Integrating School Bus and Public Transportation Services in Non-Urban Communities

Implementation Guide

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Appendix D:
Contractor's Implementation Guide

Multisystems, Inc., Cambridge, MA
TransitPlus, Inc., Elizabeth, CO
Mr. Kyle Martin, Overland Park, KS
Mr. Ted Tull, Dover, DE
and IBI Group, Toronto, Ontario, Canada

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Information on this report is available from the TCRP, 2101 Constitution Ave. N.W., Washington, D.C. 20418
Telephone: 202/334-3502 Fax: 202/334-2006

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Executive Summary

Overview

TCRP Report 56 explores the coordination of student transportation and public transportation services in non-urban areas. The study included a research component and a survey to determine the scope and breadth of this type of coordination across the country. Case studies were also conducted to obtain more detailed information about communities that have successfully coordinated or integrated some aspect of student and public transportation. Although this phenomenon is not widespread, those communities that are coordinating services are doing so using a number of different strategies.

In some non-urban communities, school districts are transporting students — particularly in high school — via public transit. In other areas, the general public is being transported on school buses when the buses are not in use for student transportation. And, in a few communities, students and the general public are riding on school buses at the same time.

Efforts employed by schools and public transit agencies to coordinate their respective transportation services are not limited to operations; some school districts, public transportation agencies, and even Head Start transportation programs have coordinated support services such as maintenance and fueling. In addition, the consolidation of administrative staffs — if not the entire programs — has been achieved in a few areas and is being considered in others.

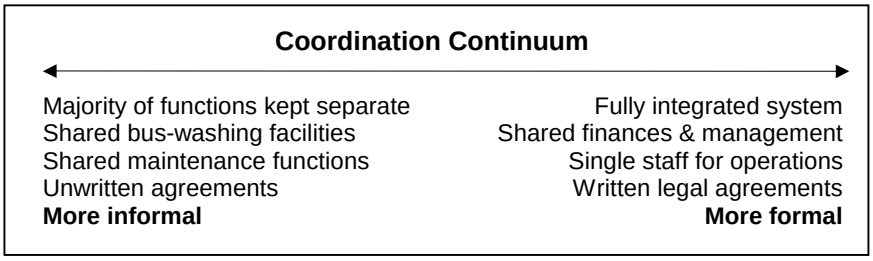
While there are success stories in the United States and in Canada, there are many barriers to accomplishing coordinated services. These include legislative and institutional barriers, restrictive funding requirements, turfism, attitudes (especially with respect to safety concerns), and operational issues.

This study identifies the types of coordination that currently exist in rural communities. It also explores in some detail the barriers and challenges to establishing coordinated services. This discussion provides insights into the complexities of coordination between student and public transportation, and also identifies how differences in regulations, funding, and vehicles impact coordination efforts. Decisions made at the federal, state, and local levels all impact a community's ability to coordinate services. A major factor in the ability of a community to blend services is the institutional willingness for — or resistance to — coordination.

The report culminates in this Implementation Guide. By providing information about how to replicate coordination in other communities, the Implementation Guide can serve as an important tool for those nonurban communities that are considering the coordination of public and pupil transportation.

Reasons to Coordinate

In recent years, the environment in which schools and public transit operators provide service has changed dramatically. The fiscal challenges and constraints faced by school districts and public transportation operators are greater than ever before, while demand for transportation services continues to be strong. This need is especially acute in rural areas, where the supply of public transportation in general is limited. The dearth of transportation leaves many rural residents unable to access health and human services and employment opportunities. In response, an increasing number of rural communities *without* public transportation services have looked to their school bus resources as a solution to filling their community transit needs, despite a battery of legislative, regulatory, and attitudinal barriers. In nonurban communities *with* separate public and pupil transportation services, a few school districts and public transit agencies are partnering to provide these services in a more coordinated manner, in order to increase the cost-effectiveness of these services and hence stretch their funding dollars.



Project Goals

The primary goal of this study is to identify successes, failures, and implementation strategies that will assist community leaders in making better decisions about how their transportation funding can translate into a maximum yield of community and student transportation.

A secondary, yet important, goal of the project is for the public transit industry and the school bus industry to learn more about one another, and to correct misconceptions that inhibit their willingness to work together for the betterment of the community.

This project included several elements:

- A literature review to identify key findings of past studies
- A survey of communities to identify instances of coordinated services
- Identification of key factors affecting service coordination/consolidation in different regulatory climates
- Case studies to identify how different communities address the key issues, tally the costs, and identify benefits
- An assessment of the real and perceived barriers to coordination
- Development of an Implementation Guide for coordinating or fully integrating services

Literature Review

A review of the findings from previous studies illustrated how little has changed in the past 20 years. The legislative concerns facing school districts and public transit systems have remained the same, as have operational issues, including vehicle availability, labor agreements, and tripper service. The institutional barriers of regulatory differences and turfism were well documented in the earlier studies, as were concerns over safety; these concerns continue today. These early studies identified institutional barriers as significant; for example, one study stated:

> The most difficult barrier to coordination is institutional. More generally stated, there is a high resistance to change

> among institutions and the persons served by these institutions….In addition, lack of a long-term commitment to coordination was apparent in most of the pilot project areas.[i]

The need for intra-agency cooperation and commitment also was noted as a prerequisite for success. As with coordination between human service transportation programs or public transit and human service transportation, successful efforts require a significant amount of staff time at the front end of the project. Researchers for an integrated transportation system in Hohenlohe, Germany, found that "the cooperation of school officials is essential; that planning for this type of service takes a lot of time and is very difficult, and involves considerable planning at the tactical level; [and] that coordination of rural and public services can only be realized if there is an institution to provide for the coordination." [ii]

Finally, there was little formal documentation of either successful or failed coordination of school bus and public transit services. Some of the failures, however, have been documented in legal battles discouraging the use of public transit for students.

Community Survey

Following the formal literature review, the project team surveyed school districts and public transit agencies about the coordination of school bus and public transit and, where applicable, Head Start transportation. Surveys were returned from across the United States and from Canada. Of the 360 surveys returned, 80 agencies indicated that they were involved in some level of coordination.

Highlights from the surveys include the following:

- Of the 80 sites coordinating service, the most popular type of coordination involved placing regular education students, Head Start, and/or agency clients on public transit vehicles. Only 30 communities used school buses to coordinate service. Of these, 10 did and 20 did not co-mingle the public with students.

- A majority of those involved in coordination were located in rural areas; 25 percent of the communities involved in coordination had populations of less than 10,000. Another 16 percent were in areas with populations between 10,000 and 30,000.

- Savings were notable for those areas coordinating service, particularly for those entities involved in formal agreements.

- Rural areas reported fewer barriers, in general, and fewer *insurmountable* barriers, in particular, than more populated communities.

An overwhelming number of those involved in coordinated services indicated that they would recommend such efforts to other communities. Respondents identified a need for cooperation and a willingness to "break down barriers" as critical to the success of such projects. Respondents also listed comprehensive driver training, extensive planning, and an eye more toward safety than financial considerations as additional keys to success.

Key Factors

The survey effort established a framework for assessing the key factors that affect the coordination / integration of student transportation service and public transportation services in non-urban areas. These key factors include the following:

1. Lack of public transportation services
2. Existence of human service agency transportation
3. Funding issues
4. Operational issues
5. Legal and regulatory issues
6. Safety issues

These six issues are explored in more detail in the final report, but will be reviewed briefly here. It is particularly important to recognize the uniqueness of each geographic area or community and to understand that each issue or each facet of an issue may have different levels of importance in different situations.

1. Lack of Public Transportation Services

Approximately 38 percent of the nation's rural residents live in areas without any public transit service, and another 28 percent live in areas in which the level of transit service is negligible, according to the Community Transportation Association of America (CTAA).

Furthermore, national statistics suggest that 1 in 4 rural households does not have an automobile, and nearly 1 in 3 rural Americans either has no car or cannot drive.[iii]

This lack of transportation is particularly acute when rural Americans are unable to travel to and from available jobs. In fact, serving these rural residents is one of the challenges of recent welfare-to-work transportation initiatives.

2. Existence of Human Service Agency Transportation

In many non-urban areas, human service agencies have become transportation operators — by necessity — in order to meet the transportation needs of their clients. These might include transportation services provided for the elderly, persons with physical and/or cognitive disabilities, persons with low income (e.g., non-emergency medical transportation for Medicaid recipients), and young children (e.g., Head Start).

Thus in many non-urban areas where human service transportation programs are the only other transportation service in existence (besides school bus transportation), there may be opportunities for coordination, especially since (1) the times that students and human service agency clients are typically transported are complementary, except, of course, for Head Start programs; (2) the school buses and human service agency vehicles are complementary by virtue of their respective sizes and degree of accessibility, and (3) many of the agencies have transportation funding available, but would prefer not to be in the transportation business.

In many non-urban areas where public and human service agency transportation service has co-existed, a long-standing challenge has been to coordinate these various resources. Indeed, as transportation needs and funding constraints have become more acute, the instances of coordination, if not integration, between non-urban public and human service agency transportation providers, have been increasing out of necessity, hence offering prospective models for coordination between non-urban public transportation providers and school transportation programs. While several of the models focus on coordinated/integrated service delivery, many do not, and instead focus on coordinating the funding of joint maintenance facilities, joint fuel procurements, the sharing of administrative space and staff, etc. Indeed, the social environment in rural areas may perhaps be more ideal for coordination than that found in urban areas.

The bottom line is that communities in non-urban areas that are looking to coordination as a prospective solution to broadening the mobility options for various segments of the population and in a more cost-efficient fashion should consider the common and complementary needs and (coordinated or uncoordinated) transportation programs of the public and private human service agencies in the community.

3. Funding Issues

Coordination is often presented as one solution to the funding constraints faced by school transportation administrators and by public transit authorities. Integrating school transportation and public transportation, many argue, is a method of stretching scarce dollars. Nonetheless, financing is a complex issue, and agencies that consider coordination of student transportation and other passenger transportation services must find similar frameworks for evaluating the cost impacts of coordinated activities.

Trends in Financing

Public transit agencies most often receive federal and state government funds; local funds often are generated through local sales taxes. State and federal funding is a key to operating public transportation programs in nonurban communities, as most rural areas do not have a tax base sufficient to fund these services without significant assistance. Most rural transportation programs also have developed a net of funding sources through coordination with human service programs. School transportation funding almost always is obtained through local or state channels.

Both public transit and student transportation are facing a need to do more with fewer dollars. School districts that provide transportation to the general school population are now required by law to provide complementary service to students who require wheelchair-accessible or medically equipped vehicles. Even though a majority of these services are funded by the federal government through percentage reimbursements, local school districts must still carry part of the financial burden. Transit agencies operating fixed-route services also are required to operate complementary paratransit services for individuals who cannot use accessible buses.

State education administrators also have made a key shift in how budget allocations are made to local school districts. For example, some states are now giving school district "block grants," or lump sums calculated on a per student rate for all expenditures, including cost of teachers, building maintenance, and transportation. As a

direct result of these block grants, transportation needs are now competing against classroom activities for this funding.

Cost Saving Potential

Transporting students on public transit vehicles is most effective when "unused capacity" on existing routes is used, resulting in a long-run incremental cost to the taxpayer that is virtually zero. Similarly, transporting the public on school buses is most effective when there is available capacity. When additional service is required, there is a measurable cost. One can see that this cost equation will vary in each individual situation. Before school administrators or transportation personnel will consider coordination as a possible financial solution, a strong business case must be made (a case that will be unique to each situation).

A related funding issue involves distributing the costs and benefits of coordination among the various levels of government. Typically, the total cost of providing school transportation and public transit is shared in varying degrees between federal, state, and local governments and school districts. Costs and savings resulting from coordination may affect the current level of grants and subsidies from the respective funding partners.

4. Operational Issues

By understanding how student and public transportation services are delivered, including differences and similarities in management and operational processes such as service standards, vehicle standards and design criteria, governance, legislative and regulatory requirements, and costs, we can better identify opportunities for enhanced coordination of these services.

The following is a list of the operational issues that must be addressed in order for coordination to succeed.

Administration – Contractual Arrangements with Operating Companies.

Arrangements to provide school bus transportation services are typically defined by relatively short-term contracts, often one to three years in duration. The contracting out of the delivery of public transportation services, on the other hand, generally is for three- to five-year periods. The greatest efficiencies in integrating school bus transportation and public transit may require time frames that encourage long-term planning by both school districts and the service provider. Further, the request for proposal/contractor procurement process leading to long-term contractual arrangements

must be fully competitive between all potential service providers, including private school bus operators and public transit providers. School district contracting processes are currently designed for private operators only.

Administration – Third Party Management

Some municipalities contract out the management of public transit services. This is not a common occurrence with school districts, which typically maintain control of administration and planning services. Some stakeholders may not believe that these arrangements would permit an objective and neutral approach to the management of public transit services where further coordination of public transit and school transportation is being considered.

Labor Arrangements

Labor arrangements with drivers, mechanics, and other staff include collective agreements governing work rules, hours, minimum call-outs, and wages. Increased coordination may lead to changes in staffing requirements. Integration may also lead to either the sharing or transferring of employees between the public transit authority and school bus operations. This type of reorganization of the workforce between the existing service providers may create a range of issues related to successor rights for existing employees, training, licensing, compensation arrangements, and so forth. Integration of school bus and public transit services may be limited by certain work rules and the existing collective agreement for employees.

Vehicle Availability

Typically, school buses are used for pupil transportation during morning and afternoon peak hours, Monday through Friday. When pupils and non-pupils are not co-mingled, these vehicles may be available for alternate populations on weekends, evenings, midday, and during the summer months. This presents other challenges ranging from the availability of drivers to the lack of air conditioning. One means of enhancing the availability of school buses when they are needed most (peak hours) is to effect a school schedule change, usually through the use of flexible bell times. Typically, school bell times occur at any time between 8:00 a.m. and 5:00 p.m. Many school districts have embraced a policy of flexible bell times within this range as a means to optimize student transportation efficiency. Under this approach, school bell times vary to allow for double and triple school bus runs. As a result, costs are reduced through the improved use of buses. Flexible bell times also can be considered as part of an integrated approach, since

coordination opportunities may result from off-peak use of transit vehicles such as the return trip use of commuter runs for student transportation or more opportunities for multiple runs of school buses.

Maintenance

While both school buses and transit buses follow similar preventative maintenance schedules, the differences in vehicle design and engine and drive train configurations present other challenges to integrating the maintenance of these two vehicle types. While diesel mechanics could work on both vehicle types, occasionally the need for an expanded parts inventory may make the costs of integrating the maintenance prohibitive. Inventory, however, may not be a significant issue since school bus operators rarely keep a large parts inventory.

Liability and Insurance

Under existing legislation, the school district is responsible for all students being transported on school buses. Essentially, from the time a student is picked up until he or she is returned to the pick-up location after school, the school district is responsible for the student's safety. Any shift in school transportation from yellow school buses to public transit may result in reduced responsibilities for the school district and increased personal and parental responsibility; however, this may not be acceptable to parents who may demand and/or expect continuation of the existing arrangements.

All groups involved in examining school transportation alternatives agree that younger students, however defined, require greater supervision and should be transported on vehicles dedicated to a point-to-point service (from near the home to school and back). Parental expectations as to when unsupervised transportation is appropriate are not clear. The use of public transit for secondary students is currently widely accepted. Establishing such criteria for the first time, or changing it, means it will likely be subjected to considerable scrutiny and question.

5. Legal and Regulatory Issues

As mentioned earlier, there are certainly a number of regulatory barriers that inhibit the coordination of services. While most of these regulatory constraints pertain to the physical design of buses used to transport school children, there are a number of additional regulatory issues, as follows:

- Many state laws restrict students to school buses (which excludes the possibility of using public transit for transporting school children if school districts are to contribute funds toward the effort)

- Many state laws only allow students, the driver, and bus monitors on board school bus vehicles

- Federal transit regulations limit the type of school transportation service that can be provided with FTA-funded vehicles, in an effort to protect private operations

- The Americans with Disabilities Act (ADA) requires that new public transit vehicles be accessible and have specified door height. Student transportation regulations do not require that every bus be accessible

Transportation for Individuals with Disabilities

Requirements for student transportation and those for other public services are different, as they are, for the most, part covered by different laws. The legal requirement that special education children must be transported to and from school if the school district is providing service to children without disabilities runs parallel to recent public transit mandates stemming from the enactment of the Americans with Disabilities Act. If a public transit agency provides fixed-route transit service, it is required by the ADA to provide complementary paratransit service (where and when the fixed-route service is provided) to persons with disabilities who, because of the disability, are unable to use the public transit service.

The growing transportation needs of children with disabilities have strained many school district budgets. Nonetheless, school districts are required by a series of laws to provide such transportation, regardless of a student's disability or the cost of service. In low-density areas, the public transit's mandate to provide complementary paratransit services whenever fixed-route services are provided has encouraged communities to eliminate fixed-route service and/or to operate only a demand-response service. Many communities struggling to provide a basic level of transit service can ill afford to operate two parallel systems, one for public transit and the other for school districts.

State Requirements

The degree of "restrictiveness" of legislation and regulations that relate to student transportation varies from state to state. After decades of school bus transportation operation, there exists a

national "crazy-quilt" of laws governing the transport of school children to and from school. Although the issue of coordinating passenger transportation services has been debated in various forms for over two decades, laws and regulations continue to be passed that create barriers between transportation for pupil, human service agency, and general public transportation services rather than strengthening the common ground among them.

6. Safety Issues

The issue of safety is central to the discussion of coordination. Safety can be an emotional issue, especially for the student transportation practitioners, school officials, and for parents. Indeed, most communities are particularly vested with school transportation because of the "cargo." As a result, prospective changes in policies and procedures that may stem from coordination planning (or anything else for that matter) are often perceived as a potential compromise to the safety of the community's school-age children.

Safety is of paramount concern to school transportation practitioners and is reflected in school bus specifications, driver screening and training, routing, the location of school bus stops, loading and unloading practices, and limiting the extent to which older and younger students ride at the same time. There are also many practitioners in the school transportation industry who believe that the co-mingling of students with the general public is not in concert with this focus on safety.

Passenger safety is also an important facet of public transportation operations. Many transit agencies have exemplary training and risk management programs, with staff dedicated to the provision of safe operations.

At the same time, with the exception of federal standards and guidelines, there appears to be a wide variance in safety programs in both the school transportation industry and the public transportation industry.

Vehicle Standards and Design Criteria

In the interest of protecting school children, the U.S. Congress mandated a unique and stringent set of safety standards for school buses. Initiated in 1977 and modified in the years since, these standards cover a wide range of areas; particularly important are passenger seating crash protection, rollover protection, warning lights, and pedestrian safety devices.

For large school buses (i.e., those with a gross vehicle weight [GVW] rating above 10,000 pounds), the federal standard offers occupant protection through a concept called "compartmentalization." In this method, school bus seats are spaced closely together to "contain" children in a cushioned compartment with only a minimum amount of space between energy-absorbing surfaces. The Department of Transportation (DOT) and National Highway Traffic Safety Administration (NHTSA) have determined that "compartmentalizing" school children in such cushioned seating areas is in fact easier, more manageable, and safer than requiring the use of lap belts in all school buses.

For small school buses (i.e., those with a GVW rating under 10,000 pounds), the federal standard requires either lap belts or lap/shoulder belts at all designated seating positions, in addition to compartmentalization. Safety belts are needed — and have been effective — in these smaller school buses because their size and weight are closer to that of passenger cars and light trucks, which minimizes the benefits of compartmentalization.

Hence, the design of school buses is based on unique safety standards ideal for school age children; at the same time, this design is not particularly conducive — and in some cases, presents an impediment and/or safety hazard — to the use of such vehicles by the general public. For example, most school buses have high steps, smaller interior dimensions, narrower aisle width, smaller seat pitch, and less headroom, and do not have air-conditioning and accessibility equipment. For some prospective (non-pupil) riders, these aspects make riding less comfortable; for others, the design may present safety concerns, as well as preclude use.

While public transit vehicles, in contrast, are designed to better accommodate adults and persons with disabilities (noting, too, that there is a much wider variance in transit vehicle design than school bus vehicle design), there are aspects of transit vehicles that are not particularly oriented to the transportation of children in the same way that school buses are. Inside the transit vehicle, there is a lack of compartmentalized seats, as well as an insufficient number of seats to guarantee each student a seat. Very little, if any, interior surface is covered with protective padding. In addition, in many designs not all seats are forward-facing. Transit vehicles are not normally equipped with lap or shoulder belts for ambulatory passengers. Transit vehicles do not have a stop arm, warning lights, and crossing arm guard to enhance the safety of children outside the vehicle. Many transit vehicles also do not have the same roll-over protection that is required for school buses. On the positive side, larger public

transit vehicles are significantly heavier than standard school buses, and are therefore likely to sustain less damage in collisions.

Although school buses and transit vehicles have developed along separate lines, an effort is being made by the California Department of Education to develop a "hybrid" vehicle that would meet the standards, laws, and regulations applicable to both school buses and transit buses and be more conducive to the transportation of the general public. The California DOE developed the specifications for this vehicle (included in Appendix D of the Implementation Guide) and has since awarded the bid to Thomas Built Buses, which is in the process of building the utility bus. It is anticipated that this will be accomplished by November 1999.

Also important is that, to date, no study has thoroughly evaluated the safety of school bus vehicles against the safety of public transit vehicles. Funds were recently approved for this type of comprehensive research in the Transportation Efficiency Act for the 21st Century (TEA-21).

Driver Qualifications, Screening, and Training

Representatives of the school transportation industry and the public transportation industry respectively acknowledge that there are many commonalties between the two industries when it comes to minimum requirements for and screening of driver applicants, as well as initial and ongoing training. For example, driver applicants in most states are required to have a commercial drivers license (CDL). Screening often includes a criminal record check, a review of the applicant's motor vehicle record, a reference a check, and a drug and alcohol test. Several states, however, also *require* fingerprinting of school bus drivers (allowing for further criminal record checks). Many of these states also maintain a statewide database of school bus drivers.

Similarly, training programs for school bus drivers and public transportation share many common elements, including defensive driving, CPR and first aid, and vehicle pre-checks and maintenance issues. School bus driver training also typically includes pupil management skills and dealing with special needs children. Meanwhile, most public transportation systems now include disability awareness and passenger assistance training, attributable in part to the ADA. In addition, both industries typically require pre-service training as well as annual or bi-annual refresher training.

While driver qualifications, screening, and training are therefore roughly commensurate between the two industries, it is also true that there is great variance in these types of safety programs in

different states, and from community to community within many states. In some of the states with less pro-active safety-related regulations and guidelines, a particular school district and/or transit property can impose higher standards. In addition, national school bus and transit management/operations contractors will often bring with them corporate safety programs.

Co-Mingling of Passengers

Many school district administrators and parents remain staunchly opposed to the co-mingling of *any* student, regardless of age, with the general public. These detractors rightly point out that many states spend millions of dollars fingerprinting and running criminal checks on anyone who comes in contact with children throughout the school day, including teachers, janitors, administrators, and drivers. Why, then, would administrators compromise this protected environment by transporting students with the general public?

Others argue that age-appropriate co-mingling should be less of a concern. While acknowledging that younger children are more vulnerable, and do require physical and social protection while being transported to school (including the separation of elementary school students from older students), they also suggest that children in high school, and perhaps junior high as well, do not necessarily need these same protections and, with proper training, could take care of themselves enough to ride safely to school with the general public on board at the same time. They point out that:

(1) in many urban communities, school district use of public transit to transport older students is fairly commonplace;

(2) many families, that are not eligible for subsidized school transportation, but still live far from school, opt to send their older children to school via public transit;

(3) many parents allow their older children to take public transit to (a) get to an after-school job (and to get home afterwards) and/or (b) enable their participation in an after-school activity in schools where there is no "late" school bus; and

(4) many parents allow their older children to ride public transit services by themselves and with friends to go the movies, and so forth.

Moreover, in many non-urban communities, there appears to be less concern about co-mingling students with the general public, whether on school buses or on public transportation vehicles. In rural

America, transporting students with the "general public" connotes that a son or daughter might be riding with a neighbor, a friend, a teacher, or another parent.

Summary of Safety Issues

It is clear that both school transportation and public transportation industries take safety seriously. At the same time, the safety practices of public transit and student transportation have developed along separate lines and are supported by separate federal and state legislation. Moreover, state regulations and guidelines that relate to safety in both industries vary widely. There is also a significant variance in safety programs from one community to another, as long-standing attitudes among the practitioners there, as well as local school boards and the community at large define what is safe and acceptable. It is also true that many families of school age children, and perhaps the community at large, are more vested in school transportation service, because of the cargo, than with the local transit system, in terms of safety (unless they are already allowing their children to use public transit).

While there are differences between the two industries, and while there are differences from state to state, most practitioners agree that effective practices for all passenger transportation services are in the best interests of the community as a whole. This common interest may provide opportunities to work together to improve the safety of all passengers.

Summary of Key Factors

The eclectic nature of the delivery and operating environment of school bus and public transportation services in nonurban communities raises several issues and challenges to a more coordinated, if not integrated, approach to the delivery of these services. An understanding of how these services are delivered, including differences and similarities in management processes, governance, legislative and regulatory requirements, and costs, is important for identifying opportunities for enhanced coordination of services. In this discussion of key issues, there are several important underlying themes:

- Coordination between — if not the integration of — student transportation services and public transportation services is a complex concept. Generalized and unsupported perceptions about coordination are not helpful to making progress in this area. Coordination activities must be tailored to local circumstances and must be specific to different age levels.

- The student, general public, and human service agency service transportation industries have developed separately over the past 50 years. Legislative and regulatory decisions have been made at the federal and state levels based on this separation of service. For example, vehicle specifications, funding, and planning processes have all developed independently.

- Many school transportation and public transportation practitioners are wary about coordination using each other's vehicles. Many school transportation practitioners believe that public transit vehicles may not be as safe for children as school buses. They also point to laws and practices which enhance the safety of children outside the vehicle that are not always present in public transit systems, as well as specialized training in pupil management that public transit drivers often do not receive. Meanwhile, public transportation practitioners argue that school buses are not designed for the transportation of adults, which results in lack of comfort, but more importantly, precludes their use by persons who require accessibility equipment and/or air-conditioning during the hotter months.

- Both industries are interested in doing things in accordance with industry norms, and each may have difficulty in looking "outside the box."

- Owing to the complexity of the issues and the emotions tied to both student and public transportation, it is easy to react to the concept of coordination based on emotion rather than informed and well thought out opinions. Emotional issues include the loss of jobs in either school transportation or in public transit, protection of private entities in the school transportation business, the identity of the community and its transit or school district, the safety of a community's children, and the need for individuals to access jobs or basic services such as supermarkets or medical services.

Case Studies

Thirteen case studies were undertaken to provide more detailed information on communities engaged in coordination activities. As shown in the table on the following page, an effort was made to achieve geographic diversity as well as a range of coordination and integration strategies.

Findings from the case studies included the following:

- **Broad-Based Community Support is Crucial.** Broad-based community support is crucial for coordination efforts to be successful. Translating this community support into political support is important, and strong leadership is key.

- **Costs Play an Important Role.** Cost savings depend upon the point of view of the entity affected, including the school district, public transit agency, human service agency, or parents. The coordination effort needs to make good business sense to at least one of these entities.

- **Safety Is an Ongoing Issue.** Safety is an ongoing issue with every kind of coordination effort, although safety concerns are very community-specific. In some areas, co-mingling concerns have seriously thwarted coordination, while in other communities co-mingling is not an issue at all.

- **Transitions Are a Challenge.** The transition from separate services to integrated services is a challenge, although agencies noted that attitudes were often more of an issue than the reality. The number one barrier noted was the reluctance of the student transportation practitioners to participate in coordination activities.

- **Legal and Regulatory Issues Shape Coordination Efforts.** The legal and regulatory environment plays a significant role in how the coordination project takes shape. The environments vary considerably from state to state.

- **Head Start Plays a Major Role.** The needs of Head Start programs also seem to have played an integral role in a number of these efforts, either by drawing the school district and public transit providers to the same table to address Head Start transportation needs or, in one case, by actually lending Head Start vehicles to establish a public transit system in the area.

- **Coordination Works.** Coordination works, particularly in rural and non-urban areas. It is effective at improving mobility and saving communities money.

Case Study Sites	Summary
Bonifay, FL Tri-County Community Council	Head Start participants transported on regular school bus routes. High school students transported on Head Start routes. Coordinating agency provides vehicles to schools for field trips. School Districts provide idle school buses to coordinating agency for group trips.
Cheraw, SC Chesterfield County Coordinating Council	School employees, school volunteers, and parents permitted to ride on regular school bus routes. Coordinating agency has requested a "proviso" to allow the transportation of general public on regular school bus routes on a space-available basis during a one-year demonstration period.
Cottonwood, AZ Cottonwood Area Transit System	School District transports some school children on general public Dial-A-Ride service. Families use Dial-A-Ride service to transport school children to after-school programs. Head Start transports pre-school participants on general public Dial-A-Ride service.
Decorah, IA Northeast Regional Transit System	School District transports some school children on general public Dial-A-Ride service. Families use general public Dial-A-Ride service to transport school children to and from school. Head Start transports pre-school participants on regular school bus routes and Dial-A-Ride service.
Gillette, WY Campbell County School District	Community groups "charter" School District yellow school buses and drivers for group trips when school buses are not needed for student transportation.
Glendale, OR Glendale-Azalea Skills Center	Coordinating agency arranges for JOBS participants to be transported to training site on regular school bus routes.
Idlewild, MI Yates Dial-A-Ride	School District uses public transportation provider, operating modified school bus vehicles, to transport school children to and from school. Services are fully integrated: school children ride along with general public riders.
Kalispell, MT Eagle Transit	School District uses public transportation service to transport special needs children to/from school. Families within walking distance use public transportation "tripper" service to transport school children.
Minot, ND Minot City Bus	School District uses public transportation provider to transport school children to and from school. Morning and afternoon routes are oriented to student transportation but are open to the public; services are fully integrated; school children ride along with general public riders.
Nampa, ID Treasure Valley Transit	Head Start agency took the lead in establishing public transportation property, also providing school buses, drivers, mechanics, and staff for system during start-up. Private school bus carrier provided maintenance and back-up vehicles and coordinated training during start-up. School District and families use public transportation service to transport some school children to/from school.
Selkirk, WA Selkirk Consolidated School District	School District took lead in establishing and operating a general public shuttle, utilizing a refitted, accessible school bus. The shuttle service connects schools, medical facilities, etc. in three towns and serves as an intra-district shuttle for students and a community transit system for the general public. Students and the general public ride on vehicles at the same time.
Thousand Palms, CA Sunline Transit Agency	School District used public transit service to transport high school students to/from school on a demonstration basis and continues to use public transit service to transport group trips. Families opt to transport high school and middle school students on public transit service. After-school programs use public transit to transport elementary school students from school to after-school program sites.
Trumbull Co., OH Trumbull Area Coordinated Transportation	Private school bus carrier assisted County in establishing county-wide coordinated system and managed, operated, and provided school bus vehicles to the system during start-up phase. The system currently focuses on the coordination of human service agency paratransit trips; plans include expanding service to provide transit and Dial-A-Ride service to the general public by 2000.

Conclusion: Coordination Can Be a Viable Alternative

There is significant potential for coordinating and integrating school and public transportation services in non-urban areas. Communities often coordinate human service transportation and public transportation services; this project has shown that school bus and public transportation coordination can fit within this coordination framework as well, especially in non-urban areas. The key is to broaden the concept of coordination so that all players in the passenger transportation industry are involved.

Although coordination of any type of transportation service is difficult, coordination between — if not the integration of — school transportation and public transportation is especially challenging. Each serves a different clientele and has different operating environments, funding sources, and vehicle requirements. Also, each type of service has developed along separate lines. These differences are supported by legislative and regulatory decisions and have resulted in unique industry practices and long-standing attitudes about what is acceptable.

The communities currently coordinating services illustrate that prevailing industry standards and perceptions may no longer be valid, particularly in rural and non-urban areas. Further, the communities successfully coordinating services show that there is no single way to coordinate. Each community's goals, needs, and resources determine the type and level of coordination that is appropriate and most effective.

The research effort further clarified that coordination of public transportation and student transportation services can provide a solution to financial constraints and limited mobility in non-urban areas, but it is not a panacea for all transportation-related issues. In some situations, coordination may not work at all. The challenge is to identify new practices that are effective and to support these practices through changes in regulations and financing rules as well as with technical assistance.

School transportation and public transportation are both significant industries in their own right. Each has a body of experience that continues to be instructive when developing new initiatives. Each also has interests to protect. It will be a key challenge for each of these industries to learn to think "out-of-the-box" in order to meet the challenges of the new century.

To support communities that wish to consider coordination, it is important to provide information on the options. Providing clear

information about what aspects of service delivery and/or support services are being coordinating, how this coordination was implemented, and the legal and regulatory limitations that exist will help to eliminate misconceptions and to simultaneously broaden our understanding of what is possible. The Implementation Guide developed for this project is an important effort toward this end.

Finally, safety is an important concern that is crucial to successful coordination. Indeed, the high level of stewardship that the student transportation practitioners and the school community feel for its passengers can preclude their objective consideration of coordinated or integrated transportation systems. Much of the school transportation practitioners' negative reaction to coordination, identified as a concern for safety, is a response to the level of care that their passengers, and especially younger students, require.

And yet many public transportation practitioners suggest that certain customer groups, such as the frail elderly and developmentally disabled individuals, might benefit significantly from similar levels of care, pointing out that readily recognizable vehicles, traffic control devices, etc., can also serve adults who require more assistance. This seems to suggest a willingness to develop a common set of safety standards for both industries that would serve to enable more opportunities for coordination.

With these thoughts in mind, there are two efforts that are worthy of the industries' attention and participation. The first is to develop a "hybrid" vehicle that meets both school safety and transit vehicle standards. The second is to standardize a common set of safety-related regulations, guidelines, and training programs for both industries and to implement these as much as possible throughout the country.

The State of California Department of Education's recent work developing a hybrid public transit/school bus vehicle — a vehicle that meets the Federal Motor Vehicle Safety Standards (FMVSS) requirements for school buses while at the same time retaining some of the comforts of the traditional transit buses — is a step in the right direction. At a reasonable cost, this new bus encourages communities to think collectively about how best to serve those passengers in need of added protections while simultaneously nurturing the notion of *community* resources and a *community* vision of mobility.

Such a vehicle would enable school districts, especially those in rural areas with little or no public transportation, to serve as the community transportation provider. In North Carolina, for example,

a new law provides for non-urban area school districts to become the lead agencies for transportation of care-dependent citizens; under this law, the school district would receive state funding of capital expenditures. This law is not only important to human service agencies, but to unaffiliated transit-dependent persons whose current mobility options are limited. The key is to recognize that the school district vehicles and operations practices have broader application than just student transportation, and with the introduction of a hybrid vehicle, the applications would be broader still.

Along with this vehicle design breakthrough, it would beneficial for public transportation agencies to include in their driver training programs and practices elements that are specific to transporting school students. With such training, non-urban communities that have both school bus service and public transportation service could consider the possible integration of service or the coordination of complementary services, both of which would be designed to reduce, if not eliminate, duplicative transportation.

The school bus is an underutilized resource which that the potential to be a vital *community* resource, especially in non-urban areas without public transportation. In such areas, the broadening of service and the conversion to a community transportation system — serving transit-dependent passengers if not the general public — with the school district either taking the lead or actively participating, would seem to be the next logical evolution. This would ensure the long-term viability of the service and would create new resources to accomplish the task. And in non-urban communities with both public transit and school bus resources, it would be beneficial the community to explore how the two services could be coordinated or integrated in such a way that the community is able to better address the unmet transportation needs of its residents.

Clearly, communities that wish to coordinate their resources will find a variety of ways to do so. In this process, however, it is important to consider coordination possibilities not just between student transportation and public transportation services but also with human service agency transportation services.

It is also important to understand that successful coordination efforts in one community may not work in another community. The effectiveness of any such effort often depends on a range of factors, including geographic area; available services and capacity; the organizational and service delivery structure of those services; state regulations and funding policies that pertain to student

transportation, general public transportation, and human service agency transportation; and the local political climate.

