How Are You Doing? Key Performance Indicators and Benchmarking

Using KPIs and benchmarking allows you to demonstrate the efficiency and effectiveness of your programs and their management.

By John P. Fahey

As school business officials, we all need to “know and show” that our operations are well managed. To do so, we constantly ask ourselves questions, such as “How are we doing? How do we compare with others? Are we making progress fast enough? Are we using the best practices?”

Using key performance indicators (KPIs) and benchmarking as regular parts of our management routine is an important way for us to provide high-quality services to our students. They allow us to identify problem areas in our operations, to measure our progress in correcting those areas, and to demonstrate the efficiency and effectiveness of our programs. They can provide bragging rights if we exceed the norm and support for changes if we fall short.

Simply defined, a KPI is a measure of performance. This article focuses primarily on transportation, but the principles apply equally to all areas of K–12 noninstructional operations, such as facilities and food service.

Some examples of KPIs in the pupil transportation world include runs per bus, students per bus, miles per bus, cost per mile, cost per student, and average age of the fleet. For example, we can look at the number of runs Bus A makes daily (a KPI). Analyzing the KPI allows us to establish a best practice such as, “For the 2009–2010 school year, each of our buses averaged 3.9 runs per day.” The best practice helps us evaluate or “benchmark” our performance: “I should be able to get as many runs per bus this year as I did last year.”

What and How to Measure
Our ability to accurately define the measure and consistently capture the correct data is key to creating KPIs. Using standardized and controlled measurements is essential to the quality of the results. For example, measuring on-time performance is critical in benchmarking all transportation programs. To measure on-time performance, we might first ask, “When is a bus on time?” Is it on time when the driver reports to work, when it leaves the yard, when it arrives at its first stop, or when it arrives at the school? Is there an acceptable window for arrival at school? Is the bus considered on time as long as no one calls?

In New York’s Buffalo School District, we measured our on-time performance by what we called the “out-the-gate” time. Our automated routing software gave us a specific time when the bus needed to pull out of the yard in order to make the first pickup on time. We emphasized the importance of this time and it became the focus of drivers, monitors, mechanics, and dispatchers.

The bus’s performance was measured by its adherence to these out-the-gate times. Because our routes were well timed, we knew that if the bus started promptly, it usually arrived at school at the designated time, barring unforeseen circumstances. The daily percentage of buses heading out the gate on time became the KPI. Looking at those KPIs, we determined that 97.5% was a best practice, which then became our benchmark for each day’s operation.
The most important KPI for a transportation program is runs per bus. The number of buses required ultimately drives the cost of a yellow bus home-to-school transportation program. The number of buses governs the number of bus drivers, bus monitors, mechanics, bus yards, fuel, capital investment, and insurance—all cost centers. The best way to lower the cost per unit and therefore maximize the efficiency of the program is to transport multiple groups of students per day on each bus. Thus, the fixed cost of each bus can be spread over more units, lowering many of the standard per-unit cost measurements.

In Buffalo, I closely tracked this KPI, averaging about 3.5 runs per bus, with 2,200 individual runs loaded on 630 buses. I knew I could not quite use each bus for 2 runs in the morning and 2 runs in the afternoon, which I thought should have been a reasonable goal—a best practice. Runs per bus are largely governed by bell times, student assignment plan, and program location. With an understanding of my data over time, I could provide my district leaders with accurate information and guidance about how changes in any of these factors would affect our overall transportation expenditures.

Another good example of an important KPI is the number of students picked up at their door (house pickups), especially in an urban environment. A bus must travel farther and expend more time for house pickups than for group stops. Both these factors (time and distance) result in fewer students per bus based on the greater time involved, more cost for time and fuel, and, perhaps most importantly, a longer bus ride for other students as the bus wends its way up and down side streets to make the house pickups.

The most efficient routing strategy is to gather students at group stops and allow the bus to pick up the greatest number of students within the shortest time and distance possible. Understanding my numbers on this KPI vis-à-vis my peers and my own history enabled me to have good data when I spoke with our committee on special education about bus stop assignments and their impact on the program.

How Are We Doing?

How do we know what needs to be fixed? Using KPIs and benchmarking allows us to identify problem areas in our operations: “My out-the-gate times have slipped from 98% compliant to 93% at the Johnson yard.”

How do we know if our corrective actions are working? Using KPIs and benchmarking lets us measure our progress in improving identified areas. Once we identify a key metric for our operation, we can focus on improving it. “My runs per bus decreased from last year—why and what can I do about it?”

How do we know how good a job we are doing? Using KPIs and benchmarking allows us to demonstrate the efficiency and effectiveness of our programs, showing our progress over time and in context with our peers or other industry standards. “We are spending a disproportionate percentage of our operations and maintenance budget on transportation, so we should not be adding new programs without first recognizing the transportation costs involved.”

Our daily goal as school business officials is to deliver high-quality programs that support the instructional mission with the greatest possible efficiency. Using KPIs and benchmarking is one important way to be accountable, to highlight essential areas of our operations, and to show ourselves and others the progress we are making.

John P. Fahey is a former assistant superintendent who was responsible for the Buffalo (New York) School District transportation program for 18 years. Email: john.fahey@tyiertech.com