

TAS

**STUDENT TRANSPORTATION
EFFICIENCY STUDY**

FINAL REPORT



**NORTH ROSE-WOLCOTT
CENTRAL SCHOOL DISTRICT**

September, 2015

TABLE OF CONTENTS

	<u>SECTION</u>
INTRODUCTION	1
METHODOLOGY	2
EXECUTIVE SUMMARY	3
OPERATIONAL/FINANCIAL	4
FLEET/FACILITY	5
LABOR	6
ROUTING	7
MANAGEMENT OPTIONS	8
APPENDIX	

INTRODUCTION

Transportation Advisory Services (TAS) was engaged to perform a review of the student transportation program of the North Rose-Wolcott Central School District (hereinafter referred to as “District”). The purpose of this Study is to provide a third-party perspective on the efficiency and effectiveness of the transportation services.

The District’s liaison for the project was Robert Magin, School Business Official. The transportation contact was Robert Galloway, Transportation Supervisor. Christopher Andrews served as the Project Consultant for TAS.

STUDY PROFILE

The District operates on a double-tier system, transporting approximately 1,165 students to 3 grade-level programs, as follows:

<u>School</u>	<u>Start Bell</u>	<u>End Bell</u>
Middle School <i>Grades 5-8</i>	7:15a.m.	2:10p.m.
High School <i>Grades 9-12</i>	7:25a.m.	2:20p.m.
Elementary School <i>Grades UPK-4</i>	8:40a.m.	3:10p.m.

The District also transports 17 students to 2 non-public schools and 18 students to 8 out-of-district SpEd campuses. Additionally, the District transports 19 Headstart Pre-K students on District runs, 20 Headstart Pre-K students on a Headstart bus, 7 Pre-K students for Wayne County to Newark and Red Creek, and 4 McKinney-Vento students to Red Creek, Lyons and Webster. The students were transported on 27 District owned and operated route vehicles in 2013-14, for a total transportation operating expenditure of \$1,344,745, exclusive of bus purchases.

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”. 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. 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 on March 25, 2015. On April 27, 2015 we were issued a Purchase Order authorizing funding for this Study.

Subsequent to the proposal's acceptance 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 prior to, and as part of, our on-site visit.
- 3) The on-site portion of the engagement occurred May 27th and 28th, 2015. During this visit TAS interviewed a number of stakeholders to gain their perspectives on the transportation programs. The following persons met with **TAS** during this trip, or responded to our questions via fax/email:
 - Superintendent
 - School Business Official
 - Director of Pupil Services
 - Athletic Director
 - Transportation Supervisor
 - Mechanics
 - Drivers/Monitors
 - Building Principals (via fax survey)
- 4) The Consultant toured the transportation facility, and visited each campus to observe the ingress and egress of each bus staging area. The visit concluded with an exit meeting with the Superintendent and School Business Official.
- 5) 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 through the use of telephone conversations, letters, fax communications, or email.

- 6) This document constitutes our written report to the District. A master and several copies of this report are being provided to the School Business Official. 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.
- 7) The following information was utilized as a part of our analysis of the District's transportation program:
 - Driver/Route data
 - Fleet listing
 - Financial reports
 - Transportation labor agreement
 - Board Transportation Policies
 - 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.

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 5 – FLEET/FACILITY

- Consider updating security cameras and/or add police refueling as a precautionary measure. **ST**

Section 6 – LABOR

- The Supervisor should utilize the “ABC’s of Driver Recruitment” found in the Appendix to resolve the Driver shortage. **ST/LT**
- Customize and utilize the “Monthly Reports” provided in the Appendix. **ST**
- Expand the opportunities for maintenance of other fleets. **LT**
- Pursue ASE Certification for at least one Mechanic. **LT**
- Seek out additional Driver training programs. **ST**
- Consider implementing an Attendance Incentive Day program to boost attendance. **LT**
- Work diligently to reduce the costs associated with paid non-worked days during the next round of contract negotiations. **LT**

- Continue to move towards a more equitable allocation of benefit costs. **LT**
- Consider paying a higher starting hourly wage for Regular and Substitute Drivers, combined with reduced benefits. **ST**
- Address the issue of trip assignments in the next round of negotiations. **LT**
- Discontinue late runs by utilizing the Elementary PM runs for that purpose. **ST**
- Utilize creative ideas provided to improve recruitment efforts. **ST**

**Section 7 –
ROUTING**

- Consider adding 5-10 minutes between runs. **LT**
- Cautiously consider a single bell time structure. **LT**
- Utilize group stops wherever possible. **ST**
- Continue to work with neighboring districts and BOCES to share out-of-District runs. **ST**
- Review the expansion of walking distances where safe to do so. **LT**
- Incorporate any changes into District policies. **ST/LT**

**Section 8 –
MANAGEMENT
OPTIONS**

- Remain District operated, implementing as many recommendations as possible, while pursuing shared service opportunities. **ST**

OPERATIONAL/FINANCIAL REVIEW

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 received replies from all three campuses. The number preceding the answer box indicates how the three respondents answered each particular question:

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

2. Regarding the afternoon pick-up of students at your building:
 - Always on time
 - 3 Usually on time (*weather and ½ days can be an issue*)
 - Regularly late

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

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

5. Regarding general lines of communication with the Department:
 - 2 Always available and great to work with
 - 1 Usually available and good to work with
 - 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?

2 Always

1 Usually

We get them, but they are 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?

2 Positive

Ambivalent

Negative

1 Other (*Mixed, but mostly positive*)

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

1 Great

2 Good

Average

Poor

As is evidenced by the responses to these questions, the majority of students usually get delivered to and from school on schedule. Bus/student lists are always provided in a timely manner to two of the three schools, and the overall rating of services is good. Copies of the survey responses can be found in the Appendix.

To further evaluate the program, we first established the operating conditions. The District operates on a double-tier system, transporting approximately 1,165 students to 3 grade-level programs, as follows:

<u>School</u>	<u>Start Bell</u>	<u>End Bell</u>
Middle School <i>Grades 5-8</i>	7:15a.m.	2:10p.m.
High School <i>Grades 9-12</i>	7:25a.m.	2:20p.m.
Elementary School <i>Grades UPK-4</i>	8:40a.m.	3:10p.m.

The District also transports 17 students to 2 non-public schools and 18 students to 8 out-of-district SpEd campuses. Additionally, the District transports 19 Headstart Pre-K students on District runs, 20 Headstart Pre-K students on a Headstart bus, 7 Pre-K students for Wayne County to

Newark and Red Creek, and 4 McKinney-Vento students to Red Creek, Lyons and Webster.

The District-owned fleet is parked, maintained and refueled at a District-owned facility. The Department is staffed with 29 employees:

1	Transportation Supervisor
1	Senior Driver (Dispatcher)
1	Driver/Senior Driver
2	Mechanics
21	Drivers
<u>3</u>	Monitors
29	

At the time of the study there were 2 Substitute Bus Drivers.

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 most currently available report is for 2014-2015. This detailed report identifies transportation related expenses, and is used as the basis for the calculation of transportation aid to the District.

Transportation aid is payable in the school year following the actual expense. Therefore, the transportation aid payable to the District during the 2014-2015 school year is based on actual expenses that occurred during the 2013-2014 school year. A copy of the referenced *TRA* is included in the Appendix to this report.