The ultimate key to coordinating public and student transportation services is to recognize that: (1) options to coordinate and integrate the community's transportation services do exist and have proven to be successful, sometimes under regulatory and political environments that are not conducive to such efforts; (2) community involvement and support are prerequisites to determining which option best fits the needs of the community, and to overseeing the implementation of that option; (3) the community must take a common stand and work with its state representatives to effect regulatory change or a restructuring of resource distribution *if* it believes that current regulations and policies represent a barrier to the coordination option that the community prefers; and (4) coordination efforts do take time, effort, and commitment and are often years in the making.

Endnotes

[i] Kyte, Michael, Richardson, Nancy, and McKean, Connie, "Coordination of Public Transit and School Bus Transportation Programs: Results of Pilot Projects in Six Iowa Communities" Transportation Research Record 1202. Washington, D.C.: TRB, National Research Council, 1988, page 31.

[ii] Fausch, *Integration of Public and School Transportation, Hohenlohe, Germany, Case Study*, Transportation Research Record 831.

[iii] Status Report on Public Transportation in Rural America, 1994, FTA: RTAP National Program, Washington, DC, pg. 29.

[iv] The three levels of coordination are adopted from "A Handbook for Coordinating Transportation Services," Ohio Department of Transportation, October 1993.

[v] The general format and several elements of the work plan are adopted from "A Handbook for Coordinating Transportation Services," Ohio Department of Transportation, October 1993.

Chapter 1: Introduction

1.1 Development of this Guide

This Implementation guide accompanies *TCRP Report 56*, "Integrating School Bus and Public Transportation Services in Non-Urban Communities." As part of this study, it was felt that a handbook or "how to" guide would help interested organizations explore the coordination of public and student transportation services in their communities. While this Implementation Guide was developed to be a stand-alone document, you may wish to obtain a copy of *TCRP Report 56* final report, which provides a more comprehensive discussion on the pertinent issues and a set of detailed case studies.

A survey conducted as part of the study revealed that many non-urban communities across the country have been considering and implementing ways to better coordinate public and school transportation services in order to reduce service duplication and improve their cost-efficiency in communities. In most cases, the achievements in cost-efficiency were only an interim objective, ultimately enabling the improvement or expansion of transportation service in the community. The survey also supplied examples of non-urban communities without public transportation that were able to utilize public school bus resources for non-pupil transportation, as well as examples of non-urban communities without school transportation that were able to utilize their public transportation services for student transportation. Ultimately, the common theme has been to accommodate unmet mobility needs through coordination – a theme which is particularly important to non-urban communities, where the unmet mobility needs are particularly acute. Indeed, in many non-urban communities, coordination has become a necessity rather than an option.

The overall purpose of the study was thus to better understand the potential benefits, implications, and issues related to coordination strategies, and to disseminate these findings to practitioners in both the school transportation and public transportation industries. This research provided insight into how communities develop successful coordination initiatives. Much of this experience and knowledge is summarized in the Guide and will assist you as you move forward with your own coordination effort. The Guide also offers information for community organizers working at the local level and for state- and national-level transportation providers, government officials and other stakeholders.

1.2 Understanding Coordination

In the context of this study, coordination may be defined as "school districts and public transit agencies (and possibly other entities as well) working together to improve the cost-efficiency of and/or expand transportation service." Under this definition, there are several types of coordination, which often can be grouped into the following three levels:[4]

- **Cooperation.** On one end of the coordination continuum is cooperation. In this arrangement, the two entities administer and operate two separate transportation systems, but they agree to work together to improve the services. For example, a public transit agency and a school district could jointly develop a common set of service and safety *policies* or *administrative* guidelines. (Shared policies can facilitate more extensive coordination, and administrative coordination can certainly ease the institutional barriers often encountered by groups that wish to broaden the existing coordination.) Cooperative efforts also could include joint purchasing of maintenance, fuel, insurance, supplies, driver training, advertising, etc. Another example of cooperation involves a school district utilizing the public transit system – through the purchase and distribution of passes – to transport some students to and from school. It also could include a school district not thwarting a public transit agency's special efforts to meet the home-to-school transportation needs of those families that are ineligible for subsidized school transportation.

- **Joint-Use Agreements.** In the middle of the coordination continuum are joint-use agreements. Under such agreements, the two entities share resources but maintain separate management and operations. This typically involves one entity making one or more of its resources available to the other entity, and also may involve reciprocal

arrangements. The resources made available could include vehicles, administrative or maintenance staff and facilities, and/or vehicle storage space. A good example of a joint-use agreement is when one entity "rents" a vehicle – and perhaps a driver – from the other entity at an agreed upon rate. Another example is when one entity utilizes the driver training staff of the other entity at an agreed-upon rate.

- **Integration.** At the other end of the coordination continuum is integration. When school and public transportation services are integrated, the services are consolidated and managed by one lead agency (either the public transit agency, the school district, or a new or existing coordination agency), which also assumes responsibility for operations. The lead agency may also be the sole operator, or it may contract with one or more operators to provide all or part of the consolidated public and student transportation services. The integration of administrative, financial, and operational functions almost always requires formal contracts between the entities.

1.3 Advantages of Coordination

Community Benefits

When community leaders and transportation providers are committed to coordination, the community as a whole stands to gain the most from the effort. The benefits to the community include the following:

- **Maximizing existing resources**. By coordinating public transportation and school transportation services, communities can eliminate costly duplication and save money by better utilizing vehicles. In smaller communities, these cost savings can be significant.
- **Increasing the mobility of residents.** In communities with limited transportation resources, coordination can be an excellent solution for increased mobility. The overall mobility of a community can be enhanced greatly by using existing school vehicles during off hours or by using public transit vehicles to carry students.

In addition to improved cost-efficiency and the more global goal of enhanced mobility for the residents of the community, coordination efforts that result from partnerships between transit providers and school districts can yield several other benefits. For example, working with school administrators and parents can help transit operators gain ridership, expand revenues, and generate broad-based community support, while school districts, in turn, can maximize the idle capacity of their vehicles, increase ridership, gain access to funding, and broaden the base of support for their services. These additional benefits are discussed below.

Advantages to Transit Agencies

There are substantial benefits to working with school districts. When transit agencies coordinate with school districts to carry regular education or special education students on transit or paratransit vehicles, the transit agency enjoys a number of positive results, including the following:

- **Increasing ridership and revenue**. By carrying students on existing vehicles and routes, transit agencies can increase ridership – and hence revenue – without significant cost.
- **Broadening the customer base and community support**. By serving students, transit broadens the range of community members who have a vested interest in maintaining transit services. This can be critical in terms of generating support for local matching. Moreover, students who are transported to school on public transit are more likely to use public transit when they are adults.
- **Gaining access to funding**. By cooperating with school districts, transit agencies often can receive financial support directly from school districts.

Advantages to School Districts

In areas where the school district is one of the few (if not the only) transportation provider(s), using school buses to carry the general public can be a boon to the community and can improve school district vehicle productivity, thereby broadening the base of support for services. More specifically, the benefits include the following:

- **Broadening base of support.** School districts generally are viewed exclusively as transportation providers for young passengers. By transporting both the general public and students, school

districts become an even more valuable community resource. This can be critical in terms of generating support for local taxation to support the school district.

➢ **Improve access to alternative funding streams.** In recent years, funders of all types have been looking more favorably at collaborative efforts. By working with public transit agencies and/or by taking on the responsibility for public transportation in the community, school districts can gain access to more public funding.

➢ **Improve stability of work force.** In recent years, the main problem in the school transportation industry has been a shortage of drivers. In past decades, one of the primary sources of drivers was mothers of school-age children who wanted to augment the family income but had to be home after school. The part-time requirements (e.g., four hours a day) and work hours for drivers made this job ideal. In the last decade, however, this pool of drivers has decreased significantly, as more and more mothers have secured full-time jobs. Attracting and retaining school bus drivers has been difficult, especially given the comparatively low pay scale. Coordination offers the possibility of full-time work with a potentially higher pay scale and benefits, which should lead to a more stable work force.

➢ **Maximizing idle capacity of vehicles**. When school buses are put to use during off-hours, vehicle capacity and efficiency is maximized. This can save taxpayers money while building even more community support for school district services.

1.4 Format of the Guide

Chapter 2 of the Guide provides a three-phased, eight-step **Work Plan** that will help you to decide whether or not coordination is appropriate for your community and to take action and move forward with your new effort. This step-by-step Work Plan includes a "to do list" at the beginning of each step, as well as detailed discussions about issues that may arise for each step in the process.

Chapter 3 discusses the initial and ongoing need for **Public Participation** in your effort, and actions that you may wish to undertake to ensure a comprehensive public participation process.

Chapter 4 presents different types of **Coordination Models**, using examples from project case studies, where appropriate. The models are categorized into the three types of coordination (i.e., cooperative agreements, joint-use agreements, and integration) defined in Section 1.2, above, and will be useful in determining which types of coordination are possible and potentially applicable in your community.

Some useful tools and information also are provided in the following appendixes to this Guide:

Appendix A provides a **Survey Form** that will help you to develop profiles of the transportation services in your community (Step 4 of the Work Plan).

Appendix B provides **Survey Responses** from the State Directors of Pupil Transportation who responded to questions regarding non-pupil use of publicly owned school buses.

Appendix C provides a **List of State Directors of Pupil Transportation**, should you need additional information.

Appendix D provides **Specifications for a Utility Bus**, as developed by the California Department of Transportation. As noted in the study, this design incorporates school bus equipment standards *and* accommodates public transit vehicular requirements.

Appendix E provides a **Glossary of Terms**.

Appendix F provides a list of **Additional Resources**.

Chapter 2: Work Plan

This chapter will help you to decide if coordination is appropriate for your community. If you decide to pursue coordination, the steps outlined in this chapter will assist you in taking action and in moving forward with your new effort. This work plan[5] consists of eight steps, grouped together into three phases as follows:

Phase 1: Identify Needs, Resources, and Participants

Step 1: Document Needs and Inventory Resources
Step 2: Identify Participating Parties, Gather Support, and Set Goals

Phase 2: Identify and Assess Coordination Opportunities and Decide on Approach

Step 3: Identify and Assess Coordination Alternatives
Step 4: Identify, Assess, and Address Barriers
Step 5: Decide on Approach

Phase 3: Develop Plan, Implement Service, and Evaluate Service

Step 6: Develop Service, Financial, and Implementation Plans
Step 7: Develop Marketing Plan
Step 8: Implement, Monitor, and Evaluate Service

How to Use this Work Plan

Each phase and step in the Work Plan is sequential. A "to do list" is included at the beginning of each step. This is followed by a detailed discussion about each work task and about pertinent issues that may arise when undertaking the action.

It also is important to note that seeking public input and garnering public support will be essential. This public participation process, discussed in Chapter 3, must go hand in hand with the Work Plan.

Phase 1: Identify Needs, Resources & Participants

Coordinating service can involve an extraordinary commitment from the parties involved. It is therefore wise to conduct some preliminary work in order to (1) assess the level of interest and need; (2) identify and gain the support of those parties in the community who are interested in exploring coordination; (3) establish an organizational structure for this exploration; and (4) find out more about what resources exist in the community.

This preliminary work usually begins with the following set of questions:

- Does the school district in your area provide subsidized school transportation service? Is there also a public transit agency in your area that provides transit and/or paratransit services to the general public? Are these services operated directly or are operations contractors used? Are there any other entities in the area (e.g., municipalities, human service agencies) that directly operate or contract for transportation?

- Has anybody associated with these transportation providers – or the community at large – identified an unmet transportation need?

- Has anybody associated with these transportation providers – or the community at large – identified coordination as a possible solution for addressing that unmet need?

- Do you have the support within your own organization to further explore coordination between these services? Do you know if other organizations – if not the community at large – would support such an effort?

- Do you have the time, support, and resources to lead an effort to further explore coordination in your community, or is there another person who is in a better position to champion this effort?

Once you have answered "yes" to these questions, you can move forward with the first phase of the Work Plan. If, however, you answered "no" to several of these questions, you may want to have a few more conversations with your supervisor, your school district, your public transit contact, or perhaps several other community leaders. Because the Work Plan involves a complex, time-consuming process, you will need this basic level of support and interest.

Phase 1 of the Work Plan consists of the following two steps:

Step 1: Document Needs and Inventory Resources
Step 2: Identify Participants, Establish Task Force, and Set Goals

These steps are detailed below.

Step 1: Document Needs and Inventory Resources

To Do List:

- Assess Information Needs
- Conduct Transportation Provider Survey
- Develop Profiles of Transportation Providers and Funding Source

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Assess Information Needs

You first should attempt to quantify the level of transportation need in your community. For example, you may know from personal experience that someone in your community is having trouble getting to and from work or that an elderly resident is having difficulty traveling to a doctor's appointment on her own. Without hard evidence of this need, though, it will be difficult for you to obtain support for your transportation initiative.

This initial assessment can be completed formally, through a survey, or less formally, through conversations. Either way, the following components should be reviewed and, where possible, quantified for each of the major transportation providers:

- **Unmet needs.** Are there transportation needs that each transportation provider is unable to meet? If possible, try to quantify this unmet need by determining the number of rides not being serviced.

- **Insufficient budget.** Is the inability to accommodate the demand due to under-funding and/or costly operations? What sources of federal, state, and local revenue fund each program, and at what level? What are the unit costs (i.e., per trip, per hour, per mile)? Have any of the transportation providers undertaken any efforts to seek more funding or to improve the cost efficiency of the service? (Be sure to document all costs, including hidden costs such as shared personnel or insurance covered under a master policy.)

- **Limited fleet size and vehicle capacity.** Do the transportation providers have enough vehicles to transport those who need service? Are the vehicles large enough?

- **Inaccessible vehicles.** Do the transportation providers have enough accessible vehicles to accommodate the growing number of persons who require accessible vehicles? Do these providers need more accessible vehicles to provide adequate service?

- **Excessive travel time.** Are some riders forced to endure excessive travel times? If yes, is this because you live in a rural community or is it because the demand for service is exceeding the supply of vehicles?

- **Insufficient equipment replacement.** Is funding for the replacement of vehicles and other capital equipment insufficient in the area, either due to the ineligibility of grant funds or the lack of local matching funds?

➢ **Insufficient or unstable work force.** Are the transportation providers able to attract and retain drivers? What controllable factors (e.g., internal wage scales and benefits, work shifts) and uncontrollable factors (e.g., wage scales and benefits of other transportation carriers) affect driver attrition?

➢ **Under-utilization of equipment.** Are transportation providers having difficulty justifying vehicle purchases because of the under-utilization of equipment? Are vehicles used only during certain days and service hours? Do these times coincide among the transportation providers or are they complementary?

Inventory Transportation Providers

Perhaps the best method for answering these questions is to conduct a survey of local transportation service providers. Included in **Appendix A** is a sample questionnaire that you can modify, as needed, and use to survey transportation providers in your area.

The survey has five sections. The first section elicits general information about the organization. The second section elicits information about the transportation program, including rider and trip purpose restrictions, funding source restrictions, details of service provision, ridership, costs, and funding. The third section elicits information about the actual operation of service (e.g., number of drivers, vehicles, vehicle utilization). The fourth section inquires about unmet needs. The fifth and last section draws out perceptions about the organization's willingness (or unwillingness) to consider specific coordination strategies and the organization's perceived obstacles to such efforts.

Incomplete or unreturned surveys should be followed up by telephone or by in-person visits, as needed, to gain a full understanding of each provider's service or program. Once you obtain this information, you will be able to better assess the gaps in service in your community and to identify potential partners and transportation solutions.

Other potential sources of data include your local chamber of commerce, your state legislature, your local or regional planning agency, and your local or regional economic development council. Each of these organizations probably collects demographic data on a yearly basis; some compile demographic and transportation statistics even more frequently. The U.S. Census data also may be of assistance to you, although figures are only generated every 10 years and may be out of date.

Develop Profiles of Each Transportation Provider and Funding Source

You should compile the responses to the survey and follow-up efforts into a profile for each provider. An outline of each profile is presented on the following page. This profile should include a quantification of unmet needs as reported by the transportation providers, existing instances of coordination, and factors such as legal mandates, external/internal policies, funding constraints, and perceptions about coordination that may affect the development of coordination strategies. Especially important to the profile of pupil transportation are (1) any state laws that specify who must or may be transported; (2) the curricular and extra-curricular use of school buses; (3) the method for calculating state funding (for transportation) to school districts; (4) vehicle standards; (5) school bus driver licensing and training standards; (6) school bus routing standards and operating policies (e.g., stopping at railroad crossings); (7) vehicle purchasing procedures; (8) service contracts; and (9) insurance standards, among many others. Once you have drafted each profile, it might be best to submit each draft to the respective provider for verification.

Outline of Transportation Provider Profile

Service Description

- Service type and mode of service delivery (e.g., direct and/or contracted)
- Route (description and map) and/or service area
- Service days and hours
- Fare or donation policy
- Other key policies (e.g., advance notification, subscription trips)

Rider Characteristics

- Rider eligibility
- Number of registered customers

Ridership and Service Characteristics

- Ridership
- Ridership by rider eligibility category
- Vehicle hours and vehicle miles
- Calculation of service performance measures (e.g., load factors, productivity)
- Key destinations and facilities served
- Unmet needs

Fleet and Facilities

- Fleet size and characteristics (e.g., make and model year, seating capacity, accessibility equipment, life-to-date mileage, expected retirement date)
- Insurance requirements
- Seasonal and daily fleet usage by time of day
- Description of facilities (e.g., administrative, maintenance, fueling, vehicle storage)
- Hardware/software and other major office equipment

Staffing and Training

- Staffing levels and responsibilities (to include required skills/certifications/training)
- Union rules (e.g., collective bargaining agreements)
- Training programs and trainers

Purchasing

- Current methods/constraints (e.g., operations, vehicles, fuel, maintenance, parts, insurance, drug testing, eligibility determination)
- Potential obstacles to joint/aggregate purchasing

Revenues and Costs

- Sources and levels of funding
- Line-item cost schedule
- Calculation of unit costs and revenues
- Identification of additional revenue sources

Mandates/Constraints

- Legal mandates affecting transportation
- Constraints associated with outside sources (e.g., funding) and internal policies

Coordination Issues

- Level of existing coordination with other transportation services
- Perceptions regarding barriers to coordination strategies

Step 2: Identify Participants, Establish Task Force, Set Goals

To Do List:

- ➢ Identify Possible Participants
- ➢ Establish Task Force
- ➢ Set Service Goals and Objectives

Identify Possible Participants

Once you have established needs and interest, it is a good idea to involve the key transportation providers in your effort and to expand the number of stakeholders (i.e., persons and organizations with a vested interest in seeing your coordination effort succeed). Obviously, in most coordination projects of this type, either the school district or the public transit agency is the cornerstone of the effort. However, the more people and/or agencies that support your work, the more effective you will be in addressing the issues, barriers, and concerns that may arise later.

To broaden your list, you may want to include representatives from other public and private agencies that provide or purchase transportation for their clients or that might benefit from clients having increased mobility options. Many of these individuals can be identified from the survey response. You could also ask each survey respondent to identify other individuals who may wish to participate. You also may wish to involve local elected officials, and possibly state officials as well, as their support may be critical in the future. Local business leaders (e.g. from the local Chamber of Commerce or from larger employers) may also have an interest in participating in your effort.

Establish Task Force

The next step in the process is to hold organizational meetings at which to request assistance and support and to strategize for future steps. Initially, you may choose to approach people on your contact list by letter or by telephone. Regardless, the important objective of this step is to establish a task force to explore coordination further.

In each successful example of public transportation and school transportation coordination, there has been an organization – or an individual within the organization – who has served as the champion for the effort. At the same time, broad support has been critical to successful coordination. Therefore, it is suggested that one organization and one individual within that organization take the lead, and that a task force or steering committee be established to guide the effort and provide support.

The Task Force can be established as a formal or an informal group. "An informal arrangement is one where people agree to participate either orally or in a letter. Informal arrangements are appropriate when decision-making rests with management and when the exchange of money is not involved. Formal arrangements are necessary when board actions are required or if a contract needs to be executed and if money is to change hands."[2] Formal arrangements, such as an Inter-Agency Transportation Coordination Council, are sometimes advantageous in that they force an organization to take a stand, often in the form of a Memorandum of Understanding which is a prerequisite to formal memberships in the council. Such councils also often have a mission statement, by-laws, membership dues and categories, etc. Whether or not to establish a formal or an informal Task Force is a question best answered by your experience and judgment and by the number, type, and insights of the other participants. With an informal approach, it is important to involve all the participants in a discussion and to establish a clear-cut decision-making process.

Set Service Goals and Objectives

One of the first assignments for the Task Force will be to develop a formal set of goals and objectives for service coordination. At a minimum, goal statements should directly relate to the needs which have been established in Step 1. For example, one overarching goal could be improved mobility in the community. Secondary goals could include providing transportation service to students that would enable them to participate in after-school activities, and to provide transportation that would allow welfare-to-work participants to access a training center.

In your goal statements, you may wish to address the following for each type of service, as appropriate:

- Unmet needs of target populations

- Service area coverage (e.g., regional accessibility, accessibility to certain facilities/areas)
- Service hours and days
- Type of service
- Vehicle type
- Accessibility of service
- Fare structure and level
- Local commitment

For each goal statement, you should establish quantifiable objectives. The objectives should be developed as measurable indicators that will serve as the yardstick for goal attainment and should be measurable from standard data sources.

Phase 2: Identify and Assess Coordination Alternatives, and Decide on Approach

The second phase of the Work Plan involves three steps:

Step 3: Identify and Assess Coordination Alternatives
Step 4: Identify and Assess Barriers
Step 5: Decide on Approach

Step 3 will not only involve developing the type of coordination (i.e., cooperation, joint-use arrangements, or integration) but also the management/organizational structure that supports the coordination effort. To help you, we have included different "models" of coordination in Chapter 4, with examples drawn from the case studies conducted as part of the Study, where appropriate. Step 3 also involves evaluating the different approaches in light of the goals and objectives previously established in Step 2.

Step 4 involves the identification and assessment of prospective barriers and other factors that may thwart or limit your effort. The discussion is categorized into the following topical areas: legal and regulatory requirements, funding considerations, safety issues, operational issues, and personnel issues.

Step 5 details the process involved in achieving a consensus on which approach to pursue.

These three steps are discussed below.

Step 3: Identify and Assess Coordination Alternatives

To Do List:

➢ Identify Alternative Coordination Approaches
➢ Identify Lead Agency for Each Approach
➢ Assess Alternative Approaches; Identify Approaches with Greatest Potential

Identify Alternative Coordination Approaches

This step involves identifying alternative ways in which your organization can coordinate its transportation service(s) with those of other organizations that provide transportation. The development of alternative approaches has two components: (1) what aspects or functions of service delivery are to be coordinated; and (2) how and through what structure these are to be coordinated.

There are a number of different functions common to both school transportation and public transportation. Different ways in which these functions can be coordinated are listed below. They are listed hierarchically from lower levels of complexity to higher levels of consolidation, and grouped by the three major types of coordination (i.e., cooperation, joint-use sharing, and integration) defined in Chapter 1. Examples of several of these coordination efforts in non-urban communities are presented in Chapter 4.

Examples of Cooperative Arrangements

➢ **Information Sharing**. The sharing of information related to all aspects of funding, management, and operations.

➢ **Coordinated Planning.** This might involve, for example, a school district's pupil transportation

director providing public transportation planners with information regarding when and where public transportation services could meet certain student transportation needs. This could involve the needs of students who are ineligible for subsidized school bus transportation or who want to utilize the public transit system after taking part in after-school activities or to get to an after-school job. This might also involve the joint siting of a public transit stop on or near school grounds and/or suggesting times in which the public transit agency could provide tripper service. Coordinated planning could involve the development of a common set of safety standards, a common set of policies and procedures, routes and bus stops, etc., thereby paving the way for higher levels of coordination in the future.

➢ **Purchase and Distribution of Transit Passes.** A school district may opt to utilize the existing public service to transport some of its students by purchasing and distributing transit passes to them.

➢ **Joint Grant Applications.** Public transit agencies and school districts could co-sponsor an application for state or federal funds that would address both public and school transportation needs.

➢ **Joint Development of Vehicle Specifications.** If there were a vehicle that accommodated both the needs of the general public and the guidelines for school buses, a community would have much more flexibility in accommodating the mobility needs of its residents and schools. (The specifications for such a vehicle are presented in Appendix D.)

➢ **Joint Procurement.** As mentioned above, the school district and the public transit agency could jointly procure buses with common specifications, as well as the maintenance parts for these vehicles. They also could jointly procure a maintenance contractor, fuel contractor, insurance, supplies, driver training, and advertising.

Examples of Joint-Use Sharing

➢ **Joint Use of Staff.** This would involve one entity borrowing staff from another entity for a fee. For example, a public transit agency may wish to utilize a school district's school bus trainers to better understand the guidelines the school district follows for loading and unloading pupils.

➢ **Joint Use of Facilities.** This could involve a public transit agency leasing office space from a school district, or a school district leasing storage space from a public transit agency.

➢ **Joint Use of Vehicles.** This would involve leasing vehicles or chartering a vehicle and driver when they are not being used for their primary purpose. This could involve a transit agency leasing/chartering a school bus or a school district chartering a transit bus, for example, to handle a one-time or regularly scheduled group trip that cannot be accommodated with the regular fleet.

Examples of Integration

➢ **Integrated Maintenance**. This might involve housing the maintenance and vehicle storage functions for both services in one facility and using the same maintenance staff to maintain either two sets of vehicles or a common set of vehicles.

➢ **Integrated Operations**. This would involve housing all aspects of operations under one roof. Thus, the routing, scheduling, dispatching, and operations functions would be consolidated. Under this approach, student transportation and public transportation service routes could remain separate. Alternatively, these routes could be consolidated, permitting the co-mingling of students with the general public.

➢ **Integrated Administration**. All personnel and functions associated with school transportation and public transportation would be housed within one organization.

The set of coordination approaches that you develop should match your community's needs and goals. Most communities in non-urban areas will likely fall into one of the following two categories:

➢ **School bus transportation is provided by the school district (or a school bus contractor), *and* public transportation is provided by the public transit agency (or a contractor)**

➢ **School bus transportation is provided, but there is no public transportation service**

If your community falls into the first category, there will likely be ample opportunities for cooperative and even joint-use sharing efforts. One type of cooperation that could yield significant results for a community of this type would be to better coordinate the routing and scheduling of the two services so that there is less duplication (i.e., the public transit service could address the travel needs of both the general public and students in its current service area, and the school district could provide school bus service elsewhere in the community).

Meanwhile, opportunities for joint-use sharing will depend on staff/vehicle/resource utilization trends and the degree to which their availability is complementary. For example, if your potential partner can offer certain resources that you require to meet your existing need, then joint-use sharing may be a wise course of action.

Finally, the degree to which you might consider integration approaches will likely depend on the degree of need. In other words, you may live in a community in which the school district and public transit agency could coordinate in several lower-level ways to *fully* address the community's fiscal and mobility needs. However, if these needs exceed the prospective or actual results of the lower-level coordination efforts, then higher-level consolidation should be considered.

On the other hand, if your community falls into the second category (i.e., it has no public transportation service), implementing a parallel public transit service would seem somewhat duplicative. Rather, you may consider an integrated system through an expansion of your existing school bus transportation service.

Legal restrictions, local politics, and other considerations (see Step 4) will obviously influence your final decision about the type of coordination that is best suited to your community. Nonetheless, it is important that you and the Task Force develop at least a few different, applicable coordination approaches for your community.

Identify Lead Agency and Management Structure for Each Approach

For each approach, it is important that you identify the organization that will be taking the lead in the coordination effort. In the lower-level coordination efforts (i.e., cooperative agreements and joint-use sharing), the participating entities (i.e., school bus district and public transit agency) will obviously both be involved. For any given effort, either entity may wish to take the lead or, alternatively, a neutral member of the Task Force could serve this purpose.

For higher levels of coordination, where one or more functions are integrated, the consolidated services by definition are under one roof. That roof could belong to a school district; a public transit agency; a municipal or county government; an existing private, non-profit organization that is vested with the coordination function; or a private, non-profit organization that is formed for this specific purpose. In addition, under almost any of these organizations, the staff responsible for this coordination effort could be in-house staff. Alternatively, a professional for-profit management firm could be contracted by the lead agency or by a consortium of the agencies to undertake this function. Similarly, in the case of integrated operations, the buses could be operated by drivers employed by the lead agency, consortium, or management contractor, and/or by a common set of carriers retained by the lead agency, consortium, or management contractor.

In deciding who should take the lead on a particular approach, you and the Task Force need to discuss and resolve the following issues:

➢ **Jurisdictional Responsibilities.** Where do the geographic, administrative, and legal jurisdictions begin and end for the school district, the transit agency, and other participating organizations?

➢ **Responsibility for Students.** Who will bear responsibility (liability) for the students while they are being transported? Once this central issue has been established, responsibility for insurance becomes clearer.

➢ **Local/State/National Liaison.** Who will take the lead in contacting local officials? Who will coordinate discussions with state Departments of Transportation and/or State Directors of Pupil Transportation? Finally, who will act as a liaison with federal officials if such communication becomes necessary?

Last, under any level of coordination, it is important that the community, as represented by the Task Force and/or an advisory body of consumers, provides guidance and input to the lead agency.

Assess Alternative Approaches; Identify Approaches with Greatest Potential

To properly assess each alternative, you will need to identify the following:

- The type of coordination activity
- The coordination role and responsibilities of each existing organization
- Necessary changes to administration, management, or operations
- Estimated revenue and cost impacts
- Prospective advantages and disadvantages that accrue to each organization and each target market segment, in comparison to the status quo

It is especially important that you attempt to (1) estimate the resulting cost savings that accrue to each participant and/or the amount of additional service (in number of trips or service hours, for example) that would be provided, and (2) identify additional advantages and disadvantages, including new mobility options and/or improvements in service quality, that would be made available. Otherwise, you should identify whether each approach contributed toward, or is concert with, the goals that you and the Task Force established in Step 2. In addition, you should attempt to quantify goal achievement by comparing the estimates above with the objectives that you and the Task Force established in Step 2.

Your assessments may reveal that certain coordination strategies may actually be counter-productive for a particular organization. For example, such a strategy may lower overall unit costs *collectively* among the participants, but it may actually increase costs for one individual participant. You also might find that coordinating school and public transportation might not save you money. This might happen, for instance, when there is a school transportation funding formula that does not address the use of public transportation for this purpose; in such a case, you might find that the cost savings that result from using public transit are outweighed by the reduced funding, noting that the additional farebox revenue that accrues to the public transit agency also must be considered.

Once the approaches have been assessed, you should narrow down the alternatives to a few coordination strategies based on their potential to achieve the identified goals. In Step 4, the feasibility or implementability of these candidates will be assessed in light of the legal, regulatory, institutional, operational, and safety considerations.

Step 4: Identify and Assess Obstacles

To Do List:

- Identify and Assess Legal and Regulatory Issues
- Identify and Assess Funding Issues
- Identify and Assess Safety Issues
- Identify and Assess Operational Issues
- Identify and Assess Organizational Issues
- Identify and Assess Liability and Insurance Issues

Identify and Assess Legal and Regulatory Issues

There are a number of regulatory barriers that inhibit certain types of coordination. For example, several states have regulations that prohibit or limit the use of publicly owned school buses for non-pupil transportation. These regulations are discussed briefly below.

- **Some states prohibit non-pupil use of publicly owned school buses.** In some states, there are regulations that limit the use of publicly owned school buses to student transportation. In these states, school buses cannot be used for other purposes, including charters, even when they are not transporting students. These regulations also

would appear to prohibit the transportation of non-students on regular school bus routes operated with publicly owned school buses.

- **Some states allow non-pupil use of publicly owned school buses, but on a limited basis.** In other states, the use of publicly owned school buses is allowed; however, there may be caveats relating to who may use the vehicles (e.g., non-profit organizations), when the vehicles may be used (e.g., non-pupil use cannot interfere with scheduled or projected student transportation), fees, proof of insurance, liability waivers, and usage/mileage limits.

- **Some states allow approved adults to ride on regular school bus routes.** Some states allow approved adults such as school employees, monitors, volunteers, and parents to ride on regular school routes.

- **Some states restrict school transportation funding to school bus transportation.** The intent of these regulations is to encourage the use of school buses for subsidized school transportation; these regulations, however, do give a school district in these states the opportunity – albeit an unfunded one – to transport some or all students in a different manner.

If you are considering the use of school buses in your coordination effort, you may wish to contact your State Director of Pupil Transportation Services to determine if any of these regulations apply to your state. To help you get started, Appendix B of this guide presents the results of a survey of each State Director that was undertaken as part of this study. The survey asked about state laws and regulations that restrict or limit the use of school buses for non-pupil transportation. Appendix C of this guide provides the address and telephone number of each State Director.

In addition to state laws, there is at least one federal law that may inhibit the use of non-accessible school buses for public transit. The Americans with Disabilities Act (ADA) requires that new transit vehicles be accessible. According to the ADA, all new vehicles purchased for fixed-route transit service must be accessible. While *used* vehicles purchased for a fixed-route transit service are not required to be accessible, a transit agency must demonstrate that it undertook a nationwide search and determined that there were no comparable accessible vehicles available. This requirement may prohibit use of non-accessible school buses for fixed-route public transit service.

If you and your Task Force are considering using the public transit system for home-to-school transportation, Federal Transit Administration regulations specify that (1) such service must be part of the transit system's scheduled service and must be available to the general public, and (2) the use of federal funding for the service cannot be to the detriment of private carriers.

Other federal regulations that apply to the transportation of persons and pupils with disabilities are included in the Americans with Disabilities Act and the Individuals with Disabilities Education Act (IDEA), respectively. The significance of these laws relative to coordination approaches is discussed in the *TCRP Report 56.*

As mentioned above, Appendix B of this Guide contains a number of the laws and regulations that may be in effect in your state. There also are other key individuals who you should contact to determine whether or not the type of coordination you are proposing is legal, as follows:

- **State Director of Pupil Transportation**. This person is knowledgeable about the laws and regulations in your state that govern student transportation and non-pupil use of publicly owned school buses. The address and telephone number of each Director is provided in Appendix C.

- **Director of Public Transportation, State Department of Transportation**. This person is knowledgeable about the laws and regulations that pertain to the funding and operation of public transportation in your state.

- **Attorney for the State Legislature**. This person is often exceptionally well versed in the laws and regulations that govern a particular state. Because the relationship between school bus transportation providers and public transit agencies can be very politicized, it is often a good idea to call the Attorney for the State Legislature to confirm what you have learned from other sources.

After you have identified the relevant laws and regulations, you must confirm that the coordination approaches under consideration adhere to these regulations. This should involve obtaining written documentation confirming the legality of your operation, especially if there is a public misconception about this legality.

Identify and Assess Funding Issues

There are several potential funding barriers pertaining to coordination. Following is a discussion of the potential barriers associated with school transportation funding.

- State funding of school buses may be accompanied by policies that prohibit or limit the use of these school buses for non-pupil transportation, as discussed above.

- Coordination efforts that result in a reduction of duplicative (existing) service – whether it is a reduction in school bus service and/or a reduction in public transit service – could result in less funding. For example, school bus mileage is often a criterion used in determining funding. Therefore, if school bus mileage is reduced because the school district opts to transport students on public transit *and* there is no state policy on funding transit passes, school transportation revenue from the state could be reduced. Thus, the collective reduction in costs must be weighed against the collective funding to see if there is a net savings, especially if this is one of the Task Force's goals.

- In coordination efforts that involve the creation of an integrated transportation service in a community where only school transportation currently exists, state school transportation funding could be jeopardized depending on (1) the type of vehicles used (i.e., transit vs. school bus), (2) who owns the vehicles (i.e., the state, school district, or transit agency), and (3) what criteria are considered in the funding formula.

