

Models of Transportation Efficiency

Local boards of education may utilize a number of methods to increase their use of school vehicles, and, therefore, their transportation efficiency. These practices encourage the more efficient use of vehicles and cost savings.

- *Tier school opening and closing times* - School opening and closing times should be staggered in such a way as to enable the use of a single vehicle for several routes. The development of additional tiers can result in the need for fewer vehicles to service the same number of students.
- *Coordinate school calendars (Public and Nonpublic)* - Coordinate the start and end of the school year, as well as school holidays and teacher in-service days, so that school calendars for both public and nonpublic schools are consistent and uniform. This will assist school districts in better coordinating public and nonpublic school transportation, may enable districts to fill a route with both public and nonpublic school students, and may necessitate the use of fewer vehicles to transport the same number of students.
- *Provide out of district transportation through a coordinated transportation services agency* - Since the number of students attending a specific out of district school is usually fewer than the number of students attending a school within a school district, utilizing coordinated or regionalized transportation services will likely result in a higher capacity utilization of the buses transporting students to that out of district school. One route could service several districts whose students attend the same out of district school.
- *Provide services through jointures, either as a host or joiner* - When school districts form jointures to provide transportation services, the host district has the opportunity to fill what would have been empty seats on their route, and the joiner is able to provide transportation to their own students without using one of their own buses or contracting for the service while leaving some seats empty.
- *Optimizing route design* - The design of routes that service the largest numbers of students with the least amount of stops. Such routes may mix public and nonpublic school students and/or have multiple schools as destinations.
- *Design routes with multiple destinations* - When a route to a certain school passes one or more schools located along that route, the bus will be more fully utilized if children attending those other schools who live along that route can be added to the route. The bus would then stop at each of the schools along the route.

- *Mix public and nonpublic school students on the same routes* - Public and nonpublic school students living in the same neighborhood and attending schools located close to each other could be placed on the same bus route with both schools as the destination. This would alleviate the need for two separate routes following the same roadways to similar destinations, and result in fewer vehicles to service the same number of students.
- *Standardize ride-time policies for all districts participating in consolidated services* - When districts with different ride-time policies (i.e., limits on the length of time a student may ride on a bus) attempt to use the same consolidated transportation services agency, the differences in the policies place constraints on the ability of the agency to provide transportation which meets all of the varying policies. Limiting the transportation for all participants to the shortest ride-time policy of its members could result in the inability of the agency to provide transportation to any of the participants.
- *Package bids with tiered routes* - The design of bid packages which would require contractors to bid on a package of routes which have been tiered for efficiency. This practice would prevent contractors from picking and choosing the most profitable routes while failing to bid on more demanding routes or routes with a lower profit margin. The packaging of bids with tiered routes enables bulk bidding and leads to volume discounts from school bus contractors wishing to bid on the entire package.
- *Use municipal/school district joint bidding for maintenance, fuel, etc.* - Savings can be realized by combining the needs of both the municipality and school district into one bid, which would be more likely to result in volume discounts from vendors.