The District has a transportation aid ratio of 84%; 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 – 70.4%), a formula based on a multiple of basic operating aid and Adjusted Sharing Aid (line 20 – 80.8%), or the enrollment wealth ratio (line 25 EWR – 67.5%). For North Rose-Wolcott, the Adjusted Sharing Aid Ratio of 80.8% was the Selected Ratio (line 26) and a Sparsity Factor of 3.2% (Line 31) was added to it to arrive at the State Share Ratio of 84.0% (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 expenses include athletic trips (known as “other purpose” miles), 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 2014-2015 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 \$1,344,745, detailed as follows:

Line 80	Personal Services (labor)	\$597,898
Line 81	Employee Benefits	290,451
Line 82	Supplies/Materials (fuel, etc)	269,905
Line 83	Contractual Expenses	144,130
Line 113	Other Purpose Transportation Contracts	2,838
Line 145	Trans Office Staff	<u>39,523</u>
Line 177	Grand Total Trans. Expenses	\$1,344,745

From this total, the deductions are calculated as follows:

Line 89	Other Purpose Miles	\$160,193
Line 93	Non-allowable Pupil Deduction	7,995
Line 100	Deduction Based on Mileage	111,484
Line 102	Receipt From Sale of Trans Equipment	13,850
Line 105	Deduction Adjustment	-1,789
Line 149	Trans Office Deduction	8,920
Line 113	Other Purpose Trans not aid-eligible	<u>2,838</u>
	Total Operating Cost Deductions	\$303,491

By subtracting the deductions of \$303,491 from the expenses of \$1,344,745 we arrive at Total Non-Capital Expenses Approved for Aid of \$1,041,254 (Line 157).

Similar calculations are performed for Assumed Capital Expenses Aidable of \$422,740 (Line 158). The two combined totals (Lines 157 & 158) are shown on Line 159 - \$1,463,994. Applying 84.0% to this number yields your Transportation Aid of \$1,229,755 (Line 163).

The District reports that it spent \$114,607 on Summer Transportation last year, as well as \$56,852 on Athletic Transportation (labor plus mileage cost), which would reduce Total Transportation operating costs to \$1,173,286. Dividing this cost by the 23* daily route buses operated last year, yields an operating cost of \$51,012 per route bus. By adding the Total Amortized Capital Expenditures (bus purchases reported on Line 179) of \$463,540 for last year to \$1,173,286, the combined cost is \$1,636,826. Dividing this cost by the 23 daily route buses yields a total cost of \$71,166 per route bus.

We're often asked how District costs compare to State-wide costs. The NYS Citizens Budget Commission did an analysis of all NYS school district transportation program expenditures. The Commission states that for the 2010-11 school year, the average cost per district was \$1,100 per pupil, placing the District's calculated expenditure of \$754 per pupil well below the State average. (See Appendix G.)

Our review of the TRA revealed that occasionally State Aid calculations can serve as a disincentive for sharing. For example, the current TRA reflects revenue of \$20,000 from BOCES, but an aid deduction of \$111,484 based upon the mileage calculation. (The District is currently reviewing this.)

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

**Reflects the 23 Driver positions*

FLEET/FACILITY

FLEET

The District reports that it has 34 school vehicles – 27 used on routes, and 7 spares. We have included in this section a Vehicle Profile which shows the vehicles by age, and the number of vehicles per model year, with the oldest vehicle being 7 years old (2009), the newest vehicles being 1 year old (2015), and an average age of 3.4 years.

Spares 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 15% to 20% of the route vehicles (4-6 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 maintains 7 spare vehicles, yielding a ratio of 26%. However, small fleets tend to have higher ratios due to the demands of sports programs, and districts located outside of major metropolitan areas tend to have more spares due to the lack of back-up vehicles when needed (accidents, breakdowns, lengthy repairs, etc). (It was stated during our interviews that it is a shortage of drivers, not buses, that occasionally disrupts athletic scheduling). For these reasons we don't suggest reducing the number of spares at this time.

FLEET REPLACEMENT

In the past, the District had been fairly inconsistent in its replacement of vehicles, but more recently the fleet is on a 5 year replacement cycle. There is no industry formula for replacement; we conducted an informal poll of national contractors a few 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 substantially after this point. In larger fleets (100+ buses), a younger fleet can reduce staffing costs, but in smaller fleets age doesn't have as much of an impact due to minimal staffing requirements.

However, schools around the country tend to keep smaller buses 5-10 years, and big buses up to 12-15 years. Statewide, we are seeing a trend towards school districts maintaining vehicles up to 10 years old on routes and 12 years old as spares. The 5 year replacement cycle is

limited to NYS schools, and is a direct result of high State aid on these purchases. We've seen no official comments about it, but industry insiders tell us this funding level may not last much longer.

The use of full size buses, as opposed to smaller buses, allows for more efficient routing, as decisions don't have to be made about which vehicle to send on which route, and drivers don't have to come in to swap buses for different capacity runs. This is evident when considering the fact that the District has 27 route vehicles but only 23 Driving positions.

We do suggest that the District consider the purchase of alternative fuel buses. Propane buses are growing in popularity, and the purchase price is not significantly higher than a standard diesel bus. As of this writing there is a federal tax subsidy on the cost of propane that makes it worth considering, and most propane dealers will provide the tank/pump at no cost to earn your business. The July, 2013 issue of *School Transportation News* magazine has an article dealing with current information regarding alternatively fueled school buses entitled "alternative STATE". It can also be viewed digitally at www.stnonline.com.

All buses are equipped with two-way radios, and digital cameras with GPS. Having access to digital recordings of bus incidents protects both drivers and innocent students. GPS devices are gaining in popularity, due to their ability to track engine performance, idling practices, and route adherence.

FACILITY

As part of our review, we toured the District-owned transportation facility. There are three work bays with two in-ground post lifts and one above ground lift, a parts room with adequate inventory, and areas elsewhere in the building for tires, brake drums, and tail pipes. The office space is sufficient for an operation of this size. The facility and on-site automated fueling area are both on District property adjacent to the Elementary School.

To improve the security of this area, we are seeing more schools with building mounted security cameras covering the refueling area, with digital memory that saves the recording for a determined amount of time – say 72 hours – before recycling itself. This enables the users to review the recordings only on an as-needed basis. The Department currently has four cameras, with only one operable, and it's in poor

condition. We are also seeing schools inviting local and/or State police agencies to refuel on-site and invoicing them monthly. This can serve as a deterrent to crime in the area. **We recommend that the District consider one or both of these alternatives as a precaution against fuel theft and/or fleet vandalism.**

NORTH ROSE-WOLCOTT FLEET PROFILE

Year	Routes	Spares
2009	1	-
2010	-	-
2011	4	5
2012	9	1
2013	1	1
2014	6	-
2015	6	-
Total	27	7

Route Buses	27
Spare Buses	<u>7</u>
Total	34

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 interviewed within the Department, and at the District level.

As part of this phase of the study, we met all of the Transportation Department employees that were available during our visit, either individually or in groups. Based upon the discussions held during these interviews and meetings, our overall impression of the Department is positive. Most individuals stated that communication with the Department was good, with the Department being responsive and accommodating. The buses appear to be clean and well maintained, with few reported mechanical issues.

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, maintaining Driver files, etc. We reviewed the routing process, which is performed utilizing VersaTrans (by Tyler Technologies) routing software. Both the Supervisor and Senior Driver (acting as Dispatcher) have a firm understanding of the program. Sports and field trips are scheduled using Triptracker, also a Tyler product. Given the number of students transported, the multiple bell schedules, and the size of the District, the payback from the investment in routing software is not difficult to validate. The Drivers indicated that they get updated route sheets and student lists every year, and should they provide the Manager with changes he updates the lists accordingly. This software is regarded within the industry as very powerful, with good support from the vendor.

A key component of the operation is proper staffing levels, and it appears that the District has been short a regular Driver and sub-Drivers on a regular basis. This has resulted in a daily scramble to get routes covered,

typically by having the Mechanics and office staff drive, which can negatively impact operational effectiveness. Although any program can survive in a crisis mode for a short time, trying to do so long term can result in low morale, poor delivery of services, and cost overruns. Although we recognize that he also has responsibilities as the Facilities Supervisor, we believe that it is imperative that the Supervisor make resolving this issue his primary goal, and **we recommend that he utilize the *ABC's of Driver Recruitment and Retention* provided in the Appendix** to accomplish this objective. Some of the “ABC’s” may require Board/Administrative funding support, while others simply require a creative mind set. One event quite popular in most schools is the 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, and creating this type of work environment will foster improved recruitment/retention. Some labor agreement changes discussed later in this section may also alleviate related problems.

