contribution until it is depleted. The District is fortunate to have community support for these benefits, as dependent health insurance premiums and retiree health insurance premiums are not eligible for transportation aid.

We are seeing a trend nationally where districts are taking the position that there should be a benefit cost allocation based upon hours worked. For example, if a full time position in the District is 8 hours/day, and an 8 hour employee has 85% of his/her premium paid for by the District, then an employee working 6 hours/day would be eligible for 3/4 of that benefit paid for by the District.

Although we understand that benefits are a primary reason many employees work for the District, **we recommend that when the driver shortage abates, the District pursue savings in benefit costs, such as**

**moving towards a more equitable allocation of benefits with limits on future costs.**

2) Paid time off - bus driving is essentially a part-time job, in that the majority of transportation services are required less than 8 hours/day, 180 days/year. Driving is a relatively unique function in that an absent employee must be replaced by a sub. This not only creates the incremental cost for the substitute employee, but it impacts the quality of the service, given that the best transportation service has the same Drivers on the same buses, every day. In this way, they know the students; the students know what to expect from the Drivers; and the Drivers know what looks "right or wrong" along a route or at a stop. Pay for non-worked days is more common among public sector jobs, but not often found in private sector, part-time employment.

As part-time employees, it appears that Drivers and Attendants are eligible for 10 days annual sick leave, 10 paid holidays, and 3 personal days. With 32 Drivers and 7 Attendants eligible, this benefit can result in up to 897 paid days off per school year, which requires the use, and extra cost, of substitutes on 507 days. The District tries to maintain a list of sub's, hoping they will be available when needed. Unfortunately, this is the most difficult position to fill, resulting in the frequent need for other transportation staff to fill in as Drivers.

To minimize that, **we recommend that the District consider implementing an Attendance Incentive Program**. A typical plan calls for employees who take no days off during a selected period to receive an attendance bonus – typically $100.00. Districts have informed us that they get more participation if it is paid out twice/year, depending upon participation July1-December break, and January 1- end of school.

3) Salary Schedule rates – pay rates for Drivers are $24.05/hour, with the exception of 4 Drivers hired before 1998. Substitute rates are $20.00/hour.

When combined with generous health benefits the District is quite competitive, but in the current economy it is having difficulty attracting transportation employees. To attract new Drivers, **we recommend that the District be more aggressive in presenting the wage and benefits package**. For example, the majority of Drivers actually drive a little less than 4 hours/day, but they also have to pre-trip and post-trip their buses. In most districts this is considered to add ½ hour to their day. So a Driver making $24.05 x 6 hours, but working 4.5 hours, is actually

earning $32.07/hour ($144.30/4.5). They also receive 10 paid holidays and 3 paid personal days for another $.72/hour ($865.80/1200 hours). When speaking with perspective Drivers, letting them know that they could earn up to $32.79/hour plus 10 paid sick days, plus longevity pay, and have lifetime health insurance premium assistance for themselves and their spouses, as well as participation in the State retirement system, should improve recruitment.

Regarding extra trips – To entice Drivers to take trips, the District offers time and one-half pay for those working more than 40 hours per week. We are also seeing a move nationally towards allowing – even encouraging – Coaches to drive when Drivers are not available. Drivers are offered the runs first, and if none are available then Coaches can drive. The common practice now is to have a Coach ride on the bus with the Driver. In some districts, included in the Coaches job description is a requirement for a CDL, so that they can drive a school bus on sports runs. In some cases they are paid a small stipend to do so, as it is viewed as a method to keep the sports programs alive. In the event some Coaches are not comfortable driving a bus during inclement weather, then Bus Drivers take the runs. Although some Coaches don't like driving, they do like to keep their bus at the game.

The Department states that Drivers are provided directions to sporting events, but substitute Drivers may not be familiar with the location. In these instances, they rely upon the Coaches riding with the teams. **We recommend that the District consider the use of tablets for substitute Drivers, for use on regular runs and after school runs.**

# ROUTING

**CURRENT PROGRAM**

Several factors drive transportation costs – labor, which was discussed in the previous section of this report, bell times, and transportation policies.