The first step in assessing the financial implications of coordinating service is to identify the sources, levels, determinants, and conditions of local, state, and federal funding for the services that are being coordinated; you will have already completed this task in Step 2. In reviewing this information, take note of (1) the criteria used to determine funding and/or whether the level of funding is likely to increase, decrease, or remain unchanged in the foreseeable future; (2) whether or not each funding source can be applied to operating or capital expenses; and (3) whether or not certain funding can be considered as local matches for other revenue sources.

The next step is to determine the start-up and on-going annual costs of each approach. These expenses include administration (labor, direct expenses), driver labor wages, maintenance (labor, parts), fuel, insurance, vehicles, vehicle-related (facilities, accessibility features), office equipment, and other capital costs. Interest on debt is another, often hidden, capital expense. You should then compare your total revenue with the total estimated cost of each coordination approach to determine whether you will need additional funding for start-up and/or to sustain your effort.

If additional funding is needed for start-up, it may be possible to obtain this funding from the current sources, especially if you show that this additional funding will be "paid back" many times over by the prospective savings. You also could look to a number of other funding sources, as listed below:

- **Community Reinvestment Act (CRA) Funds.** CRA grants are administered through financial institutions, so you should talk to your local bank for more information.

- **Revolving Loan Funds.** These funds promote economic development and infrastructure improvement. Usually, eligible projects include the acquisition of computer and communications equipment; the option, purchase, and development of land for transit facilities; and making existing services and facilities accessible.

- **State and Local Resources.** State and local funding can be derived from fuel taxes, lotteries/casino tax revenue, state/local sales, license plate fees, and special taxes.

➢ **Private Sector Resources.** You could apply for foundation grants, seek business sponsorships, sell advertising space on vehicles, lease facilities and services to outside businesses, develop community partnerships, and hold local fund-raisers.

Also keep in mind that a broader-based coordination effort, involving one or more human service agency transportation programs in addition to public transportation and school transportation, could produce economies of scale sufficient to solve the funding shortfall. At the same time, bringing additional organizations (and funding sources) into the mix may lead to additional complexities in service delivery; thus, it is important to weigh the financial advantages against any prospective disadvantages.

Identify and Assess Safety Issues

In considering coordination approaches, it is important to address real or perceived concerns regarding the safety of the riders and, in particular, the students. In this study, safety issues fell into topical areas relevant to (1) vehicle type, (2) driver qualifications, screening, and training, (3) co-mingling, and (4) operations. You should assess the extent to which the Task Force members are concerned about these issues, as their concerns are probably reflective of the concerns of parents, school officials, and the community at large.

➢ **Vehicle Type.** Most of the safety-related concerns will likely center on the type of vehicle to be used. If school children are to be transported on the public transportation system and the vehicles to be used do not comply with school bus guidelines, detractors may point out that most transit vehicles (1) do not have enough seats to guarantee that their children will get a seat; (2) do not normally have compartmentalized, padded seating and/or safety belts; (3) do not have a stop arm, warning lights, and crossing arm; and (4) do not have the level of roll-over protection that is required for school buses. On the positive side, larger public transit vehicles are significantly heavier than standard school buses and are therefore likely to sustain less damage in collisions. On the other hand, if adults are to be transported on conventional school buses, detractors may point out there may be safety concerns regarding lack of air conditioning as well as other design issues, such as high steps and lack of accessibility equipment, that may preclude use by those adults who have the greatest need for more mobility options.

You may find that the Task Force is not concerned about the vehicle type. As evidenced by many of the case studies, such concerns were not an issue for several communities, especially those that previously did not have both school transportation and public transportation services. If you do reach an impasse, however, a successful compromise for other communities has been to retrofit an air-conditioned school bus with a lift and tie-down position. When available, the "utility bus" (see Appendix E) will likely provide an even more satisfactory compromise.

➢ **Driver Qualifications, Screening, and Training.** Representatives of the school transportation industry and the public transportation industry acknowledge that there are many commonalties between the two industries when it comes to minimum requirements for and screening of driver applicants, as well as initial and ongoing training. For example, driver applicants in most states are required to have a commercial driver's license (CDL). Screening often includes a criminal record check, a review of the applicant's motor vehicle record, a reference check, and a drug and alcohol test. Several states, however, also *require* fingerprinting of school bus drivers (allowing for further criminal record checks). Many of these states also often maintain a statewide database of school bus drivers. Perhaps the best course of action would be to check with the local School District Transportation Director or the State Director of Pupil Transportation Services in order to identify the minimum requirements for school bus drivers, and with the local transit agency to identify its minimum requirements for transit drivers. If the two sets of requirements are different, coordination efforts may be thwarted depending on whether the school district or transit agency is taking the operational lead and which organization has more stringent requirements. Perhaps the best approach would be for each organization to "upgrade" its requirements to a collective, mutually acceptable set of requirements.

Similarly, training programs for school bus drivers and public transportation share many common elements, including defensive driving, CPR, and first aid training. School bus driver training also typically includes skills for pupil management and for dealing with special needs children, while most public transportation systems now include disability awareness and passenger assistance training. In addition, both industries typically require pre-service training as well as annual or bi-annual refresher training. The differences in training requirements and practices between the local school district and the local transit agency in your community may be very minor. If not, the Task Force should consider adopting driver screening and training programs and practices that meet established state requirements but are otherwise specific to both industries.

Most school district training offices have abundant training materials (e.g., films, booklets, handouts, etc.) The parent-teacher organizations, state and local safety councils, Governors Office of Highway Safety, the American Academy of Pediatrics, and school bus manufacturers also have pupil safety materials available. Pupil transportation trade journals often offer information that can be duplicated. Also, there are many avenues of films, coloring books, and other training materials available from commercial entities that specialize in pupil transportation training materials. The National Safety Council, the National Association of State Directors of Pupil Transportation Services, the National Association of Pupil Transportation, the National School Transportation Association, and other state and local pupil transportation associations also have or make training materials available. The CTAA and state DOTs and transit associations also have training materials.

➢ **Co-Minglingk** The positions taken by both advocates and detractors on the subject of co-mingling are discussed at length in *TCRP Report 56.* Here, too, the weight of concern appears to be directly linked to the options available. In communities with only one system, concerns about co-mingling appear to be outweighed by the prospect of enabling public or student transportation. In communities with a school transportation system and a public transportation system, co-mingling has proven to be a more difficult obstacle to integration.

If you are considering a coordinated approach that involves any element of co-mingling on regular school bus routes, you will first need to research its legality (see Step 4); in many states, this is either prohibited or qualified to allow only certain "approved" riders. If there are no legal barriers, it will still be important for you to assess the extent to which co-mingling is viewed as a safety-related concern and, if so, whether there are any actions that could be taken to reverse or ease this concern. For example, relegating the co-mingling to older students and/or utilizing monitors on these routes may ease parental concerns.

If students are to be transported on a public transit service as a component of a particular coordination approach, you should follow the same course of action. Here, too, relegating the use of public transit for the home-to-school transportation of older school students may mollify parents. Limiting service to tripper service also may have the same effect; although tripper service is open to the general public, many adult transit patrons will instead opt to take the next bus. Utilizing monitors on these tripper routes also could work as well.

➢ **Operational Considerations.** General operational issues that may present potential barriers are discussed in the next section. Those that pertain specifically to safety-related concerns are discussed below.

In an integrated approach, special planning must be given to locating stops that are used by students, especially younger children, and to the routing of buses. For example, thought must be given to the safety aspects of the bus stop, the walk route of the students in the morning and afternoon, the need for signals and/or crossing guards at busy intersections, and special stops for the winter season, in view of snow removal and darkness. The desire to minimize the necessity for students to cross streets also affects bus stop locations. Once bus stops are established, another

consideration is whether or not special school bus stop signage is appropriate.

In coordination approaches that involve transporting students on public transit, issues have arisen as to whether or not to allow the public transit vehicle on school grounds. On one hand, off-street stops are usually safer; on the other hand, school district liability increases if it allows public transit vehicles to stop on school grounds.

A major operational difference between school and public transit services concerns pedestrian safety at stops. School buses are equipped with warning lights and stop arms to assist in pedestrian crossings. State traffic laws require traffic to stop in both directions when a school bus stops with warning lights flashing and stop sign extended (except on divided highways where only traffic following the school bus must stop). School buses routinely stop in the traffic lane. Students are taught to cross in front of the bus where the driver can observe them while they cross. This raises two prospective issues, as follows:

(1) In coordination approaches that involve the integration of students into the public transit system, how can this extra safety measure be provided to students and, perhaps more importantly, what steps can or should be taken to ensure that students do not assume that traffic will stop for them to cross?

(2) In coordination approaches that involve transporting the general public or "approved" adults on regular school bus routes, should the eight-light warning/stop system and stop arms be activated or de-activated when stopping for adults?

Identify and Assess Operational Issues

➢ **School Bus and Driver Availability.** A potential barrier to the use of school buses for non-pupil transportation is the availability of school buses. Most school buses are used for pupil transportation for a relatively short period of time; generally, they are used for two to three hours in the morning and in the afternoon, with a portion of the school bus fleet being used for (1) kindergarten transportation in the middle of the day, (2) field trips during the middle of the day, and (3) after-school transportation of sports teams. School buses can only be used for other, non-conflicting purposes for small blocks of time during the mid-day on weekdays, late afternoons and evenings on weekdays, weekends, and during the summer months. For public transit, the availability of school buses in late afternoon and evenings could be attractive; however, most morning school bus runs coincide with the morning commute period, creating a stumbling block. Indeed, the only time that school buses may be available (for agency group trips, for example) would be during off-peak periods. But during these periods, school district-employed drivers may not be available, as they may have other child-rearing responsibilities at home or other responsibilities at school, or they may work a second job. As a result, there are only a few times when both a vehicle and a driver can be made available *and* there is no conflict with school transportation.

➢ **Routing.** Other than the aspects of school bus and transit routing that are linked to enhancing safety, there are some basic differences in the way in which school buses and transit buses are routed. School bus service is essentially a subscription bus service in which clusters of students are assigned to a specific route. Transit buses are routed ostensibly to connect residential areas with employment and shopping areas, with frequencies and fares set to maximize convenience and productivity. The result is that school buses are often routed in a circuitous fashion, while transit buses are often routed along major streets in order to offer more direct service and to minimize travel time. Moreover, in your community, you may find that student destinations (schools) and general public destinations (employment sites, shopping, senior centers, agencies) may lie in different directions. It may therefore be difficult to serve these destinations with the same vehicle or set of vehicles, especially if resources are limited. Consequently, you may find that routing compromises (other than those related to safety – see above) may need to be made.

➢ **Maintenance.** While both school buses and transit buses follow similar preventative maintenance

schedules, the differences in vehicle design and engine and drive train configurations present other challenges in integrating the maintenance of these two vehicle types. While diesel mechanics could work on both vehicle types, the need for an expanded parts inventory may make the costs of integrating maintenance a challenge.

Identify and Assess Organizational Issues

➢ **Turfism.** One of the potentially most difficult barriers to overcome may be turfism. This may surface in discussions about policies and procedures or in attitudes toward safety-related concerns, but it has its root in the need to control the process. This need may relate to a belief that (1) high service quality and flexibility cannot be guaranteed without that control; or (2) cost efficiency, as well as the balance between service quality and cost, cannot be guaranteed without direct control. It also may relate to local politics, with each organization vying to expand its importance within the community to ensure continued financial support. In the context of coordination, however, turfism is counterproductive to partnerships and weakens trust, which is one of the cornerstones of any coordination effort. Thus, in the planning stages, it is important that the lead agency for coordination be designated based on how well the capabilities of the organization match the functions that the lead agency is to undertake, and on its willingness, of course, to take on that role. This assessment may well be one of the most important decisions that the Task Force makes.

➢ **Personnel and Labor Arrangements.** School bus drivers who work for a school district are generally union employees whose work rules, hours, minimum call-outs, and wages are all governed by a collective agreement. (Most typically, this union is the same large union that includes teachers and other school district employees.) It is rare for a school bus driver to work full time; in most instances, the school bus driver works two to three hours in the morning and two to three hours in the early afternoon. Transit drivers, mechanics, and some of the staff also typically belong to a union; however, the work rules between these unions differ dramatically. For example, transit drivers tend to work a full workday. Thus, integration of public transportation and school transportation services may lead to either the sharing or transferring of employees between the public transit authority and school bus operations, a reorganization which may create a range of issues related to successor rights for existing employees, training, licensing, compensation arrangements, etc. Thus, if there are two unions, or one union and one non-union shop in your community, it is probably a good idea to involve union representatives in your planning.

Identify Liability and Insurance Issues

Under existing legislation, school districts are responsible for all students while they are being transported on school buses. However, there are questions regarding liability in cases where a school district utilizes a public transit system for school transportation. For example, if the school district and public transit agency coordinate their routes such that there is no duplication, is the school district still liable if a student is injured as a result of an accident on the public transit bus? Is the school district even more liable if it pays for and distributes transit passes to certain students instead of transporting them by school bus? Does the school district assume liability if it allows a public transit agency to discharge students on a tripper route on school grounds? There are no easy answers to these questions, and they may vary from state to state. Therefore, you should contact your legal counsel, as well as parents and other participants, to discuss and resolve these questions.

Insurance premiums issued on school bus operations generally cover only pupil transportation. The use of school buses for non-pupil transportation requires additional coverage. Some state insurance regulations make it prohibitively expensive to use school buses for anything but large group trips. Since this is a relatively new concept, a consistent set of rules has yet to be established by the insurance industry. Insurance for non-pupil use of school buses has been issued on a case-by-case basis. To date, insurance companies have underwritten such policies in the following ways:

- Incorporating non-pupil use of school buses in the premium
- Attaching a rider to the school bus premium
- Requiring a separate premium for non-pupil transportation

A conversation with an insurance agent should clarify which approach is most appropriate for your situation.

Indeed, it is a good idea to speak with your legal representative about liability issues and to inform your insurance agent about your activities *early on* in the project; in that way, these individuals can become potential problem solvers. Your legal representative will be instrumental in developing wording for agreements that will reduce your exposure. You also will need to obtain written documentation from your insurance agent or carrier regarding insurance coverage.

Step 5: Decide on Approach

To Do List:

- Identify Coordination Approach to Pursue
- Transfer Lead to Lead Agency

Identify Coordination Approach to Pursue

Step 3 should have culminated in a narrowed-down set of coordination approaches that you and the Task Force felt had the greatest potential for achieving the goals established in Step 2. Armed with the findings from Step 4, you and the Task Force should now be able to select the coordination strategy or strategies that will comprise your approach.

It may turn out that there are institutional or regulatory barriers to the preferred coordination approach that will seemingly stall or block its implementation. In this event, you may wish to implement lower-level coordination strategies that can be implemented in the short term *and* that will support the preferred approach. Once these have been implemented, you and the Task Force can continue to work toward overcoming these obstacles, with the goal of eventually implementing the preferred approach. Remember that it has taken years for some communities to implement their preferred alternatives.

It is important that you document the findings that support your decision. For example, you and the Task Force may wish to prepare an Executive Summary that documents the following:

- Unmet mobility needs in your community
- How coordination (in general) can contribute to meeting those needs
- Composition of Task Force that was established to explore coordination in your community
- Goals and objectives that were developed by the Task Force
- Alternative strategies that were initially considered, and the results of the assessment
- Process by which these coordination strategies were narrowed down
- Barriers that may present an obstacle to one or more of these strategies
- Reasons underlying the Task Force's decision to pursue the preferred coordination approach
- Next steps in the process and the preliminary implementation schedule
- How public input was elicited throughout the project (see Chapter 3) and how it shaped the findings, the alternatives considered, and the resulting selection of the preferred alternative

You also may wish to seek letters of support from the community and attach them to this Executive Summary.

Transfer Lead

The final task in Phase 2 is to transfer the organizational lead to the entity that will serve as the lead agency (although a transfer may not be necessary if the lead agency is the same agency that has led the planning process). If there is a transfer, it is important that you provide the new lead agency with all the materials that have been collected and produced thus far (including this Guide).

Above all, it is important to keep the momentum going. Numerous communities and states have reached the point at which all parties agree that a certain type of coordination should be pursued and the lead agency agrees to take on the role, and then something happens to derail the project. It may be that the hierarchy or the local political leadership in the lead agency changes

and the new leaders do not support the effort. It may be that the new lead agency has other priorities and/or insufficient staff to take on the project and so tables the coordination effort to the future, thereby stopping the momentum. It may be that the champion in the lead agency leaves the organization and a suitable replacement is not found (or not found soon enough). It also may be that the person assigned to take the lead does not have the requisite organizational or consensus-building skills, or does not rise to the occasion in dealing with obstacles. All of these are real dangers that could jeopardize all the hard work undertaken by you and the Task Force.

It is therefore critical that you and the Task Force are certain of the new lead agency's commitment to see this effort through to fruition. Remember, though, that your work is not done. It will be the Task Force's job to support the new lead agency by continuing to serve as a Steering or Advisory Committee through Phase 3, and on a continuing basis. This is discussed in more detail in Chapter 3.

If the coordination approach involves the creation of a new private, non-profit organization, you should understand that this will take time. There are two things, however, that can be done to keep the coordination momentum going. First, as mentioned above, the participating agencies can begin lower-level coordination activities that will facilitate the eventual transfer of functions to the new organization. Indeed, one could even serve as an interim lead agency until the new organization is formed, staffed, and prepared to take on this role. Second, the Task Force members could serve as the new organization's inaugural Board of Directors, thereby eliminating the time it would take to conduct a search and the time it would take for the new directors to get acclimated to the effort.

If you choose to hire a management firm to serve as the lead agency, such a hiring will take time, especially if a competitive procurement is required (or desired). In this case, you will need to (1) develop a Request for Proposal (RFP), a sample contract that should be part of the RFP, and evaluation criteria; (2) advertise the RFP; (3) conduct a pre-proposal conference; (4) evaluate the proposals; (5) interview the candidate firms; and (6) negotiate a contract with the selected firm. This process could take several months, possibly six months or longer. Therefore, some of the same strategies outlined above should be undertaken during this process to ensure that the momentum does not die.

Phase 3: Develop Plan, Implement Service, and Evaluate Service

The third phase of the Work Plan involves the following three steps:

Step 6: Develop Service, Financial, and Implementation Plans
Step 7: Develop Marketing Plan
Step 8: Implement, Monitor, and Evaluate Service

These steps are discussed below.

Step 6: Develop Service, Financial, and Implementation Plans

To Do List:

➢ Develop Service Plan
➢ Develop Financial Plan
➢ Develop Implementation Plan

Develop Service Plan

One of the first tasks of the designated lead agency will be to prepare a Service Plan. Such a plan would be necessary for lower-level coordination efforts, such as those where public transit routes and school bus routes are better coordinated, as well as for higher-level coordination efforts involving some aspect of service integration. For the purposes of this Guide, we will assume that you are undertaking a higher-level coordination effort, although some of the guidance will apply to lower-level efforts as well.

The Service Plan should focus on the routing and scheduling, staffing, vehicle purchasing, vehicle maintenance, and computerization, as discussed below. Some of this information may have already been developed in defining each alternative; if this is the case, then all that may be needed for the Service Plan is some fine-tuning.

➢ **Routing and Scheduling.** The Service Plan should include the following for each route: (1) a map of the system and each route that highlights primary pick-up areas and stops, major destinations (e.g., schools, employment sites, shopping areas, senior centers, and human service agencies), and any seasonal variations for tripper service and/or winter service; (2) details of bus stops, showing where students will be getting on and off the bus in the morning and afternoon and where additional school crossing guards and/or traffic signalization are required; (3) a schedule (or schedules based on different headways); (3) a summary of advantages and disadvantages as compared to the status quo; (4) ridership estimates by rider type (student vs. general public); and (5) fleet requirements.

➢ **Staffing.** The Service Plan also should include a staffing plan for office staff, drivers, mechanics, etc. This staffing plan should identify staffing levels and wage scales by position, skill descriptions, and staff training for the tasks to be performed by the lead agency (which may depend on the organizational structure of the lead agency and other participating agencies). For example, if the lead agency operates an integrated school/public transportation service in your coordination effort, you will need to determine the number of drivers that will need to be hired at the proposed level of operations, identifying whether drivers should be full- or part-time employees and establishing hiring, training, and discipline procedures. If unions are involved, you should work with the unions to understand work rules, wage scales, etc., as discussed in Step 4. You also should develop a procedure for determining when changes need to be made in staffing levels; this is linked to ongoing service evaluation, as discussed in Step 9. Lastly, the staffing plan should determine if there is sufficient office space to house additional office employees and whether additional office equipment (e.g., telephone and fax machines, copying machines, computers, and furniture) will be needed.

➢ **Vehicle Design and Procurement.** As part of this task, you should identify fleet needs and purchase vehicles, as needed. This would involve the following two tasks:

- Review Current Fleet and Vehicle Designs - As part of Step 2, you will have completed an inventory of the participants' fleets; some updating may need to be performed depending on the lag time between Step 2 and Step 6. The capacity and availability of the current set of vehicles should be compared to ridership information, especially spatial and temporal ridership forecasts. The appropriateness of the current vehicles for meeting specific service needs (e.g., students and persons with disabilities) will have been discussed already in Step 4; as a result of this discussion, you may need to purchase new or different vehicles, or retrofit current vehicles to meet these needs.

- Develop Vehicle Specifications, Bid Documents, and Vehicle Acceptance Procedures - You should review the bid documents and vehicle specifications currently being used to purchase buses, and then revise them to accommodate specific needs. This should be done in consultation with vehicle experts. Two sources might be helpful: (1) the California Department of Education, which has developed specifications for a utility bus that meets school bus guidelines and has community transit features such as accessibility equipment and air conditioning (these specifications are found in Appendix E); and (2) Yates Dial-A-Ride, which is using a retrofitted Bluebird school bus for integrated service (see the Idlewild, Michigan, case study in *TCRP Report 56*). In addition to the technical vehicle specifications, you also should review the bid documents to ensure that all appropriate protections are provided by the manufacturer and local service agent. For example, this should include language on

all applicable system and subsystem tests, clarifying inspection and acceptance procedures, and ensuring a clear line of responsibility for any needed warranty work. Finally, you should review existing procedures that are used to inspect vehicles during the manufacturing process and to conduct final acceptance inspections, and improve these forms and procedures, if needed.

Note that vehicle procurement and retrofitting can take from several months to one year.

➢ **Vehicle Maintenance.** Vehicles utilized to provide school transportation and public transportation must be safe; they also are a principal source of passengers' opinions regarding public transportation and, in particular, the operator. The key to both of these issues is a comprehensive and aggressive preventive maintenance program carried out cooperatively by supervisors, vehicle operators, maintenance personnel, and local outside services. An effective maintenance program is one that is structured in such a way as to ensure timely preventive maintenance of all vehicles. You should therefore review and, if necessary, adjust the current preventive maintenance programs, work flow, maintenance record-keeping, inventory controls, garage equipment, facilities, maintenance staff training, and staffing requirements. In performing the evaluations, you should collect preventive maintenance specifications for each vehicle, fleet and maintenance equipment descriptions, job descriptions, service data from maintenance reports, and inventory reports. From this information, you should be able to determine quantifiable measures, such as miles per mechanical failure, miles per road call, and vehicle-to-staff ratios, as well as qualitative measures, such as cleanliness and vehicle condition. Modifications to procedures, equipment upgrades, staffing additions, staff training, and/or computerization (see below) should be undertaken as needed to improve the effectiveness of the maintenance programs.

➢ **Computerization.** The Service Plan also should include the introduction of computerization or new computer applications, as needed. This might include, for example, a school bus routing package that not only assists in routing and scheduling school buses based on the projected ridership, but also then automatically assigns students to specific routes. It also might include vehicle maintenance programs, as suggested above.

Develop Financial Plan

In this task, you will fine-tune the initial cost estimates into a line-item cost schedule, develop budgetary procedures, identify funding sources and levels, establish a fare structure (if needed), and develop a capital plan.

➢ **Cost Schedule.** For each of the coordination alternatives that you evaluated, you would have to first estimate costs. Using this estimate as a point of departure, you should first develop a detailed cost estimate for both the start-up (implementation) phase and for each of the first five years of operation. Note that this cost schedule should focus on non-capital costs (capital costs are discussed below in the context of the Capital Plan). Major cost groupings might include administration (labor, direct expenses), driver labor wages and benefits, maintenance (labor, parts), fuel, and insurance.

➢ **Budget Organization and Procedures.** After completing the operational budget, you should review existing administrative procedures to ensure that budgeting procedures and other financial control procedures consider the potential sources of revenue and otherwise comply with the specific requirements of the funding streams.

➢ **Funding Sources and Levels.** Funding sources for public transportation are likely to include FTA Section 5311 funding (for rural public transportation funding) and possibly FTA Section 5310 funding (for accessible vehicles), as well as state and local matching for these revenue sources. On the school transportation side, the funding source is primarily the state, with the level of funding subject to state requirements and formulae. Other sources of funding might include (1) specific federal grants for specialized

transportation, such as welfare-to-work transportation, (2) other public and private sources within the community, and (3) fare revenue from public transit riders (see below). If the public transportation component of your coordination effort includes paratransit, another source of revenue may be those agencies that wish to purchase demand-responsive transportation for their clients. An important part of the Financial Plan is to document the probable sources of funding, expected funding levels in the next five years, and sources and levels of matching funding that will be needed. It is obviously critical that a sufficient amount of funding is obtained to cover expected start-up and ongoing costs, and that constraints that accompany each funding source do not threaten the implementation of the coordination effort (see Step 4).

- **Establish Fare Structure.** Another principal source of funding is fare revenue for the public transportation component of your coordinated service. In establishing a fare structure and setting fares, you should consider the distinct markets and their different degrees of sensitivity to price and service quality variables. For example, commuters generally have a fairly low sensitivity to price and a much higher sensitivity to the dependability of the service and the convenience of the schedule; transit-dependent individuals are mainly sensitive to the price of the service. Based on the demographics of the markets being served by each proposed transit service, you should set a base cash fare and perhaps establish a monthly pass or multi-ride fare ticket. Above all, you should ensure that the fare structure is not excessively complex, particularly such that the cost of installing, maintaining, and operating the fare system exceeds the revenues generated. Once the fare structure is set, fare revenue can be projected based on the estimated ridership for the service. The estimated fare revenues will then be combined with the other funding sources in the Financial Plan.

- **Establish Contract Rates.** If your coordinated effort includes a demand-responsive component and there are human service agencies in the community that may want to purchase client transportation service from the lead agency, then the Financial Plan should include a line item for contract revenue. For budgetary purposes, it may be best to base this rate on the fully allocated unit cost of providing service. For example, an hourly cost multiplied by the number of hours of dedicated service that an agency might wish to purchase would yield the contract revenue for that agency. If the prospective sponsor cannot determine the hours of service that are needed, but does have a sense of the volume of trips and the current unit cost per trip, this data can be converted to hourly data (or vice versa) by estimating the productivity (in trips per hour).

- **Capital Plan.** In this task, you should develop a short-range capital plan for the proposed service, especially the purchase and replacement of fixed facilities and rolling stock. This will be driven by an inventory and evaluation of the current assets of the lead agency and participants, as well as the needs of its existing and proposed services (including details on number and type of vehicles, required administrative and maintenance facilities [including shop equipment], signage, shelters, and other passenger amenities). The plan should include a five-year capital program schedule identifying the capital improvements to be purchased each year and the probable funding sources.

Note that support for your coordination effort will be developed as part of the community participation work elements (see Chapter 3). This support, if managed properly, can be leveraged for greater financial capacity through higher revenue generation, local ordinances that are supportive of transit system development, and other programs of local resource mobilization.

Develop Implementation Plan

Your implementation plan should include a detailed outline for the transition period and the first five years of service. At a minimum, this outline should identify tasks, task initiation dates, anticipated completion dates, and the responsible person (or organization, if appropriate). The plan should reflect an implementation strategy that is consistent with the fiscal and personnel resources available to the lead agency, as supported by the other participating organizations. It also may be advisable to prepare a more detailed implementation plan for each activity and a responsibility chart,

especially if implementation activities are delegated to a number of persons or organizations.

Step 7: Develop Marketing Plan

To Do List:

- ➢ Conduct a Marketing Inventory
- ➢ Develop a Marketing Strategy
- ➢ Develop an Action Plan
- ➢ Develop Marketing Plan Products

The development of a Marketing Plan is an integral part of any community transit plan. Because there is a new prospective user every day, there is a need to continually promote community transit service(s). In concert with this philosophy, you should develop a marketing plan that enables current and potential riders to:

- ➢ Know about the service
- ➢ Have easy access to information about the service
- ➢ Feel safe and comfortable riding the service
- ➢ Be able to use the system to accommodate their basic transportation needs

In marketing community transit, it is important to emphasize that the provision of good service is key to effective marketing, because service is the product being marketed. The best conceivable marketing program will fail if the product does not live up to the claims made in the marketing effort. Thus, the service itself must meet the expectations of its existing and potential patrons. Some service factors that must be assessed include patron comfort, dependability, flexibility, and accessibility.

Promotional efforts should be designed to generate particular responses from identifiable market segments. It is important to understand who the people are who can benefit from transit, how the service fits into their lives and schedules, and what kind of message is likely to reach and appeal to each market group.

Components of a Marketing Plan

A community transportation marketing program comprises a number of components. These include market research, public information, customer relations, public relations, image, and promotion. A brief synopsis of each of these areas follows.

- ➢ **Market Research.** It is important that you understand the transportation needs of the existing market, including existing riders, potential riders, and other members of the public. Step 2 of this Guide discussed inventorying these needs.
- ➢ **Public Information.** Public information is the most basic and one of the most critical elements of a marketing program. Disseminating basic information regarding what service is available at what times, what number to call for additional information, and what destinations people can travel to is critical for capturing potential patrons. Public information includes basic informational materials such as schedules, brochures, telephone information procedures, and announcements of service changes. These materials should carry a system logo, be widely distributed and made readily available, and be easy to use.
- ➢ **Customer Relations.** Good customer relations begin with the provision of reliable, clean, safe, and courteous service. It also involves being responsive when customers call to obtain system information or to register compliments or complaints. The information number should be easy to remember, if possible, and the phone should always be answered during business hours (augmented by a telephone answering machine during non-work hours). Complaints should always be promptly followed up by written responses.
- ➢ **Public Relations.** Community transportation systems need to treat elected and public officials, agency staff, private businesses, and interested groups as "shareholders" who have a stake in the success of the service. Good public relations should mean developing and maintaining good working relationships with these individuals and with the media. You also should take advantage of every available opportunity for free publicity for the transportation service.
- ➢ **Image.** The image or packaging of your public transportation services should be carefully crafted to appeal to the target markets that you have

identified. Image refers both to the way a system looks and to the image it projects to potential patrons (i.e., bus color, bus cleanliness, driver appearance and conduct, logo, slogan, responsiveness, profile in the community, etc.). Through the development of marketing materials and a marketing plan, you should cultivate a bold and positive image that emphasizes the benefits of the service.

- **Promotion.** Promotion involves all forms of advertising. Promotion can range from radio and television advertisements to flyers and direct mail postcards. It can include special events such as contests or holiday specials. It can include special fares or shopper's discounts designed to get people to try the service. These and other similar ideas help raise the profile of your service and make people in your community aware that the service is a viable and active force in serving the transportation needs of your community.

With these components in mind and to ensure that your Marketing Plan is complete and comprehensive as discussed above, you should prepare to undertake the follow tasks:

Conduct a Marketing Inventory

After reviewing the assessment of existing services and needs from Step 2, the first task will be to identify any current marketing efforts being undertaken by any of the participants. This may involve interviewing the staff responsible for marketing to discuss existing strategies and past marketing efforts. Topics to be addressed in the marketing inventory include the following:

- Background and history of the organization
- Perceptions regarding community attitudes by market segment
- Customer services
- Advertising and promotion
- Use of public relations resources

Develop a Marketing Strategy

Marketing efforts need to be based on a clearly stated and clearly understood strategy. This is necessary so that the focus and purpose of marketing efforts do not become lost in the flow of day-to-day operating and administrative decisions. A successful marketing program requires consistent effort over an extended period of time. A concisely written marketing strategy will help keep this effort focused and will help ensure that planned marketing efforts are implemented. The output of this task should be a one-page summary of a marketing strategy. The summary should include the following:

- Clear statement of the purpose of the marketing program
- Statement summarizing how this purpose will be accomplished
- Brief description of target audiences
- List of individual marketing efforts to be employed
- Statement of your market position
- Description of financial and personnel resources that will be devoted to the marketing effort

Develop an Action Plan

Your next task will be to develop a detailed action plan rooted in the inventory findings and the marketing strategy. This plan should include a detailed description of each marketing effort listed in the marketing strategy, as follows:

- Program or situation to be addressed
- Goals and objectives
- Criteria for measuring the success of the effort
- Discussion of strategies and target audiences, with a list of specific tasks to be performed
- Development of marketing materials and image recommendations
- Projected expenses associated with the effort
- Calendar that includes target dates for implementation

The goals and objectives of each action plan must be consistent with the overall marketing strategy and with the Task Force's goals and objectives for the coordination effort.

Develop Marketing Plan Products

The next task is to design and prepare marketing plan products and materials. Possible products that could be developed are listed below:

- **Route Maps, Schedules, and Brochures.** High-quality schedules and route maps are essential, as they provide the primary invitation for people to actually use the service. They should present basic information about which areas are served and at what times. This information should be presented in a clear and concise manner. It will be particularly important to tell people how to get to their destinations and how to access the system.
- **General Promotional Packet.** Promotional packets are kits that provide the public with information about the service. Such a packet might contain an invitation to use the service, a coupon towards a trial trip, a schedule and route map, and a brochure about the service. All materials in the packet should have the service logo and should provide the phone number to call for additional information. The brochure could highlight information about average trip times from a popular origin to a popular destination; list any service changes to be implemented; provide interesting and informing statistics on the service; and encourage people to use the service. Promotional packets also can be tailored to specific events, such as "transit fairs" or employer-based marketing campaigns.
- **Incentive Programs.** Shopper's discounts or door prize contests can be developed as an incentive for area residents to use the service. A successful incentive program must offer a reward that is worth more than a bus ride, so that people are willing to use the bus in order to gain access to that reward.
- **Special Services Packages.** Special services packages could include tickets to sports events or an amusement park, or to the symphony, museum exhibition, or other cultural event. You should contact your local chamber of commerce, civic groups, school groups, etc., to determine the potential demand for such packages; they have proven to be an excellent method of generating revenue while at the same time introducing passengers to the service.

Evaluate Marketing Strategies

An important element of marketing is obtaining constant feedback from the customers and integrating suggestions into the control of operations and the planning of service changes. Customer information can pinpoint faulty service, *and* it can be a powerful competitive advantage that helps drive down the cost of operations while simultaneously identifying customer travel demands. The intake of passenger complaints, for example, can provide a wealth of marketing information. Rider surveys and focus groups are also proven methods of evaluating the general effectiveness and specific cost-effectiveness of each marketing strategy.

Marketing Manuals

There are a variety of manuals available that give considerable guidance in the development of marketing plans and materials for community transportation services. Four such manuals include *Small Transit System Management Handbook,* published by the USDOT; *Transit Marketing in Pennsylvania: a Handbook of Effective Transit Marketing Aids,* published by the Pennsylvania Department of Transportation; and *Effective Methods of Marketing Transit Services to Business* and *Low-Cost and Cost-Effective Marketing Techniques for Public Transit Agencies*, published by TCRP.

Step 8: Implement, Monitor, and Evaluate Coordination Effort

To Do List:

- Implement the Service
- Monitor and Assess Results
- Make Adjustments

Implement Service

Armed with a Service Plan, a Financial Plan, and a Marketing Plan, your next task will be to carry out

the Implementation Plan. Prior to beginning the implementation process, however, you should notify all those persons who will be directly or indirectly affected by the coordination effort, as determined by you and the Task Force. The Executive Summary developed in Step 5 may be a useful attachment to this notice, as it provides a concise description of (1) the changes, (2) who will be affected by the changes, and (3) the underlying reasons why the changes are being made. You also may want to take this opportunity to convey procedural changes to specific recipients of this notice. It may be a good idea to hold a public forum or hearing to get the word out to the public through press releases, as described in Chapter 3.