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

MAINTENANCE

In all of our staff meetings and interviews, the overall impression of the vehicle maintenance program was very high. No breakdowns in recent memory, supportive staff, and a young fleet were the comments heard. The fleet is maintained by 2 Mechanics. The most recent Bus Inspection Report Summary detailing 90 inspections during the period 4/1/2014 – 3/31/2015, reflected a 98.9% inspection passing rate (copy provided in the Appendix). This is an indication that the Mechanics are staying on top of the maintenance program. With 34 DOT-inspected vehicles, and 2 other vehicles (counted .5 each) the bus:mechanic ratio is 17.5:1. While nationally the trend is from 20:1 to 30:1, within NYS it's closer to 15:1. The Mechanics currently work different shifts: 5:30am – 2:30pm, and 7:30am – 4:30pm, so that coverage is available when the buses first roll out in the morning, and someone is in the shop until most buses are back in the afternoon. This is adequate coverage, but it can often be negated by the Mechanics having to drive. Given the young age of the fleet, and the vehicle warranties, it may appear at times that two Mechanics are not necessary. However, having only one Mechanic for this size fleet could cause problems when the one Mechanic has to drive, takes vacations, is sick, etc. And it would be difficult to cover both ends of the

work day as noted above. Instead of looking at cutting back, **we recommend expanding the amount of work available, by either bringing in maintenance from a neighboring district, or working on vehicles belonging to other agencies (municipal, Headstart, etc.).** It is our understanding that preliminary discussions have been undertaken with Clyde-Savannah CSD regarding such work.

Although it would appear that the Mechanics have a good knowledge of the bus fleet, neither of them are certified as an ASE Certified Bus Mechanic. Within the transportation industry, this certification is highly regarded as a method for insuring 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 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 \$30.00. To maintain their certification, mechanics are recertified every five years to ensure that they are staying current. **We recommend that at least one of the Mechanics obtain such certification, and be reimbursed by the District for the costs associated with the process.** For more information, contact them at ASE.com or (703) 669-6600.

In the Mechanic I job description, it is stated that he/she should possess a NYS Motor Vehicle Operator's Class 5 License. We're not familiar with that designation, but he/she should also possess the CDL B License with P and S endorsements. The Mechanic II job description should have the S endorsement added as well.

The cost of bus repair parts during the previous school year was \$18,690. According to the information provided, the fleet was driven 618,777 miles during the 2013-14 school year, for an estimated cost of \$0.03 cents per mile – well below the industry range of \$0.15 - \$0.30/mile. This can be attributed to a combination of a strong maintenance program, good purchasing practices, and a young fleet under warrantee. The Mechanics schedule work and track costs using Fleetvision software, part of the Tyler suite of products.

In order to provide the Board and Administration with a monthly recap of transportation maintenance, we **recommend that the Mechanics complete a “Monthly Report”** – see sample provided in the Appendix. (It has also been emailed to the District for your customization.)

DRIVERS

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, the labor agreement should support and facilitate the provision of quality services to the students and the education community.

It was noted that at times it can be difficult to recruit and retain Drivers – especially substitutes. To assist in this effort, we have provided in the Appendix the “ABC’s of Driver Recruitment”, assembled from our studies of hundreds of other school districts around the country, and we have recommended its use.

For the most part, everyone interviewed appeared to be pleased with the quantity and quality of training provided. There was an interest on the part of the Drivers to receive special needs specific training when applicable. The handling of student discipline issues was raised as an important issue by both Principals and Drivers – most have found the new digital cameras helpful. Most school districts report that discipline is best when the standards are similar for the classroom and the bus. Many schools report success when utilizing seating charts on buses, and we have included a sample chart in the Appendix. We’re also seeing more schools providing training on the use of EpiPens.

A concern among some of the Principals was raised regarding the consistency of student management skill sets on the bus, the completeness of discipline forms provided by the Drivers, and the content of those forms.

To stay on top of these issues, **we recommend that the District seek out additional training programs** from organizations such as PTSL.org, SchoolBusSafetyCo.com and NHTSA.dot.gov. There is also a training package entitled *The Peaceful Bus Program* available at Hazelden.org. Training should be mandatory, with participants paid for their time.

We have reviewed the labor agreement between the District and NYSUT, which is effective July 1, 2012 thru June 30, 2016. Following are our

perspectives from a transportation viewpoint. Our comments only relate to transportation issues, and do not reflect any review of the other employee groups that may be covered or impacted by this agreement. We understand the critical and important nature of negotiations, and the difficulty to all parties in making changes to historical practices, yet we strongly believe that an agreement needs to be consistent with the goal of providing quality, affordable transportation services. Additionally, we believe that an agreement must provide the District's Administration with the flexibility to modify assignments and costs to reflect the realities of program demands, student enrollment, and economic conditions.

1) 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. It 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 ten month employees, it appears that covered employees are eligible for 12 sick days, 6 holidays and 2 personal days for a total of 20 paid, non-work days. There are also a variety of bereavement days available, depending upon the relationship to the deceased. With 23 Drivers eligible, this benefit can result in up to 460 paid days off per school year; 14 of these days impact work schedules for up to 322 days – up to 2 absences each day! Each of these absences requires the use, and extra cost, of substitutes.

Due to absenteeism related to the available days off, **we recommend that the District consider implementing an Attendance Incentive.** A typical plan calls for employees who take no days off during a selected period of time getting one extra day's pay. Districts have informed us that they get more participation if it is paid out twice/year, depending upon participation July 1-December break, and January 1- end of school.

This analysis is not meant to disparage the Drivers, as they are only benefitting from a contract they worked hard to negotiate over the years. It is provided as a means to answer the often asked question – "Can we compete with the private sector?". While it is possible to do so, it will

prove difficult unless some of these provisions of the Agreement are addressed. **We recommend that the District and the Union work diligently in future contract renewals to eliminate or significantly lower this type of cost.**

2) Health Insurance – this is one of the fastest growing transportation costs in many school districts, and North Rose-Wolcott is no exception. The District has worked diligently at controlling these costs, and currently pays 85% of the individual premium for employees hired before 7/1/1994, and a pro-rated % for those hired after that date. Upon retirement employees are eligible for continued paid coverage for five years, or until reaching age 65, whichever is longer. These insurance packages can result in benefit costs exceeding wages for this group of part-time employees that retires under the conditions stipulated in the Agreement.

Although we understand that benefits are a primary reason some employees work for the District, **we recommend that the District continue to pursue savings in benefit costs, such as moving towards a more equitable allocation of benefits and limits on future costs, in the next round of negotiations.**

3) Hourly pay rates – current pay rates for Regular Route Drivers start at \$14.50/hour for new hires, and go up to \$19.57/hour for long term Drivers. AM/PM routes have a 15 minutes pre-trip daily; if assigned another bus in the same day, another pre-trip is paid. Activity/late runs are paid at \$14.50/hour, as are trips. Substitute Drivers are paid \$13.00/hour. One of the most difficult jobs is driving a bus as a substitute, as the routes and students may be unfamiliar. Trying to read the route directions, and find the address – often in the early morning or late in the day, can present a challenge. If anything, **we recommend that the Substitute Driver pay be raised to equal the starting pay of regular Drivers.** This is not a dis-incentive for Drivers wanting full time Driver positions, as their income would become more predictable in that event.

There is also longevity pay – referred to as a Career Increment - in recognition of years of service. It is increased every five years in increments of \$150, \$250, \$450, \$650, \$850, and \$1050, paid once annually. In light of our recommendation for decreasing benefit costs, in order to attract new Drivers **we recommend that the District consider paying a higher starting wage combined with reduced benefits.** Most workers looking for part-time jobs are mainly interested in their take-home pay.

4) Extra trips – the current system of assigning Drivers based upon seniority from sign-up sheets appears to work well, except when there aren't enough Drivers interested in the extra work. Although the Agreement allows the District to assign runs in excess of 8 hours, it does not address such an option in the event of a lack of Drivers. **We recommend that this be addressed in the next round of negotiations – allowing the District to fill such needs.** North Rose-Wolcott has subscribed to the shift we are seeing towards “trip” rates, whereas Drivers get paid one rate for driving their regular runs, which can vary depending upon seniority, and a flat rate for trips.

