## Resolution 23/2011

# **Bus Hoist Replacement**

**WHEREAS,** the Ann Arbor Transportation Authority (AATA) programmed capital funds to replace its aging and increasingly expensive to maintain vehicle lifts, and in the bidding process for that project, discovered that the capital funds allotted were insufficient to meet the lowest qualified bidder's price of \$1.4 million for this project, and

WHEREAS, new lifts would reduce the cost of maintaining vehicles, enable AATA to maintain a variety of vehicles (including articulated buses), increase the safety of the workplace, reduce possible ground pollution from aging hydraulic systems, and eliminate the present "linked" lift power system which often results in multiple lifts being incapacitated at the same time, and

**WHEREAS,** as a result of the original bidding process, the project was re-designed (with the assistance of a consulting engineer) to reduce its cost to approximately \$1 million, and an alternative capital financing plan has been developed to fund the project, therefore

**IT IS RESOLVED,** that the replacement of vehicle lifts (in accordance with the project's redesign) may proceed; with this project being financed by a combination of the remaining funds in the existing grants for this purpose, with the remainder from currently available federal formula funds not programmed for another project,

**IT IS FURTHER RESOLVED,** AATA shall enter into a contract with Spence Brothers for the amount of \$980,500 to replace the existing bus hoist and the project overseen by AATA and DLZ.

Jesse Bernstein, Chair	Charles Griffith, Secretary
July 19, 2011	July 19, 2011

# **BUS HOIST ISSUE ANALYSIS**

	ANALYZED BY:	TERRY BLACK	DATE:	7 <i>/</i> 7/11	
--	--------------	-------------	-------	-----------------	--

#### Issue:

Should AATA replace its bus hoists and expand its vehicle lifting capacity to include articulated vehicles at an estimated cost of \$1 million.

## Background:

AATA has 10 in-floor hydraulic bus lifts. Eight lifts are in desperate need of replacement (only 7 are currently operable). Lifts are essential to AATA's daily maintenance activities.

### DATA:

The rehabilitation of the bus hoist was included as one of the projects in the renovation of our facility. We completed the other projects including roof replacement, replacement of the energy management system, upgrades to the fuel tank storage monitoring system, replacement of the fueling dispensing equipment, window replacement, installation of fall protection system in maintenance garage, replacement of farebox vaulting system, renovation of maintenance offices, and security system upgrade. The rehabilitation of the storm water detention pond and bus hoist is the two remaining projects to be completed. There is \$597,082 remaining in the approved grants, which is not sufficient for the bus hoist project and detention pond rehabilitation.

Lifts are essential to the maintenance technicians' ability to maintain the fleet (necessary for preventative maintenance, brake repairs, engine repairs, transmission accessibility, etc., etc.)

The 8 lifts to be replaced are original to the building (installed in 1983) and have been cycled thousands of times over their lives.

The 8 lifts are not flush with the floor and represent tripping hazards. The maintenance cost required to continue their use now exceeds \$50,000 per year.

Power systems for older lifts are linked in series. When one lift goes down, multiple others are incapacitated. AATA is rarely able to use more than 7 lifts at once, sometimes only 4.

New lift technology provides for separate power systems for each lift so that other lifts are not affected with system failures.

Implications			
Risks	Benefits		
Increased lift failures/extended repair time for downed buses. Increased repair costs	Shortened repair times on buses.		
·	Reduced operating costs/ reduced lift repairs.		
Potential for ground pollution from older leaking hydraulic systems.	Reduced risk of potential ground pollution due to new hydraulic systems and technology.		
Increased down-time for lifts.			
	Increased flexibility to service other vehicles,		
Continued inability to utilize articulated vehicles in the bus fleet.	including articulated buses .		

### **Staff Recommendation**

Replace the current aging lifts as quickly as possible and utilize a combination of the remaining funds in the existing grants for this purpose with the remainder from currently available federal formula funds not programmed for another project.

# **Implications of Moving Forward**

The replacement of the aging and frequently failing lifts will greatly improve the efficiency of the maintenance department by enabling it to repair or inspect up to 10 vehicles at one time. The installation of new equipment will greatly reduce repair cost of lifts.