**BELL TIMES**

The District operates on a two tier system, transporting approximately 2,796 students to 7 in-District campuses:

| School | Morning Bell | Afternoon Bell |
|---|---|---|
| Oswego HS<br>*Grades 9-12* | 7:15a.m. | 2:35p.m. |
| Oswego MS<br>*Grades 7-8* | 7:15a.m. | 2:35p.m. |
| Fitzhugh Park ES<br>*Grades PreK-6* | 8:30a.m. | 3:40p.m. |
| Kingsford Park ES<br>*Grades PreK-6* | 8:30a.m. | 3:40p.m. |
| Leighton ES<br>*Grades PreK-6* | 8:30a.m. | 3:40p.m. |
| Minetto ES<br>*Grades PreK-6* | 8:30a.m. | 3:40p.m. |
| Riley ES<br>*Grades PreK-6* | 8:30a.m. | 3:40p.m. |

*The District also transports 41 students from both districts to 2 non-public schools, 43 students to 5 Special Education locations, and a growing number of McKinney-Vento students to out of district schools.*

Evaluating the pro's and con's of various bell time options is not an easy task for a district to undertake. There are many factors to consider, such as mileage, road conditions, policies, enrollment, riding times, vehicle capacities, population density, location of campuses, contractual agreements, etc. As noted above, the District is two tiered (also referred to as double tripped).

Of the 500+ reviews we've conducted over the past thirty-five years, the vast majority of schools are multiple tripped. Some smaller districts are single tripped but transporting all students at the same time naturally requires a larger fleet. Decreases/elimination in transportation subsidies, combined with higher costs and increases in mandated transportation have all districts looking at ways to improve efficiency. A double tripped fleet requires fewer buses and drivers to

transport the same number of students as the fleet makes two runs in the morning and afternoon instead of just one run. A triple tripped fleet requires even fewer buses and drivers to transport the same number of students as the buses make three runs in the morning and afternoon instead of two. This results in the remaining buses having more miles, and the remaining drivers having more hours – typically 6-7 hours/day. The drivers are currently paid for 6 hours so the impact upon labor costs would not be significant (more on this topic in the Labor Section). Since most buses "age out" before they "wear out", the additional miles are not usually a factor.

Under "true" double tripping, the entire fleet makes two trips throughout the district, transporting students in different grade levels at different times. However the reality of school bus routing is that there are very few examples of true routing, whether it is single, double or triple tripping. The reasons are varied, but are usually caused by:

Fluctuating enrollment levels
Age and size of students at each grade level
Certain programs offered at different grade levels
Growth in private, parochial and special ed. programs
Labor agreement with teachers and drivers
Breakfast programs and after school activities
Fleet configuration
Geographic size of the district (short vs. long runs)
Federal/State/Local mandates (NCLB, Choice, McKinney-Vento, etc.)

To analyze routing efficiency, we typically look at the number of seats available per bus and the number of students per bus, per run. For example, a 66 passenger bus may be able to seat 66 elementary grade students, but only 44 secondary grade students, as the seats are designed for 13" passengers. Although it is technically possible to fill all seats at the elementary level, the common use of backpacks, combined with longer loading times, results in most buses being routed at less than capacity. While filling the bus is the goal of efficient routing, it is not always feasible for these reasons. Further, if ride times are limited due to compressed bell times, then efficiency is lower as shorter routes limit pick-ups, requiring more buses.

When we evaluate different bell time options, we look for efficiency gains in the use of regular route vehicles, not vehicles used for transporting special education students, non-public school students, and McKinney-Vento students, as the District has little control over their schedules. They are quite often designed to accommodate student needs, destination locations, bell times, and length of run. For example, a bus transporting 3 students to a nonpublic school may be best utilized to transport 4 more students to a nearby public high school. It would be the most efficient run, but not optimized for loading purposes. These type of runs lend themselves to outsourcing, although it's worth noting that during the pandemic and the national driver shortage, contractors are experiencing the same labor shortage as districts.

Of the District's 47 route vehicles, 39 buses are utilized on regular in-District routes, with the remaining vehicles used for a combination of in-District and out-of-district routes. For the calculations that follow we will use 66 passenger capacity buses, although 3 of them have reduced seating due to having wheelchair seating (42p, 59p, 60p).

Routing software creates routes based upon eligibility. The District audits ridership and recent audits (copy in the Appendix) indicate that approximately 50% of eligible MS/HS students are currently riding the bus, while approximately 60% of eligible ES students are currently riding the bus. For reasons specified above, many schools aim for 85% capacity on regular school runs. For this fleet, capacity would look like the following for the double-tripped fleet:

39 buses x 66p = 2,574p x .85 = 2,188p PK-6 students (56p/bus)
39 buses x 44p = 1,716p x .85 = 1,459p secondary students (37p/bus)
Total capacity = 4,290; targeted seating capacity = 3,647 students

If all 3,754 students in the District were eligible to ride, the fleet would be utilized at 103% of targeted capacity. The District routing audit states that peak time eligibility is 2,796 students (1,446 MS/HS pm runs plus 1,350 ES pm runs), indicating that the fleet would be operating at 77% (2,796/3,647) of targeted capacity. Eligibility is utilized to determine ridership needs by the routing software system. Most double tripped fleets run at 60-80% of targeted capacity. As noted above, the ridership audit indicates that the fleet is running at 50-60%. The pandemic had a significant impact on ridership nationally, and here as well.

