## **Estimated Transportation Costs**

## Middle School Configuration – Grades 5-6 and Grades 7-8

# Prepared by Ross Haber, August 2017

The intent of this document is to provide the Buildings and Grounds Committee of Fair Lawn Public Schools with estimated transportation costs should the District split the middle schools into a grade 5-6 and grade 7-8 configuration.

The District currently provides transportation to special needs students to schools both inside and outside of the District. In addition, the District Transportation Department provides student transportation for athletics, music and other co-curricular activities. The District currently operates a fleet of 37 mixed sized vehicles. Of these 37, approximately 11 have or are nearing 15 years on the road, meaning that within the next three years these vehicles will need to be replaced. The District has 11 54 passenger buses of which 1 needs to be replaced.

The current transportation budget for the 2017-18 school year is \$ 2,997,923. The following cost estimates are based upon the assumption that the District will have to expand its fleet in order to meet the transportation needs of middle school students who will become eligible for transportation (residing 2.0 miles or greater from the school of attendance). Because a transportation efficiency study has not been done, this estimate is based on the assumption that none of the existing 54 passenger buses would be able to be used for the middle schools.

Table 1 shows the projected number of students who will need to be transported to the two schools.

**Table 1: Eligible Students** 

School	Eligible	Cap	Load
	Stds (2.0 Miles)	54	Average
TJMS	101	3	34
MMS	310	7	45
	Total Buses	10	

Table 1 shows that based upon current enrollment, 101 students would be eligible for bussing to TJMS if grades 7 and 8 are housed in the building. The District would need 3 54 passenger buses in order to ensure that students have a reasonable ride time and that they get to school on time. Although the above average load of 34 is below the rated capacity of a 54 passenger bus, the rated capacity is based upon elementary school students. Further, the length of ride times and stop locations, along with normal street traffic, construction, garbage collection, trains and

stragglers lowers the real capacity of a school bus. Three buses for 101 children is not an unreasonable estimate. Of course an alternative is a 29 passenger bus and 2 54 passenger buses. This alternative this might be less expensive initially, however, it would not allow for much student growth.

MMS, based upon current enrollment, would have 310 students eligible for transportation and require 7 buses. The reasons for not having full capacity busses are the same for MMS as for TJMS.

**Table 2: Estimated Costs of Purchasing Vehicles** 

Purchase Estimate						
No. of	Equipped	Type	Purchase	Total		
Buses			per/Veh	Cost		
10	Average	Diesel	\$90,000.00	\$900,000.00		
10	Average	Gas	\$75,000.00	\$750,000.00		

Table 2 provides an estimate of the cost for the purchase of either gas or diesel fueled 54 passenger buses. The cost range for diesel buses is a low of approximately \$81,000. per vehicle to a high of \$101,000. per vehicle. The cost range of gas fueled 54 passenger buses is \$72,000 to \$85,000. per vehicle. The median price shown in the table is for a reasonably, but not fully, equipped bus. The exact price for a bus can be determined if all of the specifications are known. For the purpose of this document these estimates should be adequate.

**Table 3: Estimated Annual Operating Costs** 

Category	Year	Year	Year	
	1-5	6-10	11-12	
<b>Operating Cost</b>	\$2,500.00	\$4,500.00	\$6,500.00	
*10	\$25,000.00	\$45,000.00	\$65,000.00	
<b>Driver Cost</b>				
Min 4 Hrs @ \$23.20				
\$92.80	\$165,744.00	\$165,744.00	\$165,744.00	
(182 Days)				
Sub-Total	\$190,744.00	\$210,744.00	\$230,744.00	
Mai	ntenance Fac	ility, Insurance	e, Other Costs	
Facility	?	?	?	
Parking/Storage	?	?	?	
Insurance	?	?	?	

Table 3 shows the estimated operating costs of those expenses which can reasonably be estimated. The First Category (Operating Costs) consists of items such as fuel, oil and other basic costs. As each vehicle ages the annual operating costs increase as more parts, such as tires and belts begin to wear. These costs also do not include depreciation. The second category is driver cost. This is based upon current salaries for part time drivers working in the District. This does not include employment taxes and other associated costs. For the two schools, a four hour shift for the drivers (2 mornings and 2 afternoons) was used for estimation purposes. This may not be enough hours to attract part time drivers. Bell schedules and conflicts may not provide an opportunity for current drivers to take up additional routes. Also, the nationwide bus driver shortage is expected to have a significant impact on the number of hours and the hourly salary rates that must be offered to be able to recruit and retain drivers. Recent *USA Today* and ABC news articles have additional information about the current nationwide bus driver shortage (https://www.usatoday.com/story/money/nation-now/2017/08/09/school-bus-companies-across-u-s-facing-driver-shortage/554681001/ and http://abcnews.go.com/Lifestyle/school-bus-driver-shortage-us-sparks-growing-concern/story?id=49222961)

Other unknown costs include leasing space in a maintenance facility. The District currently uses the municipal facility, but the addition of 10 buses may strain the capabilities of that facility. Parking and storage of the vehicles, especially long term storage during vacations and the summer, may be a logistical problem as well as adding further cost for leasing storage space. Additional fleet insurance for 10 buses will also add to the cost.

### **Contractor Services**

Contracting services in the first few years is less expensive than purchasing. The District does not incur the cost of purchasing buses and does incur the associated costs of labor, storage, maintenance and the like (all of which is built into the contract cost). Cost for contracted large buses in New Jersey is between \$70,000 and \$80,000 per year per bus. Buses are contracted through RFP's and transportation services may be obtained through the Educational Services Commission. The annual cost for transportation services for Fair Lawn would be on the high side of the cost per vehicle spectrum for several reasons. The main reason is that, with only one tier and two schools, this would not be an attractive contract for a contractor who would lose the ability to couple buses dedicated to Fair Lawn with other systems. Further, over the past few years there has been a shortage of school buses available for contract and school bus drivers in New Jersey. All of this argues against contracted services in Fair Lawn. Another issue has to do with service. As long as a District is happy with the services provided, contracts can be renewed generally in line with the annual cost of living estimates in the State. If the District is not happy with the contractor it would have to rebid and there is no limitation on what contractors can charge to a new customer.

## The estimate for contracted services for 10 buses would be in the range of \$750,000 per

**year.** While that amount is less than the total first year costs of operating purchased buses due to the purchase cost of the buses, the annual operating costs for District owned buses is the lower cost method after the initial purchase year. However, the logistics of operating, insuring and managing a larger fleet of owned buses in today's environment of bus driver shortages and heightened security requirements make owning a larger fleet operationally impractical.

#### **Other Issues**

If both schools are on the same bell schedule then the estimated need for 10 buses would not change. If the schools are tiered then it would be possible to do this with 7 buses. However, tiering the two middle schools could cause major issues for parents with students in two or more schools on different bell schedules. For parents with children in the elementary and both middle schools it would be a very difficult situation.

It should also be noted that managing transportation adds another layer of administrative costs in terms of routing, dealing with discipline problems on buses, dealing with additional driver issues, creating stop location issues and a host of other problems such as scheduling and routing conflicts at the beginning of the school year.

In conclusion, it is important to remember the District's primary objective of educating students. Every dollar spent for transportation is a dollar that is not available for enhancing the education offered to the students of Fair Lawn.