## Livonia Public Schools

## **Business Services Office**

Date: June 9, 2015

To: Randy Liepa, Ph.D., Superintendent

From: Lisa Abbey, Director of Business Services

Re: Discussion on Purchase of Buses – 2013 Bond

We would like to discuss the next purchase of buses (Phase II) at the Finance Committee meeting on Monday June 15, 2015.

As you know, we have set aside funds in the 2013 bond fund to replace buses. When we originally prepared estimates for the bond, we anticipated purchasing 61 buses, in three phases, at a total estimated cost of \$4,796,000. We have attached a spreadsheet with the detail plan for purchasing buses.

You may recall when we purchased buses in 2013 there was discussion regarding alternate fuel buses. We analyzed the costs and return on investment at that time and we recommended that we continue to purchase diesel and gasoline fueled buses, as the additional costs for the equipment was greater than the anticipated savings from lower fuel costs. At that time, the Board of Education requested that before we make the Phase II bus purchase we revisit the cost benefit analysis of alternate fuel buses.

Please note the mini special education buses are gas fueled and for the purpose of our analysis are not included in the discussion below.

We have reviewed the differences in benefits and costs between diesel, propane and natural gas fuel sources. We have attached a detailed analysis (Bus Fuel Comparison) between these options. Our estimates are based on the number of buses in the bond budget left to replace (29) and LPS historical data for diesel costs and consumptions, and estimates for propane and natural gas.

First let's discuss the natural gas option. We estimate the additional cost to purchase natural gas buses to be approximately \$28,000 per bus or \$812,000. This would require us to either, purchase fewer buses, or increase the bond fund budget for equipment. Further, the current cost per gallon of natural gas is higher than diesel or propane. Based on the above reasons, we would not recommend the purchase of natural gas fueled buses at this time.

We also compared the costs and benefits of propane fuel buses. If we rented a propane tank, there is a savings in the price per gallon and we would estimate operational savings of approximately \$36,000 per year. If the district invested in a propane tank directly at an estimated cost of \$40,000 to purchase and install, total savings in operational costs would be approximately \$56,000 per year.

However, there would be an additional cost of \$8,420 on average for each propane bus, or a total of \$244,167. If we purchased propane buses and we do not increase the bond budget for this equipment, it would mean we purchase three fewer conventional, or three fewer wheel chair lifts, or five fewer special education mini buses.

As you are aware, we have 110 buses and are only replacing 61 of the oldest buses with the resources of this bond. Please let me know if there are any questions. Nick Armelagos and I will be available at the Finance Committee to review the analysis provided.

LA/kp Attachments