It was noted during our visit that neighboring districts were helping fulfill trips due to a lack of Drivers. We also observed that five buses were being utilized on late runs for the MS/HS students, averaging 100-120 passengers in total. These buses depart the HS about 10 minutes before the ES runs depart for their PM trip. **We recommend that instead of using five late buses, two-three buses transport these students to the ES, where they board the appropriate ES bus for a ride home.** As seen in the Routing Section, these buses have the capacity, although it may be necessary to adjust some routes, or even add an extra ES PM bus run. But you will still have saved the expense of several late bus runs, and freed up some Drivers for extra trips.

We are also seeing a move nationally towards allowing – even encouraging – Coaches to 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, but it is viewed as a budgetary procedure 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.

Another approach to filling these Driver positions is to bid sports runs as a seasonal package. For example, Drivers could bid for all football trips, or all soccer trips, etc. In effect, they become part of that team effort, which some Coaches report as a positive impact. If regular Drivers don't bid on these, Substitute Drivers should be invited to participate. If for some reason they can't take a trip mid-season, it can be bid as a stand-alone trip.

Using these creative ideas, and others contained in the “ABC’s” included in the Appendix, we recommend that the District take some unique approaches to filling these positions. One of the most successful of these is the use of Referral and Signing Bonuses, which provides an incentive to both current employees and new hires.

ROUTING

CURRENT PROGRAM

The District is double tripped, transporting approximately 1,165 students to 3 grade-level programs, as follows:

<u>School</u>	<u>Start Bell</u>	<u>End Bell</u>
Middle School <i>Grades 5-8</i>	7:15a.m.	2:10p.m.
High School <i>Grades 9-12</i>	7:25a.m.	2:20p.m.
Elementary School <i>Grades UPK-4</i>	8:40a.m.	3:10p.m.

The District also transports 17 students to 2 non-public schools and 18 students to 8 out-of-district SpEd campuses. Additionally, the District transports 19 Headstart Pre-K students on District runs, 20 Headstart Pre-K students on a Headstart bus, 7 Pre-K students for Wayne County to Newark and Red Creek, and 4 McKinney-Vento students to Red Creek, Lyons and Webster. The students were transported on 27 District owned and operated route vehicles in 2013-14. A bus from Clyde-Savannah CSD also transports several Amish students to/from school.

BELL TIMES

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

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 double tripped (also referred to as two tiered). Based upon our review of the route sheets and ridership levels (see table below), coupled with our interviews, it appears that the current route structure is based upon historical routing practices, which could be redesigned to make the more efficient use of the fleet. The buses currently have about an hour to complete their runs, and the size of the District limits the ability to maximize the capacity of the bus. **We recommend that the District consider adding an additional 5-10 minutes between runs to improve the efficiency by reducing the fleet size.**

Of the 500+ reviews we've conducted over the past twenty-seven years, the vast majority of schools are multiple tripped, with the most

common configuration being double tripping, as it is an efficient use of labor and equipment. Fewer than 5% of districts State-wide are single tripped, and they are primarily very small enrollment districts or in very large geographic locales. Additionally, until the mid-'90's, transportation aid was a flat 90% Statewide. That has now become dependent on a combination of local wealth factors, resulting in many schools seeing a reduction in this aid – currently 84.0% in North Rose-Wolcott. With State transportation aid approaching \$2 billion per year, and the current belt-tightening environment in Albany, further aid reductions can be expected in the years ahead. This projected decrease in aid, combined with the current decrease in overall aid as a result of GAP Elimination Adjustments, has all districts looking at ways to improve efficiency.

At the request of the District, we asked Tyler Technology, the company that owns the VersaTrans routing software utilized by the District, to run a computer analysis of possible routing efficiencies, including the possibility of a single route configuration – meaning one bell time for all students. Their report is enclosed in the Appendix. While in most cases this doesn't make sense, the size of the District and length of the runs currently prohibits the District from filling its buses, so a case might be made for single-tripping. As indicated on Page 12, Scenario 2, of that report, their findings indicate that single tripping might be possible utilizing 29 buses. Since this may result in a three hour workday for most drivers, the biggest challenge would be finding enough drivers willing to work short days. The only way around that would be to guarantee a longer work-day – likely a four hour minimum. Should transportation aid continue to decrease, this could become an expensive alternative. **We cautiously recommend considering this option.**

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 agreements with teachers and drivers
- Breakfast programs
- Fleet configuration
- Geographic size of district (i.e.: short vs. long runs)
- Federal/State/local mandates (NCLB, Choice, etc.)
- After school activities – sports, jobs, etc.

To analyze routing efficiency, we typically start by looking at the number of buses utilized combined with number of runs per bus. As noted above, the District engaged the services of Tyler Technologies (VersaTrans) to analyze the routes for possible efficiencies, utilizing their proprietary software technology. (Note: their reference to KEEP runs reflects the District’s old terminology for late runs.) There may be slight variations in actual versus computer generated information. The routing software analysis yielded data reporting that your buses have between 1-6 runs each, as seen on the table below:

The District uses 28 daily buses in support of its home to school transportation program as shown on the chart below.	Run Counts	Bus #	Run Counts
Bus #			
212	3	240	1
220	2	241	5
223	2	242	6
227	6	243	6
228	1	244	4
229	2	245	4
230	4	246	6
231	5	247	4
234	3	248	5
235	5	249	4
236	4	250	4
237	4	251	4
238	4	252	4
239	3	CLYDE	2

From a historical perspective, transportation policies throughout NYS have been developed as a result of regulations and transportation aid calculations. For many years, most schools have followed the commonly held perception that it was necessary to reserve a seat on each bus for every eligible student. Effective January 1, 2012, the State clarified this topic by issuing subsection 8 of Section 3635 of the Education Law, stating that the “... board of education may, at its discretion, provide student transportation based upon patterns of

actual ridership.” This relieves the District from having to operate a larger than necessary fleet. The following chart shows the count of students receiving transportation services by school, as recorded in the routing software:

School	Transported	% of Total
Huron HeadStart	42	
Burton Road	6	
Stoney Ridge	8	
Total HeadStart/Non-Public	56	4.53%
North Rose Elementary	517	
NRW High	371	
NRW Middle	266	
Total Public School	1154	93.44%
Creekside	1	
Crestwood	1	
Midlakes Jr/Sr	2	
Midlakes Primary	1	
Perkins ES	2	
Red Creek Cuyler Elem	1	
Red Creek High	1	
Red Jacket Education Center	5	
Roosevelt Newark	6	
Wayne Education Ctr.	3	
Williamson Elementary	2	
Total Special Needs	25	2.02%
Total Transported Students:	1235	100.00%

While filling a bus is the goal of efficient routing, it is not always feasible due to the varying size of students in the lower grades versus the upper grades, and the common practice of carrying backpacks, as well as musical instruments. The practice of allowing students to ride different buses at different times (daycare and babysitter changes, the use of route buses as late buses, etc.) also affects the utilization, as multiple seats may be assigned to one student. Further, if ride times are limited or capacities reduced, then efficiency is lower, as shorter ride times equates to more buses required. Due to the rural nature of the District, most students are picked up at their homes. **Wherever possible, we recommend that group stops be utilized, as each stop adds time to the run.** It should also be noted that PreK/K buses typically take longer to load and unload, resulting in slower route times, which prevents filling buses to capacity.