Monitor and Assess Results

The only way to determine the success of the implemented plan is to monitor the results. This gets back to the original service goals and objectives. It is therefore necessary to establish a Performance Monitoring Plan that details the data collection procedures that will be used to measure goal achievement. For example, such a data collection process should track ridership by rider type and trip patterns to determine increases in community mobility, as well as actual costs and revenues to determine whether any savings (or improvements in cost-efficiency) have been achieved. It is also important that service monitoring activities track service quality measurements, such as service reliability (through on-time performance) and customer satisfaction (through complaint levels), and safety measures, such as accident frequency ratios. Riders (and their families, in the case of students) should be surveyed on their level of satisfaction with the new service; such a survey also could be used to seek suggestions regarding ways in which the new service could be improved.

Make Adjustments

Ongoing monitoring as described above will provide you with the information you need to evaluate the success or failure of the changes that you have implemented. When problems do arise, it is essential that you make adjustments to resolve them. If the achievement of certain objectives falls short of expectations, assess why this has happened and implement actions designed to improve the results (if you believe an improvement can be achieved). At the same time, be careful not to make too many changes at once, as it will be difficult later to assess which results were influenced by which adjustment.

Chapter 3: Public Participation

3.1 Gather Broad Support from Local and State Leaders

The success of any project of this type depends on public acceptance. Public participation should therefore be an ongoing effort for the duration of the project. Indeed, we have found that successful implementation of any action requires the *collective* acceptance, support, and cooperation of those persons, groups, or organizations in the public and private sectors that are affected by those actions. As stated in *Newsline*, the Transportation Research Board's newsletter on current research in public transportation, "a delivery system that meets locally established goals and fits local institutional realities has to be designed. A coordinated system cannot be superimposed on a community; it must be homegrown."

The support of key stakeholders and community leaders is critical to the success of any cooperative venture. In the case of coordinating public and pupil transportation services, the support of the local school and transit boards is particularly crucial. Garnering the support of local politicians is also very important, as they are likely to be particularly vested in resolving pervasive community problems such as lack of mobility and high unemployment. By explaining the relationship between public transportation and better access to vocational training, for example, local politicians can become instrumental players in engendering broad-based support for a coordination initiative.

You also may want to seek the support of state officials, especially if the coordination effort addresses regional needs. This might include the State Director of Pupil Transportation as well as appropriate representatives from the State Departments of Transportation and Health and Human Services. A state-level economic development authority also may be particularly helpful if it has identified transportation access as a key problem impacting employment in your area.

With these thoughts in mind, we have provided an outline for a public participation process designed to generate that fusion of ownership that is necessary for developing an appropriate, implementable plan of action. You and the Task Force will need to develop a more detailed process; this process should remain flexible, however, because you may need to reshape it as your efforts proceed.

3.2 Establish Task Force

Although establishing the Task Force was discussed in the Work Plan, we want to emphasize that it is critically important that the Task Force include representation from key stakeholders, especially decision-makers from the participating transportation providers (i.e., the local School Board and Board of Directors for the public transit agency), local elected officials, and state officials.

The Task Force should, at a minimum, offer guidance and facilitate your work, and get you in touch with the right contacts. The Task Force also should provide input to findings, conclusions, and the approach to pursue. By involving the Task Force from the outset, the preferred approach will already have the support of key decision-makers from the community.

The Task Force also should be viewed – and indeed should view itself – as a catalyst for supporting and facilitating the coordination effort. The Task Force should also continue to provide whatever level of post-implementation guidance it feels is appropriate.

3.3 Hold Public Forums

It also is a good idea to involve the community-at-large in your efforts by conducting public forums at three key times during the planning process: after Steps 2, 4, and 6, respectively. Public forums should be held at accessible sites. You also may choose to hold pairs of public forums – one during the day and one at night – to ensure that all interested parties can attend.

The purpose of the first public forum should be to

elicit comments and concerns in order to (1) qualify your findings regarding needs and existing services, (2) aid in targeting areas for a new service or service expansion; and (3) assess community values and the overall need and configuration for public and student transportation. You also may choose to distribute the goals and objectives developed in Step 2 and encourage attendees to comment. Input from forums of this type almost always provides insight into the community's perceptions of the existing transportation services' strengths and weaknesses, as well as invaluable information regarding unmet mobility needs.

The open forum should be structured loosely to allow for open dialogue and input from the participants. You should guide the discussion to ensure input on each major topic. Comments raised at the public forum should be summarized for the Task Force. You also should inform the attendees that this is the first of three public forums and encourage them to remain involved throughout the effort by attending the subsequent forums.

The purpose of the second public forum should be to present and elicit comments on the alternative coordination approaches and corresponding assessments. We have found that an informal, interactive "workshop" style is more conducive to information exchange. Where appropriate, alternative approaches should be displayed on large maps, with the major characteristics summarized on accompanying displays. Attendees should be encouraged to come early in order to view the displays. After an initial presentation summarizing the alternative approaches, major barriers, and the evaluations, you should hold an *interactive* discussion to address any and all questions.

It is especially important that the attendees – as well as the Task Force members – see the fruits of their direct or indirect involvement and that you allow them to voice their support or any concerns that have not been adequately addressed. At the conclusion of the second public forum, you should summarize the input and consensus among the attendees. You also should inform the attendees of the remaining phases of the planning process and explain how they can continue to participate.

The purpose of the third public forum should be to present and elicit comments on the service plan for the preferred approach. This forum could be an informal workshop, like the second public forum, or it could be more formal, like a public hearing, possibly in combination with a presentation to local elected officials. Here, again, the public forum/hearing should serve to (1) seek additional input to the final coordination design, (2) keep the community involved, and (3) continue to build consensus and support.

3.4 Cultivate Media Coverage

Because it is a low-cost, effective purveyor of information, you should use the media to the greatest extent feasible to alert the public of upcoming forums and to keep them abreast of your efforts. For example, you should send press releases to the local media (e.g. newspapers, radio stations, television stations, and community access television stations) to announce the completion of each phase of the Work Plan and also to advertise upcoming public forums.

Chapter 4: Coordination Models

4.1 Examples of Cooperative Arrangements

School District Use of the Public Transit System for Home-to-School Transportation

Illustrated below are different models of school districts making use of the public transit system to transport students; the school districts and the public transit agencies otherwise remain autonomous.

➢ Eagle Transit (Kalispell, Montana)

Eagle Transit is the public transportation provider in Kalispell, Montana. It operates a paratransit service that focuses on seniors and persons with disabilities and also is available to the general public. The local School District utilizes Eagle Transit for the home-to-school transportation of some regular students and some special education students. At the beginning of each school year, Eagle Transit and the School District work together to determine the best methods for providing service for each student, with Eagle Transit serving students from the more remote parts of the region. The School District estimates that this coordination saved the School District an estimated $14,500 last year. In addition, some families that are ineligible for subsidized school transportation successfully petitioned Eagle Transit to operate a tripper service that now transports their children from the school to their homes in the afternoon.

➢ Northeast Regional Transit System (Decorah, Iowa)

Northeast Regional Transit System (NRTS), the state-designated regional public transportation system in northeastern Iowa, operates a region-wide paratransit service for the general public. Some of the riders are local human service agency clients whose trips are sponsored by the agency. Other riders are students whose home-to-school trips are paid for by some of the 18 school districts in the region. In addition, some families that are ineligible for subsidized school transportation also opt to use NRTS to transport their children to and from school. Pre-school children, students, and adult clients all ride on NRTS paratransit services at the same time, resulting in significant cost savings.

➢ SunLine Transit Agency (Thousand Palms, California)

In response to a funding crisis, the Palm Springs School District conducted a demonstration to determine if cost savings would result from using SunBus for high school students' home-to-school transportation and, at the same time, eliminating a school bus route serving Thousand Palms. For this demonstration, the School District purchased and distributed transit passes to the students, and the transit agency restructured some of its transit routes to better match the home-to-school transportation needs of these students. The demonstration resulted in significant savings as well as some unexpected benefits. High school students found that the SunBus passes enabled them to participate in after-school activities and to hold after-school jobs. During the demonstration, many families also elected to use SunBus to transport younger siblings to and from the middle school. SunLine also noticed that youth ridership on SunBus was nearly as high on non-school holidays and weekends as it was on school days, evidencing that the students were using SunBus to get around. At the conclusion of the demonstration period, SunLine decided to install these routes and schedules permanently. And, although the School District elected to reinstall school service to Thousand Palms (largely because the funding crisis abated), many students have continued to use SunBus instead. SunLine's permanent installation of these routes resulted in several other benefits: (1) families wishing to send their children to a different school (via an open enrollment program) now have a transportation solution; and (2) families whose children are required to attend summer school now have a transportation solution.

Use of Regular School Bus Routes for Non-Pupil Transportation

In the three models illustrated below, the organizations use regular school bus routes for non-pupil transportation. In these two cases, the school districts

have agreed to allow the co-mingling of "approved" adults with students on regular school bus routes.

➢ Chesterfield County Coordinating Council (Cheraw, South Carolina)

The Chesterfield County Coordinating Council (CCCC), a private, non-profit organization, is participating in a project focusing on the coordination of all transportation services in Chesterfield County, South Carolina. In conjunction with the local School District, CCCC has implemented a program whereby parents, school volunteers, and school employees may request to ride on regular school bus routes, as is consistent with state law. CCCC and the School District view this effort as the first step toward utilizing extra capacity on school bus routes for general public transportation and accordingly requested State approval of a one-year pilot project to demonstrate this type of coordination. Approval was denied because of concerns about liability (the school buses are owned by the State) and the co-mingling of other adults and children on the same vehicle. CCCC is planning to resubmit its request in 1999.

➢ Glendale-Azalea Skills Center (Glendale, Oregon)

Developed by a coalition of businesses, residents, agencies, and the School District, the Glendale-Azalea Skills Center provides job training, GED, counseling, community college courses, child care, AFS branch office, and life skills training in southern Douglas County, Oregon. In an effort to enhance the Skills Center's effectiveness, Center staff applied for and received a JOBLINKS grant for a transportation program called GATEWAY, a coordinated transportation and driver education system designed to link residents with the Center and with employment opportunities in the community and the County. Among many other transportation strategies, GATEWAY utilizes existing school bus routes (with extra capacity) for the transportation of Skills Center participants. In Oregon, state regulations allow only school monitors, who are first required to pass a formal criminal background check, to ride along with students on school buses. In response to Skill Center queries, the Attorney for the Oregon State Legislature advised the Skills Center that a participant could ride on regular school bus routes as long as (1) approval of the local School District was obtained; (2) the necessary background checks were conducted, and the participant passed; (3) the individual was willing to serve as a volunteer monitor while on the school bus; and (4) there was space available on the regular route. Fourteen participants have since utilized school bus routes to get to the Skills Center.

➢ Northeast Regional Transit System (Decorah, Iowa)

NRTS (see above) is also responsible for Head Start transportation in northeastern Iowa. While NRTS chooses to transport some of these students on its own paratransit, it also arranges with school districts to transport some of the pre-school Head Start participants on regular school bus routes operated by the region's school districts. NRTS estimates that these arrangements have saved NRTS about 12 percent of its operating budget.

4.2 Examples of Joint Use Arrangements

Joint Use of Non-Vehicular Resources

The following example provides a model whereby a transit agency entered into a joint-use agreement with a school bus operator for maintenance and training services.

➢ Treasure Valley Transit (Nampa, Idaho)

Treasure Valley Transit, Inc. (TVT) is the private, non-profit public transportation provider in Nampa, Idaho. TVT operates a commuter route, a local transit route (within Nampa), and a countywide paratransit service for agency clients and the general public. During the start-up period and the initial phase of operation, a local, for-profit school bus carrier played a role in supporting the fledgling public transit property. The school bus carrier provided maintenance for TVT vehicles and even provided back-up vehicles when needed. Training also was coordinated between the school bus carrier and TVT; TVT employees attended the school bus carrier's CDL Skills Testing and School Bus Driver Training programs, and the carrier's employees attended TVT's passenger-assistance training programs.

Use of the Public Transit System by School Districts (and Other Organizations) for Student Group Trips

In the following model, a public transit system is used for the group transportation of students.

➢ SunLine Transit Agency (Thousand Palms, California)

SunLine (see above) also transports groups of students from elementary schools, middle schools, and high schools on field trips or to after-school athletic contests. All three districts within SunLine's service area take advantage of this service; they report that these trips would otherwise not have been made, as there was no other affordable alternative. The same is true for several elementary school student after-school programs run by the YMCA and the Boys and Girls Clubs throughout the Coachella Valley; the only affordable option for the programs and the parents of participating children – other than parents leaving work early to transport their children from school to the after-school site – was a supervised SunBus route. School officials, the after-school programs, parents, and the students are all supportive. This past year, over 62,000 riders (reflecting over 2 percent of the SunBus ridership) were able to go on group trips because of SunLine.

Use of Publicly Owned School Buses for Non-Pupil Transportation

In the case illustrated below, a school district has made its school buses available for non-pupil transportation when such use does not conflict with pupil transportation schedules.

➢ Campbell County School District (Gillette, Wyoming)

The Campbell County School District in Wyoming operates a large fleet of yellow school buses that travel over two million miles every school year. On weeknights and weekends, local non-profit groups rent the yellow school buses to travel to nearby towns (some of which are located 100 to 400 miles away) for special events, athletic tournaments, regular season games, academic competitions, and special group trips. Non-profit groups must reserve a bus and School District driver, cover the cost of the driver and fuel, sign a waiver, and pay a $0.25 per mile insurance fee to cover the group under the School District's umbrella for vehicle and/or property damage. Non-profit groups must provide their own personal liability coverage.

4.3 Examples of Integration

Integrated Transportation Operated by a Public Transit Agency

In the following models, a public transit agency provides all the school transportation in the community.

➢ City of Minot, North Dakota

The Minot City Schools do not provide conventional school bus transportation for school children in their service area. Instead, the City of Minot operates an integrated, fixed-route public transit service that focuses on student transportation in the morning and late afternoon, and on transportation for other transit-dependent individuals (e.g., seniors and persons with disabilities) during the mid-day. As this service is always open to the general public, students ride along with the general public. The early morning (7:00 a.m. to 8:30 a.m.) routes focus on bringing children to eleven elementary schools, one middle school, and one high school. Most of the routes have two bus trips each in the morning. In the afternoon, beginning around 3:30 p.m., service is designed to return students from their schools to their homes. Normally, one bus trip is made from each school in the afternoon. Early morning service is only operated during the school year. Both the City of Minot and the School District view the high level of public transit service provided to school students as a community service. The volume of school children carried by Minot City Bus (65 percent of total ridership) helps to justify the system in the eyes of the City Council and saves the School District the expense of operating a separate service itself.

➢ Yates Dial-A-Ride (Idlewild, Michigan)

Yates Dial-A-Ride (YDAR) provides demand-response, fixed-route, and school transportation in the northern lower peninsula of Michigan. Formal student

transportation was folded into operations in 1995 as a less costly alternative to starting a separate student transportation service, thus creating a fully integrated system. In the early morning and early afternoon, YDAR's converted Bluebird buses are used to transport students along routes that are oriented toward student transportation but are open to the general public. Students ride along with the general public. During the midday and evening hours, the buses are used to provide general public transit and paratransit, as well as human service agency client transportation. From its inception, the coordination project has had the cooperation and assistance of the Governor, senators, legislative representatives, the Michigan Department of Transportation, county and local governments, human service agencies, the Baldwin School District and the entire school board, local citizens, and the community. The system is notable for its success in solving the acute transportation needs of a community identified as the poorest township in the State of Michigan.

Integrated Transportation Operated by a School District

In the example below, a school district, seeing the need for public transportation service, initiated and now operates a shuttle route that also accommodates the inter-community transportation needs of students.

➢ Selkirk Consolidated School District (Selkirk, Washington)

Selkirk is a rural community approximately 10 miles from the Canadian border in the northeast corner of Washington State. The area is not heavily populated and, prior to the Selkirk Shuttle, had no public transportation services for its residents. This changed when the Selkirk Consolidated School District successfully applied for a rural transportation grant from the Washington Department of Transportation to introduce a new public transit service. Called the Selkirk Shuttle, this service consists of a 28-mile transit route that connects the three towns of Metaline, Metaline Falls, and Ione (where the District schools are located). The service is operated with a refitted, 56-foot, lift-equipped school bus. The route is repeated three times per day on weekdays only. In the Selkirk area, the high school, middle school, and elementary school are not centrally located; instead, each town houses one school. The Selkirk Shuttle was designed to enable students to get to different schools within the District, as well as to enable the larger community to access different educational opportunities. The Selkirk Shuttle was also designed to link area residents to widely dispersed services. Within this community, certain services are provided in one town but not in another, making it very difficult for low-income, disabled, or senior citizens to access medical and dental services or grocery stores. Now, with the Selkirk Shuttle, residents can get to work, run errands, travel to the Selkirk health clinic, and visit friends and family. The Selkirk Shuttle presents yet another example of an integrated service in which students are riding along with the general public. Plans are underway to erect bus stop shelters and to expand service hours and days.

Endnotes:

[1] Kyte, Michael, Richardson, Nancy, and McKean, Connie, "Coordination of Public Transit and School Bus Transportation Programs: Results of Pilot Projects in Six Iowa Communities" Transportation Research Record 1202. Washington, D.C.: TRB, National Research Council, 1988, page 31.

[2] Fausch, *Integration of Public and School Transportation, Hohenlohe, Germany, Case Study*, Transportation Research Record 831.

[3] Status Report on Public Transportation in Rural America, 1994, FTA: RTAP National Program, Washington, DC, pg. 29.

[4] The three levels of coordination are adopted from "A Handbook for Coordinating Transportation Services," Ohio Department of Transportation, October 1993.

[5] The general format and several elements of the work plan are adopted from "A Handbook for Coordinating Transportation Services," Ohio Department of Transportation, October 1993.

Sample Questionnaire to Inventory Services

SAMPLE QUESTIONNAIRE

(TAILOR TO MEET THE NEEDS OF YOUR COMMUNITY AND COORDINATED EFFORT)

Organization: _____

Address: _____

_____

Contact Person: _____

Title: _____

Phone: _____ Fax: _____ Email:_____

The objective of this survey is to gather information from organizations serving the xxxxxxxxxxxxx from those and other organizations that may be able to identify unmet transportation needs in the region. The questionnaire is organized as follows:

Part A: Profile of Your Organization (Agency or School District); to be completed by all respondents.

Part B: Profile of Your Organization's Transportation Program; to be completed by all organizations that operate, purchase, or arrange for transportation.

Part C: Profile of Your Organization's Transportation Operations; to be completed by all organizations that operate some or all of their own transportation services.

Part D: Unmet Needs; to be completed by all respondents.

Part E: Coordination; to be completed by all respondents.

Please follow the directions on the questionnaire, and complete the sections that apply to your organization. **A list of definitions is provided on the next page of the questionnaire.** If you have any questions or need assistance, please call XXXXXXXXXXX at the phone number listed below.

Please return this survey by ***XXXXXXXX*** *to:*

Your Name
Your Organization/Agency/School District
Your Address
Your Address
Phone: (XXX) XXX-XXXX
Fax: (XXX) XXX-XXXX

Definitions

1. Coordinated Transportation Services - A cooperative arrangement between human service agencies and/or transportation providers to combine or consolidate some or all transportation functions or activities of the different organizations, in order to improve the efficiency and effectiveness of an area's transportation system. Many types and degrees of coordination exist, from vehicle sharing or the joint procurement of equipment or services to the performance of centralized administration and other functions by a single entity acting as a transportation broker. The intended result of coordination is lower costs for participating organizations through greater efficiency, which can mean better transportation services for the region.

2. Curb-to-curb - Service is provided to the passenger's particular origin or destination. The driver offers no assistance other than operating the wheelchair lift and tie down.

3. Demand Responsive - A system characterized by flexible routes and time schedules. Service is provided on an advanced reservation basis and is usually door-to-door.

4. Door-through-door - The driver escorts the passenger to or from the vehicle and *through* the front entrance of the building.

5. Door-to-door - The driver escorts the passenger to or from the vehicle and the front entrance of the building.

6. Fixed Route - Transit service that operates over specified routes during scheduled time periods. Passengers may board or be discharged at designated points along the route.

7. Fixed Stop - Service is provided only at designated locations along a fixed route.

8. Full-time Employee - An employee who works 30 or more hours per week.

9. Part-Time Employee - An employee who works less than 30 hours per week.

10. One-way Passenger Trips - A passenger trip consists of one person riding one-way from an origin to a destination. Thus, a round trip by one person is considered as two "one-way passenger trips."

11. Route Deviation - Service in which a vehicle operates along a fixed route but can deviate from the route to accommodate rider requests. The vehicle returns to the fixed route after the deviation.

12. Semi-fixed Route - A system in which the route changes in response to clientele/passenger demand changes.

13. Subscription Service - Those trips that occur at regularly scheduled times, either every day or on particular days of the week. Regularly scheduled passengers do not have to call to confirm pre-arranged service.

PART A. PROFILE OF YOUR ORGANIZATION

Al. What type of organization does this survey response represent?

Municipal Government State Agency

Other (Please Specify) _____

IF YOUR ANSWER IS ONE OF THE ABOVE, PLEASE SKIP TO QUESTION A6

Human Service Agency (Please answer Questions A2 through A6)

A2. Overall, what types of programs/services does your human service agency offer? (Check all that apply.)

Medical	Unemployment Benefits	Meal Delivery
Job/Employment Training	Public Assistance	Daily Meals
Transportation	Child Day Care	Head Start
Adult Day Car	Workshop/Rehabilitation Services	Mental Health

Other (Please Specify) _____

A3. Overall, what population segments does your human service agency serve? (Please check all that apply.)

Elderly	Youth	Veterans
Unemployed	Low income	Substance abusers
Physical disability	Mental or cognitive disability	Visually impaired
General public	Other (Please Specify) _____	

A4. What is the total number of clients your agency serves?

A5. Please indicate your human service agency's hours of operation:

	Monday – Friday	*Saturday*	*Sunday*
Administrative Offices:	_____-_____	_____-_____	_____-_____
Programs:	_____-_____	_____-_____	_____-_____

A6. What are the geographic boundaries of your human service agency's overall service area?

A7. Does your organization provide (i.e. purchase, operate, or arrange for) passenger transportation services of any type?

Yes (Please answer the following questions in Part B)

No (Please skip to **Part D)**

PART B. PROFILE OF YOUR ORGANIZATION'S TRANSPORTATION PROGRAM

B1. What type of transportation service(s) do you provide?
(If there is more than one type of service, *please submit a separate copy of this survey for each one.)*

Demand Responsive (Dial-A-Ride) Semi-Fixed Route

Fixed Route Route Deviation

Taxicab Subsidy

Other (Please Specify)

B2. What type of pick-up/drop-off service(s) do you provide?

Fixed Route Curb-to-Curb

Door-to-Door Door-through-Door

Other (Please Describe)

B3. What percentage of the trips that you provide are subscription trips?

_____

B4. (a) What are your ridership eligibility requirements? (Please check all that apply, and attach a detailed explanation if necessary.)

Elderly (overage _____) Youth (below age_____) Veterans

Unemployed Low income Substance abusers

Physical disability Mental or cognitive disability Visually impaired

General public Other (Please Specify) _____

B4. (b) Do your funding sources restrict potential eligible users of your transportation service?

Yes

No

If so, please cite federal/state statute or attach a copy of any contractual restrictions.

_____

_____

_____

B5. For which of the following trip purposes can your organization provide transportation services, and what percentage of your total transportation service does each type of trip account for?

Any type of trip need within your organization's service area.	_____%
Health/medical (e.g., trips to the doctor, clinic, drug store treatment center)	_____%
Nutrition (e.g., trips to a nutrition site.)	_____%
Maintenance (e.g., trips to food stamp, welfare, unemployment office, etc.)	_____%
Social (e.g., visits to friends/relatives)	_____%
Recreation (e.g., trips to cultural, social, athletic events)	_____%
Education/training (e.g., trips to training centers, schools, etc.,)	_____%
Employment (e.g., trips to job interview sites or places of employment, etc.)	_____%
Shopping / Personal needs (trips to the mall, barber, beauty shop, etc.)	_____%
Social services (e.g., trips to social service centers, adult daycare, training, etc.)	_____%
Other (Please specify)	_____%

B6. Indicate your hours of service by day:

	Mon.	*Tues.*	*Wed.*	*Thurs.*	*Fri.*	*Sat.*	*Sun.*
Transportation service begins:	_____	_____	_____	_____	_____	_____	_____
Transportation service ends:	_____	_____	_____	_____	_____	_____	_____

B7. How much advance notice is necessary to use your transportation service?: _____ day(s), _____ hours

B8. Please explain your fare or donation policy: _____

_____

_____

B9. **Using the map which follows,** please indicate your *transportation service area* and any *geographical restrictions* on where your transportation programs are provided (i.e. what townships, municipalities, and major destinations do you serve?) You may provide additional comments below:

_____

_____

_____

B9. Please indicate your transportation service area on this map.

IT IS IMPORTANT THAT YOU GIVE THE BEST ESTIMATES POSSIBLE FOR THE FOLLOWING QUESTIONS:

B10. Please indicate annual one-way passenger trips provided by this service:

FY96 or prior year	_____	passenger trips
FY97 or current year to date	_____	passenger trips
FY98 or future	_____	passenger trips

B11. How many annual vehicle miles of service were provided?

FY96 or prior year	_____	vehicle miles
FY97 or current year to date	_____	vehicle miles
FY98 or future	_____	vehicle miles

B12. How many annual vehicle hours of service were provided?

FY96 or prior year	_____	vehicle hours
FY97 or current year to date	_____	vehicle hours
FY98 or future	_____	vehicle hours

B13. Please provide your best estimate of the operating expenses and revenues associated with your transportation services (Note: Total Operating Revenues must equal or exceed Total Annual Operating Expenses).

	FY96 or prior year	FY97 or current year to date	FY98 or future
Total Operating Revenues for Transportation			
Revenues from Cash Fares or Donations	$_____	_____	_____
Revenues from Paid-in-Advance Fares (tickets, coupons, etc.)	$_____	_____	_____
Non-fare Revenues (charters, advertising, etc.)	$_____	_____	_____
Operating Subsidies:			
GWTD:	$_____	_____	_____
Municipal	$_____	_____	_____
State (please specify agency)	$_____	_____	_____
_____	$_____	_____	_____
_____	$_____	_____	_____
_____	$_____	_____	_____
Title III (Older Americans Act)	$_____	_____	_____
Title XIX (Medicaid)	$_____	_____	_____
Section 5311 (Formerly Section 18)	$_____	_____	_____
Other (Please specify)	$_____	_____	_____
TOTAL OPERATING REVENUES	$_____	_____	_____
Total Operating Expenses for Transportation			
Operating and Maintenance Expenses	$_____	_____	_____
Carrier Contract Expenses	$_____	_____	_____
Administrative Expenses	$_____	_____	_____
TOTAL OPERATING EXPENSES	$_____	_____	_____

B14. Please provide your best estimate of the capital expenses and revenues associated with your transportation services (Note: Total Annual Capital Revenues must equal or exceed Total Annual Capital Expenses).

	FY96 or prior year	FY97 or current year to date	FY98 or future
Total Capital Revenues for Transportation			
Excess Operating Revenues	$_____	_____	_____
Capital Subsidies:	$_____	_____	_____
Municipal	$_____	_____	_____
State (please specify agency)	$_____	_____	_____
_____	$_____	_____	_____
_____	$_____	_____	_____
_____	$_____	_____	_____
Section 5310 (Formerly Section 16)	$_____	_____	_____
Section 5311 (Formerly Section 18)	$_____	_____	_____
Other (Please specify)	$_____	_____	_____
TOTAL CAPITAL REVENUES	$_____	_____	_____
Total Capital Expenses for Transportation:			
Vehicles	$_____	_____	_____
Facilities	$_____	_____	_____
Other (Please Specify)	$_____	_____	_____
TOTAL CAPITAL EXPENSES	$_____	_____	_____

B15. Please describe any significant changes in the above sources of funding that you foresee in the next year or so.

_____

_____

_____

B16. Please define your organization's fiscal year.

PART C. PROFILE OF YOUR ORGANIZATION'S TRANSPORTATION OPERATIONS

C1. Please indicate the *proportion* of your *trips* that are provided in the following manner:

_____% Organization vehicles driven by paid drivers

_____% Organization vehicles driven by non-transportation staff--i.e., caseworker or volunteer driver

_____% Volunteer drivers using their own vehicles

_____% Contract/purchase service from an independent carrier/operator

(includes taxicab companies and van operators) _____

Please specify the name(s) of the contract operator(s): _____

_____% Other (Please explain):

NOTE: If you have indicated that you provide trips in MORE THAN ONE manner, please explain why (i.e. "Lift-van trips are provided with organization vehicles, while taxi trips are contracted"):

_____

_____

IF YOU ANSWERED "**100%** Contract/purchase service..." IN QUESTION **C1**, PLEASE SKIP TO **PART D** OTHERWISE, PLEASE COMPLETE THE REMAINING QUESTIONS IN PART C.

C2. Describe the staffing of your transportation operation.

	Full-time	Part-Time	Volunteer
Managers			
Supervisors			
Reservationists			
Schedulers			
Dispatchers			
Drivers			
Mechanics			
Accounting			
Support			
Others (please specify)			
_____			
_____			

C3. If volunteer drivers are reimbursed in any way, please explain.

_____

_____

_____

C4. What is the nature of your vehicle overnight storage facility?

Indoors Outdoors Both

Please indicate the location of your storage facility: _____

C5. How do you schedule your vehicles?

Manually Computer-Assisted Fully Automated

Name of software (if applicable): _____

C6. How is your vehicle maintenance provided?
In-House
By Contract (please indicate what organization provides maintenance):
Both

C7. Please indicate the level of your insurance coverage:

General Liability _____ Umbrella or Excess Coverage _____

Vehicle Liability _____

C8. Do you provide seasonal or special service during the year?

No (Please skip to Question C9) Yes (Please provide the information requested below):

Type Of Trip(s)	*Frequency*	*# of Passengers*	*Destination*

C9. Do you provide transportation service for other organizations?

No (Please complete the following charts) Yes (Please provide the information requested below):

Sponsoring Organization	*Annual Revenue*	*Payment Basis**	*Days/ Week*	*Number of Trips/Day*	*Trip Purpose*

* Please indicate the rate level and structure, e.g., cost per vehicle mile, cost per passenger, cost per hour.

Please complete the following two charts.

CHART C1. VEHICLE INFORMATION

In the table below, please provide information on all vehicles that your organization uses to transport passengers/ clients.

Vehicle Number or Designation	*Make and Model*	*Active or Spare*	*Model Year*	*Funding Source**	*Capacity***	*Equipped with Radio (Yes/No)*	*Equipped with Wheelchair Lift (Yes/No)*	*Capacity of Lift (lbs.)*	*# of Miles on Vehicle*	*Condition*	*Date of Anticipated Retirement*	*Anticipated Funding Source for Replacement Vehicle**
EXAMPLE	Dodge Maxivan	Active	1992	Section 16	10 + 0 wc 8 + 2 wc	Yes	Yes	600	40,000	Good	12/96	Section 16

* Please indicate the source(s) of funding for vehicle purchases.

**Please indicate seating capacity and wheelchair capacity, if any (e.g., 10 seats with no wheelchairs; 8 seats with 2 wheelchairs).

CHART C2. VEHICLE UTILIZATION

In the chart below, please indicate which time periods during the day that each of your vehicles is in use. If vehicle utilization varies by day of the week please explain this below.

Use arrows across boxes to indicate periods of time when the vehicles are providing passenger transportation, and use 'X' marks to indicate time spent traveling without passengers (for example, to and from the garaging location, or between one drop-off and the next pick-up). In the example shown, the vehicle is traveling without passengers between 6 A.M. and 7 A.M., is in use between 7 A.M. and 9 A.M. and traveling without passengers between 9 A.M. and 10 A.M., is in use between 11 A.M. and 1 P.M., and 2 P.M. and 3 P.M., and traveling without passengers between 4 P.M. and 5 P.M.

Please also indicate what type of trip is being provided by the vehicle during each time slot (e.g., general demand-response, nutrition, dialysis, employment) by writing the type of trip in the boxes. In the example below, the vehicle is providing trips to adult day care between 7:00 A.M. and 8:00 A.M., and between 2 P.M. and 4 P.M., and nutrition trips between 11 A.M. and 1 P.M.

Below the boxes, please indicate the number of passengers, on average, that are transported during each block of time. In the example, 8 people are usually driven to day care between 7:00 and 9:00 am, and driven home between 2:00 and 4:00 p.m.; 12 people are taken to a meal site between 11:00 am and 1:00 p.m.

Vehicle Number	6 AM	7 A	8 AM	9 AM	10 AM	11 AM	12 NOON	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM
EXAMPLE	X	← Day Care →		X		← Nutrition →			← Day Care →		X		
		8				12			8				

Comments: _____

_____

_____

_____

PART D. UNMET NEEDS

(Please continue on a separate sheet, if necessary)

D1. Please describe any destinations or geographic areas that your *constituents/clients/customers* would like to *access* but are unable to due to a lack of appropriate transportation services: _____

_____

_____

_____

D2. Please describe any destinations or geographic areas that your *organization* would like to *serve* but are unable due to a lack of appropriate transportation services:

_____

_____

_____

D3. Please describe any *population groups* that your organization would like to serve but are unable due to a lack of appropriate transportation services: _____

_____

_____

D4. Please describe any *times of the day or week* during which your organization would like to function but are unable to due to a lack of appropriate transportation services? _____

_____

_____

D5. With respect to your organization, what is the greatest transportation dilemma that you face? (For example, lack of funding, lack of adequate transportation services, etc.) _____

_____

_____

_____

D6. What additional transportation needs do you anticipate for your organization in the next five years?_____

_____

_____

_____

D7. Please describe any shortcomings in transportation program *eligibility determination* that have been experienced by your constituents/clients/customers: _____

_____

_____

_____

D8. If you were given a simple, user-friendly form, would you be willing to track your unmet needs (i.e., trip requests that you cannot accommodate) for a period of one month, and share that information with us? [ ] Yes [ ] No

_____

_____

_____

D9. Other comments: _____

_____

_____

_____

PART E. COORDINATION

E1. Please describe any coordination that *presently does take place* between your organization and nearby organizations that use and/or provide transportation services (attach additional sheet if necessary):

_____
_____
_____

E2. Would your organization have any interest in coordinating your transportation needs and/or services with other agencies and transportation providers in your area in one of the following ways:

a. ***Coordinated Procurement*** *(check all that apply)*	YES	NO	UNSURE (but willing to consider)
Vehicles	☐	☐	☐
Fuel	☐	☐	☐
Staff/Driver Training	☐	☐	☐
Operation Contract (i.e., purchase of service)	☐	☐	☐
Maintenance	☐	☐	☐
Insurance	☐	☐	☐
Hardware/Software	☐	☐	☐
Other (specify) _____	☐	☐	☐

b. ***Coordinated Functions*** *(check all that apply)*	YES	NO	UNSURE (but willing to consider)
Reservation Intake	☐	☐	☐
Scheduling/Dispatching	☐	☐	☐
Vehicle Operation	☐	☐	☐
Service Monitoring	☐	☐	☐
Customer Service / Information Referral	☐	☐	☐
Volunteer Driver Coordination	☐	☐	☐
Other (specify) _____	☐	☐	☐

E3. Would your organization be interested in providing transportation services, or more transportation services, under contract to another agency?

_____
_____
_____

E4. Would your organization consider purchasing transportation services from another agency, assuming that the price and quality of service met your needs?

_____
_____
_____

E5. If your organization operates transportation services directly, would you be willing to consider coordinating pick-up and drop-off points to facilitate the transfer of passengers from one transportation service to another?

_____
_____
_____

E6. Would your organization be willing to consider participating in a coordinated regional transportation system in which some or all management/administrative functions would be performed by one entity?

_____
_____
_____

E7. Are you aware of any organizations, including your own, which might perform such a "Mobility Manager" function?

