Chapter 4: Managing for Convenient and Accessible Transit Systems

In This Chapter
⇒ What are convenient and accessible transit services?
⇒ How are convenience and accessibility measured?
⇒ How can convenience and accessibility be tracked?
⇒ How can you improve your transit system’s convenience and accessibility?

What Does Transit System Convenience and Accessibility Mean? ...............

Convenient and accessible transit means making services easy to use by customers. Convenient service also means serving not only locations where customers live, but also where they need to go as well as providing service at the times and during the days when customers need to travel. Convenience also means scheduling transfers between vehicles or between different modes so customers can go directly from an incoming vehicle to their outbound vehicle without waiting.

Another key component of a convenient transit system is easy access to information. For example, implementing a voice mail system or an automated keypad system for demand-responsive services allows customers to place reservations at times other than when the office is staffers. Convenience may mean placing a transit system schedule on an Internet Web page in addition to distributing printed information. Convenience means reaching out to meet your customers' needs.

Measuring Convenience and Accessibility....................................................

Convenient, accessible transit services are generally measured by the following:

- Headways for fixed-route services
- Wait time for immediate response paratransit and as specified in advance reservation policies
- Wait time deviation (the difference between promised and actual pickup times)
- Service area coverage (the percent of the service area population living within one-quarter or one-half mile of routes)
- Service span (the number of hours/days during which service is provided)
- Number of stops per route mile
- Percentage of trips requiring a transfer
- Ratio of automobile drive time to transit trip time
- Average length of time for transit agency staff to answer phone calls
- Passenger perceptions based on surveys

Tracking Measures of Convenience and Accessibility

You can track and measure customer convenience in a number of ways:

The headway between fixed-route buses is an important measure of customer convenience. Headways are typically established according to formal or informal policies for the minimum level of service to be provided (policy headway), or according to the frequency of service needed to meet passenger demand. Transit systems may use a combination of these types of headways, for example, a policy headway of 30-minute service during non-peak times and a 15-minute headway during peak times.

Service area coverage, or the number of people living within a specific distance of transit routes, may be readily calculated by using geographic information systems (GIS) software and US Census data. Load US Census population data containing residential location for your service area. Using GIS, construct a buffer along each transit route at the desired distance from the routes. Then determine the sum of the number of persons living within the area encompassed by the GIS buffer. Divide that number by the total population of the service area and multiply by 100 to calculate the percentage of the service area population living within the specified distance of transit routes. If you do not have a GIS system, ask a larger system or a city or county planner, or a high school computer teacher for help.

Service span, or the number of hours and days during which service is provided, should be used to track convenience, but with caution.

Deciding on an appropriate number of stops per route mile requires balancing the transit system's convenience of accessibility with average vehicle speed.

Minimize the percentage of trips requiring a transfer because many customers find transfers inconvenient. To determine if it is possible to reduce transfers, conduct a passenger origin-destination survey. This will provide data that can be entered into a spreadsheet or a database for analysis, allowing you to better understand your customers' travel patterns. Then it may be possible to reconfigure routes to provide through services between locations with the greatest number of trips.
Make your service time competitive with other transportation options. Before implementing any changes to service, it is important to assess if the changes will make it harder for customers to reach other destinations or if service frequency will be compromised. The ratio of automobile drive time to transit trip time compares the door-to-door travel time via automobile to that via transit.

To make this comparison, calculate total travel time, including 1) access to each mode, 2) wait time, 3) in-vehicle travel time, 4) transfer time, and 5) access to the destination. Because passengers perceive the convenience (or inconvenience) of each of these time intervals differently, they must be assigned a different relative weight. For that reason, wait time and transfer time should be assigned a relative weight equal to 2 to 2.5 times that for access and in-vehicle travel times. This means that each minute of wait or transfer time is perceived by customers to count as at least two minutes of in-vehicle travel time.

Surveys of passenger perceptions can help you to determine ways in which you may make your transit system more convenient. Information gained from passenger surveys may reveal a location in which you may want to create a transit stop. Information could also reveal that two stops could be combined into a central location that is more convenient to customers, allowing you to increase average travel speed of the route and to become more time competitive with other transportation modes.

Several transit agencies make it more convenient for riders to use transit for shopping purposes by implementing agreements with local merchants by which customers may use transit passes to receive discounts from those merchants. To implement this type of program, the transit agency must 1) serve shopping areas; 2) have a transit pass program in place; and 3) develop relationships with local merchants.

### Real-Life Example

**Sell Transit Passes at Retail Businesses**

The **Riverside Transit Agency** (RTA) in Riverside, California, contacted local K-Mart and Wal-Mart stores in their service area and asked about the possibility of selling bus passes at the customer service counter of each store. The RTA offered the vendors a five-percent commission on the sale of each bus pass. Wal-Mart decided to pass this along to their customers, which allowed Wal-Mart customers to buy their monthly bus pass at a five-percent discount. The RTA provided training for customer service personnel and paid for advertisements and flyers to promote the program. The objective for the transit system was to increase prepaid fare revenue. This action could be particularly effective in rural areas where the transit system’s offices or other locations are often not readily accessible to passengers to purchase fares.