OUT OF DISTRICT PLACEMENTS

The software reports that about 78% of the runs provide public school transportation, while 22% support non-public and special education runs, as shown below:

School / #Routes	% of Total
Huron HeadStart PK (Shuttles) 2	
North Rose Elementary 34	

Late Advantage (Ele - MS combined)	3	
NRW Middle - High Combined	39	
Wayne Tech Career Center (Shuttles)	2	
New Visions (Shuttles)	2	
Total Public	82	78.09%
Stoney Ridge	3	
Burton	2	
Huron HeadStart	2	
Total HeadStart/NonPublic	7	6.67%
Perkins - Roosevelt Newark	4	
Midlakes EL/JR/SR- Red Jacket Combined	2	
Red Creek High - RC Cuyler Combined	3	
Wayne Education Center	2	
Williamson Elementary	2	
Creekside - Crestwood combined	2	
Total Special Needs	16	15.24%
Total Routes	105	100%

The 2011 tax cap legislation amended Education Law 1709(25)(h), making it permissible for one district to transport the students of another district to any legally allowable out-of-district location. Prior to this change, districts were restricted to providing services only to locations where they were sending their own students. The District has a history of sharing runs with neighboring Districts, and **we recommend that the District continue working with neighboring districts, as well as BOCES, each year to ascertain interest in developing common routes for as many of the programs as possible.** Sharing of these runs has been proven to significantly lower associated costs.

POLICIES

According to the District's website, the District's transportation policy states that all students are eligible for transportation, except Middle School students living within the Village of Wolcott. NYS regulations state that school districts may require students in grades K-8 to walk a distance of up to two miles, and students in grades 9-12 to walk a distance of up to three miles from their homes to their schools. If they choose to provide a higher level of service, transportation aid is not provided for those transported less than 1.5 miles from their school, although hazardous exceptions can be made thru the use of

regulations governing established child safety zones. **We recommend that the District review the expansion of walking distances where it can be safely accomplished.**

To summarize this section, it is our belief that while the fleet can be operated more efficiently, it will take a change in policies and practices to do so. **We recommend that any changes resulting from these efforts be incorporated in the District's Transportation Policies,** as it is difficult for the District to defend a position on policy if none exists.

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 State Aid being continued at the current level:

1. Continue to operate as is, with recommended changes.
2. Consider contracting - full, management, or partial.
3. Share services with neighboring schools and municipalities.

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 of 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 implementing some of the recommendations.

Con's: 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. It should be noted that districts in rural locations don't usually generate much competition, which can result in no to little savings.

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 renting 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 some savings. Labor related issues such as recruitment and training would become the responsibility of the contractor. Annual contract cost increases would 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. 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. As the National Health Care Act is fully implemented, the mandated health care costs contractors may be subject to could negate much of the savings.

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. Some savings may be realized, but they would 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. The same mandated health care costs are a concern.

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-Ed, non-public, workstudy programs, etc).

Pro's: The District would only need to maintain the fleet and staff necessary to transport a defined student population. Some of the fleet replacement costs in future years could be reduced. 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 terminating some District employees, and 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 would be necessary regarding Taylor Law privatization restrictions before proceeding, as these restrictions may require the District to negotiate the decision to contract, and/or the impact of that decision, with the Union.

3. SHARE SERVICES WITH NEIGHBORING SCHOOLS AND MUNICIPALITIES

Under this option, you would consider sharing transportation resources with neighboring schools, agencies and municipalities. As referenced throughout this report, this may involve shared transportation to common locations, shared management, shared fleet maintenance, and fuel sharing.

Pro's: Costs may be reduced by developing opportunities for the shared use of assets currently in place, both for the District and the entities involved, as well as the taxpayers supporting all parties.

Con's: Some partners in sharing may have more to gain than others, although it must be a win-win for all participants. The impact of

State Aid must be considered, as some State Aid calculations can occasionally prove to be a disincentive to sharing.

Based upon the findings of this report, **it is our recommendation that the District should continue to operate the program in-house with recommended changes (Option 1), while pursuing shared service opportunities (Option 3).**

APPENDIX

- A DISTRICT PROVIDED DATA
- B TRANSPORTATION AID OUTPUT REPORT
- C SEATING CHART
- D LABOR AGREEMENT
- E TYLER ROUTE ANALYSIS REPORT
- F PRINCIPAL FAX SURVEY
- G POLICY BRIEF

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



23 British American Blvd.
Latham, New York 12110

P: 800.433.5530
F: 518.786.7778

www.tylertech.com

July 26, 2015

Christopher J. Andrews, Senior Consultant
Transportation Advisory Services
7512 Dr. Phillips Blvd, Ste. 50-905
Orlando, FL 32819

Dear Chris:

Attached is our review and report on the North Rose – Wolcott Central School District transportation program. It is an honor to be included as a partner with TAS for this project. We hope this review provides the North Rose – Wolcott CSD with an objective viewpoint of the efficiency and effectiveness of the routing component of its transportation program.

Thank you,

A handwritten signature in cursive script that reads "Carla Osborn Jones".

Carla Osborn Jones
Senior Implementation Consultant
carla.jones@tylertech.com
800.433.5530 x 131893

1.0 Executive summary

Tyler Technologies (“Tyler”) was engaged to review the routing plan of the student transportation program of the North Rose – Wolcott Central School District (“District”) for the purpose of determining possible transportation efficiencies. The overall impression is that the District has been managing its transportation resources very well given some historical expectations of a high level of service.

Areas of further study include managing bus mileage, bus stop location and frequency, route counts per school, individual route analysis, student loading (ridership) of routes on buses, time & mileage analysis, and bell times (defined as one campus for all schools). These areas are explored in greater depth within the report.

2.0 Methodology

The District provided Tyler with a standalone copy of its Versatrans Routing & Planning® database dated May 22, 2015. Tyler used this data to provide the following analysis.

3.0 Program background

The District operates 3 public schools: 1 high school, 1 middle school, and 1 elementary school. All are district-wide, grade level specific buildings.

The District encompasses an area of 123.4 square miles¹, which is relatively spread out in size.

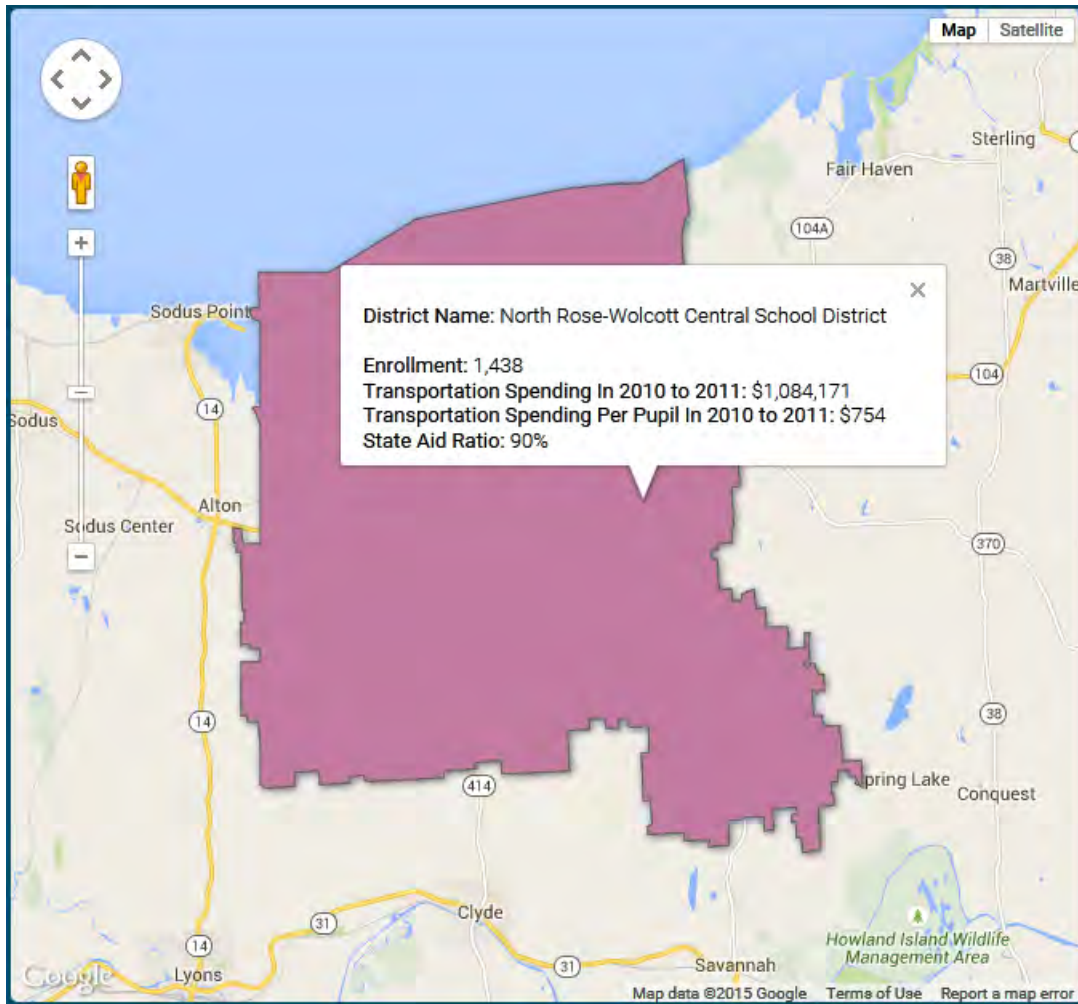
The District operates its own bus fleet of 37 vehicles from the transportation center at 10486 Salter Rd. adjacent to the elementary school.