It is important to note that because eligibility is used for routing purposes, software calculations assume all eligible students ride a bus to/from school, which is often not the case. **We recommend that actual ridership be audited again, when the pandemic protocols have been lifted and parents and students again feel comfortable utilizing school buses, to ensure accurate forecasting of needed buses.** Morning counts are more valuable as afternoon ridership can vary greatly due to sports and late bus ridership. This often causes the buses to appear "half-empty" on the regular afternoon routes. **Using the results of the AM audits, we recommend routes be adjusted accordingly should actual ridership continue to be significantly less than current estimates based upon eligibility.** Before proceeding with any changes, the actual ridership counts should be utilized to create new route configurations, which would estimate more accurately the future fleet needs resulting from these changes.

A major determination in routing efficiency is the bell time structure. The more time a bus has to complete a route the more efficiently it can be routed to the targeted capacity. Route time equals increased seating capacity. As seen on the table below, buses can have as much as 75 minutes between bell tiers in the morning and 65 minutes between bell tiers in the afternoon.

It is also possible to increase efficiency by transporting students on a triple bell time structure. For best results the education days at all schools would be the same length and allow for sufficient time between bells to maximize fleet capacity.

**Oswego Enrollments and Ridership Based Upon Eligibility**

| SCHOOL | GRADES | ENROLLED | ELIGIBLE | # BUSES |
|---|---|---|---|---|
| Oswego HS | 9-12 | 1,142 | 795 | 21 |
| Oswego MS | 7-8 | 599 | 575 | 16 |
| Fitzhugh ES | PK-6 | 423 | 254 | 7 |
| Kingsford ES | PK-6 | 457 | 251 | 6 |
| Minetto ES | PK-6 | 432 | 330 | 12 |
| Leighton ES | PK-6 | 295 | 233 | 5 |
| Riley ES | PK-6 | 406 | 237 | 6 |
| | | 3,754 | 2675 | |

Current Double Tier Bell Schedule:

| | |
|---|---|
| HS/MS 7:15 – 2:35 | Buses required: 37 |
| ES 8:30 – 3:40 | Buses required: 36 |

Possible Triple Tier Bell Schedule:

| | |
|---|---|
| HS 7:15 – 2:35 | Buses required: 21 |
| MS, Leighton ES & Kingsford ES 8:15 – 3:25 | Buses required: 27 |
| Riley ES, Minetto ES & Fitzhugh ES 9:00 – 4:10 | Buses required: 25 |

The bell times suggested above are only for estimating the impact of such a change… different start and end times can be utilized. To analyze this option, it needs to be understood that all projections are based on "educated guesstimates", as there is no way to accurately project the impact of changes to the bell times and route structures without the aid of routing software. Using these bell times, will more high school students ride the bus, or catch rides with parents or friends? Will parents of elementary school students be uncomfortable putting their younger ones on the bus with the older middle school students, or opt to drive them to school? The mixing of grade levels also poses a challenge when designing new routes, as the age/grade level comes into play when calculating seating capacity on a particular run.

Using eligibility as the criteria, the fleet could operate with 10 fewer buses at peak times. If actual ridership levels continue, even fewer buses may be needed. To equate this to dollars saved, 10 fewer buses means fewer replacements needed when the "bubble" appears again, at a savings of over $110,000/bus. Additionally, 10 fewer drivers equates to a reduction in pay and benefits of $500,000 - $600,000/year. Most importantly, this would alleviate the driver shortage.

**We recommend that the District utilize the One Touch Routing (OTR) capability of the routing software to establish routes under various triple-tripped scenarios to more accurately estimate cost savings.** As envisioned herein, triple tripping is designed as a tool with transportation in mind, understanding that such a change would require negotiations to driver contracts and teacher contracts, as well as parent buy-in.

**POLICIES & PRACTICES**

The District's transportation policy states that all P/K students are eligible for transportation, all Grade 1-6 students residing outside

student limits are eligible, all Grade 1-6 students residing more than ½ mile from their school or having to cross a main highway are eligible, and all Grade 9-12 students residing more than 1 mile from their school are eligible. is silent on walking/riding eligibility. The transportation of students living less than 1.5 miles from their assigned school is a non-aidable expense, referred to as non-allowable miles. Deductions for these miles in 2020-2021 were $31,080 on fleet and equipment purchases and $126,994 on operations.

To summarize this section, it is our belief that although the current in-District routes are meeting the needs of the District during the pandemic, the program may improve efficiency by auditing actual ridership post-pandemic and adjusting bell times and routes accordingly.