_____
_____
_____

E8. In the areas that you have checked off or described above, are there any specific organizations with which you would like to coordinate?

_____
_____
_____

E9. Do you feel there are any real or perceived barriers to the coordination of existing transportation services in your area? (For example, statutory barriers to pooling funds, liability concerns, "turf issues", etc.-continue on reverse side.)

_____
_____
_____

E10. Additional comments (attach additional sheet if necessary):

_____
_____
_____

THANK YOU FOR YOUR TIME!

Please mail the completed survey to the address on the cover sheet by XXXXXXXXX.

Appendix B

Use of School Buses for Non-Pupil Transportation
Survey of State Directors of Pupil Transportation Services

Overview

Appendix A includes the results of a survey conducted with state directors of pupil transportation, aimed at assessing the extent to which school buses may be used for non-pupil transportation and under what conditions. An initial survey was conducted in February 1998. A follow-up survey was distributed via E-mail and fax in July 1998. Of the 51 state directors contacted (including the District of Columbia), 31 or 61% responded to one or both of the surveys. Answers to key questions are highlighted in Table A-1.

Surveys were sent to each state director of pupil transportation, based on a list provided by the National Association of State Directors of Pupil Transportation Services (NASDPTS). The survey was designed to answer the following key questions:

- Can school buses be used for non-school-related transportation (e.g., general public transportation or specialized transportation services)?
- Is co-mingling of pupils and non-pupils allowed on school buses?
- How are insurance and funding issues handled for services provided for non-pupil transportation?
- Do school buses need to be modified if someone other than the local school district uses them?

Comments from pupil transportation directors are summarized after Table A-1. These comments help to elaborate on the key highlights presented in the table. In addition, an Internet search was conducted to identify relevant state-level statutes and regulations for states that did not respond to the survey. During the course of the research, two useful Web Sites were found, which permit a state-by-state search for relevant statutes, regulations, legal opinions, and state agency information. The two Web Sites are:

- **Washburn University Law School Library**
  http://lawlib.wuacc.edu/washlaw/uslaw/statelaw.html
- **Legal.Online**
  http://www.legalonline.com

Findings

The findings for each of the main topics addressed by the survey are summarized below. For a specific state's perspective, please see Table A-1 and the comments that follow. Although every effort was made to accurately reflect the current status of state statutes and regulations, before embarking on any course

of action related to the use of school buses for non-pupil transportation, it would be wise to check to be sure you have up-to-date information. The state director of pupil transportation, the state department of transportation, and the legal staff for the state legislature are good places to start. A list of the school bus directors, provided by the National Association of State Directors of Pupil Transportation Services, is included in this Appendix.

Use of School Buses for Non-pupil Transportation

The first three questions on the summary chart and a few others in the full survey address the question of whether school buses may be used to transport non-pupils. For the most part, state statutes and regulations allow non-pupils to be transported on school buses under certain conditions. Question 1a asks whether state statutes or regulations prohibit transporting non-pupils. According to the 31 directors who answered the survey, 73% said there are no prohibitions on the use of school buses for transporting non-pupils, 20% said there were prohibitions, and 7% said sometimes there were prohibitions. In a corollary question, survey respondents were asked whether state statutes or regulations *allow* the use of school buses to transport non-pupils. Of the 31 directors who answered the question, 68% said the use of school buses is allowed, 6% said their use is not allowed, 19% said sometimes school buses may be used to transport non-pupils, and 6% said there is no reference.

Respondents also were asked whether local school districts and boards were allowed to determine non-pupil use of school buses locally. Of the 31 respondents, 61% said local districts may decide, 26% said they are not allowed to decide locally, and 13% said sometimes local districts may determine non-pupil use of school buses.

Co-Mingling of Pupils and Non-pupils on School Buses

Another question asked whether it is legal to co-mingle pupils and non-pupils on school buses. Of the 28 persons who answered the survey, 49% said it is legal to co-mingle pupils, 25% said it was not legal, 7% said the issue is not specified. In several surveys, respondents noted the potential liability and safety problems of mixing children and unknown adults.

A companion question asked whether school employees could be transported on school buses along with pupils. Of the 27 who answered this question, 70% said it is all right, 15% said you could not, and another 15% said sometimes. Several comments centered on the idea that if non-pupils were co-mingled with others, the municipality would not allow the non-pupil transportation to interfere with pupil transportation and the local authority would not pay for non-pupil transportation.

The survey also asked whether it was possible to use school buses to transport special populations (e.g., transporting senior citizens). Of the 24 who answered this question, 71% said yes, 7% said no, and 21% sometimes. When asked whether school buses could be used for summer transportation, 74% said yes, 9% said no, and 17 % said sometimes. Finally, when asked whether an agency can contract with the school districts for transportation services, 71% said yes, 8% said no, and 21% said sometimes.

Required School Bus Modifications

By and large, no significant changes have to be made when a school bus is used by another agency. The noted exception is the need to cover the school bus signs and to deactivate the flashing lights, which is a common requirement for school buses when transporting non-pupils.

Insurance and Funding Issues

Although often cited as a reason why agencies are reluctant to share their vehicles, only 21% of the survey respondents said they needed extra insurance when using school buses for non-pupil transportation; 46% said no extra insurance was needed, 21% said sometimes, 7% did not know, and 4% said such policies were not mentioned.

Of bigger concern was the issue of how non-pupil transportation is funded. For the most part, state regulations do not appear to negatively or positively affect funding; however, many survey respondents commented that the state department of education will not reimburse local school districts for non-pupil transportation.

Table A-1: Survey Highlights
Use of School Buses for Non-pupil Transportation

State	Returned Survey	Q1a Do state statutes or regulations prohibit school buses from transporting non-pupils?	Q1b Do state statutes or regulations allow school buses to transport non-pupils?	Q2 Are local (school) authorities allowed to determine non-pupil use of school buses?	Q3 Is it legal to co-mingle pupils and non-pupils on school buses?	Q7 Can school buses be used to transport school employees (with pupils)?	Q8 Is additional insurance required for non-pupil transportation?	Q9 If someone else uses the school buses, must any modifications be made to the vehicle?	Q10 & Q11 Do funding incentives / barriers affect use of school buses for non-pupil transportation?	
									Incentives	Barriers
Alabama										
Alaska	☐	No	No reference	Yes	Not specified	Yes	Not specified			
Arizona	☐	No	Yes	No	No	Yes	No	No	No	No
Arkansas	☐	Sometimes	Yes	Yes	Not specified					
California	☐	No	Yes	Yes	Yes	Yes	No		Sometimes	Sometimes
Colorado	☐	No	Yes	Yes	Sometimes	Yes	No	Yes	Yes	No
Connecticut										
Delaware	☐	Yes	Sometimes	Sometimes	No	No	Don't know	No	Yes	No
District of Columbia										
Florida										
Georgia										
Hawaii	☐	No	No reference	Sometimes	No	No	No	No		
Idaho	☐	No	Yes	Yes	Yes	Yes	Don't know	Uncertain	Yes	No
Illinois	☐	No	Yes	No	Sometimes	No	Sometimes	No	Sometimes	No
Indiana										
Iowa	☐	No	Yes	Yes	Sometimes	Yes	Sometimes	Yes	No	Yes
Kansas	☐	No	Yes	Yes	Yes	Yes	No			
Kentucky	☐	No	Yes	No	Yes	Yes	Yes	No	No	No
Louisiana										
Maine	☐	No	Yes	Yes	Yes	Yes	Sometimes	Yes	No	No
Maryland	☐	No	Yes	Yes	Yes	Yes	Yes	No		Not Sure
Massachusetts										
Michigan										
Minnesota	☐	No	Yes	Yes	Yes	Yes	No	No	No	No
Mississippi	☐	Yes	Sometimes	No	Yes	Yes	No	No	No	No
Missouri	☐	No	Sometimes	Sometimes	No	Yes	No	Yes	No	No
Montana										

State	Returned Survey	Q1a Do state statutes or regulations prohibit school buses from transporting non-pupils?	Q1b Do state statutes or regulations allow school buses to transport non-pupils?	Q2 Are local (school) authorities allowed to determine non-pupil use of school buses?	Q3 Is it legal to co-mingle pupils and non-pupils on school buses?	Q7 Can school buses be used to transport school employees (with pupils)?	Q8 Is additional insurance required for non-pupil transportation?	Q9 If someone else uses the school buses, must any modifications be made to the vehicle?	Q10 & Q11 Do funding incentives / barriers affect use of school buses for non-pupil transportation?	
									Incentives	Barriers
Nebraska	✓	Yes (with two exceptions)	No	No	No	Sometimes	Sometimes	Yes	No	No
Nevada										
New Hampshire	✓	No	Yes	Yes	No	Sometimes	No	Yes	No	No
New Jersey	✓	Yes and No (see comments)	Sometimes	No	Sometimes	No	No	No	No	No
New Mexico										
New York										
North Carolina	✓	Yes	Yes	No	Sometimes	Yes	No	No	No	No
North Dakota	✓	No	Yes	Yes	Yes	Yes	No	No	No	No
Ohio	✓	Yes	Sometimes	Sometimes	Sometimes	Sometimes	Yes			
Oklahoma	✓		Yes	Yes			Yes			
Oregon										
Pennsylvania										
Rhode Island										
South Carolina	✓	No	Yes	Yes	Yes	Yes	Sometimes	No	No	No
South Dakota	✓	No	Yes	Yes	Sometimes	Yes	Yes			
Tennessee										
Texas	✓	No	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Utah										
Vermont										
Virginia	✓	No	Yes	Yes						
Washington	✓	Yes	Sometimes	No	No	Sometimes	No	No	Yes	No
West Virginia										
Wisconsin	✓	No	No	Yes						
Wyoming	✓	No	Yes	Yes	Not Recommended	Yes	Sometimes	No	No	No

✓ = answered second survey ✓ = answered first survey only blank = did not respond

Fax-Back Survey
Integrating School Bus and Public Transportation Services in Non-urban Communities

Please complete and return by July 15, 1998, to Raisa Lawrence at: 617-864-3521 (or mail to her at: Multisystems, Inc. 10 Fawcett Street, Cambridge, MA 02138).

Name: N=31 (61%) State:
Telephone: E-mail:

Q 1a. Do state statutes or regulations **prohibit** school buses from being used to transport non-pupils? 6 (20%) Yes 22 (73%) No 2 (7%) Sometimes

What is the complete citation for that statute or rule? (Please attach a copy of the pertinent section(s))

Q 1b. Do state statutes or regulations **allow** school buses to be used to transport non-pupils? 21 (68%) Yes 2 (6%) No 6 (19%) Sometimes 2 (6%) No Reference

If so, under what conditions?

What is the complete citation for that statute or rule? (Please attach a copy of the pertinent section(s))

Q 2. Are local authorities allowed to determine non-pupil use of school buses? 19 (61%) Yes 8 (26%) No 4 (13%) Sometimes

If so, under what conditions?

Q 3. Is it legal to co-mingle pupils and non-pupils on school buses? 11 (39%) Yes 7 (25%) No 7 (25%) Sometimes 2 (7%) Not Specified 1 (4%) Not Recommended

If so, under what conditions?

What is the complete citation for that statute or rule? (Please attach a copy of the pertinent section(s))

Q 4. Can school buses be used to transport special populations (e.g., senior citizens or persons with disabilities (non-pupils)? 17 (71%) Yes 2 (7%) No 5 (21%) Sometimes

If so, under what conditions?

Q 5. Can school buses be used during the summer (or during school vacations) for non-pupil transportation? 17 (74%) Yes 2 (9%) No 4 (17%) Sometime

If so, who may drive the bus?

If so, how is the service funded?

Q 6. Can an agency contract to use a school bus to transport its clients or members?
17 (71%) Yes 2 (8%) No 5 (21%) Sometimes

If so, under what conditions?

Q 7. Can school buses be used to transport employees who work at the school?
19 (70%) Yes 4 (15%) No 4 (15%) Sometimes
If so, under what conditions?

Q 8. Is additional insurance required to use school buses for non-pupil transportation?
6 (21%) Yes 13 (46%) No 6 (21%) Sometimes 2 (7%) Don't Know
1 (4%) Not Mentioned

If so, under what conditions?

How much coverage is required?

How much does it cost? Who pays for it?

Q 9. If someone else uses school buses for transportation, are any modifications made to the vehicles? 7 (32%) Yes 14 (64%) No 1 (4%) Sometimes

If so, please describe the nature of the modifications.

Q 10. Are there any funding formulas or special requirements that make using school buses for non-pupil transportation difficult? 1 (5%) Yes 19 (90%) No
1 (5%) Sometimes

If so, please describe.

Q 11. Are there any funding formulas or special incentives that make using school buses for non-pupil transportation attractive? 4 (19%) Yes 15 (71%) No
2 (10%) Sometimes

If so, please describe.

Thank you again for your help. Please feel free to add any comments that may explain how school buses and public transportation are integrated or coordinated in your state.

Survey Comments
(November1998)

Alabama

Source: Based on Internet search of Alabama Code.

- Alabama Code Sec. 16-8-27 Transportation of Employees:
- "County boards of education may at their discretion provide for the transportation of employees of such boards of education to and form schools along with pupils on established pupil transportation route schedules where such transportation can be provided without extra mileage or the overcrowding of school buses, provided, that the county board of education shall not be liable for any damage which may occur to such employee of the school board so transported."

Alaska

Source: Alaska Department of Education

- State regulations only refer to reimbursement for pupil transportation from state funds. If no funding is requested, district can use vehicles as they choose.
- No regulation or statute specifically prohibits the possibility of co-mingling pupils and non-pupils on school buses.
- The Department of Education's regulations do not address requirements for additional insurance when using school buses for non-pupil transportation.
- "Native corporations in the state of Alaska (which are in some ways the Alaskan equivalent of reservations in the lower 48) have cooperatively purchased buses with the local school district in bush communities where no public transportation is offered. The buses are used to transport children to Early Childhood Education programs which are not funded by the state DOE, therefore, the pupil transportation is also not funded."

Arizona

Source: Arizona Department of Public Safety

- School districts may contract with a third party to provide transportation using school buses for non-pupils. Drivers must meet federal motor vehicle licensing requirements. School buses may be used for activity trips.
- No alterations/modifications may be made to school buses used to transport non-pupils without written permission from the Arizona Department of Public Safety.

Arkansas

Source: Arkansas Department of Education (White Paper: "Issues Involving Usage of Arkansas School Buses for Non-School Purposes," prepared by Arkansas Public Transportation Coordinating Council, April 1998.)

- The white paper lists pertinent Constitutional Articles, Arkansas Code, and Attorney General (AG) opinions concerning the use of school buses. For example:
  - Ark. Code 6-19-101 gives the State Board of Education authority to set up regulations and standards governing the school transportation program in the school districts of Arkansas.
  - Ark. Code 6-19-112 exempts all motor vehicles owned and operated by public school districts from taxation when used exclusively for school purposes to include license tag fees and charges.

- AG Opinion 90-311 advises that the use of public school district's buses for the transportation of private school students could be prohibited under the Arkansas Constitution, Art. 14.2. The opinion further states that a school district allowing its buses to transport private school students could lose its tax exemption under A.C.A. 6-19-12.

- The white paper concludes with a concept paper by the Arkansas Department of Education, School Transportation Section, which emphasizes the department's "belief that the safest means of transporting school children is a separate transportation system designed and operated specifically to meet their unique needs. . . The value and effectiveness of these characteristics are well documented by the pupil transportation community's outstanding safety record. The pupil transportation community has spent decades refining the safety and quality of its service to its constituents."

California

Source: California Department of Education

- Responsibility for school bus operations and policies is delegated to local school districts.
- It is legal to co-mingle pupils and non-pupils on school buses as long as seating is available.
- An agency may contract with the local School District to use school buses for agency trips. Driver must have proper licensing to drive a school bus.

Colorado

Source: Colorado Department of Education

- Responsibility for school bus operations and policies is delegated to local school districts.
- School buses may be used for non-pupil transportation if district policy allows and it is not in competition with private carriers.
- When school buses are used for non-pupil transportation, must cover the district name and the words, "school bus."
- The state does not provide reimbursement for non-pupil transportation.

Connecticut

Source: Based on Internet search of Connecticut General Statutes

- School bus statutes were not available on-line; however, there was mention of the carrying of passengers for hire by mail carriers and others (Connecticut General Statutes, Title 13b, Sec. 13b-92), which allows this practice in rural areas where there is no other agency of public transportation for passengers.

Delaware

Source: Delaware Department of Education

- School buses may not be used to transport non-pupils when they are transporting pupils to and from school, except as allowed in the "Instructional Program" for drivers manual: "No person other than a pupil, teacher school official, aide or substitute driver shall be permitted to ride on a school bus while transporting pupils.
- School buses may be used to transport non-pupils when they are not transporting pupils (not referenced in statute).
- Drivers must have CDL with School Bus Endorsement.

District of Columbia

No information available

Florida

Source: Based on Internet search of Florida Statutes

- *Chapter 234.211 Use of school buses for public purposes* – allows school districts to enter into agreements with community transportation coordinators for the provision of service to persons who are transportation disadvantaged (seniors, persons with disabilities, low income individuals, and children at-risk, as defined by Florida Statute Chapter 427.011). Also permits school districts to enter into agreements with nonprofit organizations (e.g., Boy Scouts, Girl Scouts, 4-H Clubs) that wish to use school buses for transportation to and from events. School board must be compensated at least equal to the costs incurred by the board for such use.
- When used for non-school purposes other than the transportation of the transportation disadvantaged, Chapter 234.211 stipulates that flashing red lights and white strobe lights shall not be used and the "school bus" inscription on the front and rear of the buses shall be covered or concealed.
- Chapter 427, Florida Statutes, requires community transportation coordinators to maximize the use of public school transportation and public fixed route service for the transportation of the transportation disadvantaged.
- *Section 427.0158 School bus and public transportation* - requires school boards to cooperate in the utilization of school buses to transport persons who are transportation disadvantaged. Semiannually, the local school board is required to provide the community transportation coordinators with information about:
  - (a) the number and type of vehicles by adult capacity, including days and times, that the vehicles are available for coordinated transportation disadvantaged services;
  - (b) the actual cost per mile by vehicle type available;
  - (c) the actual driver cost per hour;
  - (d) additional actual costs associated with vehicle use outside the established workday or workweek of the entity; and
  - (e) notification of lead-time required for vehicle use.

Georgia

Source: Based on Internet search of Georgia Code

- Georgia Code 40-8-116 – "It shall be unlawful to operate . . . (3) Any school bus for any purpose other than the transportation of school children to or from school or school activities without concealing or covering all markings thereon indicating 'SCHOOL BUS.'"

Hawaii

Source: Hawaii Department of Education

- State laws do not address whether non-pupils are allowed to be transported on school buses.
- Other agencies can contract to use school buses for their clients.

Idaho

Source: Idaho Department of Education

- If there are no other commercial services available, school buses may be used to transport special populations. Costs of transporting non-pupils are not reimbursable by the Department of Education.
- School buses may be used to transport school employees to work.
- If used for non-pupil transportation, signs must be covered and eight-way lights disabled.

Illinois

Source: Illinois State Board of Education

- *105 ILC8 5/29-3.5 Other use of school buses* – "The school board of any school district may provide transportation services to any non-profit organization for recreational, cultural, educational, and public service programs operated by the organization for the benefit of its members. Transportation shall be provided to non-profit organizations during times when the vehicles used are not needed for the transportation of students between school and their homes. The school board, shall make a charge for such transportation in an amount equal to the cost thereof, which shall include a reasonable allowance for depreciation of the vehicles used. The school board is authorized to enter into contracts, leases, or agreements covering the use of transportation by non-profit organizations. The school board shall add to the charges made for the use of transportation a reasonable amount to cover any increase in insurance premiums incident to the use of transportation by the organization . . . Nothing in this Section shall be construe to permit any school district to provide transportation services in competition with any mass transit carrier."

Indiana

No response; no information available.

Iowa

Source: Iowa Department of Transportation

- Local boards set policies relating to use of school buses.
- Iowa Code and Administrative Rules of the Department of Education allow for the use of school buses by certain organizations (281-43.10(5) Iowa Administrative Code): "School buses may be used by an organization of, or sponsoring activities for, senior citizens, children, handicapped, and other persons and groups, and for

transportation of persons other than pupils to activities in which pupils from the school are participants or are attending the activity or for which the school is a sponsor . . ."

- Signs must be covered, flashing lamps and stop-arm made inoperable when used for non-school-sponsored activity.

- In addition, teachers may be transported on school transportation as follows (281-43.11(285) Iowa Administrative Code) "*Teacher transportation* – Public school teachers who are transported should be included in the average number transported and should be charged the pro rata cost by the transporting district.".

Kansas

Source: Kansas Department of Education

- Provided 104-page *Kansas School Transportation Regulations Standards & Statutes*.
  - Allows mass public transportation provided by a metropolitan transit authority to be used by school districts to provide transportation of pupils, students, and school personnel to and form school or to or from school related functions or activities (Sec. 36-13 –37).
  - If public transit buses are used for school route transportation, they must have temporary signs located on the front and rear of the vehicle, as specified in the rule (Sec. 36-13-37).
  - Kansas Statutes Annotated allows school bus use for purposes other than pupil transportation when the bus is not being used for regularly required school purposes as follows (72-8326):
    (1) (A) Transporting parents and other adults to or from school related functions or activities, (b) transporting pupils to or from functions or activities sponsored by organizations, the membership of which is principally composed of children of school age, and (C0 transporting persons engaged in field trips in connection with their participation in an adult education program maintained by the transporting school district or by any other school district, within or outside the boundaries of the transporting school district; and
    (2) contracting with (A) the governing body of any township, city or county for transportation of senior citizen groups or organizations, (B) the governing authority of any nonpublic school for transportation of pupils attending such nonpublic school to or from inter-school or intra-school functions or activities, (C) the board of trustees of any community college for transportation of students attending such community college to or from functions or activities of the community college, (D) a public recreation commission established and operated under the laws of this state, for any purposes related to the operation of the recreation commission and all programs and services thereof, or (E) the board of education of any other school district for transportation, on a cooperative and shared-cost basis, of pupils, school personnel, parents and other adults to or from school-related functions or activities." Costs must be covered by the purchasing agency.

Kentucky

Source: Kentucky Department of Education

- State regulations allow adult school board employees to be transported with written permission from the district superintendent.
- Kansas Revised Statutes allow school buses to be used for transporting certain persons (KRS 160-305) *Contracts for use of school buses to transport persons eligible for transportation services –*
  - (1) The Cabinet for Human Resources may enter into a contract with the local board of education of any school district in the Commonwealth for the use of school buses to transport persons eligible for transportation services at times when the buses are not needed to transport students to or from school or school events. Persons eligible for such transportation services shall be:
    (a) Sixty-two (62) years of age or older;
    (b) Those with physical or mental disabilities; or
    (c) Any other person designated by the Cabinet for Human Resources as appropriate for such transportation services."

Louisiana

Source: No information available.

Maine

Source: Maine Department of Education

- Use of school buses is a local decision.
- Local school districts may provide non-pupil transportation but may not seek out and bid on such services.

Maryland

Source: Maryland State Department of Education

- Co-mingling of pupils and non-pupils is not done; concern for criminal background checks, etc.
- Local entities have latitude in decisions about use of school buses.

Massachusetts

No information available.

Michigan

Source: Based on Internet search of Public Acts of Michigan Compiled Laws

- Sec. 340.231 – Use of school bus to transport senior citizens; conditions.
  - "Rule 1. A school district may permit the use of a school bus for the purpose of transporting senior citizen groups if the following conditions exist: (a) The school bus is not otherwise being used for school purposes; (b) An organization or group requesting use of a school bus attests that a person to be transported is retired, 55 years of age or older, the spouse of a retired person, a staff member of the sponsoring organization or group, or an individual required to assist seniors or retired persons with handicaps; (c) The persons to be transported are not subject to a sales promotion; (d) A school bus is not furnished to a profit-making organization or used for the transporting of freight, goods, or merchandise other that that which is carried on the laps of individual passengers; and (e) It is

determined that other suitable or economically feasible transportation is not available."

- Sec. 340.236 – Receiving or discharging passengers.
  - "Rule 6. A senior citizen or retired person shall, whenever practical, be received or discharged from a school bus only in a designated parking or loading area not part of a street or highway."
- Sec. 340.237 – Fee; costs.
  - "Rule 7. A board of education may charge a fee to cover the costs for transporting senior citizens or retired persons in a school bus, or may pay costs from available funds not needed for the support of the educational program or necessary services for pupils."
- Further, red flashing lights may not be used when transporting non-pupils.
- Insurance must be in place, per local decisions.

Minnesota

Source: Department of Public Safety

- Minnesota allows the following types of persons to ride in school buses with pupils: preschoolers, drivers' children, teen moms with children, low income traveling to work, and elderly, with prior arrangements.
- When used for non-pupil transportation, school identification signs are covered with charter sign.

Mississippi

Source: Mississippi Department of Education

- Student Transportation Code JGG-2 (also EDDA) states that school buses are intended for the transport of students. The use of buses for special events is limited to students, teachers, coaches, and sponsors. "Buses shall be used for no purpose other than those specified in the order of the local school board of education."
- Although the survey indicated that regulations prohibit the use of school buses to transport non-pupils, there are a few exceptions to this rule. For example, cafeteria workers may be transported on school buses.
- Also, according to Mississippi Code, school buses may be used to transport "citizens for grand jury and other jury functions upon order of the court" (Sec. 37-41-27).
- Except as noted above, non-pupils may only be transported in the event of an emergency (i.e., hurricanes, tornadoes, etc.) (Sec. 37-41-27).
- Local school board shall set the amount charged to use a publicly owned bus, with a minimum charge of 30 cents per mile.

Missouri

Source: Department of Elementary and Secondary Education

- Internet site includes copy of Missouri Department of Elementary and Secondary Education 1997-98 Pupil Transportation Administrative Handbook.
- School buses with commercial license plates may be used to transport non-pupils. Signs must be covered and lights must be deactivated.
- School employees may be transported by school bus when they are supervising pupils being transported for educational purposes.
- Comment: "Please visit the home page and download the *Pupil Transportation Administrators Handbook*. The questions asked in my opinion will not generate

information useful for deciding the issue being studied. The direction that should be taken is whether such an activity is feasible. For example, senior citizens need transportation during the day, are school buses available during the times there is a need for transporting senior citizens?"

Montana

No information available

Nebraska

Source: Nebraska Department of Education

- According to Rule 92-008.06, "No one except school personnel, supervisory personnel, monitoring personnel and school children regularly assigned to a student transportation vehicle for a particular route and schedule may ride in such vehicles."
- School buses may not be used for non-pupil transportation, except for senior citizens (see below) and during emergency evacuations.
- Article 12 – Nebraska Public Transportation Act – allows "any municipality or county in providing public transportation for the elderly under subsection (1) of this section may contract with the school board or board of education of a public school district for the use of a school bus at times other than during the normal school day or on days when school is not in session if all costs incurred by such municipality or county are paid for with money generated from passenger fees or federal or state funds. . ." (13-208(2). (Also Article 39 - Nebraska Public Transportation Act of 1975.)
- Article 12 – Nebraska Public Transportation Act – allows "any municipality or county may contract with the school board or board of education of any public school district for the use of school buses for emergency evacuation of members of the public by qualified law enforcement personnel during emergency or crisis situations that pose a threat to the health, safety, or well-being of the individuals to be evacuated. . . " (13-208(3).
- When used to transport non-pupils, the school bus signage must be covered or concealed, the stop signal arm and flashing stop warning signal lights shall not be operable (Article 6 – Nebraska Rules of the Road – Section 60-6,175(6)).

Nevada

Source: Based on Internet search of Nevada Revised Statutes.

- An online review of Nevada Revised Statutes revealed little information about the use of school buses for non-pupil transportation. However, there was mention of the ability of school boards to purchase public transportation for pupils enrolled in high school who use public transit to and from school (NRS 392.330 (1(b)).
- NRS 392.330 (2(b)) also allows for the transportation of pupils via private automobile, if properly insured.

New Hampshire

Source: New Hampshire Department of Safety

- If school district owns the school bus, it can use it as it wishes. A contractor must register it as a commercial vehicle.
- When a vehicle is in service for school transportation, it may only transport pupils. The New Hampshire Code of Administrative Rules (Saf-C 1303.06(e)) states: "Any

school bus contracted or leased to a school, school district, or town, which is registered in the name of the school, school district or town, shall be exclusively used for the transportation of pupils for said school, school district or town, in and from school and school related activities."

- School buses may be used to transport others if it is properly registered and not transporting students.
- Any properly licensed person may operate a school bus used to transport non-pupils.
- School signs must be covered when vehicle is used to transport non-pupils (New Hampshire Motor Vehicle Laws (RSA) Sec. 285.56)

New Jersey

Source: New Jersey Department of Education

- District Boards of Education are prohibited from using school buses for non-pupil transportation. Privately owned school buses for hire may be used to transport non-pupils.
- Some trips are allowed for seniors, people with disabilities, children and adults on recreational trips sponsored by the municipality (NJS 18A:39-22 & 22.1).
- Adults serving as chaperones may ride on school buses (NJAC 6:21-4.2).

New Mexico

No information available.

New York

No information available.

North Carolina

Source: North Carolina Department of Transportation

- North Carolina permits school employees and volunteer monitors to ride on school buses.
- Senior citizens and National Guard may be transported on school buses.
- No additional insurance is needed when used for non-pupil transportation.
- School buses may be used to transport employees.
- Citations not provided.

North Dakota

Source: North Dakota Department of Public Instruction

- Qualified drivers may drive buses used for non-pupil transportation.
- Non-school organizations are required to provide insurance.
- When used for non-pupil transportation, flashing lights cannot be used.
- Chapter 15-34 Transportation of Students provides that "The school board of a public school district providing transportation for public elementary and high school students may utilize the authority conferred by article VII section 10 of the Constitution of North Dakota and section 54-40-08 to enter into agreements with other political subdivisions, the state, or the federal government for the joint provision and integration of transportation services to the public (15-34.2-16(2)).

Ohio

Source: Ohio Department of Education

- Ohio Administrative Code Sec. 3301-83-15 Non-routine use of school buses.
  - "'Non-routine use of school buses' is defined as transportation of passengers for purposes other than regularly scheduled routes to and from school. School buses may be used for non-routine trips only when such trips will not interfere with routine transportation services.

    (A) Approved non-routine use of buses
    (1) Trips that are extensions of the instructional program as determined by school district or county board of mental retardation and developmental disabilities administration.
    (2) Trips for the transportation of enrolled pupils directly participating in school-sponsored events. . .
    (3) Transporting pupils taking part in summer recreation programs . . .
    (4) Trips for transportation of the aged when contracted with a municipal corporation or a public or nonprofit private agency or organization delivering services to the aged.
    (5) Trips for transportation of pupils and/or adults, as approved by the board of education . . .
    (6) Emergency evacuation and/or emergency evacuation drills when such emergencies are declared by state or local directors of emergency disaster services.
    (7) A civil emergency as declared by the governor.
    (8) Transporting school AND/OR SCHOOL BUS OWNER employees engaged in APPROVED employee improvement programs."
- Ohio Administrative Code Sec. 3301-83-17 (B) Unauthorized passengers.
    (9) Family members of school bus drivers who are not enrolled in any of the approved school programs, unless adults appointed as chaperone on non-routine trips.
    (10) School employees, on routine bus routes.
    (11) Adults not enrolled in any of the approved programs, unless assigned by proper school officials as bus monitors.

Oklahoma

No information available.

Oregon

No information available.

Pennsylvania

No information available.

Rhode Island

No information available.

South Carolina

Source: South Carolina Department of Education

- SECTION 59-67-545. Parents and other adult school volunteers or employees authorized to ride route school buses on space available basis. Parents and other adult school volunteers or employees may ride route school buses on a space available basis. Parents and other adults also may ride school buses in conjunction with special programs that are sponsored by the local school district. This use of route school buses shall be in accordance with local school district board policies and programs. School districts may not re-route school buses in order to accommodate the pickup of adults authorized to ride school buses as provided by this section. The State is not responsible for any costs associated with parents and other adults riding school buses in conjunction with special programs. The provisions of this section shall not be construed as a waiver or abrogation of the state's limited immunity from liability and suit under the State Tort Claims Act.
- SECTION 59-67-510 USE OF TRANSPORTATION EQUIPMENT FOR SPECIAL EVENTS AND OTHER EDUCATIONAL PURPOSES. "County boards of education may permit the use of school bus equipment for transportation in connection with athletic events, boys' and girls' clubs, special events in connection with the schools and such other educational purposes as may appear proper to the respective boards."
- Section 59-5-60, Regulations 43-80, B. ". . . Special programs operated and or sponsored by the governing body of the school district may use school buses as long as transportation services are paid for by the school district at no cost to the State and do not disrupt school bus maintenance servicing or regular school bus routes. A Special program is any education or other program sponsored by the school district that is not a program required by State statute or regulation to be operated by the school district. . . ."
- School districts may allow for the use of school buses for activities that are school related in some sense.
- Drivers must be state-certified and have a CDL. Drivers must be employees of the school district.
- The school district is responsible for insuring all riders that are not students, teachers, chaperones, or others listed above.
- When used for non-route service, the words "school bus" on the front and back should be covered.

South Dakota

Source: South Dakota Division of Education

- South Dakota Code (SDC) Sec 13-24-20 – use of school facilities or buses for other community purposes – Compensation – Liability for damage: "The school board may rent or grant the use of school facilities, motor vehicles or land belonging to the school district for any purposes, which it considers advisable as a community service for such compensation as it determines. The use may not interfere with school activities. Any person or persons or public body using such school facilities, motor vehicles or land is responsible to the school district for any and all damages that may be incurred by reason of the use of occupancy The school district is no liable for any suit for damages which might arise as the result of such use or occupancy."

- Opinion of attorney general: "A county extension office may borrow school buses from willing school districts for community purposes; however, the driver must have a school bus license, and an insurance policy must be in effect" (Opinion No. 87-10).
- Opinion of attorney general: "School board could not authorize use of school bus by adult commuting to or from work" (Opinion No. 84-41).
- Opinion of attorney general: "While it is possible to construe this section to allow simultaneous public and private use of a school bus by a public school and a church-run preschool if this section is considered alone, when the entire scheme on public and private use of school buses is considered, the simultaneous public and private use of a school bus is not permissible; the school board lacks the statutory authority to transport private, preschool children at the same time that it is using the bus for school purposes; additionally, the Attorney General had grave doubts about the constitutionality of the proposal, eve n if the statutory authority existed to permit simultaneous private and public uses of school buses" (Opinion No. 92-04).
- When using school buses for non-pupil transportation, must cover the words "school bus."

Tennessee

No information available.

Texas

Source: Texas Education Agency

- State public education funds may not be used to fund non-pupil transportation.
- Operators must meet all school bus driver qualifications as established by Department of Public Safety.
- Insurance is required unless local entity is self-insured.
- May not use flashing lights when boarding and exiting vehicles transporting non-pupils.

Utah

No information available.

Vermont

No information available.

Virginia

No information available.

Washington

Source: Office of the Superintendent of Public Instruction

- Revised Code of Washington (RCW) Sec. 28A.160 prohibits the use of school buses to transport non-pupils.
- RCW 28A.160.010: ""school districts may use school buses and drivers hired by the district or commercial chartered bus service for the transportation of school children and the school employees necessary for their supervision to and from any school activities within or without the school district during or after school hours and whether or not a required school activity, as long as the school board has officially designated it as a school activity. . ."

- RCW 28A.160.010 “In addition . . . any school district may contract to furnish the use of school buses of that district to other uses who are engaged in conducting an educational or recreational program supported wholly or in part by tax funds or programs for elderly persons at times when those buses are not needed by that district and under such terms as will fully reimburse such school district for all costs related or incident thereto: PROVIDED, HOWEVER, That no such use of school district buses shall be permitted except where other public or private transportation certified or licensed by the Washington utilities and transportation commission is not reasonably available to the user. . .”

West Virginia

No information available.

Wisconsin

No information available.