¹ http://proximityone.com/schooldistrict_size.htm

The District web-site states “Bus service is provided for all students, except Middle School students within the Village of Wolcott”.²

The New York State Citizens Budget Commission³ did an analysis of all New York State school district transportation program expenditures. Its results for the District are as follows:



The Commission states that for the 2010-11 school year, the average cost per district was \$1,100 per pupil, placing the District’s calculated expenditure of \$754 per pupil well below the state average.

3.1 Daily Buses

² <http://www.nrwcs.org/district.cfm?subpage=1198218>

³ <http://www.cbcny.org>

The District uses 28 daily buses in support of its home to school transportation program as shown on the chart below.

Bus #	Run Counts	Bus #	Run Counts
212	3	240	1
220	2	241	5
223	2	242	6
227	6	243	6
228	1	244	4
229	2	245	4
230	4	246	6
231	5	247	4
234	3	248	5
235	5	249	4
236	4	250	4
237	4	251	4
238	4	252	4
239	3	CLYDE	2

Attachment A – All Current Runs shows all the daily runs currently assigned to each bus.

3.2 List of Transported Students

The following chart shows the count of students receiving transportation services by school.

<u>School</u>	<u>Transported</u>	<u>% of Total</u>
Huron HeadStart	42	
Burton Road	6	
Stoney Ridge	8	
Total HeadStart/Non-Public	56	4.53%
North Rose Elementary	517	
NRW High	371	
NRW Middle	266	
Total Public School	1154	93.44%
Creekside	1	
Crestwood	1	
Midlakes Jr/Sr	2	
Midlakes Primary	1	
Perkins ES	2	
Red Creek Cuyler Elem	1	
Red Creek High	1	
Red Jacket Education Center	5	
Roosevelt Newark	6	
Wayne Education Ctr.	3	
Williamson Elementary	2	
Total Special Needs	25	2.02%
<u>Total Transported Students:</u>	1235	100.00%

The following chart compares the corresponding runs used to transport the students noted above.

School		Routes	% of Total
Huron HeadStart PK (Shuttles)	2	2	
North Rose Elementary		34	
Late Advantage (Ele - MS combined)		3	
NRW Middle - High Combined		39	
Wayne Tech Career Center (Shuttles)		2	
New Visions (Shuttles)		2	
Total Public		82	78.09%
Stoney Ridge		3	
Burton		2	
Huron HeadStart		2	
Total HeadStart/NonPublic		7	6.67%
Perkins - Roosevelt Newark		4	
Midlakes EL/JR/SR- Red Jacket Combined		2	
Red Creek High - RC Cuyler Combined		3	
Wayne Education Center		2	
Williamson Elementary		2	
Creekside - Crestwood combined		2	
Total Special Needs		16	15.24%
Total Routes		105	100%

This data shows that the specialized programs such as HeadStart, NonPublic and Special Needs are by their nature less efficient than transportation to the public schools, primarily because of the much lower number of students in widely dispersed locations. As such, every consideration must be made to carefully schedule these types of student placements, when possible, as they come at a far greater cost to the District.

3.4 Daily hours and miles by bus

The following chart shows the planned daily hours and miles for the 28 buses currently in use for the 14-15 school year, followed by the chart of averages and percentages. These percentages are very reasonable, especially considering the relatively high number of miles to be covered within the district.

Bus #	Unloaded Hours	Loaded Hours	Bus Hours	Unloaded Miles	Loaded Miles	Bus Miles
CLYDE	0:45	0:10	0:55	26.36	5.06	31.42
212	0:29	0:23	0:52	18.23	12.22	30.45
220	2:01	3:33	5:34	82.57	123.97	206.54
223	0:44	1:37	2:21	30.32	63.71	94.03
227	1:17	3:39	4:56	47.47	140.98	188.45
228	0:42	0:39	1:21	28.77	29.7	58.47
229	0:42	1:50	2:32	23.76	79.2	102.96
230	0:42	2:19	3:01	32.8	88.04	120.84
231	0:55	3:36	4:31	36.92	124.68	161.6
234	0:32	1:58	2:30	18.69	60.15	78.84
235	1:26	4:42	6:08	58.41	136.27	194.68
236	1:04	3:41	4:45	43.42	93.38	136.8
237	0:48	3:18	4:06	28.81	69.75	98.56
238	1:10	3:19	4:29	43.37	85.08	128.45
239	1:20	1:22	2:42	57.04	55.66	112.7
240	1:02	1:00	2:02	47.16	45.08	92.24
241	1:54	3:42	5:36	72.58	125.76	198.34
242	0:50	6:22	7:12	23.42	156.04	179.46
243	0:49	2:50	3:39	26.17	48.68	74.85
244	0:35	3:19	3:54	21.51	62.88	84.39
245	0:58	3:48	4:46	35.22	91.38	126.6
246	1:34	3:41	5:15	59.87	81.38	141.25
247	1:07	3:26	4:33	40.16	70.54	110.7
248	1:12	3:26	4:38	43.13	69.89	113.02
249	0:30	3:35	4:05	15.3	76.53	91.83
250	0:46	3:11	3:57	26.65	88.18	114.83
251	0:44	3:22	4:06	26.55	88.75	115.3
252	1:08	3:19	4:27	41.11	91.14	132.25
28	27:46	81:07	108:53	1055.77	2264.1	3319.9

	Unloaded hours	Loaded Hours	Total Hours	Unloaded Miles	Loaded Miles	Total Miles
Totals	27:46	81:07	108:53	1055.77	2264.1	3319.9
Averages	0:59	2:54	3:53	37.71	80.86	118.57
Percentages		Deadhead hours %	25%		Deadhead miles %	32%

4.0 Analysis by the service components of the transportation program

4.1 Transportation eligibility

The following chart shows all transported (excluding students on Special Needs/HeadStart routes) by their home to school distance.

< 1.5 miles	88	7.2%
1.51 – 5.00 miles	455	37.6%
> 5.0 miles	668	55.2%
Total transported	1211	

Overall 7.2% of transported students live closer than 1.5 miles from their school. The New York State Education Department threshold for transportation aid specifies that a child must live 1.5 miles or greater from their school.

The following chart shows the counts of students (excluding those on Special Needs/HeadStart routes) who receive District-provided transportation but live less than 1.5 miles from their school of attendance.