# MANAGEMENT OPTIONS

Our review of the transportation program includes an analysis of management options available to the District. We have included an evaluation of the pro's and con's of operating alternatives that may be of interest to the District in the years ahead, given the uncertainty of funding being continued at the current level:

1. Continue to operate as is, with recommended changes.
2. Consider contracting - full, management, or partial.

On the following pages, we have described the options that we evaluated in this report, highlighting the results that the District may expect from each decision.

## 1. CONTINUE TO OPERATE AS IS, WITH RECOMMENDED CHANGES.

Under this option, you would make some or all the changes to the way you currently operate the transportation program.

**Pro's:** You would not have major labor related consequences that may result from the other options; savings may be realized, particularly from improving the efficiency of the routes, which would result in a smaller operation.

**Con's:** The District can expect initial pushback from some parents and teachers in regard to routes or bell time changes. The District may continue to face budgetary concerns associated with the economy and increasing demands for services.

## 2. CONSIDER CONTRACTING – FULL, MANAGEMENT, OR PARTIAL

Either process can work effectively, provided the specifications clearly define service expectations.

### 2.1 Full Contracting

Under this option, the District would sell the fleet and terminate employment with the majority of staff members. The contractor(s) would be responsible for providing a fleet, facility (or using yours), and staff.

**Pro's:** The District would, relatively speaking, be out of the transportation business. A significant amount of administrative time and effort now devoted to transportation (payroll processing, accounts payable, benefits administration, budgeting, purchasing, etc.) would be eliminated. The District would receive a cash infusion the first year due to the sale of the fleet. A competitive bid environment may result in limited savings. Labor related issues such as recruitment and training would become the responsibility of the contractor. Annual contract cost increases could be controlled by market pricing and/or annual price caps.

**Con's:** The District could expect quite an emotional period of upheaval among the staff, and some members of the community, as some staff live in-District. Day to day operation of the program would be out of District control, which could result in a loss of flexibility. Service levels are often reported to be not as high as those provided in-house, especially early in the conversion. The costs of sports and field trips typically increase faster than the cost of home to school transportation. It is difficult to get back into transportation should the District ever desire to do so.

## 2.2 Management Contracting

Under this option, the District would continue to own the fleet, but would contract out all labor. You would have the option of replacing the vehicles as they age out or rebidding as a full contract.

**Pro's:** You effectively contract out the most expensive aspect of student transportation – the labor – while you continue to control the assets. This type of bid is attractive to some contractors because a sizeable investment is not involved. Should it become advisable to retake the program in the future, it is much easier because you have retained ownership of the fleet.

**Con's:** You are still in the transportation business; you must still invest in fleet replacements. While limited savings may be realized, they may not equal those of full contracting due to continued ownership of the fleet, which would preclude additional use of the fleet by the contractor. Some contractors may not bid due to the ability of the District to re-take the program.

2.3 Partial Contracting

Under this option, a District continues to provide transportation for a portion of the program (Regular-Ed public school transportation only, for example), while contracting out the other parts of the program (Special Needs, Private/Parochial, McKinney-Vento, etc).

> **Pro's:** The District would only need to maintain the fleet and staff necessary to transport a defined student population. Some fleet replacement costs in future years could be reduced. Parking issues would be minimized. Competitive bids may result in lower costs. Contract costs are more easily controlled due to your ability to retake some runs if service and/or costs are unsatisfactory. Sports and field trip costs could be contained due to having a District fleet.
>
> **Con's:** The routing and responsibility for these runs would remain with the District. The cost for such services must be monitored, and the quality of services provided must be watched closely. There may be negative community reaction to transporting a select group of students on contracted vehicles.

To accurately evaluate potential savings from contracting, bid specifications or RFP's would have to be developed, with prices compared to District costs at that time. Legal advice should be sought regarding privatization laws, regulations, and successor agreement impact before proceeding, although there is precedent for Option 2.3 in the District. Due to the pandemic and driver shortages the participation in recent bid opportunities has been lower than in previous years.

Based upon the findings of this report, and the high satisfaction of the majority of participants with the day-to-day operation of the program, **it is our recommendation that the District should continue to operate the program in-house with recommended changes (Option 1)**, while pursuing partial contracting opportunities (Option 2.3).

# APPENDIX

A DISTRICT PROVIDED DATA

B RIDERSHIP AUDIT

C FLEET LIST

D ABC'S OF DRIVER RECRUITMENT

E TRA OUTPUT REPORT

F BUS ROUTING INFORMATION

G ADMINISTRATOR SURVEYS

H MONTHLY REPORT FORMS

*The complete Appendix is on file in the District Business Office.*