Wyoming

Source: Wyoming Department of Education

- “I forgot how nice it is to live in Wyoming until I fill out a survey like yours. We do not spell out everything by statute or rule—we tend to do what is right.”
- Local districts make most decisions.
- “I am not aware of any districts in Wyoming that use their buses for transporting anyone other than school kids on a regular basis.”

National Association of State Directors of Pupil Transportation Services

List of State Directors

STATE DIRECTORS of PUPIL TRANSPORTATION
(As of 6-24-98)

ALABAMA
Pupil Transportation
Alabama Dept. of Education
50 N. Ripley Street
Montgomery, AL 36130-21 01
Phone: 334-242-9730
Fax: 334-242-2475
E-Mail: sdenet.alsde.edu

ARIZONA
School Bus/Tow Truck lnsptn.
Arizona Dept. of Public Safety
261 0 South 16th Street
Phoenix, AZ 85034
Phone: 602-223-2522
Fax: 602-223-2508
E-Mail: none

CALIFORNIA
School Transportation
California Dept. of Education
560 J Street, Suite 170
Sacramento, CA 95814
Phone: 916-322-4879
Fax: 916-323-3265
E-Mail: cwo.com

CONNECTICUT
Division Chief
Commercial Vehicle Safety Div.
60 State Street
Wethersfield, CT 06161
Phone: 860-566-6569
Fax: 860-566-3182
E-Mail:

ALASKA
Div. of Education Support Services
Alaska Dept. of Education
801 West 10th St., Suite 200
Juneau, AK 99801-1894
Phone: 907-465-8687
Fax: 907-463-5279
E-Mail: educ.state.ak.us

ARKANSAS
School Transportation
Arkansas Dept. of Education
#3 Capitol Mall, Room 209-D
Little Rock, AR 72201
Phone: 501-682-4264
Fax: 501-682-6308
E-Mail: arkedu.k12.ar.us

COLORADO
Sr. Transportation Consultant
Colorado Dept. of Education
201 East Colfax Avenue
Denver, CO 80203
Phone: 303-866-6655
Fax: 303-866-6663
E-Mail: cde.state.co.us

DELAWARE
Pupil Transportation
Delaware Dept. of Education
P.O. Box 1402
Dover, DE 19903
Phone: 302-739-4696
Fax: 302-739-5894
E-Mail: state.de.us

DISTRICT OF COLUMBIA
Transportation Branch
2115 Fifth St., NE
Washington, DC 20002
Phone: 202-576-6305
Fax: 202-576-6947
E-Mail:

FLORIDA
Director, School Transportation
Florida Dept. of Education
Suite 824, Fla. Education Center
Tallahassee, FL 32399-0400
Phone: 850-488-4405
Fax: 850-922-6742
Shipping: 325 W. Gaines Street, #824
E-Mail: mail.doe.state.fl.us

HAWAII
Student Transportation, Safety, and Sec.
Hawaii Dept. of Education
1037 S. Beretania Street
Honolulu, Hawaii 96814
Phone: 808-586-3457
Fax: 808-586-8385
E-Mail:

ILLINOIS
Alvida Petro, Fiscal Consultant
Div. Funding & Disburs. Services
Illinois State Board of Educ.
100 N. First Street
Springfield, IL 62777-0001
Phone: 217-782-5256
Fax: 217-782-3910
E-Mail: smtp.isbe.state.il.us

IOWA
Consultant, School Transportation
Iowa Dept. of Education
Grimes State Office Bldg.
Des Moines, IA 50319
Phone: 515-281-5811
Fax: 515-281-7700
E-Mail: ed.state.ia.us

GEORGIA
Pupil Transportation
Georgia Dept. of Education
1666 Twin Towers, East
Atlanta, GA 30334-5050
Phone: 404-656-2467
Fax: 404-657-1330
E-Mail: @doe.k12.ga.us

IDAHO
Pupil Transportation
Idaho Dept. of Education
P.O. Box 83720
Boise, ID 83720-0027
Phone: 208-332-6853
Fax: 208-334-3484
E-Mail: sde.state.id.us

INDIANA
Division of School Traffic Safety
Indiana Dept. of Education
State House, Room 229
Indianapolis, IN 46204-2798
Phone: 317-232-0891
Fax: 317-232-9121
Shipping:251 East Ohio St., 46204
E-Mail: doe.state.in.us

KANSAS
School Bus Safety Education Unit
Kansas Department of Education
120 SE 10th Avenue
Topeka, KS 66612-1182
Phone: 913-296-4567
Fax: 913-296-6659
E-Mail: smtpgw.ksbe.state.ks.us

KENTUCKY
St. Director of Pupil Transportation
Kentucky Dept. of Education
1506 Capital Plaza Tower
500 Mero Street
Frankfort, KY 40601
Phone: 502-564-4718
Fax: 502-564-7574
E-Mail: kde.state.ky.us

MAINE
Director of Transportation
Maine Dept. of Education
State House Station, #23
Augusta, ME 04333
Phone: 207-287-5903
Fax: 207-287-5900
E-Mail: state.me.us

MASSACHUSETTS
Bureau of School Management
Massachusetts Dept. of Education
350 Main Street
Maiden, MA 02148
Phone: 781-388-3300 Ext. 638
Fax: 781-388-3475
E-Mail: doe.mass.edu

MINNESOTA
Dept. of Public Safety
Suite 130, Town Square
444 Cedar Street.
St. Paul, MN 55101-5130
Phone: 612-296-2606
Fax: 612-296-5937
E-Mail: state.mn.us

LOUISIANA
School Transportation Supervisor
Dept. of Education
P.O. Box 94064
Baton Rouge, LA 70804-9064
Phone: 504-342-3466
Fax: 504-342-3283 or 1-800-864-2204
Shipping: 626 N. 4th St., 70804
E-Mail: @mail.doe.st.1a.us

MARYLAND
Chief of Pupil Transportation
Maryland Dept. of Education
200 W. Baltimore Street
Baltimore, MD 21201
Phone: 410-767-0209
Fax: 410-333-2635
E-Mail: metnet.epflbalto

MICHIGAN
Traffic Safety & Management
Michigan Dept. of Education
P.O. Box 30008
Lansing, Ml 48909
Phone: 517-373-8374
Fax: 517-373-4022
E-Mail: state.mi.us

Also Michigan (for information only)
Michigan State Police MCD
4000 Collins Road
P.O. Box 30632
Lansing, MI 48909
Phone: 517-336-6417
Fax: 517-333-4414
E-Mail:

MISSISSIPPI
Director of Transportation
Mississippi Dept. of Education
P.O. Box 771
Jackson, MS 39205
Phone: 601-359-1028
Fax: 601-359-3184
E-Mail: mdek12.state.ms.us

MISSOURI
Pupil Transportation
Dept. of Elem. & Sec. Education
P.O. Box 480
Jefferson City, MO 65102-0480
Phone: 573-751-2626
Fax: 573-751-1179
E-Mail: mail.dese.state.mo.us

NEBRASKA
Pupil Transportation
Nebraska Dept. of Education
301 Centennial Mall South
Lincoln, NE 68509
Phone: 402-471-2740
Fax: 402-471-0117
E-Mail: nde4.nde.state.ne.us

NEW HAMPSHIRE
Pupil Transportation
New Hampshire Dept. of Safety
10 Hazen Drive
Concord, NH 03305
Phone: 603-271-1999
Fax: 603-271-1061
E-Mail:

NEW MEXICO
New Mexico Dept. of Education
300 Don Gaspar
Santa Fe, NM 87501-2786
Phone: 505-827-6640
Fax: 505-827-5802
E-Mail: sde.state.nm.us

MONTANA
Montana Office of Public Instruction
P.O. Box 202501
Helena, MT 59620-2501
Phone: 406-444-3096
Fax: 406-444-1396
E-Mail: opi.mt.gov

NEVADA
Director Pupil Transportation
Nevada Dept. of Education
1850 East Sahara, Suite 205
Las Vegas, NV 89104-3746
Phone: 702-486-6455
Fax: 702-486-6540
E-Mail: nsn.K12.nv.us

NEW JERSEY
Office of Pupil Transportation
New Jersey Dept. of Education
P.O. Box 500, 100 Riverview Plaza
Trenton, NJ 08625-0500
Phone: 609-984-5757
Fax: 609-396-2032
E-Mail: none

NEW YORK
State Director
New York Dept. of Education
ED Mgt. Svcs. Room 876 EBA
Albany, NY 12234
Phone: 518-474-6541
Fax: 518-474-1983
E-Mail: mail.nysed.gov

NORTH CAROLINA
Section Chief, Transportation
N.C. Dept. of Public Instruction
301 N. Wilmington Street
Raleigh, NC 27601-2825
Phone: 919-715-1948
Fax: 919-715-1928
E-Mail: dpi.state.nc.us

OHIO
Supervisor of Pupil Transportation
Ohio Department of Education
65 S Front Street, Room 815
Columbus, OH 43215-4183
Phone: 614-466-4230
Fax: 614-466-8700
E-Mail: al.ode.ohio.gov

OREGON
Director of Pupil Transportation
Oregon Dept. of Education
255 Capital St., NE
Salem, OR 97310-0203
Phone: 503-378-3577, ext. 684
Fax: 503-378-5258
E-Mail: state.or.us

RHODE ISLAND
School Bus Safety
RI Registry of Motor Vehicles
286 Main Street
Pawtucket, RI 02860-2908
Phone: 401-222-2970, ext. 2034
Fax: 401-222-0855
E-Mail: none

NORTH DAKOTA
School Bus Transportation
N.D. Dept. of Public Instruction
State Capitol
Bismarck, ND 58505
Phone: 701-328-2267
Fax: 701-328-2461
E-Mail:

OKLAHOMA
Transportation Director
Oklahoma Dept. of Education
2500 N. Lincoln Boulevard
Oklahoma City, OK 73105-4599
Phone: 405-521-3472
Fax: 405-522-3559 or 521-6205
E-Mail: mail.sde.state.ok.us

PENNSYLVANIA
Manager, Special Driver Program
Pennsylvania Dept. of Transportation
P.O. Box 68684
Harrisburg, PA 17106-8684
Phone: 717-772-2117
Fax: 717-705-1131
E-Mail:

SOUTH CAROLINA
Director of Transportation
South Carolina Dept of Education
1429 Senate Street, Rm. 512
Columbia, SC 29201
Phone: 803-734-8244
Fax: 803-734-8254
E-Mail: sde.state.sc.us

SOUTH DAKOTA
Director of Pupil Transportation
South Dakota Div. of Education
Kneip Building, 700 Governors Dr.
Pierre, SD 57501-2291
Phone: 605-773-4669
Fax: 605-773-6139
E-Mail: deca.state.sd.us

TEXAS
Director
School Transportation
Texas Education Agency
1701 N. Congress Avenue
Austin, TX 78701-9233
Phone: 512-463-9185
Fax: 512-463-9233
E-Mail: tmail.tea.state.b(.us

Also Texas (shared position)
Texas Dept. of Public Safety
School Transportation
P.O. Box 4087
Austin, TX 78773-0300
Phone: 512-424-5732
Fax: 512-424-7184
E-Mail: schoolbus@txdps.state.tx.us

VERMONT
Dept of Motor Vehicles
120 State Street
Montpelier, VT 05603-0001
Phone: 802-828-2083
Fax: 802-828-2092
E-Mail: STATE.VT.US

TENNESSEE
Tennessee Dept of Education
710 James Robertson Parkway
Andrew Johnson Tower
Nashville, TN 37243-0375
Phone: 615-532-4703
Fax: 615-532-7860
E-Mail:

UTAH
Pupil Transportation Specialist
Utah State Office of Education
250 E. 500 South
Salt Lake City, UT 84111
Phone: 801-538-7666
Fax: 801-538-7729
E-Mail: usoe.k12.ut.us

VIRGINIA
Assoc. Director, Pupil Transportation
Virginia Dept of Education
P.O. Box 2120
Richmond, VA 23216-2120
Phone: 804-225-2037
Fax: 804-225-2831
Shipping: 101 N 14th Street 23219
E-Mail: pen.k12.va.us

WASHINGTON
Office of the Superintendent of
Public Instruction
P.O. Box 47200
Olympia, WA 98504-7200
Phone: 360-753-0235
Fax: 360-586-6124
E-Mail: inspire.ospi.wednet.edu

WEST VIRGINIA
West Virginia Dept. of Education
Building 6, Room B-252
1900 Kanawha Blvd. East
Charleston, WV 25305-0330
Phone: 304-558-2711
Fax: 304-558-8867
E-Mail: access.k12.wv.us

WISCONSIN
Wisconsin School Bus Association
Acting for State Director Pupil Transportation
P.O. Box 168
Sheboygan, WI 53082
Phone: 920-457-7008
Fax: 920-457-5758
E-Mail:

WYOMING
School Transportation
Wyoming Dept. of Education
Hathaway Bldg., 2300 Capital Ave.
Cheyenne, WY 82002-0050
Phone: 307-777-6265
Fax: 307-777-6234
E-Mail: educ.state.wy.us

NATIONAL ASSOC. OF STATE DIRECTORS OF PUPIL TRANSPORTATION SERVICES
Executive Director
1604 Longfellow Street
McLean, VA 22101
Phone: 800-585-0340
Fax: 703-734-1868
E-Mail:

NATIONAL ASSOC. OF STATE DIRECTORS OF PUPIL TRANSPORTATION SERVICES
Administrative Director
NASDPTS Office
116 Howe Drive
Dover, DE 19901
Phone: 800-585-0340
Fax: 302-698-1997
E-Mail: ce.net

DEPT OF DEFENSE-EUROPE
Chief, Transportation Mgmt. Office
DODDS, DETMO
Unit 29649, Box 7500
APO AE 09096
Phone: 06134-604-737
Fax: 06134-604-519
E-Mail:

DEPT OF DEFENSE-ASIA
Transportation Operations Specialist
DODEA/PACTMO-Yokota
Unit 5232
APO AP 96328-5232
Phone: 81-31175-57243
Fax: 225-3392
E-Mail: ccmaii.odedodea.edu

ENGLAND
Sian Thornthwaite Consultants
Nelson House, 1A Church Street
Epsom, Surrey, KT17 4PF UK
Phone: 01 1 44 1372 747001
Fax: 01 1 44 1372 747002
E-Mail: btinternet.com

Specifications for the Utility School Bus

California Department of Education

CALIFORNIA DEPARTMENT OF EDUCATION

SPECIFICATIONS

Utility School Bus, Heavy-Duty Integral Transit Type 42 Passenger Minimum

September 10, 1998

School bus, transit type, rear mounted engine diesel, monocoque or integral construction, 42-passenger minimum.

1.0 SCOPE:

1.1 The California Department of Education proposes to purchase a heavy-duty integral transit type 42 passenger, utility school bus. The utility bus shall be fully certified (California Vehicle Code, CCR 13 and FMVSS) and functional school bus with the addition of a second entrance/exit door wheelchair lift combination to the rear and on the right side of the bus. In addition, to school transportation service, this vehicle is intended to provide meet additional alternative community transportation service needs.

The California Department of Education's utility school bus will see daily service in the Department's Bus Driver Instructor Training Program. The utility school bus will also be used routinely to transport Departmental personnel on public highways and at state driving competitions (rodeos), workshops and industry conferences.

1.2 These specifications cover the minimum requirements for a heavy-duty transit style utility school bus, for use in the transportation of pupils attending California schools. The expected service life of the utility school bus meeting these specifications and operating in any region, terrain or conditions within California should be at least 20 years or 400,000 miles. Twenty four-inch (24") clear path aisle to the emergency exits shall be standard. The term Integral is defined as, "The body and underbody frame shall be integrally constructed and fully welded together so that body and chassis form a single unit. " Coach body and under-framing components are to be constructed with the basic floor frame, to which the front and rear axles are attached. This floor frame becomes an integral part of the body framework. This integral construction shall be constructed and equipped by a single manufacturer to comply with all applicable California and Federal laws, regulations and standards in effect at the time of delivery.

1.3 These specifications are intended for use in the purchase of a complete vehicle unit and all equipment and accessories necessary for the operation of a school bus in California. All parts, equipment, and accessories shall be completely installed, assembled and adjusted as required by a single manufacturer.

1.4 **Availability of bus type:**

Only a new model for which the manufacturer's literature and printed specifications are currently available will be acceptable. All components of the body and chassis must be standard items.

2.0 **APPLICABLE REGULATIONS:**

The following specifications, laws, regulations and standards applicable on the date of manufacturer for this vehicle and its intended application form a part of these specifications:

- All applicable Federal Motor Vehicle Safety Standards, (FMVSS, 49 CFR) and Americans with Disabilities Act (ADA) requirements.
- All applicable statues of the California Education and Vehicle Codes.
- All applicable regulations contained in the California Code of Regulations (CCR), Title 5 and Title 13.
- California Air Resources Board (CARB).
- Tire and Rim Association, Inc. Latest Revised Edition of Standards
- SAE J1349 - Engine Test Code - Spark Ignition and Diesel.

3.0 GENERAL REQUIREMENTS:

3.1 Bus type:

The bus shall conform to the requirements of Table I. The bus shall have a rear or mid-ship mounted engine, transit type body, and integral construction.

TABLE 1 MINIMUM BUS SPECIFICATIONS

Passengers/Capacity	42 minimum Note: Seating capacity shall be based upon two (2) passengers per seat plus each wheelchair station and shall exclude the driver.
GVWR (X 1,000 lbs.)	37
Wheel Base,	267 inches minimum,
Number of Axles	2
Axles Front (X 1,000 lbs.)	14.6
Axles Rear (X 1,000 lbs.)	23.0
Number of wheels with tires	7
Tires size	12R x 22.5
Front Brakes	16 .5"x 6 inches
Rear Brakes (either/or)	16.5"x 10 inches
	16.5"x 8"/w Transmission Retarder (mandatory)
Turning Radius Body corner (max.)	40 ft.
Overall Length (max.)	40 ft.
Overall height (max.)	138 inches (top of air conditioning unit)
Overall width (max.)	102 inches
Air Conditioning System,	(Ref. RAC systems - 2 Rooftop Units, 2 compressors, with an aggregate rating of 110,000 BTU)

3.2 Material:

The material shall be new and free of defects affecting performance, durability, safety and appearance.

3.3 Frame, Drive Train and Chassis:

Chassis frame rails shall be "C" channel straight design, certified by the manufacturer as the heaviest school bus application available, and shall be warranted for a minimum 20 year vehicle life at maximum GVW rating. Warranty certificate to be provided at time of delivery.

Outriggers, shall not be of less strength than the strongest cross member used between the frame rails, and mounted not more than 40 inches apart between the front and rear axles. The elimination of one or a maximum of two outriggers, and /or the variance in outrigger mounting distance will be allowed in order to accommodate the wheelchair lift. The elimination of any outrigger(s) and replaced with a wheelchair lift support(s), will not degrade the frame/body integrity and/or strength. Outriggers shall be bolted or welded to the frame rails and fully welded to the body, floor and side panels. A system providing comparable side crash protection such as found in caged CNG fuel tank protection systems is acceptable. The frame rails, outriggers and cross members shall be warranted for a minimum of 20 years at maximum GVW rating.

3.3.1 **Bumpers, front and rear:**

Bumper, front. The front bumper shall be a minimum of three sixteenth (0.1875 plus or minus 0.0156) inch thickness, pressed steel channel and shall have not less than an 8 inch face, painted black, capable of impact with no damage to the bumper and bus during impact tests made in accordance with SAE J980a and shall extend to protect the outer edges of the fenders. It shall be attached directly to the chassis frame with provision for easy removal. It shall be of sufficient strength to permit pushing another vehicle of equal gross weight without permanent deformation. The front bumper shall be located at the height of not more than 22 inches when measured from the bottom edge of the bumper to the level surface upon which the unloaded bus stands.

Bumper, rear. The rear bumper shall be a minimum of three sixteenth (0.1875 plus or minus 0.0156) inch thickness, pressed steel channel and shall have not less than an 8 inch face, painted black. It shall wrap around the rear corners of the body to a point 12 inches forward from the rearmost point of the body at floor line. It shall be capable of impact with no damage to bumper and bus during impact tests made in accordance with SAE J980a shall be used as a testing guideline as it would apply to heavy school buses. Bumper shall extend to protect the outer edges of the fenders. It shall be attached directly to the chassis frame with provision for easy removal. It shall be of sufficient strength to permit pushing by another vehicle of equal gross weight without permanent deformation. The rear bumper shall be constructed so the tail pipe and engine exhaust goes through the bumper. The rear bumper shall be constructed to protect the tail pipe from being crushed, and to prevent the tail pipe from being used as a step or foot hold.

3.3.2 **Axles:**

GAWR shall be as listed in Table I. Front and rear axles shall have **(Stemco oil seals or comparable).**

3.3.3 **Steering:**

Integral full time hydraulic power steering equipped with a tilt-telescopic steering wheel. Turning radius shall be as indicated in Table I, and equal on either left or right turn.

3.3.4 **Drive Shaft:**

Standard drive line incorporating static and dynamic balancing. Each drive shaft segment shall be equipped with protective guard to prevent the shaft, if broken, from whipping through the floor or dropping to the ground. Universal joints shall be serviceable (**Spicer or comparable**).

3.3.5 **Suspension:**

The rear suspension system shall be either rubber torsion springs (Ref. B. F. Goodrich Velvet-Ride Suspension System or air ride (Ref. Ridewell Mono Pivot 227 RD or Mono Pivot 241 OS, or manufacturers offering comparable performances). Front suspension may be full air ride or progressive rate spring type. Front and rear suspension combined GAWR's shall have sufficient capacity to meet the required GVWR (Gross Vehicle Weight Rating). The suspension system shall be warranted for a minimum of 4 years.

3.3.6 **Shock Absorbers:**

The chassis shall be equipped with front and rear, heavy duty, double-acting shock absorbers direct action (2 X 1 5/8 " or 4 X 1 3/8") diameter minimum (**Koni or comparable**) to adequately stabilize the loaded bus.

3.3.7 **Roll, Pitch, and Yaw control:**

If needed (i.e. air ride), adequate radius rods and front and rear stabilizer bars shall be provided to control lateral, longitudinal, and torsional movement,

3.4 **Wheels and Brakes:**

3.4.1 **Wheels:**

The bus shall be equipped with yellow painted steel disk or aluminum wheels. A spare wheel and tire shall be mounted on a spare tire rack on the bus. All wheels shall be standard 10 holes 11.25 inches bolt circles, double nut Bud type or 8 or 10-hole hub piloted type.

3.4.2 **Tires:**

All tires (including spare) shall be radial tubeless highway tread premium grade (Ref. Michelin XZE or comparable). Minimum size and ply rating shall be as indicated in Table I or maximum manufacturer's standard for vehicle GVWR shall be supplied. All tires shall be of the same size and load range.

3.4.3 **Service brakes:**

Service brakes shall be full air actuated. The service brake air shall be supplied from the dry tanks. A separate system shall activate the emergency or parking brake. Minimum chamber size shall be 24 square inches front and 30 square inches rear. Brakes shall be "S" cam type (Ref. **Rockwell or equivalent)** and shall have outboard mounted drums. A desiccant type air dryer containing a minimum of 3.9 pounds of desiccant material shall be furnished (Ref. **Bendix AD-IP or** equivalent). A 13.0 cubic feet/minute air compressor shall be supplied. Air compressor shall be gear or flange drive. Compressor intake air shall come from the engine air intake system after filtering. The service air reservoir shall consist of at least three tanks clearly labeled using 2-inch letters minimum. The air tank system may use a single tank divided into the required number of compartments or reservoirs. The front, rear and wet air tank(s) shall each be equipped with a separate solenoid drain valve remotely operated from the driver's compartment. Each valve when opened shall drain only the tank indicated. A pressure safety valve shall be provided in the air brake supply circuit as recommended by the brake manufacturer. The brake system (including the draining) shall be in accordance with FMVSS 121 and CCR Title 13 requirements and have a minimum of 6000 cubic inch total air reservoir capacity. Non-asbestos brake blocks shall be installed. Self adjusting slack adjusters (Ref: Haldex) shall be installed on all wheels. All tubing shall be identified, color-coded or tagged at ends of each run.

3.4.4 **Parking Brakes:**

Parking brake shall be spring brake type unit mounted on rear service brake chamber, and maintain wheels locked on any grade which the vehicle is operated under all conditions of loading on a surface free of snow, ice or loose material, (CVC 26451). The release of the parking brake shall be disabled when the ignition key is off, or the bus is stopped and either the front or rear service door is open. A parking brake default relay system shall be installed to permit the parking brake to be released during maintenance and brake adjustments. **(The parking brake control** valve **must be designed so that it can not be accidentally or intentionally released, except by a qualified driver or mechanic).**

3.4.5 **Antilock Braking System:**

An electronic four channel ABS (Antilock Braking System) of the manufacturer's most current design shall be provided. Individual wheel speed sensors, modulators, and an electronic controller shall monitor and control the four-wheel ends of the vehicle, compensating for wheel slip or lockup (Ref: **Meritor Wabaco).** Warning lights shall indicate system status to the driver. Manufacturers shall label and define warning lights. The system shall be compatible with the retarder system offered. An ABS failure shall not affect the service brake system. Easy access to the CPU shall be provided.

3.5 **Electrical System:**

The electrical system shall be a 12-volt system. All components shall be easily accessible for service. Contractor shall furnish complete laminated wiring diagram showing color and number code used.

3.5.1 **Wiring and terminal:**

All wiring, except battery wiring, shall have insulation, shall be waterproof and shall meet specification requirement of SAE J1128, bus wiring may be SXL and/or GXL type if the entire bundle is within a loom and routed within the body walls and or covered by body panels. Bus chassis wiring shall be SXL or a combination of SXL and GXL type. Battery wiring shall conform to specification requirements of SAE J1127 SGT. All wiring shall be uninterrupted color-coded and /or numbered for identification every 18 to 24 inches throughout run length.

Design of the electrical system shall be modular so that each major component apparatus panel, or wiring bundle is easily separable. Each module shall be removable and replaceable.

Main wiring harness shall be loom covered and concealed within the body or under the floor preferably in the vicinity of the "C" channel of the frame rail to maintain protection against damage. It is desirable to maintain two spare circuits, easily identifiable, of 14 ga. wire in each major harness complete with terminals and extra length at each end. However, in areas where using the wires to add future components could cause interference with existing electronic circuitry (RFI anomalies especially in the transmission/engine control modules) and it is unreasonable to reroute the harness, the spare wires may be eliminated. Wiring may be hung in the vicinity of the frame so long as protection against damage is maintained. Bus body wiring may be SXL and/or GXL type if the entire bundle is within a loom and routed within the body walls and/or covered by body panels. Bus chassis wiring shall be SXL or a combination of SXL and GXL type.

All harnesses and wiring shall be securely retained by rubber or PVC covered clips and holes edges in metal members properly bushed with suitable grommets. Wiring terminals and junctions shall be weather tight. Wiring in the engine compartment shall be insulated from heat and resistant to oil and grease. Quick disconnect shall be high quality plastic construction.

All main circuits shall be protected by auto-reset circuit breakers SAE Type I or fuses (manual reset) when circuit breakers are not practical (above 80 AMP). All switches shall be weatherproof.

3.5.2. **Alternator:**

A single or dual 12-volt alternator(s) with an aggregate potential of 240 amp minimum capacity internally regulated shall be provided. Alternator(s) shall provide 60 percent of rated output at engine idle.

3.5.3 **Battery:**

The storage battery(ies) shall be of sufficient capacity to supply current to all electrical equipment called for by this specification and any additional equipment required in the invitation for bid or purchase order. Two (2) 8D batteries with a minimum of 2300 CCA at 0 degree Fahrenheit, and using sealed cables shall be provided on all units. For easy maintenance, batteries shall be mounted in a lockable, heavy-duty roll out type drawer (Ref. manufacturer top of the line) safely secured to prevent any movement when bus is driven. Additionally, a safe door lock shall be furnished. Battery cables shall be soldered. Battery disconnect shall be furnished.

3.5.4 **Instrument Panels:**

The driver's instrument panel shall be equipped with a minimum of: Speedometer, odometer, voltmeter and ammeter, tachometer, oil pressure gauge, water temperature gauge, audible warning for low engine oil pressure and high engine coolant temperature, all fuel gauges shall be accurate and read fuel tank(s) content (1/4, 1/2, 3/4, Full), air application gauge, transmission temperature gauge, transmission high oil temperature lamp and audible alarm, head lamp upper beam indicator, and other indicator lamps associated with the normal monitoring functions of the engine. A dual air pressure gauge with low air pressure audible and visual warning devices shall be installed. Lamps in lieu of gauges are not acceptable. Premium quality switches for all functional components associated with the body and chassis. Heavy-duty turn signal switch self-canceling shall be provided. Panel shall have sufficient illumination of all instruments. All instruments shall be easily accessible for maintenance and repair and shall be mounted so that each instrument is clearly visible from the driver's line of sight.

An engine compartment instrument panel shall be provided with at least: engine hour-meter, voltmeter and ammeter, and oil pressure gauge. The engine must be able to be started from a command from that panel.

3.6 **Body/framework:**

The bus body shall be constructed of steel structural sections with metal panels attached inside and outside. The bus body, as a unit, shall be designed and built to provide impact crash protection in accordance with FMVSS, bus sides and floor shall be fully welded. Bus top, body and windows shall not leak water. Entire body and support components are to be made corrosion resistant by zinc coating or zinc phosphate treatment (or comparable) before painting, and all areas sealed with compound to prevent moisture penetration. Interior of all areas shall also be primed for corrosion resistance. The body shall be drywall construction; water shall not drain into wall cavity. Areas where moisture collects from condensation shall be adequately drained and ventilated to minimize corrosion. No part of the body shall have bare steel. Galvanized steel, aluminum, etc.... are not bare steel and are acceptable. The lowest portion of the body panels (skirts) shall extend 18" or less from the ground in all locations between the front and rear axles. Four exterior 16 gauge X 4 inches black rub rails full length shall be installed on both sides of the bus. Location shall be: under windows, seat cushion line, floor line, extended skirt.

3.6.1 **Materials:**

All materials utilized in the construction of the body shall be available to all body manufacturers on an equal, non-proprietary basis. For maximum occupant safety, all exterior body walls and roof shall be steel. Molded plastic or fiberglass may only be used in non-stress areas such as front and back.

	(Minimum Gauge Requirements)
-Floor	14 gauge
-Smooth Exterior Wall	16 gauge
-Interior Wall	22 gauge
-Exterior Roof	22 gauge
-Wall Posts	14 gauge
-Roof Bows	14 gauge
-Extended skirt	16 gauge

3.6.2 **Roof Caps:**

The front and rear roof caps (headers) shall be designed to house a glass enclosed "school bus" and "destination" signage system.

3.6.3 **Flashing Red and Amber Light Signal Systems:**

The front and rear flashing red and amber light signal systems shall meet all legal requirements for operation as a school bus, and shall be equipped with "flip hoods" which will cover the flashing red light and amber warning light signal systems when in non-school bus use.

3.6.4 **Headroom:**

Between the first and last roof bow, through the center of aisle, inside height shall not be less than 75 inches.

3.6.5 **Insulation and soundproofing:**

All bus cavities shall be insulated. Insulation may be fiberglass (1.5"min) or comparable. Insulation area will include the roof, roof bow, bulkhead, sides, front and rear, and driver's area. Heavy-duty thermal and sound barrier insulation shall be used in the engine compartment separating the engine compartment from the passenger compartment. Acoustical headlining shall be provided the full length of the passenger compartment.

3.6.6 **Floor:**

The floor shall consist of either one (1) inch seven-ply marine plywood, or 5/8-inch marine plywood over 14-gauge steel. Floor shall be applied directly over the steel frame cross members and outriggers. The joints in no two layers of floor shall coincide. Fireproof material separating fuel and engine area from passenger compartment shall be provided on vehicle. A covered access to liquid fuel tanks sending unit shall be provided.

3.6.7 **Floor Coverings:**

The underseat floor area and the wheel housings shall be covered with not less than 1/8 inch thick synthetic blend material. The aisle and entrance area shall be covered with not less than l/8-inch thick synthetic blend material. Platform edge and step noses shall be yellow, minimum 11/2 inch wide. Coverings shall be properly installed and securely bonded to the floor. Floor and aisle color shall be as designated by the Department of Education. The floor in the driver's area shall be covered with the same materials as used in the underseat or aisle area. Seams between the entry and the passenger areas should be located and designed to allow for maximum ease of replacement of the passenger floor covering

All floor covering shall meet DOT FMVSS 302, Federal GSA ZZ-M-71b, ASTME-648. All seams shall be welded. Standard floor color options shall be available at no extra cost and be compatible with interior paint color listed in Section 5.1.

3.6.8 **Luggage Compartment Storage:**

The compartment storage shall be the maximum cubic feet offered by the manufacturer. Each luggage compartment shall be equipped with drain plug, pneumatic spring door holder, and have adequate inside lighting activated automatically by a switch when door is opened. All luggage compartment doors shall be lockable, keyed alike (two keys supplied).

3.6.9 **Interior Overhead Compartments:**

Interior overhead storage compartments must meet head protection requirements of FMVSS 222, where applicable. Have a maximum rated capacity displayed for each compartment. They must be completely enclosed and equipped with latching doors. Door and latches must be sufficient to withstand a force of five (5) times the maximum rated capacity of the compartment. All corners and edges must have rounded with a minimum of 1" or padded equivalent to door header padding. Must be attached to the bus sufficiently to withstand a force equal to twenty (20) times the maximum rated capacity. They shall have no protrusions greater than 1/4". The overhead compartments shall run above the seats along both the right and left side of the bus interior beginning at the second seat position from the front entrance door rearward excluding the area directly above the rear entrance/wheelchair loading door.

3.6.10 **Emergency Exits:**

At least (4) emergency exits shall be provided. 1) Left side, floor level emergency exit door shall be located behind the rear axle of the bus; 2) A rear emergency exit window (California type) equipped with two pneumatic shocks or equivalent system; 3 & 4). Two roof escape hatches with ventilators (Ref: Transpec Triple Value). Side and rear emergency exits shall be marked and equipped with warning buzzers and warning lights. No passenger seat, safety barrier or flip seat shall block the side emergency exit paths. Modesty shield safety barriers shall be placed to the rear of the emergency doors. All floor level emergency exits shall provide an unobstructed door opening not less than 24 inches wide and 45 inches high. There shall be no obstruction higher than 1/4 inch across the bottom of any emergency door opening. Header pads shall be installed on each emergency door. All emergency exits shall comply with the markings, performance and size required in FMVSS 217.

The 24-inch clear aisles required for floor emergency exits are mandatory minimums. Flip up seats are not acceptable to obtain the 24-inch clearance. A device shall be used that holds the door open to prevent the emergency door from closing during emergencies and school bus evacuation drills.

Locking system (Ref: Vandalock or comparable) shall be installed on the two emergency side doors and the rear windows. Emergency exits warning devices shall comply with FMVSS and Title 13 CCR.

3.6.11 **Entrance Door:**

A front entrance inward or outward opening door(s), air operated incorporating an anti-slam air control device to protect door operation (Ref: Vapor Corp.). Door controls placed for convenient driver operation shall be provided. The door air actuator shall have positive stops and be fully adjustable mechanically and by air pressure. Entrance door shall be equipped with an emergency release that opens the door outward. The entrance shall consist of a three step entrance with not less than 1/8 inch thick synthetic blend non-slip material, wear plates with white safety edges and complies with 13 CCR 1280 (Steps). The step risers shall be covered with scuff-resistant material. Kick plate to barrier and door protection plate, step well shall be supplied and shall be stainless or aluminized steel lined. The entrance shall be equipped with an automatic entrance hooded step light system controlled by door operation. No direct light shall shine in passenger's eyes when boarding the bus. A key security lock hardware system, easily accessible by the driver when standing outside, shall be provided.
An exterior entrance door protection plate (rigid skid plate to prevent distortion of the step well/door) is required. An access door shall be installed over entrance door panel. Entrance door shall have header pad.