School Description	Total
Huron PreSchool	5
Stoney Ridge	2
North Rose Elementary	41
NRW High	16
NRW Middle	23
Spry Middle School	1

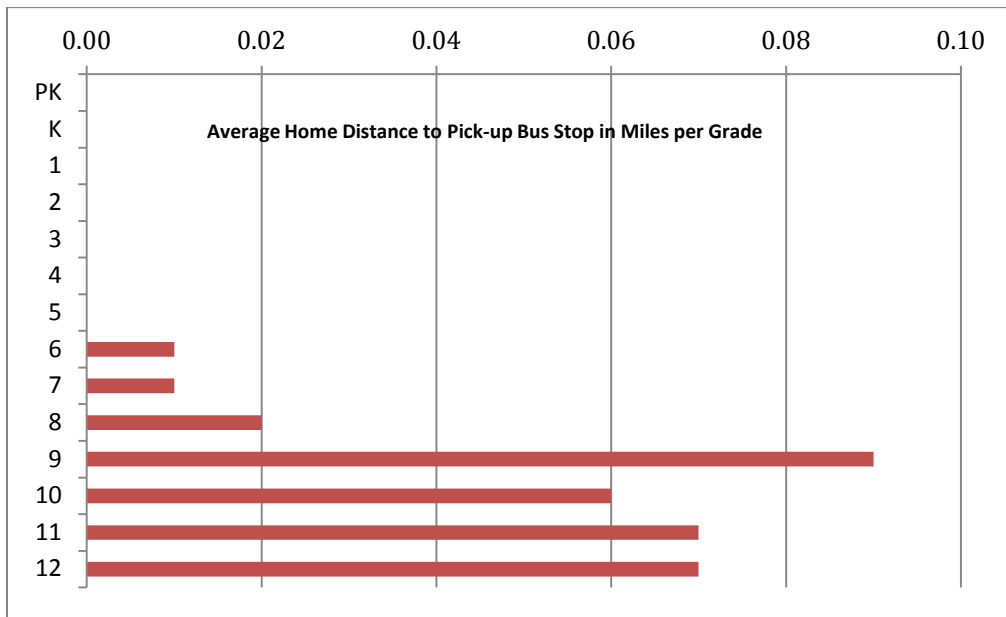
4.2 Average home to school distance for students transported (not on Special Needs/Headstart routes) by school

The following chart shows the average home to school distance of transported students by their school of attendance. The average home-to-school distances of the students attending public schools in the district (including the Huron building where public preschoolers are housed) are fairly consistent, indicating strength in the District's student assignment plan and school placements in relation to students.

School Name	Avg Home-School Distance
Huron PreSchool	4.84
Burton Road	4.43
Stoney Ridge	2.38
North Rose Elementary	5.84
NRW High	4.82
NRW Middle	5.31

4.3 Home to bus stop distances

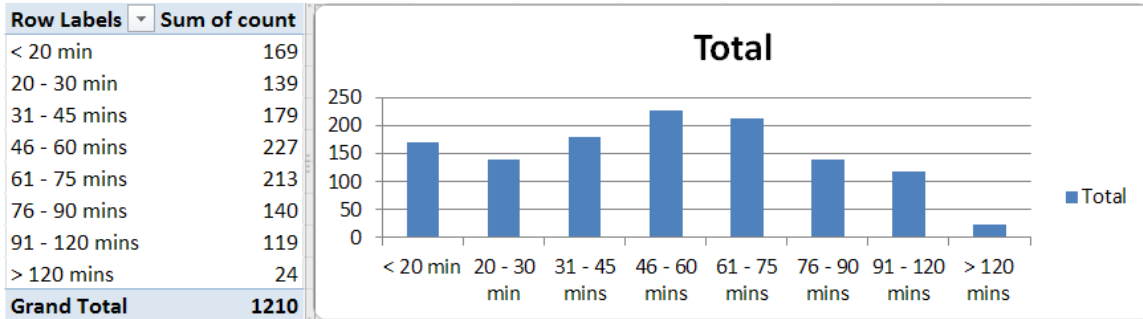
Because the North Rose-Wolcott district is mostly rural, the majority of students are picked up at their address. Some older students walk to a stop at the end of their street, but this, too, is dependent on their location and the relative safety for students to walk to a stop. The middle school students who live in town walk to school, so they are not a part of this equation. The following chart shows the average walk-to-stop distance of all transported students (excluding Special Needs/Headstart students) by grade level, indicating that the older students do walk somewhat farther.



The very short distances the students are walking to a bus stop shows high regard for student safety and/or customer service. However, every stop on a route adds route time and lengthens student ride time. Virtually all PK – 5 graders are currently being picked up at home, and no older student is walking as much as .10 mile, even in areas where it might be safe to do so. This may be an area for future exploration if budget constraints create the need for further efficiencies in the transportation program.

4.4 Average ride times

The average daily ride time (AM plus PM) for all transported students, excluding Special Needs/Headstart students, is 54 minutes. This reflects not only the size of the district in square miles, but also the level of service offered to deliver the KEEP/Late Advantage students home on additional PM routes.



5.0 Analysis by the efficiency components of the transportation program

5.1 Route Set Key Performance Indicators

Key Performance Indicators (KPIs) such as riders per run, riders per mile and riders per minute provide an important measure of routing efficiency. This data was examined in different ways to gauge the routing efficiency characteristics of the District. As above, we concentrated on the public/non-public students and excluded Special Needs/Headstart students.

The first view breaks down the runs into categories that reflect their general characteristics of service delivery. The identifiable categories are as follows:

-
- Grade PK – 4 routes
- Grade 5 – 12 routes
- All routes

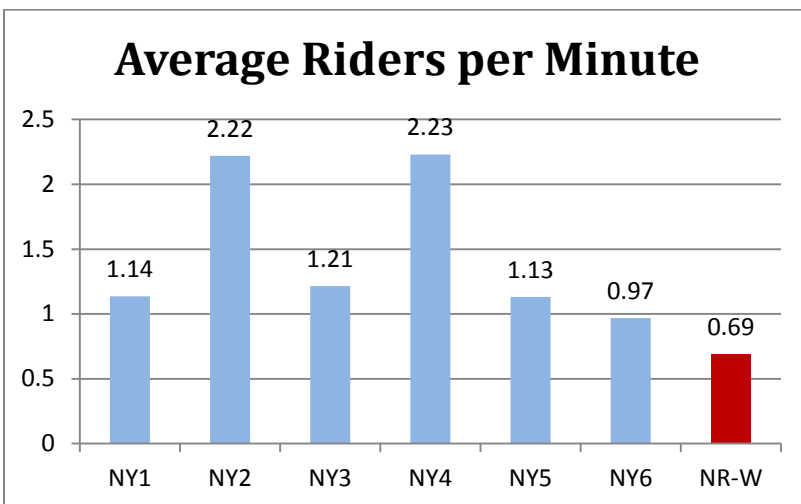
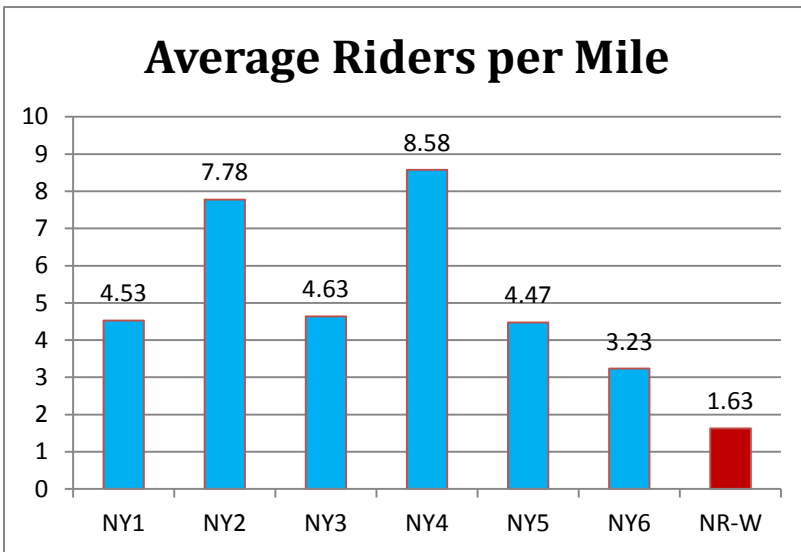
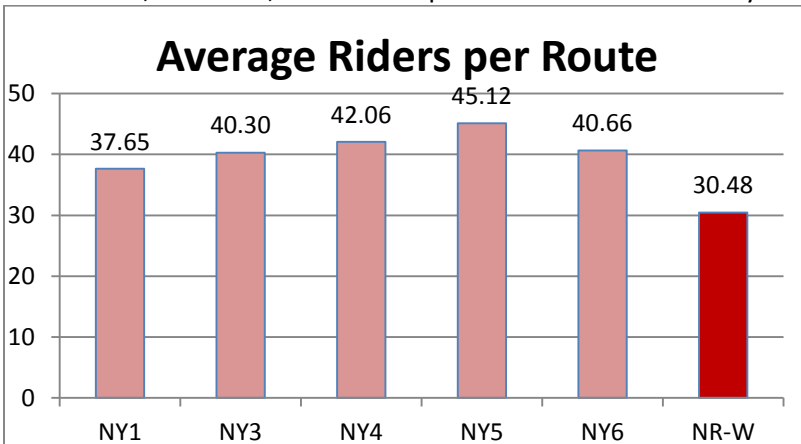
Following is an analysis of these types:

