

## **Bridging the Business Office Divide: Using Basic Accounting To Communicate What Drives Transportation Costs**

Expenditures, revenues, and funding formulas are the language of the business office. Your ability to buy new buses and to get the budget you need is dependent on you being able to communicate in the language of the business office.

The information being provided comes from a session conducted at the 2007 School Transportation News Expo designed to introduce transportation personnel with some basic accounting terminology, demonstrate a simple to understand and use cost allocation technique and to address the basic accounting issues that drives transportation costs in school districts and Head Start programs.

The costs of transportation are going to continue to increase and explaining the impact of costs to key stakeholders will make the difference between making good choices when it comes to controlling transportation costs.

### **Transportation Accounting: Why is it important?**

- First question: why does transportation cost so much?
- Highlights areas of operational strength and weakness
- Facilitates comparisons with other public and private sector service providers
- Enables modeling of different service delivery strategies

Accounting for transportation involves a four-step process, with each step building on itself.

Step 1 - Identify the services provided

Step 2 - Allocate time & costs

Step 3 - Calculate service volumes

Step 4 - Calculate costs of services

**Step 1: Identify the services provided by the transportation organization, such as:**

#### **Transportation Operations**

- General & Administrative
- Busing Operations
- Dispatch
- Training
- Route Maintenance

#### **Fleet Support Operations**

- General & Administrative
- Maintenance & Repair
- Parts Management
- Vendor Management
- Fuel Management
- Fleet Management

When identifying the services, keep in mind what you want to accomplish. Activity-based accounting is recommended.

### Step 2: Allocate Staff Time to Functions

The tables provided below are examples of how to identify each function and how much time each person spends in each function. Positions will vary across school districts and Head Start programs.

**Table 1. Staff Time Spent in Each Position**

Position Code	General & Admin	Bus Operations	Dispatch	Training	Route Maint.	M&R	Parts Mgmt	Vendor Mgmt	Fuel Mgmt	Fleet Mgmt
<b>Director</b>	53%	0%	0%	0%	0%	0%	0%	0%	0%	0%
<b>Routing Super</b>	21%	0%	22%	0%	47%	0%	0%	0%	0%	0%
<b>Dispatcher</b>	0%	0%	75%	0%	0%	0%	0%	0%	0%	0%
<b>Mechanic</b>	0%	0%	0%	0%	0%	88%	0%	0%	0%	0%
<b>Mechanic</b>	0%	0%	0%	0%	0%	87%	0%	0%	0%	0%
<b>Trainer</b>	9%	59%	0%	32%	0%	0%	0%	0%	0%	0%
<b>Driver</b>	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%
<b>Driver</b>	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%

**Table 2. Allocating Costs to Transportation Functions**

Line Item	Description	Amount	Transport. Allocation	Fleet Allocation	M&R	Parts Mgmt	Vendor Mgmt	Fuel Mgmt.	Fleet Mgmt
1610	Vehicle Operation	\$2,588,296	\$2,339,777	\$248,518	\$84,691	\$21,484	\$5,410	\$40,813	\$0
1630	Bus Aides	\$313,244	\$283,167	\$30,076	\$10,250	\$2,600	\$655	\$4,939	\$0
3150	Management Services	\$6,317	\$5,711	\$607	\$207	\$52	\$13	\$100	\$0
4120	Repair Equipment	\$672	\$607	\$65	\$22	\$6	\$1	\$11	\$0
5730	Vehicle Parts	\$244,195	\$0	\$244,195	\$0	\$244,195	\$0	\$0	\$0
5790	Garage Supplies	\$4,931	\$0	\$4,931	\$0	\$0	\$0	\$0	\$0
5910	Office Supplies	\$6,791	\$6,139	\$652	\$222	\$56	\$14	\$107	\$0
5930	Supplies Warehouse	\$1,844	\$1,667	\$177	\$60	\$15	\$4	\$29	\$0
5940	Cust Electrical Supplies	\$2,284	\$2,065	\$219	\$75	\$19	\$5	\$36	\$0
7900	Misc Expenses	\$2,899	\$2,621	\$278	\$95	\$24	\$6	\$46	\$0
<b>Total Costs</b>		<b>\$6,749,329</b>	<b>\$5,125,829</b>	<b>\$1,623,500</b>	<b>\$181,804</b>	<b>\$46,120</b>	<b>\$11,613</b>	<b>\$87,612</b>	<b>\$0</b>

### Step 3: Calculating Transportation Operations Service Volumes

Step 3 involves the cost assigned to appropriate transportation functions as illustrated in the Table 3. The following process in Table 4 involves calculating the amount of transportation operations related to the services provided.

**Table 3. Service Volumes**

Service Area	Number of Students	Number of Buses	Total Miles Traveled
Service Levels	7,550	150	1, 868,975

**Table 4. Calculating Fleet Support Service Volumes**

Service Area	Maintenance & Repair	Parts Costs	Vendor Costs	Fuel Services	Fleet Mgt.
Service Levels	8,625 labor costs	\$335,847	\$21, 873	196, 824	150

### Step 4: Calculate costs of services

#### Costs of Services

Service Area	Cost Per Student	Cost Per Bus	Cost Per Mile
Total Transportation Costs	\$5,050,205	\$5,050,205	\$5,050,205
Service Levels	7,550	150	1,868,975
Cost of Service	\$673 per student	\$33,668 per bus	\$2.70 per mile

Total costs are divided by units of service to yield the per unit cost of each service

#### Cost of Services to Transport

Service Area	Maintenance & Repair	Parts Costs	Vendor Services	Fuel Services	Fleet Mgt.
Total Cost	\$449,537	\$93,450	\$17,719	\$31,423	\$9,391
Service Levels	8,625 labor costs	\$335,847	\$21, 873	196, 824	150
Cost of Service	\$52.12 per hour	28%	81%	&.16 per gallon	\$21.84 per year

Total costs are divided by units of service to yield the per unit cost of each service

To make use of this four-step process:

- Evaluate the cost of your services
- Analyze the cost impact of changing policies
- Measure efficiency and effectiveness

To determine the resources needed, take time to review and change the way you do business.

The quality and availability of transportation services to Head Start families is affected by the true cost of transporting children. For more on the true costs [select here](#).