3.6.12 **Rear Entrance Door:** (Bode {ADA} or Vapor {ADA})

A right side entrance door located as close a practicable in front of the rear axle consisting of an air operated double plug side exit doors with sensitive edge and touch bars, upper and lower stationary glass, 44 inches wide by 86 1/4 inches high clear opening (meeting full ADA requirements, including transmission interlock), panels open out sliding fore and aft, with (5) position door control and stainless steel stanchion.

3.6.13 **Wheelchair Lift (ADA):** (Ref. Ricon Mirage 9000)

Electro-hydraulic lift meeting full ADA requirements, with a minimum 600 lb. load capacity, installed on the right side of the vehicle in combination with the Bode (ADA) or Vapor (ADA) SXD 44 inch Opg. w/Touch Bars. Built-in emergency backup system with a 48 inch by 31.75-inch non-skid platform with automatic inboard and outboard roll stops.

3.6.14 **Interior Paneling:**

Side interior panels below windows shall be embossed corrosion resistant or stainless steel material, no sharp edge. All ceiling panels shall be painted with appropriate color.

3.7 **Windows and Windshield:**

3.7.1 **Windshield:**

Two or four piece windshield shall be provided with approved tinted safety glass which provides the largest field of vision to the driver. Glazing material shall conform to DOT FMVSS 205 and the American National Standard Z-26.1-1977 and Z-26.1a-1980.

3.7.2 **Windows:**

Windows shall conform to DOT FMVSS 205 and the American National Standard Z-26.1-1977 and Z-26.1a-1980. Side windows shall be adjustable, split or drop sash type providing an unobstructed opening at least 12 inches in height and 264 square inches in area. The window openings shall be designed so that passengers are prevented from extending their arms and other extremities outside the bus when seated. All windows shall be free opening and closing, and shall prevent rattles, drafts, and weather intrusion while closed, and designed for easy serviceability each window to be able to be removed independently. Windows shall be provided with removable window latches. All side windows and rear shall be A3 tinted (smoked, to the highest percentage of light transmission legally available), Driver's sides window shall be tinted the same as the windshield, easily adjustable horizontal slide type using one hand. Latch must lock window when in the close position. Provide a driver side window sun visor. Window frames shall be black anodized with painted highlights.

3.7.3 **Windshield Wipers:**

Windshield wipers shall be heavy duty electric design incorporating both variable and intermittent speed control of sufficient size and power to provide maximum swept area proportional to windshield area, and unobstructed, clear vision at all times. Wiper blades shall be maximum to adequately clear driver view and provide a maximum swept area proportional to the windshield. Wipers shall return to park position when turned to off position. The washer reservoir shall incorporate an electrically operated windshield washer with a minimum capacity of 1 gallon. Wet arm windshield wiper shall be required. Wiper motors located above windshield are preferred.

3.8 **Seating:**

3.8.1 **Driver's Seat:**

Driver's seat shall be high back heavy duty, air ride, bus type, and air suspension. It shall be the manufacturer's deluxe model with dual shack absorbers, tilting adjustment for cushion and back, and lumbar support to provide maximum driver comfort. It shall be provided with a type 2 (3 point) retracting, inertia locking seat belt system, with easy access to the buckle.

3.8.2 **Passenger seats:**

The seats shall be activity type meeting FMVSS 222, and designed to be seat belt (lap belts) compatible. The seats shall be mounted at the maximum allowable distance as stated in FMVSS 222. The seats shall not be less than 36 inches in length. The seat frame shall be fabricated from 14 gauge minimum, 1 inch OD round or 1 inch square tubing, adequately reinforced at all stress points and may be supported by a rail on the wall side. The legs on the aisle side shall be offset and not infringe on the aisle clearance. Seat cushion shall consist of polyurethane foam or heat resistant material. Fire blocking material shall fully cover the seat cushion (top and bottom) and the seat backs (front and back), lying between the polyurethane or heat resistant material and the outer upholstery.

Seat backs shall be fully padded with polyurethane foam or heat resistant material. The outer upholstery is to be no less than 42 oz. finish weight, 51-inch width, flame resistant vinyl upholstery material. The seat cushion, seat back and modesty shield (barrier) shall be upholstered with the same color and weight and type of material, as designated by the school district. The seat shall be a flame-retardant type. Proof that the complete seat assembly has passed a full-scale composite seat burn test must be furnished on request (Boston Fire Department Chair Test). Paramount considerations must be given to prevent the ignition of the polyurethane foam or heat resistant material pads. If the seat cushion and the seat back padding are completely wrapped in a fire blocker, the blocking material must conform to ASTM D2863 and the vinyl upholstery must be flame retardant type. If composite upholstery is used as a fire blocker, the material shall be self-extinguishing in 6 minutes or less when exposed to the School Bus Seat Upholstery Fire Block Test. A complete description of the seat materials shall be furnished with the bid. If requested, certified test results must show conformance to FMVSS 222 and to the flammability requirements stated above.

Alternate seat construction materials are acceptable as long as they fully comply with the Boston Fire Dept. Chair Test, ASTM, D2863, and FMVSS 222. The burden of proof is on the bidder to verify compliance to these fire prevention measures.

3.8.3 **Restraining Barriers:**

A barrier shall be provided to the rear of the entrance step, emergency exits, and in the back of the driver's seat shielding passengers in both front seats. Design and performance of the barrier shall conform to FMVSS 222 and be padded and upholstered with same material and color as designated by the Department of Education.

4.0 HEATING and AIR CONDITIONING:

4.1 Heaters:

Minimum equipment shall consist of engine coolant type heaters. The front fresh air heater shall have a total minimum rating of 102,000 BTU/hr output and shall be installed near the front of the bus. Based on School Transportation Manufacturing Technical Committee (SBMTC) Stn. 001 "Heater Test Code."

The rear heater shall be a convection type heating system (Ref: TransVector heating system, TransMatic Co.) The rear passenger heating system shall consist of vinyl coated steel covering copper tubing and aluminum finned convection heating units one length extending down both the right and left side of the passenger compartment excluding wheel wells, doors, etc... Each side shall have a separate thermostat to control each convection heating unit independently. The color of the convection-heating unit shall match the bus interior. The convection-heating unit shall have a minimum 5-year warranty.

4.2 Defroster and Defrosting fans:

The independently operated defroster units shall be incorporated in the heater system to force an even flow of hot air over the interior of the windshield in sufficient quantity and velocity to keep the entire windshield surface clear of fog, ice or snow under all California weather conditions.

Additionally, two six (6) inch caged windshield defroster fans shall be mounted one above the driver and over the left windshield, one over the right windshield to provide an even flow of air over the entire windshield. Fans shall not obstruct driver's view in any way, in particular the driver's view of the mirror system.

4.3 Air Conditioning:

Air conditioning is referenced on the floorplan included with this solicitation and is required. It shall consist of two each roof mounted (self-contained) units placed front and rear (Ref: Rifled Air Conditioning) with an aggregate rating of 110,000 BTU.

5.0 PAINTING AND UNDERCOATING:

5.1 Paint and finish:

Prior to application of the finish coats to body, all surfaces shall be cleaned of grease, foreign matter, excessive body caulking and sealing material and treated as per paint manufacturer's recommendation for proper paint adhesion. School bus yellow paint shall meet School Transportation Manufacturing Technical Committee (SBMTC) Stn. 008 "National School Bus Yellow" for color and shall have a super high gloss polyurethane enamel finish rating of at least 85 at 60 degrees and a distinctness of image rating of an average of at least 50 measured using the same method specified for gloss under warranties (Super high glass polyurethane enamel). The roof shall be painted white. The interior paneling except for the guardrails, side panels and trim, shall be painted with manufacturer's neutral shade standard interior color and contrast with upholstery color selected. Painted surfaces trim, lettering, and bumpers shall be black except that bumpers may be striped in accordance with guidelines from the National Conference on School Transportation, or applicable specifications required in Section 2.0. lead-free paint shall be used on all interior and exterior surfaces of the body and chassis.

WARRANTY: Paint finish coats to body shall be warranted for 60 months (no mileage limit), 100% parts and labor for adhesion, color retention, and gloss retention. Acceptable lower limits during the warranty period are:

ADHESION: During the 60 months warranty period, paint and priming compounds shall not fail to adhere to the bus with normal use and care.

COLOR RETENTION: During the first 36 months from in service date the color coat shall not shift color more than four (delta epsilon) from the centroid of the national standard. During the 60-month warranty period the color coat shall not shift color more than eight (delta epsilon) from the centroid of the national standard.

GLOSS: During the first 36 months from in service date the gloss reading shall not fall below 60 at 60 degrees. During the 60-month warranty period the gloss reading shall not drop below 30 at 60 degrees.

All measurements shall be the average of 12 readings taken at various points on the bus but no reading shall be more than three points under the stated minimum. All readings shall be taken after the bus is thoroughly washed to remove road film and dust.

5.2 **Lettering:**

All lettering and identification required by the California Vehicle Code, the CHP, and the California Department of Education shall be included. Additionally, the bus shall have an identification letters "CDE" followed by the bus number on the roof. Roof top lettering and number shall be industry standard size but not less than 24" in height. The California Department of Education will provide vehicle number. All lettering shall be made of a material, which is compatible with the polyurethane

5.3 Undercoating:

The entire underside of the body and chassis including floor members, side panels below floor level, and fender wells shall be coated with not less than 1/8-inch thick undercoating material. All openings in the floorboards or firewall shall be sealed. Undercoatings offering comparable protection are acceptable(Ref. Zebar material) (See exemptions for CNG equipment). All openings in the floorboards or firewall shall be sealed.

6.0 **SAFETY ITEM AND MISCELLANEOUS:**

6.1 **Eight light system:**

Four-sealed beam, roof mounted red flasher lights with black "flip hoods" and four sealed beam amber lights with black hoods shall be furnished. Switch positions shall include a visual pilot lights displaying separate system "On" status for both the amber and red systems. Seated driver must be able to operate system. Wiring shall be for 8 light system according to VC Section 22112 and FMVSS 571.108 S5.1.4.

6.2 **AM/FM Radio/Cassette Tape System/PA Address - Radio antenna:**

Mounting location for all driver units and amplifiers shall be in a manufacturers enclosure that brings the radio out and down more accessible to the driver's compartment. Conduits shall be installed at the factory for the AM/FM radio leads.

Solid state combination AM/FM radio/PA cassette tape system with microphone, 9 interior speakers and 2 exterior speakers with volume controls and removable dynamic microphone with a coiled extension cord at the driver's position (microphone not battery operated) shall be provided. Interior speakers and microphone shall be premium grade with clear and undistorted voice reproduction. Antenna wiring shall not interfere with insulation. Speaker(s) located adjacent to the driver's compartment shall be equipped with a speaker disconnect switch. Exterior speakers shall be mounted inside the front body panels of the bus.

6.3 **Stop Signal Arm:**

An approved electrically activated stop arm with red strobe lights and 3M (or comparable) reflectorizing material, including electrical wiring and/or air plumbing as required for stop arm shall be provided. The stop signal arm shall meet the requirements set forth in FMVSS 131.

6.4 **Conspicuous retro-reflective marking:**

Bus sides, rear and all emergency exits shall be outfitted with retro-reflective safety marking. Material type, color and location shall comply with Regulations and be of Type m (3M's Diamond Grade or comparable). All reflective markings shall meet the requirements set forth in FMVSS 217

6.5 **Miscellaneous Equipment:**

The following miscellaneous equipment shall be furnished and meet CCR, Title 13, California Vehicle Code and FMVSS requirements if applicable:

Approved amber turn signal system with LED indicator light(s), self-canceling switch, pilot light, and emergency flashing capability

Two LED turn signals, front side lamps located above front wheel wells and rear side turn signals located in line with front side lamps located above rear wheel wells

Double row of interior dome lights, seven left and seven right staggered down length of the bus (interior lighting providing comparable or better intensity to the system described herein are acceptable), front and rear lights on separate switch, overhead map light in driver's area on separate switch. Dimmer rheostat switch to control driver's compartment dash and driver's dome lights.

Two approved LED stop/tail lights 7" diameter minimum

Two approved red; rear reflectors

Two LED back-up lamps

Required LED side marker lamps and/or reflectors

Dual electric horns plus one air horn

Back-up alarm meeting VC 27000(b) requirements

One master electrical switch that shall isolate battery(s) during routine maintenance procedures

Interior rear view mirror 10" x 30" safety glass

One 7" x 17" minimum left side flat exterior mirror mounted on the left front side of the bus in such a way that a drivers field of vision is not blocked when scanning to the left. (When seated in the driver's seat, the driver should be able to look over the top of the left side flat mirror)

One 7" x 20" minimum right side flat exterior mirror mounted on the right front side of the bus.

Note: Right and left side flat mirrors shall be made of stainless steel and fully adjustable by the driver. (Ref: New San Diego Unified mirror system)

One right side mounted 8" convex mirror located just below the right side flat mirror, and one left side mounted 8" convex mirror located just below the left side flat mirror to comply with FMVSS 111.

Front mounted convex, cross view mirror(s) at least 8" in diameter or comparable, certified to meet FMVSS 111 System B.

Sun visor shall be largest available from OEM.

One GVW plate.

CHP certificate, registration and school bus rules holders.

Rubber Front and back mud flaps on each wheel well.

Rubber fenders on all wheel housings.

One driver's glove box in the bulkhead to hold first aid and miscellaneous items

Tow hooks on front and rear

One approved 10 BC unit, fire extinguisher located at the front

One approved 24-unit first aid kit

One approved body fluid clean-up kit

One (1) set of three (3) safety triangles (warning reflectors)

Hand held portable "STOP" sign and holder

Roof mounted strobe light (white) with switch and control light on dashboard

7.0 QUALITY ASSURANCE PROVISION:

All equipment shall be securely fastened to the body in order to minimize distortion through vibration. In addition, all equipment cataloged as standard and any equipment not expressly mentioned in this specification but required by Federal Motor Vehicle Safety Standards, the California Vehicle Code and the California Code of Regulation Title 13 shall be furnished.

7.1 Inspection:

The State of California reserves the right to inspect and evaluate the design and component location on the bus at any time during manufacturing. If the designated person in charge of inspection determines a problem(s) exists, such problem(s) will be corrected before acceptance of the vehicle(s) by the California Department of Education. The State of California and/or their representatives shall have inspection privileges at the site of manufacturing during construction of the bus built to this specification.

The bus shall be inspected and approved to carry pupils by the Motor Carrier Safety Unit of the California Highway Patrol before acceptance.

The bus shall be inspected and approved for quality and workmanship by the California Department of Education's Office of School Transportation before acceptance by the Department of Education.

7.2 Pre-construction Conference:

The successful bidder shall meet and confer with the State approximately two weeks following the award of contract. The contractor shall contact the Department of Education, Mr. John Green at (916) 322-4879 in Sacramento, California to schedule the meeting. The purpose of the meeting is to finalize any details, which may be unique to the utility school bus.

7.3 Inspections:

The State reserves the right to conduct in-process inspections of the manufacturing and assembly of this bus. Cost for the contractor shall pay for travel associated with these inspections. The contractor shall allow access to various facilities upon request by the State. The contractor shall include status checks against the performance of the contract.

7.4 **Component parts capacity:**

The component parts of the bus shall all be of sufficient size and design to safely withstand maximum stresses imposed by a capacity load. The manufacturer's rated loads for axles and bearings must not be exceeded when the bus is loaded to such capacity loads. The torque capacity of each driven part shall equal or exceed the torque capacity of its driving member.

7.5 **Documents:**

Supplier shall provide all necessary documents, weight certificate, etc., and register the bus with the California Department of Motor Vehicles. Contact the California Department of Education's Office of School Transportation for correct owner's information prior to registration.

8.0 **POWER UNIT AND FUELING SYSTEM:**

Power unit furnished for the respective vehicle type shall operate on diesel fuel (sold in California). The power unit (engine) will be the chassis manufacturer standard, or optional engine for the model bus, which meets or exceeds the power requirements specified herein, at not more than the engine manufacturer's rated operating speed. The engine, including all peripherals specific to the fuel type shall be manufactured by an original engine manufacturer. The engine shall be of such design and construction that it will give an even flow of power at all engine speeds without undue vibrations, strain or overheating of engine parts. The engine oil pan plug shall be of magnetic type.

8.1 **Engine Starting:**

Engine shall start satisfactorily without secondary fuels or refillable devices that are not self-contained on the vehicle at temperature down to -10 degrees F., and within 30 seconds of cranking. The vehicle manufacturer shall incorporate sufficient battery capacity to satisfy this requirement.

8.2 **Engine Configuration:**

The primary intended service is school bus application. At a minimum a heavy-duty engine shall be furnished, as defined by the Environment Protection Agency (EPA) and the California Air Resource Board (CARB) at the date of manufacture. The engine shall be a liquid cooled, diesel cycle type, two or four-stroke reciprocating engine. Horsepower rating shall be no less than 275 hp (net flywheel) at 775 foot/pounds of maximum torque. Horsepower rating shall be maintained to a minimum of 7,500 ft. of altitude. The engine shall be rated in accordance with SAE J1349. Engine horsepower shall be certified by the manufacturer and include latest performance curves published.

8.3 **Performance:**

All performance requirements are based on the fully loaded curb weight plus passengers and driver.

Note I: Requirement shall be met at GVW and with all accessories operating.

Note II: The GVW is equal to the curb weight of the body and the chassis plus payload at 120 lbs. per student and 150 lbs. for the driver. After contract is awarded, consideration may be given to choosing different gearing ratios to accommodate higher grades, geographical sites, gear ratio, altitude and routes.

8.3.1 **Grade-ability:**

Grade ability requirements shall be met with drive train specified on grades with surface friction coefficient of 0.3 and above. Grade-ability shall be no less than 3 percent at 50 mph and 16 percent grade at 7 mph. Upon request by the State provide Allison SCAN program analysis verifying grade performance.

8.3.2 **Top Speed:**

Maximum gear speed at GVWR shall be adequate to perform at not be less than 65 mph on straight, level road with all accessories operating.

8.3.3 **Acceleration:**

An average rate of at least 0.06G shall be achieved between 0 and 15 mph. minimum acceleration rates are as follows:

Speed (mph)	Elapse time (sec)
10	4.5
20	10.0
30	19.0
40	34.0
50	60.0

8.3.4 **Range:**

A diesel bus shall have sufficient tank capacity to achieve a minimum 500 miles range with the bus at GVWR fully loaded.

8.3.5 **Emissions Certification:**

The manufacturer shall certify that the engine and the vehicle meet all Federal and State emission standards applicable on the date of manufacture.

8.3.6 **Governor:**

Engine shall be equipped with a suitable governor, approved by the engine manufacturer, and set and sealed to manufacturer operating specification.

8.4 **Engine Fuel Type:**

8.4.1 **(Diesel):**

Engine shall be heavy duty of compression ignition type. The engine shall be designed to operate on 0.05 percent sulfur diesel.

8.5 **Fuel Tank and Fuel System:**

The fuel tank must be capable of being filled to capacity from single filler opening. Fueling rate for liquid fuels shall not be less than the maximum commercial fueling standard available for the fuel (no less than 10 gpm, excluding posi-lock or dry break system.

All fuel system components including tank(s), valves, manifolds, lines, regulators and fittings shall be free of undercoating and paint and shall be accessible for inspection of parts and markings.

8.5.1 **Fuel tank:**

The fuel tank shall be constructed of 14-gauge steel with coating suitable for use with diesel fuel. Appropriate labels and warnings shall be placed inside and outside of fuel door. A keyed lock shall be provided on the fuel compartment door.

8.5.3 **Fuel hose:**

Teflon or braided nylon fuel hoses shall be supplied for a diesel bus. All fuel hoses shall comply with SAE rates for fuel line applications.

8.6 **Filters:**

8.6.1 **Fuel filter and fuel/water separator:**

For a diesel bus, secondary fuel filter shall be spin-on disposable type. Primary fuel /water filter separator shall be furnished (Ref. Raccor 500 FG)

8.6.2 **Oil Filter:**

Full flow, replaceable element or throw away type.

8.6.3 **Engine Air Filter:**

One or two stage. If one stage, intake shall be installed above top of rear window.

8.7 **Cooling system:**

The cooling system shall have a heat rejection capacity of 125 percent the performance required by the engine and transmission manufacturer and maintain optimum temperature with the vehicle loaded to the rated GVWR and continually operating at all driveable altitudes and grades in ambient temperatures ranging from minus 30 degrees F to plus 125 degrees F without loss of coolant. The cooling system shall adequate to cool the transmission, transmission retarder and heat exchanger. Hoses shall silicone or rubber (Ref: Gates Blue Stripe two or Green Stripe Two with Polymer Clamps). Drain outlet shall be provided to allow complete cooling system drainage. Double stainless steel clamps at each end shall be used. Water filtering system shall be provided. The cooling requirements stated are based on a traditional mechanically controlled engines and transmissions. Electronically controlled power trains using automatic temperature, pressure and/or flow sensors and controls used to protect from overheating meet this specification.

8.8 **Transmission and Retarder:**

The warranty for the transmission, retarder and heat exchanger (Ref: Stewart-Warner Southwind) shall be 5 years with unlimited miles.

8.8.1 **Automatic Transmission:**

The automatic transmission shall have a minimum of five speeds with automatic lockup clutch (Allison 3060R). The transmission shall be certified as compatible with the engine performance offered.

Shifter (T-handle or push button) shall operate smoothly in all positions. Air park brake controls shall be red or yellow according to the industry standard for school buses.

8.9.2 **Retarder:**

Retarder system shall maintain the speed of the fully loaded school bus at no more than 19.0 mph or 30 km/hr on a grade of no less than 7 percent for 3.6 miles or 6 km. Retarder modulation shall be achieved with a standard six-position lever located under the steering wheel or on the dash board. Retarder shall be compatible with transmission (Ref. 3060R). Retarder shall be activated when throttle is released.

9.0 **EMISSION STANDARD:**

Vendors shall submit proof that the vehicle meets all Federal and State emission standards applicable at the time and date of manufacture.

10.0 **SALE REQUIREMENTS:**

10.1 **Delivery:**

Delivery shall be made to the California Department of Education's Office of School Transportation training facility, located at 3500 Reed Avenue West Sacramento, California. The bus shall be delivered within 360 days ARO and during regular business hours. All original manufacturer's warranties shall be protected.

Drive-away deliveries from outside the State to dealer site will be accepted provided the bus is driven by a professional driver, either employed by the manufacturer, distributors or by permanent employees of a bonded "drive-away" firm.

At the time of delivery the following support materials for the bus shall be provided:

Two laminated complete wiring diagrams (as installed on the bus) indicating wire colors and numbers, and all junctions, boxes and components.

Two operating instructions books

A line set ticket showing all options installed on vehicle

Two service manuals

Two parts manual sets, including but not limited to bus, engine and each major component (ABS, Fire suppression etc.).

10.1 **Start-up:**

The contractor shall provide training the delivery location for up to one eight hour period. This shall include proper operation and safety concerns for all bus systems, routine maintenance, warranty procedures, service, parts, lubrication, etc.

10.2 **Prior to delivery:**

The new bus must be completely serviced by the dealer. Crankcase, differentials and transmissions must be filled to the capacity recommended by the manufacturer and the bus, whether diesel or alternatively fueled, must be delivered to the Department of Education's training facility in West Sacramento with fuel tank(s) full.

10.3 **Report of sale:**

The original report of sale shall be delivered to the consignee at the time of delivery.

10.4 **Price:**

The California Department of Education is limited to a purchase price not to exceed $150,000.00 inclusive for this bus. Bids exceeding that price will not be considered.

Note: Bidder's are encouraged to seek donations from component manufacturer's in order to stay below the price ceiling established for this purchase. Preliminary analysis by the State has validated interest in supporting this concept vehicle by suppliers of these components.

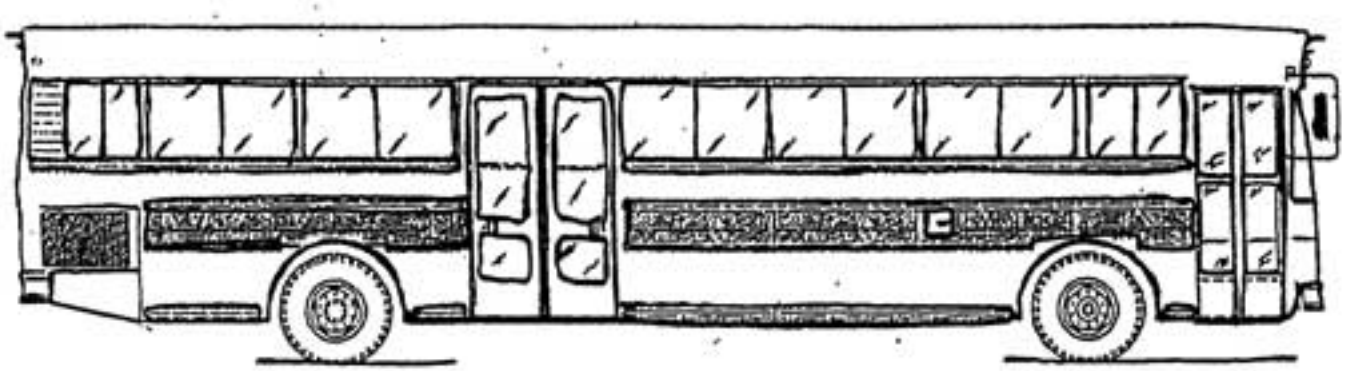
10.5 **Replacement parts:**

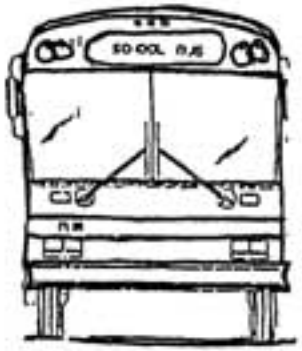
The vendor or the manufacturer of the equipment being supplied shall guarantee that all proprietary replacement parts for the equipment shall be shipped common carrier from a domestic source to the school district within 72 working hours of notification. This requirement shall be in effect for a period of ten (10) years after delivery of the bus. Vendors may be removed from the bid list for failure to meet the parts availability requirement.

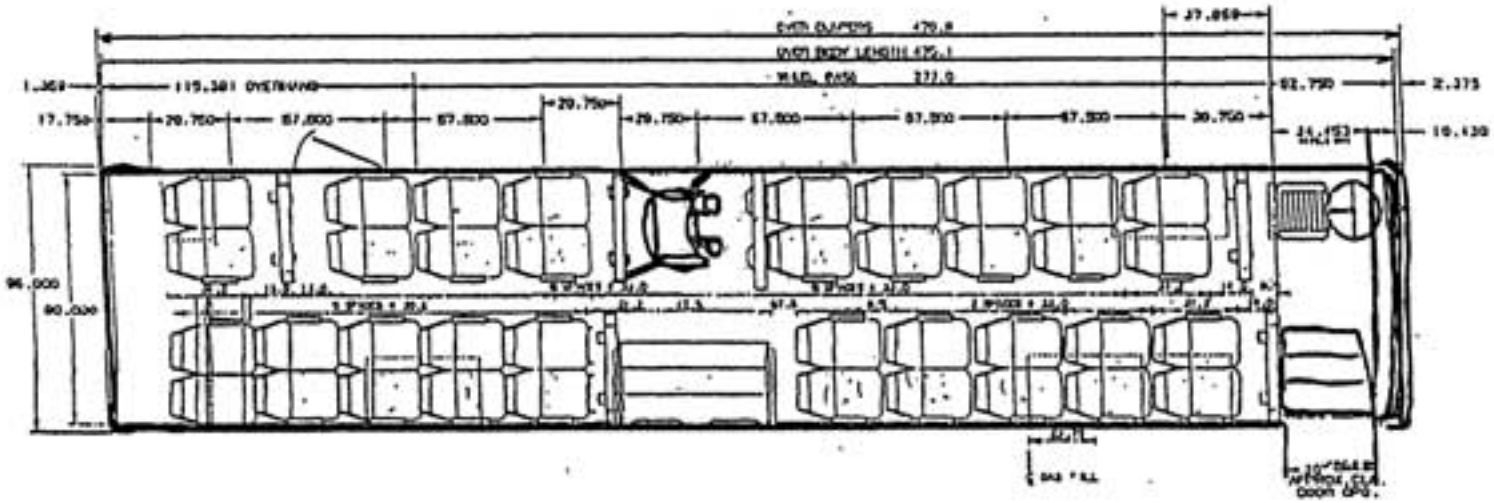
At the time of delivery of the bus, the vendor shall provide evidence of an adequate availability of proprietary stocked spare and replacement parts in the bus manufacturer's inventory within the United States. This parts list will be determined at the time of the bid award. The vendors shall provide a list of commercial replacement part numbers and a minimum of (2) two sources for each part.

Miscellaneous electrical and mechanical spare parts used on the bus shall be currently available from any major automotive part store in California.

UTILITY SCHOOL BUS







Minimum Specifications

Passengers/Capacity 42 minimum **Note:** Seating capacity shall be based upon two (2) passengers per seat plus each wheelchair station and shall exclude the driver.

GVWR (X 1,000 lbs.)	37	Tires size	12R x 22.5
Wheel Base,	267 inches minimum,	Front Brakes	16 .5"x 6 inches
Number of Axles	2	Rear Brakes	16.5"x 8"/w Transmission Retarder (mandatory)
Axles Front (X 1,000 lbs.)	23.0	Overall Length (max.)	40 ft.
Number of wheels with tires	7	Overall height (max.)	11.6 ft. (top of AC unit)
Turning Radius Body corner(max.)	40 ft.	Overall width (max.)	102 inches

Air Conditioning System, (Ref. RAC systems - 2 Rooftop Units, 2 compressors, 110,000 BTU)

Glossary of Terms

Glossary of Terms

Overview

Entries for the glossary of terms were obtained from a review of the transportation literature available from the MIT and Volpe Transportation Libraries, and information found on the Internet. Additional reports and pamphlets were provided by contacts in the school bus and public transit fields as well as from particular transit properties. Literature was reviewed for the time period 1970-1996.

There were, however, several resources that were particularly useful: School Transportation News' on-line, electronic library called STN OnLine BBS, APTA's pamphlet Glossary of Transit Terms and the 1995 National Standards for School Buses and School Bus Operations. Additional sources are noted in the glossary footnotes.

Reviewers will note that in addition to technical definitions, an icon is located to the left of each glossary term. In the course of compiling the glossary, we realized that definitions fell into three categories: (1) definitions exclusively for the school bus transportation industry, (2) definitions applicable only to the transit industry and (3) definitions common to both industries. To distinguish between these three categories, we utilized the following icons:

SCHOOL BUS

Icon used for definitions that apply exclusively to the school transportation industry.

PUBLIC TRANSIT BUS

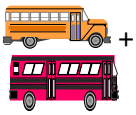
Icon used for definitions that apply exclusively to the public transit industry.

SCHOOL & TRANSIT BUS

School and public transit bus icons are used for definitions that apply to both industries.

Accident, School Bus

(1) A motor vehicle accident involving a school bus with or without a pupil on board, resulting in any personal injury or death, or disabling damage to one or more motor vehicles requiring the vehicle(s) to be transported away from the scene by a tow truck or other vehicle; or (2) A collision involving any vehicle or any pupil or school bus at any time during the loading or unloading process; or (3) injury of any pupil inside the school bus as a result of negligent / unsafe acceleration, deceleration, or other movement of the school bus.[1]



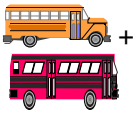
Accessibility

The extent to which facilities and services are barrier-free and can be used by students and other persons with disabilities, including wheelchair users.

Americans with Disabilities Act (ADA)

The Americans with Disabilities Act, PL 101-336, 42 USC 12101, et. seq. The ADA is an extensive civil rights law that provides protection against discrimination to persons with disabilities. It covers a wide range of issues including: employment; the provision of services (including transportation services); access to facilities and "places of public accommodation;" and access to the nation's telecommunications systems. As a broad civil rights law, the ADA applies to public and private entities. The requirements of the law also apply regardless of the type of funding used by the entity - federal, state, local or private funding.

According to Part 37 of the amended ADA regulations, Transportation for elementary and secondary education systems, the ADA transportation requirements "do not apply to public school transportation" and the transportation of school children to and from a private elementary or secondary school, and its school-related activities, if the school is a recipient of Federal financial assistance, subject to the provisions of Section 504 of the Rehabilitation Act of 1973, and is providing transportation service to students with disabilities equivalent to that provided to students without disabilities."[2]



CDL

A CDL is a Commercial Driver's License.[3]

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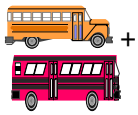
[1] National Standards for School Buses and School Bus Operations, 1995 Revised Edition, Recommendations of the Twelfth National Conference on School Transportation, Central Missouri State University, Warrensburg, Missouri, May 21-26, 1995, Appendix A, pg. 177. These are voluntary guidelines that have been developed for the industry but that do no have legal authority unless adopted by a state.

[2] 49 CFR Part 37, "Transportation for Individuals With Disabilities; Final Rule," Section 37.27 (a) and (b), "Transportation for Elementary and Secondary Education Systems," Federal Register, September 6, 1991.

[3] National Standards, pg. 182.



CFR

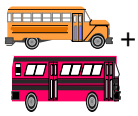
CFR is the Code of Federal Regulations.[4]

Child Safety Seat

A restraint system meeting the requirements of Federal Motor Vehicle Safety Standards 213, generally intended for use by children under four years of age and forty pounds. Also known as child restraint system or car seat.[5] These are not federally mandated for young children, but are used (and sometimes state-mandated) for young children and preschoolers.[6]

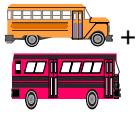
Children with Disabilities

Children with disabilities are children with mental retardation, hearing impairments including deafness, speech or language impairments, visual impairments including blindness, serious emotional disturbance, orthopedic impairments, autism, traumatic brain injury, other health impairments, or specific learning disabilities; and who, by reason of their disability, need special education and related services.[7]



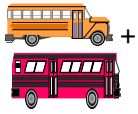
CMV

A CMV is a commercial motor vehicle.[8]



CNG

CNG is compressed natural gas.[9]



Community Transportation

Community transportation includes services that address all transit needs of a community, including general public and specific populations, such as youth, seniors, persons with disabilities, and persons with low-income.[10]

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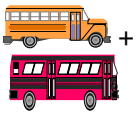
[4] Ibid., pg. 182.
[5] Ibid., pg. 182.
[6] Ibid., pg. 182.
[7] Ibid., pg. 182.
[8] Ibid., pg. 182.
[9] Ibid., pg. 182.
[10] Ibid., pg. 182.

Compartmentalization

For large school buses (i.e. those with a gross vehicle weight rating above 10,000 pounds), the Federal standard offers occupant protection through a concept called "compartmentalization."[11] In this method, school bus seats are spaced closely together to "contain" children in a cushioned compartment with only a minimum amount of space between energy absorbing surfacing. This "compartmentalization" is most effective when seat backs are made higher, wider and thicker than usual, and when all metal surfaces are covered with foam padding. For the padding to remain effective during a collision, seats must be relatively close together; by law, no more than 24" away from the mid-point of a child's abdomen.

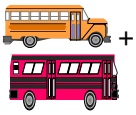
To augment the padded environment, seats also must have a steel inner structure that springs and bends forward to help absorb energy when a child is thrown against it. The steel frame must "give" just enough to absorb the child in the seat ahead. Seats also are required to be anchored to the bus floor strongly enough to not pull loose during this bending action.

After years of research, DOT and the NHTSA determined that "compartmentalizing" school children in such cushioned seating areas was easier, more manageable, and safer than requiring the use of seat belts in all school buses. Compartmentalization also has the advantage of working equally well for 1, 2 or 3 students per seat or with both smaller or larger passengers.[12]



Coordination

A cooperative arrangement between transportation providers and agencies needing transportation services. Coordination models include: (1) shared information and referral; (2) shared use of staff, vehicles, facilities, training, and/or maintenance resources; (3) procurement of a common transportation provider (or set of providers) either directly or through a broker; and (4) a fully-integrated service.



Criminal Record Check

Also known as background check. The investigation of a person's criminal history through submission of fingerprints to state and/or federal authorities.[13] Many states require a criminal record check for any staff person who will come into contact with school children throughout the course of a school day, including administrators, teachers, janitors and school district bus drivers.