Type	Total Runs	Total Riders	Route Distance	Route Time in minutes	Average Planned Riders per run	Riders per mile	Riders per minute	Average Actual Riders by district count**
PK - 4	44	1178	760	1835	27	1.55	0.64	28
5 - 12	42	1443	847	1985	34	1.7	0.72	22
All	86	2621	1607	3820	30	1.63	0.69	25

The analysis shows that the grade 5 – 12 runs are the most efficient in terms of planned riders per run, per mile, and per minute. However the actual average number of riders**, according to district count, displays a lower efficiency. These averages are indicative of the distance and time necessary to cover the large size of this district which makes distance and time more critical to routing than the actual load level. While having more students per run is optimal, the length of ride is critical here.

As part of its continuing effort to assist districts with successful and efficient transportation programs, Tyler has collected comparable Route Set KPIs from a number of districts over the last

several years. The charts below reflect comparison to other New York districts. Comparison districts are, of course, renamed to protect their confidentiality.



These charts indicate that the North Rose-Wolcott routes have lower efficiency than the comparable districts in every category which, again, is indicative of the challenge represented by the larger territory and more rural nature of the district.

5.2 Bell Times

With only 1 public school building for any grade level there is little to be done with bell schedules that would make a major impact. There are 2 scenarios, however, that should be considered.

Scenario 1: Currently the K.E.E.P. runs for HS/MS students who stay late are run separately from other routes. By running a shuttle route from the HS/MS buildings to the elementary building, these students can be accommodated by the existing elementary routes with little inconvenience to the students and an increase of students per route/mile/minute. Along with some careful repackaging of runs, this could reduce the number of buses needed on a daily basis. An example of the impact such an alteration could have on the daily hours and miles per bus can be seen below and should be compared to the chart in section 3.4.

Bus #	Unloaded Hrs	Loaded Hours	Bus Hours	Unloaded Miles	Loaded Miles	Bus Miles
CLYDE	1:15	0:35	1:50	48.92	22.35	71.27
212	1:51	2:20	4:11	73.87	77.67	151.54
220	2:01	3:33	5:34	82.57	123.97	206.54
223	1:01	1:01	2:02	40.47	31.85	72.32
227	1:37	3:39	5:16	64.26	145.89	210.15
229	0:40	0:45	1:25	23.6	35.66	59.26
234	0:28	1:57	2:25	12.89	56.54	69.43
235	1:31	3:03	4:34	65.24	92.63	157.87
236	1:04	4:21	5:25	43.42	143.47	186.89
237	0:57	4:47	5:44	34.78	107.28	142.06
238	1:25	4:47	6:12	52.33	120.63	172.96
239	1:31	1:50	3:21	64.59	76.94	141.53
241	3:09	3:32	6:41	136.07	138.36	274.43
242	0:39	4:43	5:22	18.64	111.79	130.43
243	0:56	4:48	5:44	31.3	132.43	163.73
244	0:35	3:16	3:51	21.51	62.88	84.39
245	0:59	3:52	4:51	35.57	92.09	127.66
246	1:31	3:31	5:02	55.76	78.35	134.11
247	1:07	3:27	4:34	40.16	70.54	110.7
248	1:12	3:29	4:41	43.13	69.89	113.02
249	0:30	3:35	4:05	15.3	76.86	92.16
250	0:42	2:13	2:55	25.77	37.73	63.5
251	0:40	3:30	4:10	23.57	94.19	117.76
252	1:08	3:19	4:27	41.11	92.14	133.25

24	28:29	75:53	104:22	1094.83	2092.13	3186.96
----	-------	-------	--------	---------	---------	---------

Scenario 2: The option of single-tier routing is sometimes employed to good advantage at districts where there is a large territory (square miles) to be covered. With the current placement of the District’s buildings it could be implemented with the use of a hub and spoke type system creating transfer routes for students. If, as mentioned to Tyler, the district were to pursue a one-campus, one bell schedule location for all students in the future the use of transfers would not be necessary. As an example for comparison purposes, using the current high school as the one campus location, the chart below shows the miles and hours of routes of that hypothetical option.

Bus #	Unloaded Hours	Loaded Hours	Bus Hours	Unloaded Miles	Loaded Miles	Bus Miles
CLYDE	1:22	0:40	2:02	50.41	25.47	75.88
RED CREEK	0:33	1:40	2:13	17.75	37.13	54.88
SODUS	0:30	2:00	2:30	18.35	53.86	72.21
212	2:07	2:59	5:06	81.34	107.54	188.88
220	2:21	2:52	5:13	108.4	110.16	218.56
221	0:34	2:35	3:09	22.97	60.44	83.41
222	0:35	1:40	2:15	22.75	40.55	63.3
223	0:28	2:04	2:32	18.62	67.5	86.12
224	0:40	2:20	3:00	26.16	56.46	82.62
225	0:27	2:18	2:45	17.87	58.45	76.32
226	0:32	2:11	2:43	19.9	50.72	70.62
227	1:44	2:00	3:44	73.37	83.4	156.77
229	0:22	1:53	2:15	13.84	66.7	80.54
234	1:10	2:37	3:47	45.58	89.85	135.43
235	0:59	2:23	3:22	42.25	66.93	109.18
236	0:44	1:43	2:27	28.67	38.27	66.94
237	0:46	1:44	2:30	29.81	45.67	75.48
238	0:46	2:47	3:33	26.79	69.22	96.01
239	2:00	2:06	4:06	80.64	91.31	171.95
241	2:42	3:38	6:20	110.97	122.78	233.75
242	0:18	1:56	2:14	11	33.67	44.67
243	0:32	1:30	2:02	21.41	23.23	44.64
244	0:22	1:52	2:14	14.04	41.25	55.29
245	0:28	1:37	2:05	19.33	37.69	57.02
246	0:43	2:07	2:50	28.94	49.99	78.93
247	1:07	1:40	2:47	47.01	41.85	88.86
248	0:21	1:48	2:09	12.04	39.5	51.54
249	0:36	1:50	2:26	23.65	45.68	69.33
250	0:32	2:11	2:43	21.05	53.8	74.85
29	26:21	60:41	87:02	1054.91	1709.07	2763.98

With this option the current practice of picking up in-town elementary students at each home instead of group stops would be in conflict with the method of picking up older students.

6.0 Options for your Consideration

6.1 - Transport the HS/MS K.E.E.P. students home on the elementary routes.

6.2 - Examine route packaging for potential reduction in buses, keeping employee benefit package rules in mind.

6.3 - Consolidate in-town elementary stops to group stops where possible.

6.4 - Extend the current walk-to-stop distances, especially for older students, in non-hazardous walking areas.

6.5 - Require students to register for transportation. This should give a better measure of actual riders vs. eligible riders, thus allowing for more accurate run design and more efficient allocation of resources.

6.6 - Weigh the advantages and disadvantages of a one-tier busing scenario, including but not limited to the following factors:

- Higher Student per Route, Student per Mile, and Student per Minute KPIs for greater efficiency. See attachment B for comparison data.
- May need additional vehicles to transport same number of students.
- Fewer miles driven on each vehicle produces less wear & tear and can reduce cost/mile expenditures.
- Fewer driver hours may mean lower overall wages and benefits expenditure.
- Fewer driver hours can mean more difficulty retaining staff.

Attachments included:

- Attachment A – All Current Runs
- Attachment B – One Campus KPIs