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[11] "Safety Belts on Large School Buses," A position paper of the National Association of State Directors of Pupil Transportation Services, Revised January 1996.

[12] Information on compartmentalization obtained from AmTran Corporation's publication "5 Most Frequently Asked Questions About School Buses."

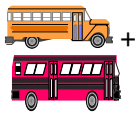
[13] National Standards, pg. 183.

Crossing Arm

Also known as crossing control arm.[14] Device attached to the front bumper of a school bus, activated during loading and unloading, designed to force the students to walk far enough away from the front of the bus to be seen by the driver.

Danger Zone

A ten foot area immediately surrounding the stopped school bus.[15]



Deadhead

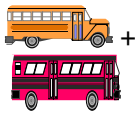
Movement of a bus without passengers, e.g. from bus yard or garage to first pick up, and from last drop-off back to bus yard or garage.[16]

Demand-Responsive Transportation

See Paratransit. The term Demand-Responsive Transportation is sometimes used to connote paratransit that is <u>not</u> provided under the auspices of a public transit agency.

Dial-A-Ride

See Paratransit. This is sometimes used to connote paratransit for the general public, in contrast to specialized paratransit for specific groups. In many communities, Dial-A-Ride is the sole form of public transportation. In other communities, it replaces public transit in low-demand periods and/or in low-demand areas, and sometimes is used as feeder service to a public transit service or to test the viability for public transit in certain areas. A modified version of Dial-A-Ride, sometimes referred to as "Bus Stop Dial-A-Ride" restricts pick-ups and drop-offs to designated locations.



Driver Training

Instructional program designed to impart and improve the skills necessary for bus drivers, including but not limited to knowledge of the vehicle, safe driving practices, emergency procedures, service-specific operational policies and procedures, passenger understanding, and passenger relations.[17] Standards differ for school bus and public transit industries.

Extended Year Service

Transportation provided for students subsequent to the end of the traditional school year.[18]

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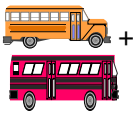
[14] Ibid., pg. 183.
[15] Ibid., pg. 183.
[16] National Standards., pg. 183.
[17] Ibid., pg. 184.
[18] Ibid., pg. 186.



FHWA

Federal Highway Administration. An agency of the United States Department of Transportation (USDOT).[19]

Field Trip

The transportation of students to an event or destination which is an extension of classroom activity, i.e. a part of the curriculum. A field trip is one type of activity trip.[20]

Fixed-Route Transit

A passenger transportation service open to the general public where a vehicle or vehicles operate along a prescribed route according to a fixed schedule.

Flexibly-Routed Transit

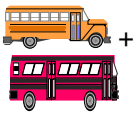
A transit service that involve flexibility in scheduling or routing of service. Examples include the following services:

- Flag-Stop and Request-A-Stop Service: Flag stop service allows patrons to request a bus by waving it down anywhere along the prescribed route. "Request-A-Stop" service allows a person on a bus to request to get off at any location along a route.

- Route Deviation Service: A transit service with a prescribed route with scheduled stops, but where the vehicle will deviate from the route to pick up and drop off passengers upon request, and then return to the route at the point at which it departed to accommodate the request. Route deviation service operates in one of three ways: (1) riders may be required to call in advance; (2) the service may allow drop-offs only (with riders requesting the service as they board the vehicle); and (3) riders place their request at specific "remote" bus stops that have communications linkages to the service; this is often called "check-point" deviation.

- Point Deviation Service: A transit service where the vehicle operates on a fixed schedule with specific stops but without a fixed route. Vehicles will accommodate requests for pick ups and drop offs at locations other than specified stops or "points" as long as they can be accommodated within the fixed schedule.

[19] Ibid., pg. 186.
[20] Ibid., pg. 186.

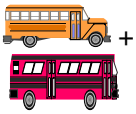


Federal Motor Carrier Safety Regulations (FMCSR)

FMCSR are the regulations of the Federal Highway Administration (FHWA) for commercial motor vehicles in interstate commerce, including buses with gross vehicle weight rating (GVWR) greater than 10,000 pounds or designed to carry 16 or more persons (including the driver), other than buses used to transport school children from home to school and from school to home.[21] More specifically, the FMCR are motor vehicle and safety and construction standards under FHWA that apply to commercial motor vehicles and drivers transporting passengers in interstate commerce.

Feeder Service

Feeder service is a transit or paratransit service that provides transportation to and from a fixed-route bus stop or train station.



FMVSS

Federal Motor Vehicle Safety Standards, 49 CFR 571. Construction standards under NHTSA that apply generally to all new motor vehicles and motor vehicle equipment.[22] See also school bus safety regulations.

Head Start

Started in 1965, Head Start is an early childhood development program that provides comprehensive developmental services for low-income, pre-school children ages 3 to 5 and social services for their families.[23] In FY 1994, almost 714,00 children were enrolled in over 37,000 Head Start classrooms. About 13 percent of the enrollees are children with disabilities.[24] The NHTSA espouses the view that Head Start facilities are considered preprimary schools for the purpose of being subject to the Federal school bus safety standards.[25]

- Centers operate 4 or 5 days per week, and transportation is usually provided for those who need it both to and from the center. Transportation is also provided by some centers for annual or bi-annual medical and doctor appointments. Field trips may be provided with transportation, usually from one to four times per month.

- Homebase Programs are outreach programs and typically the only transportation provided is for the children to receive dental and medical care, usually twice per year. In some cases, the children are brought to centers with their parents twice per month. Parents may also be transported, with or without their children, for parenting classes and/or counseling.[26]

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[21] Highway Safety Program Guideline #17
[22] Ibid., pg. 186.
[23] "Moving Ahead on Head Start," The New York Times, Sunday, April 18, 1993.
[24] "Fact Sheet: Head Start," Administration on Children, Youth and Families, 1993.
[25] Letter to James Tydings, Thomas Built Buses, Inc, Specifications Engineer, from Joseph J. Levin, Jr., Chief Counsel, Department of Transportation, dated December 21, 1977.
[26] Transit Cooperative Research Program (TCRP) Report 6, User's Manual for Assessing Service-Delivery for Rural Passenger Transportation, TRB, National Research Council, 1995, pg. 12.

HOV/HOV Lane

High Occupancy Vehicle; a vehicle that carries two or more passengers, in the context of special lanes or rights-of-way that only allow vehicles with a certain minimum number of occupants.[27]

Incidental Charter Bus Operations

Incidental means the transportation of school students, personnel and equipment in charter bus operations during off peak hours which does not interfere with regularly scheduled service to the public (as defined in the Opinion of the Comptroller General of the United States, B160204, December 7, 1966).[28] See also Motor Bus: Charter Bus.

Inclusion

Also known as mainstreaming. Integration of students with disabilities into regular classrooms and onto regular school buses.[29]

Individualized Education Program (IEP)

A plan including information for each child with disabilities required under IDEA, P.L. 101-476 (Part B).[30] Per the IDEA, a case study team consisting of educators, administrators, parents and, if necessary, the school transportation supervisor or other providers of "related services" must first evaluate the educational and ancillary needs of the child. This evaluation is formalized into an "Individual Education Program (IEP)", and is revised each year the child attends school. Specific transportation criteria establishing parameters for determining transportation needs has been a particularly effective mechanism for administrators 1) to maintain children in the least restrictive environment (and therefore in the company of other children) and 2) to ensure that requests for special education transportation remain reasonable.

Individuals with Disabilities Education Act (IDEA)

The Individuals with Disabilities Education Act, passed in 1990 as P.L. 101-476 (Part B) to replace the EHA. The IDEA is specifically geared to assist the 8 million children with disabilities attain a public school (or equivalent) education.[31]

Integrated Restraint System

A system in which the occupant restraint of an individual in a wheelchair / mobility aid connects directly to and is dependent upon the mobility aid's securement system's rear strap assemblies.[32]

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[27] National Standards, pg. 188.
[28] Title 49 of the Code of Federal Regulations, Part 605: School Bus Operations.
[29] Ibid., pg. 189.
[30] Ibid., pg. 188.
[31] National Standards, pg. 188.

Lap Belt

Type 1 seat belt assembly meeting the requirements of FMVSS 209, intended to limit movement of the pelvis.[33]

Least Restrictive Environment (LRE)

A concept embodied in IDEA which requires that children with disabilities be integrated as fully as possible into situations and settings with nondisabled peers.[34]

Mainstreaming

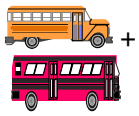
See inclusion.[35]

Match

State or local funds required by the federal government to complement federal funds for a project. A match may also be required by states in funding projects which are joint state / local efforts.

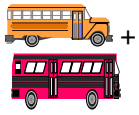
Medically Fragile

Refers to students who require specialized technological health care procedures for life support and / or health support.[36]



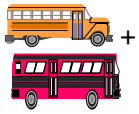
Minibus

A small bus. When used as a school bus, usually a Type A or B (see School Bus definitions).[37]



Minivan

A Multipurpose Passenger Vehicle (MPV) designed to carry a maximum of seven or eight passengers.



Mobility Aid

A wheelchair, walker, cane or other device, either battery-powered or manual, that is used by a person with a disability to assist with mobility. [38]

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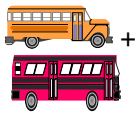
[32] Ibid., pg. 189.
[33] Ibid., pg. 189.
[34] Ibid., pg. 190.
[35] Ibid., pg. 190.
[36] Ibid., pg. 191.
[37] Ibid., pg. 191.
[38] National Standards, pg. 191.



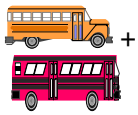
Mobility Disadvantaged

Mobility disadvantaged refers to any person who cannot carry out a reasonable level of desired activity outside the home because of a lack of available vehicle, road facility, or transportation service. These persons are also sometimes referred to as "transit dependent," or those who cannot drive: the young, the poor, the unemployed, the carless members of suburban families, persons with physical or cognitive disabilities.

Motor Bus

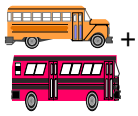
A rubber-tired, self-propelled, manually steered vehicle with fuel supply carried on board the vehicle. Types include:

- Articulated Bus: A bus usually 55 feet or more in length with two connected passenger compartments and that bend at the connecting point when the bus turns a corner.
- Charter Bus: A bus transporting a group of persons who, pursuant to a common purpose and under a single contract at a fixed price, have acquired the exclusive use of a bus to travel together under an itinerary.
- Circulator Bus: A bus serving a specific locale, such as a downtown area or suburban neighborhood with connections to major traffic corridors.
- Double Deck Bus: A bus with two separate passenger compartments, one above the other.
- Express Bus: A bus that operates a portion of the route without stops or with a limited number of stops.
- Feeder Bus: A bus service that picks up and delivers passengers to a rail rapid transit station or another bus route or terminal.
- Intercity Bus: A bus with front doors only, high-backed seats, separate luggage compartments, and usually with restroom facilities for use in high-speed long-distance service.
- Medium Size Bus: A bus from 29 to 34 feet in length.
- Sightseeing Bus: A bus adapted for sightseeing use, usually with expanded window areas.
- Small Bus: A bus 28 feet or less in length.
- Standard-Size Bus: A bus from 35 to 41 feet in length.
- Subscription Bus: A commuter bus express service operated for a guaranteed number of patrons from a given area on a prepaid, reserved seat basis.
- Transit Bus: A bus with front and center doors, normally with a rear-mounted engine, low-back seating, and without luggage compartments or a restroom.



National Highway Traffic Safety Administration (NHTSA)

NHTSA develops and distributes safety regulations and guidelines concerning buses. Most states use the NHSTA definitions and generally comply with the NHSTA regulations, particularly where the transport involves public school students. State or local school bus regulations may be more detailed than the federal regulations.



NTSB

National Transportation Safety Board. An independent federal agency authorized by Congress to investigate accidents and issue recommendations.[39]

Occupant Restraint

A Type 2 seat belt assembly that meets the requirements of FMVSS 209, installed according to FMVSS 210 and used to secure the torso and pelvic area of a passenger in a motor vehicle or an occupant of a wheelchair / mobility aid.[40]

Parallel Restraint System

A system in which the occupant restraint lap belt anchors directly to the floor track or plates, and is independent of the wheelchair / mobility aid securement system.[41]

Paratransit

Sometimes also called Demand-Responsive Service or Dial-A-Ride. It is sometimes used to connote any form of transportation that is not fixed-route, fixed-schedule transit, and that involved placing a trip requests. Under this broad definition, taxis and other for-hire vehicles, as well as ridesharing services such as carpooling and vanpooling, would be included in the definition.

A narrower definition in use excludes taxis and for-hire vehicles, as well as ridesharing arrangements, except in instances where taxis and / or other for-hire vehicles are used as contractors. This definition is sometimes augmented to include only programs that are overseen by public entities (or that benefit from public funds) and where trips are fully or partially subsidized. This would hence include demand-responsive transportation services under the auspices of public transit agencies as well as human service agencies.

A narrower definition still defines paratransit as a component of a public transit service, differentiating it from other "demand-responsive" services that might be provided, for example, by human service agencies. Advocates of this definition stress the connection with transit and not human service agencies.

Public transit agencies that operate fixed-route transit are required by the ADA to also provide ADA Complementary Paratransit where and when fixed-route transit service is provided to persons who – because of their disability -- are unable to use the fixed-route transit service. Such service is often referred to as ADA Paratransit.

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[39] Ibid., pg. 192.
[40] Ibid., pg. 193.
[41] Ibid., pg. 193.

Pre-School

Refers to a child between the ages of three and five years old who is not yet in kindergarten; or to a program serving children in that age range.[42] Head Start is considered a pre-school program.

Public Transit Agency

An organization that provides transportation services owned, operated, or subsidized by any municipality, county, regional authority, state, or other governmental agency, including those operated or managed by a private firm under contract to or funded by a government agency.[43]

Public Transit

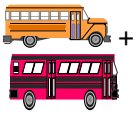
Transportation open to the general public that is provided by or through a public transit agency by bus, rail, or other conveyance on a regular basis.

Reverse Commuting

Movement in a direction opposite the main flow of traffic, such as from the central city to a suburb during the morning peak period.[44]

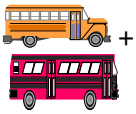
Restraint System

A generic term for one or more devices intended to secure and protect a passenger with or without a mobility aid in a vehicle, including seat belts, occupant restraints, child safety seats, safety vests, etc.[45]



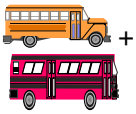
Ridership

The number of passengers using a transportation system during a given time period, typically measured in one-way passenger trips.[46]



Risk Management

Practices and procedures designed to protect against losses from accidents, passenger and worker injuries, vehicle damage and other losses and reduce insurance costs.[47]



Rolling Stock

The vehicles in a transportation system.[48] Also known as a fleet.

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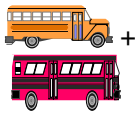
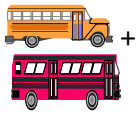
[42] Ibid., pg. 194.
[43] Glossary of Transit Terminology (Pamphlet), APTA, 1994.
[44] Ibid.
[45] National Standards, pg. 195.
[46] Ibid., pg. 196.
[47] Ibid., pg. 196.
[48] Ibid., pg. 196.



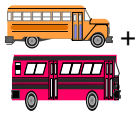
Route

For the student transportation industry, a designated course regularly traveled by a school bus to pick up students and take them to school, or to deliver students from school to their homes or designated bus stops.[49] In the public transit industry, a route is a path followed by a transit vehicle in revenue services. On transit buses, passengers may ride from start to finish of a route, paying their fares (or displaying their passes) when boarding and/or alighting. Several transit routes may traverse a single portion of road or track, and a single run may encompass more than one route.



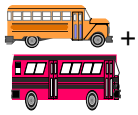
Route Sheet

A list of all the designated stops on a route. Also called a driver sheet or manifest[50]



Run

A complete trip on a route. A run is "a piece of work" which typically begins and ends at the bus yard or garage. A run may involve one or more routes. For example, a school bus driver may be assigned to a morning run which consists of a high school route, a middle school route, and an elementary school route.[51] A transit driver may also operate a bus over more than one route during the course of his/her shift.



Rural Area

1980 the US Department of Transportation (USDOT) issued a study that provided several definitions related to rural areas. It defined "rural area" as "any area outside of an urbanized area where the urbanized area boundaries have been designated by the Bureau of the Census." It should be noted that some rural areas exist within the boundaries of the Standard Metropolitan Statistical Areas (SMSAs). A "rural place" was defined as "any incorporated or unincorporated place (as defined by the Bureau of the Census) located in a rural area." A large rural place has a population of 25,000 or more while a small rural place contains a population less than 5,000. A medium rural place falls in between these two categories. The study further defined small rural communities as those closely settled rural population centers that are not incorporated and that normally are not reported separately in census statistical populations. These communities usually have populations of less than 1,000.

The Census' short-hand definition is more manageable. Rural areas are defined as non-urbanized areas, whether or not included in an SMSA, plus urbanized areas under 5,000 population not included in an SMSA. Small urban areas are those urbanized areas exceeding 5,000 persons but not in an SMSA.

In terms of transit in rural and small urban areas, the following table offers a specific comparison:

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[49] Ibid., pg. 196.
[50] Ibid., pg. 196.
[51] Ibid., pg. 196.

Comparison Between Rural and Small Urban Transit	
Rural	Small Urban
Areas outside incorporated cities of 2,500 or more; areas not included as part of an urbanized area.	Places of 2,500 inhabitants or more incorporated as a city, village, or town, or other area included as part of an urbanized area.
Rural transit characterized by: • Long trip lengths (40-50 miles or more) • High per passenger trip cost • Often fully or partially sponsored human service agencies • Service ignores city and county boundaries. • Provides intercity and inter-regional travel.	Small Urban Transit characterized by: • Shorter trip lengths (2-5 miles) than rural transit (40-50 miles or more) • Usually operated by a municipality or by carrier under contract to municipality • Service usually limited to city limits • Provides intracity travel and may provide intercity travel.

Safety Vest/Harness
An upper torso restraint that supports and secures a child by attachment to the vehicle seat.[52]

Safety Training
Educational programs provided for students to teach proper behavior while waiting for, riding in, boarding, or leaving school buses. Also known as ridership programs.[53]

School
An educational institution for children at the pre-primary, primary, elementary, or secondary level, including nursery schools and Head Start programs, but not including day care programs.[54]

School Bus
A motor vehicle with motive power, except a trailer, designed for carrying more than ten persons.

- Activity Bus: A bus owned, leased, or contracted by a school district and regularly used to transport students on field trips, athletic trips, or other curricular or extracurricular activities, but not used for to-and-from school transportation. Must meet all Federal Motor Vehicle Safety Standards (FMVSS) for school buses.

[52] Ibid., pg. 197.
[53] Ibid., pg. 197.
[54] Ibid., pg. 197.

- Charter Bus: A bus that is operated under a short-term contract with a school district or other sponsor who has acquired the exclusive use of the vehicle at a fixed charge to transport students to a school-related event.
- DOT Bus: A school bus that meets the Federal Motor Carrier Safety Regulations (FMCSR) standards for interstate transportation set forth in 49 CFR 390.
- Intercity Bus: A large bus with front doors only, high-back seats and under-floor luggage storage for high-speed, long distance trips. Also known as motor coach and over-the-road coach.
- School Bus: A bus owned, leased, contracted or operated by a school or school district and regularly used to transport students to and from school or school-related activities, but not including a charter bus or transit bus. Must meet all applicable FMVSS, and is readily identified by alternately flashing lights. National School Bus Yellow paint, and legend School Bus.[55] The vehicle definitions were issued in the late 1980s, and replaced the Type I and Type II designations.
- Type A: A conversion or body constructed upon a van-type or cutaway front-section vehicle, with a left side driver's door, designed for carrying more than 10 persons. Type A-I has a Gross Vehicle Weight Rating (GVWR) of 10,001 pounds or more, and Type A-II has a GVWR of 10,000 pounds or less.
- Type B: A conversion or body constructed and installed upon a van or front section vehicle chassis, or stripped chassis, with a GVWR of 10,001 pounds or more, designed for carrying more than 10 persons. Part of the engine is beneath and / or behind the windshield and beside the driver's seat. The entrance door is behind the front wheels.
- Type C: Also known as a conventional school bus. A body installed upon a flat back cowl chassis, with a GVWR of 10,001 pounds or more, designed for carrying more than 10 persons. All of the engine is in front of the windshield and the entrance door is behind the front wheels.
- Type D: Also known as transit-style school bus. A body installed upon a chassis, with the engine mounted in the front, midship or rear, with a GVWR of 10,001 pounds or more, designed for carrying more than 10 persons. The engine may be behind the windshield and beside the driver's seat; it may be at the rear of the bus, behind the rears wheels, or midship between the front and rear axles. The entrance door is ahead of the front wheels.
- Specially equipped: A school bus designed, equipped, or modified to accommodate students with special needs.[56]

School Bus Operations

School Bus Operations signifies transportation by bus exclusively for school students, personnel and equipment in school.[57]

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[55] Ibid., pg. 180.
[56] Ibid., pg. 180.
[57] Title 49 of the Code of Federal Regulations, Part 605: School Bus Operations.

FREQUENTLY ASKED QUESTIONS ABOUT FEDERAL SCHOOL BUS SAFETY REQURIEMENTS

QUESTION: What is a school bus?
The National Highway Traffic Safety Administration (NHTSA), U.S. Department of Transportation, defines a bus as a motor vehicle designed to carry more than I 0 persons, and a school bus as a bus that is sold or introduced into interstate commerce "for purposes that include carrying students to and from school or related events," This definition does not include buses operated as conunon carriers in urban transportation.

QUESTION: What is a school related event?
A school related event is any activity sponsored by a school, whether on or off the school grounds, including transportation between home and school, sports events, band concerts, Field trips, and competitions such as debates or chess tournaments.

QUESTION: To whom do the Federal Motor Vehicle Safety Standards (FMVSSs) apply?
The FMVSSs apply to motor vehicle manufacturers and any person selling or offering for sale or lease a new motor vehicle. It is a violation of Federal law for any person knowingly to sell or lease a new vehicle for use as a school bus that does not comply with all FMVSSs applicable to school buses. The law provides substantial penalties for violation of the FMVSSs, including civil fines.

QUESTION: Do the FMVSS's apply to the purchaser as well as the seller?

NO. The FMVSSs regulate the manufacture and sale of only new motor vehicles, not to the use of vehicles. Therefore, a purchaser, including a school, can purchase and use any vehicle it wants, whether new or used, for whatever purposes it wants, subject to State law. That is because once a new vehicle is sold to the first retail purchaser, Federal requirements no longer apply, with certain narrow exceptions, and the use of that vehicle becomes subject to State law.

QUESTION: Do the school bus requirements apply to the sale of buses to private schools?

Yes. NHTSA looks to the nature of the particular institution purchasing the bus. If the central purpose of the institution is the education of preprimary, primary, or secondary school students., whether public or private, new buses sold to the school purchased for their transportation must comply with the FMVSSs applicable to school uses.

QUESTION: Are college students to be transported in school buses?
NO. The school bus requirements do not apply to the transportation of post-secondary school students such as college students, adult education participants, or post-high school vocational students. The school bus requirements also do not apply to religious instruction such as Sunday school or catechism students, athletic teams that have no connection with a school, or to children in custodial facilities such as day care centers.

QUESTION: Does Federal law require school buses to be yellow?
No. Federal law applies only to safety performance standards, and not to design standards or appearance State and local governments establish policy of school children's transportation. However, NHTSA provides recommendations to the States on operational aspects of school bus and pupil transportation safety programs, in the form of Highway Safety Program Guideline No. 17, Pulpil Transportation Policy. Among other matters, Guideline 17 recommends that school buses be yellow. The States have authority to specify the color of buses.

Source: *National Highway Traffic Safety Administration, October 1998.*

School Bus Safety Regulations

The school transport community and the Federal government have developed standards and guidelines to minimize the number of school-bus fatalities in the US. Now, two Federal laws regulate the design and operation of school bus: the National Traffic and Motor Vehicle Safety Act of 1966 and the School Bus Safety Amendments of 1974. In addition, the National Traffic Safety Administration has issued 34 Federal motor vehicle safety standards which apply to school buses. These standards are summarized in the 1995 National Standards on School Transportation. These safety guidelines detail standards for brakes, steering, lights, fuel systems integrity, mirrors, heaters / defrosters, compressed gas containers and a range of other bus components.[58]

Several regulations have unique requirements for school buses, including mandated outside mirrors to provide the seated driver with a view in front of and along both sides of the bus, and red warning lights when the bus is stopped to load or unload passengers and emergency exits. In addition, four regulations apply only to school buses:

1. "School Bus Rollover Protection," which specifies the minimum structural strength of buses in rollover-type accidents;

2. "School Bus Body Joint Strength," which specifies the minimum strength of the joints between panels that comprise the bus body and the body structure;

3. "School Bus Passenger Seating and Crash Protection," which establishes requirements for school bus seating systems for all sizes of school buses and provides minimum performance requirements for wheelchair securement / occupant restraint devices (including the requirement that wheelchair locations be forward facing); and

4. "School Bus Pedestrian Safety Devices," which requires school buses to be equipped with an automatic stop signal arm on the left side of the bus to help alert motorists that they should stop their vehicles because children are boarding or leaving a stopped school bus.[59]

Federal law applies only to safety performance standards, and not to design standards or appearance. However, the National Highway Traffic Safety Administration (NHTSA) provides recommendations for the States on various operational aspects of school bus and pupil transportation safety programs in the form of Highway Safety Program Guideline No. 17, Pupil Transportation Safety.[60] States and local governments may offer more stringent safety guidelines, but cannot loosen any Federal regulations pertaining to school bus safety.

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[58] "History of School Bus Safety: Why Are School Buses Built as They Are," A Position Paper of the National Association of State Directors of Pupil Transportation Services, Revised January 1996.
[59] Ibid., pg. 181.
[60] "NHTSA Answers Frequently Asked Questions About Federal School Bus Safety Requirements," National Highway Traffic Safety Administration (NHTSA), Department of Transportation.

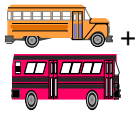
School Bus Stop
An area on the street or highway designated by school officials for picking up and discharging students.[61]

School Chartered Bus
A school chartered bus is a bus that is operated under a short-term contact with State or school authorities who have acquired the exclusive use of the vehicle at a fixed charge to provide transportation for a group of students to a special school-related event.[62]

School Van
A vehicle smaller than a bus, designed to carry seven to ten passengers and used to transport students. In the student transportation industry "school van" means that it does not meet FMVSS for school buses. See minivan.[63]

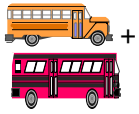
School Vehicle
Any vehicle owned, leased, contracted or operated by a school or school district and regularly used to transport students to and from school or school-related activities. Includes school buses, activity buses, vans, and passenger cars, but does not include transit or charter buses.[64]

Seat Belt
A passenger restraint system incorporating lap belts or lap and shoulder belts and meeting the requirements of FMVSS 208, 209, and 210. Also known as seat restraints.[65]



Seating Capacity
The number of designated seating positions provided in a vehicle, including the driver's position.

- Designated Seating Capacity: The theoretical passenger capacity that a vehicle would have if it were constructed with the maximum number of seating positions according to standard seating plans. Also known as manufacturer's seating capacity.
- Reduced Capacity: The capacity that is achieved when one or more seats are removed from the standard design during/after the vehicle is manufactured.[66]



Seating Position
The space on a bench seat designated for one person.[67]

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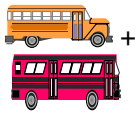
[61] Ibid., pg. 181.
[62] Highway Safety Program Guideline #17
[63] Ibid., pg. 197.
[64] Ibid., pg. 197.
[65] Ibid., pg. 198.
[66] Ibid., pg. 198.

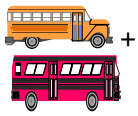
Section 5311 (formerly Section 18)

Section 5311, originally authorized by the Surface Transportation Act of 1978, is the Federal source of capital and operating assistance for rural public transportation (i.e., public transit service in areas with populations under 50,000). The Federal Transit Administration apportions funds annually to the states according to a formula-based on non-urban area population. The Federal share is up to 50% for operating assistance and 80% for capital. Public bodies and private, non-profit entities are eligible sub-recipients.



Securement System

The means of securing a wheelchair or mobility aid to a vehicle in accordance with FMVSS 222, including all necessary buckles, anchors, webbing/straps and other fasteners.[68]



Shuttle

A public or private vehicle that travels back and forth over a particular route, especially a short route or one that provides connections between transportation systems, employment centers, two schools, etc.

Special Education

Specially designed instruction to meet the unique needs of a child with disabilities.[69] For additional information, see also Individualized Education Program.

Specially Equipped School Bus

Any school bus designed, equipped, or modified to accommodate students with special needs.[70]

Stop Arm

A device in the form of a red octagon extending outward from the side of a school bus to signal that the bus has stopped to load or unload passengers and meeting FMVSS 131. Also known as stop semaphore and stop signal arm.[71]

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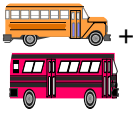
[67] Ibid., pg. 198.
[68] Ibid., pg. 199.
[69] Ibid., pg. 200.
[70] Ibid., pg. 200.
[71] Ibid., pg. 200.

Student Rides

The number of students transported in a given system multiplied by the number of one-way trips in a school bus, e.g. a school district that transports 1,000 students provides 2,000 student rides daily, or 360,000 students rides to and from school annually (based on a 180 day school year). To determine the total number of student rides annually, the district would add the actual or estimated number of students transported on activity trips (times 2) to the figure above.[72]



Suburban Area

The distinction between "suburban" and "urban" is not always clear, as evidenced by the somewhat imprecise definitions offered by the 1990 Census. For analytical purposes, the Census identifies a "Metropolitan Area (MU)" as "a large population nucleus, together with adjacent communities that have a high degree of economic and social integration."[73] Unfortunately, the designation "MA" blurs the significant geographic, political and economic differences between distinct suburban and urban areas. The Census-defined "Central City" is less descriptive and, in the end, less helpful in clarifying the boundaries between urban and suburban. As stated in the Area Classifications, "Central City" denotes "the largest place, and, in some cases, additional places designated as "central cities" under official standards."[74]

One of the more useful definitions of "suburb" is found in the Final Report for TCRP B-6, Improving Transit Connections for Suburban Mobility. The authors define suburbs as "as places that lie outside of CBDs and central cities, generally with population densities below 2,000 persons per square mile and with floor area ratios below 1.0." The authors caution that the definition "is meant to convey a low-density area outside of a traditional urban center."

The low densities and decentralized activities in suburban areas make efficient and cost-effective transit and paratransit operation difficult. Moreover, the dearth of public transportation services in suburban (as well as rural) areas has made it difficult for school systems to shift older school bus riders to the public transit system, a shift which has proven effective in larger urban centers such as New York and San Francisco.

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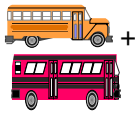
[72] Ibid., pg. 200.

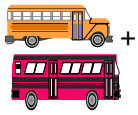
[73] 1990 Census, Area Classifications, pg. A-8. The definition of MA is also determined by aggregate population figures: "Each MA must contain either a place with a minimum population of 50,000 or a Census Bureau-defined urbanized area and a total MA population of at least 100,000 (75,000 in New England).."

[74] Ibid., pg. A-9.



Trip

The school bus industry defines a trip as the transportation of students to school from any destination, followed by a return trip back to that desination. The two together make a round trip.[75] In the public transit industry, a trip is defined as a one-way movement of a person or vehicle between two points for a specific purpose.[76]



Tripper Service

Tripper service means regularly scheduled mass transportation service which is open to the public, and which is designed or modified to accommodate the needs of school students and personnel, using various fare collections or subsidy systems. Buses used in tripper service must be clearly marked as open to the public and may not carry designations such as "school bus" or "school special." These buses may stop only at a grantee or operator's regular service stop. All routes traveled by tripper buses must be within a grantee's or operator's regular route service as indicated in their published route schedules.[77] The prohibition against the use of "project equipment" (school buses) for non-school-related uses does not apply for tripper service.[78]

Type I School Vehicles

Note: Type I and Type II designations were used to identify school buses until the late 1980s when a new set of definitions were introduced. See School Bus for the most recent definitions.

For historical purposes, the USDOT Highway Safety Standard No. 17 defined Type I school buses as motor vehicles used to carry more than 16 pupils to and from school. Included in this definition were vehicles that at any one time exclusively carried pupils and/or school personnel; specifically excluded were common carriers.

Federal Safety Guideline No. 17 recommended that all Type I school buses:

1. be identified with the words "School Bus" printed on the front and rear of the vehicle with letters at least eight inches high;
2. be painted the national school bus glossy yellow color;
3. be equipped with an eight-light warning signal system;
4. be equipped with a system of mirrors providing the seated driver a view of the roadway on either side of the bus and immediately in front of the front bumper; and
5. be equipped with stop arms at the option of the State.

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[75] National Standards., pg. 202.
[76] Transit Project Planning, pg. 112.
[77] Title 49 of the Code of Federal Regulations, Part 605: School Bus Operations.
[78] Ibid.

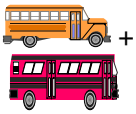
In cases where Type I school buses were operated by a publicly or privately owned transit system primarily for public transportation but also for pupil transportation service, such vehicles:

6. did not have to be painted yellow and black;
7. had to be equipped with temporary "School Bus" signs while transporting pupils to and from school; and
8. did not have to be equipped with a warning signal system if the vehicle was used only in places where such a system was prohibited.

Type I school buses that were permanently converted for other than school transportation had to be painted in a color other than school bus yellow. If and when Type I school buses were used for non-pupil transportation, the words "School Bus" had to be concealed or removed and the system of warning signals deactivated. Similar specifications for Type II vehicles were left to each state. [79]

Type II School Vehicles

e Type I School Vehicles for a more comprehensive review. Type II school buses were defined as motor vehicles used to carry 16 or fewer pupils to and from school. Excluded from this definition were private autos.



Urban Area

The traffic safety codes define urban areas as the entire area in which a local public body is authorized by appropriate local, State and Federal law to provide regularly scheduled mass transportation service. This includes all areas which are either: (a) Within an "urbanized area" as defined and fixed in accordance with 23 CFR part 470, subpart B; or (b) within an "urban area" or other built-up place as determined by the Secretary under Section 12 (c) (4) of the Federal Mass Transit Act of 1964, as amended (40 U.S.C. 1608 (c) (4)).

The Census offers another definition, specifically, "all territory population, and housing units in urbanized areas and in places of 2,500 or more persons outside urbanized areas." More specifically, "urban" consists of territory, persons, and housing units in:

1. Places of 2,500 or more persons incorporated as cities, villages, boroughs (except in Alaska and New York), and towns (except in the six New England States, New York, and Wisconsin), but excluding the rural portions of "extended cities."

2. Census designated places of 2,500 or more persons.

3. Other territory, incorporated or unincorporated, including in urbanized areas.

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[79] Ibid.

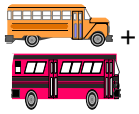
In order to better distinguish between urban and rural areas, the Census also specifically defines "Urbanized Areas (UA)". According to the Census, a "UA comprises one or more places ("central place") and the adjacent densely settled surrounding territory ("urban fringe") that together have a minimum of 50,000 persons. The urban fringe generally consists of contiguous territory having a density of at least 1,000 persons per square mile."[80]

Walking Distance

The maximum distance a student can be required to walk to school before transportation must be provided.[81]

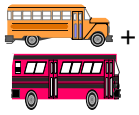
Weather Emergencies

Weather conditions that require a deviation from normal transportation procedures, e.g. flooding, snowstorm.[82]



Wheelchair Lift

A mechanized platform designed to lift a person using a mobility aid or wheelchair onto a vehicle. A wheelchair lift is also used for ambulatory individuals who are unable to negotiate the vehicle's steps. Also known as a power lift.[83]



Wheelchair Ramp

A vehicle access ramp designed for individuals who are unable to negotiate the vehicle's steps.

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[80] 1990 Census, Area Classifications, pg. A-12.
[81] National Standards, pg. 203.
[82] Ibid., pg. 203.
[83] National Standards, pg. 194.