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### Managing to Increase Your Transit System’s Convenience and Accessibility

You can improve the customer convenience and accessibility of your services by addressing convenience in number of management areas, including:
Convenient and effective routes and schedules
Convenient scheduling and reservations policies
Useful informational materials for customers
Effective communications with customers
Customer friendly planning process
Effective regular driver and staff training
Use of appropriate fare media
Convenient and accessible bus stops

The following sections approach each of these areas with the intention of improving customer convenience and accessibility to your system.

Service Design and Operating Procedures to Promote Convenience

One of the most important aspects of customer convenience is minimizing ride time. Design routes that allow for directness of trips. This means reducing loops, both in terms of overall route design, and at ends of routes, to create more direct routes. For paratransit, this means creating runs that do not involve extensive backtracking. All systems should track their routes and schedules, determine what adjustments are needed to maximize customer convenience and accessibility, and make those adjustments as needed.

If your system operates in a town or city with a college or university, coordinate your schedules with class starting and ending times to make using the system more convenient for students. When deciding on schedules, don't forget to include appropriate time for students to walk to/from classrooms to bus stops. Coordinating transit schedules with starting/stopping times of major employment centers (including shopping malls) can also be an effective way to increase your system's convenience.

In paratransit, average wait time rather than headways can be used to measure customer convenience. The longer a customer must wait, the less convenient your service. Wait time for immediate service paratransit should not exceed 60 minutes, and should be less than 30 to 45 minutes. For advance reservation paratransit service, use a "window of time" within which riders should expect to be picked up. This "window" could be five minutes before and ten minutes after the promised pick-up time. Establish a policy for the frequency within which vehicles will arrive within this service window, e.g., 90 or 95 percent of the time. Then measure wait times.
Real-Life Example

Bicycles on Buses

A growing number of transit agencies are providing equipment to allow passengers to bring their bicycles along on transit trips. This includes bicycle storage at stops, and racks on vehicles to carry bicycles. While this practice has been implemented most often by larger transit systems, several smaller systems, such as LINK, a rural system serving Chelan and Douglas counties in central Washington, and the Roaring Forks Transit Agency in Aspen, Colorado, have also equipped buses with racks. Usage tends to be highest in municipalities with significant student populations. Although passengers typically store and retrieve their own bicycles from bus racks, drivers must be trained in proper operation of the equipment. Implementation requires development of policies and procedures, selection and installation of the equipment, operator training, and user information/training. Transit systems have found minimal impact of the bicycle racks on maintenance and operations. This practice has resulted in additional ridership, an improved community image, and the addition of a new transit constituency.

Another key strategy in increasing customer convenience is to minimize the percentage of passenger trips that require a transfer. Transfers are an undesirable facet of transit to customers, as transfers involve uncertainty about when (and if) the next vehicle will show up. Transfers generally add to travel time, require changing vehicles, and may involve following a very indirect route compared to driving in one's own car, and may expose customers to inclement weather conditions. However, transfers are often necessary to maximize the number of destinations a customer can reach quickly without out-of-direction travel or to improve frequency on key route segments (frequency is often the number one factor in determining transit's desirability.) Therefore, service design should strive to minimize transfers, but not at the expense of providing the widest choice of destinations easily accessed.
Real-Life Example

Vermont Rideshare Ridematch

The Vermont Rideshare/Ridematch Program is a comprehensive transportation service encompassing Rideshare, Ridematch, Pool-to-School, Employer-Based Rideshare, Emergency Ride Home, Interest-Free Vanpool Loan and Third Party Van Leasing Programs. The Vermont Public Transportation Association (VPTA) administers the Rideshare/Ridematch Program, including all program and fiscal management. The VPTA also provides promotional activities, education campaigns, and marketing programs to increase public consciousness of available commuter alternatives.

The purpose of the program is to enhance residents' quality of life through improved mobility, reduced air pollution, fuel consumption and traffic congestion by offering alternatives to single occupant vehicles. The program also provides employment transportation for many rural residents who lack public transit alternatives. Several vanpool programs are offered, including an Interest-Free Vanpool Loan Program that offers a four-year, interest-free loan to obtain a seven- to 15-passenger van. The VPTA serves as a referral agency for a Third Party Lease Program, in which vans are leased from a vendor to a vanpool group. Program services provided 398,588 one-way trips during 1996, a 10-percent increase from the previous year.

Using transit is seldom as convenient as door-to-door transportation in a private car. To minimize walking, and make transit as accessible as possible, locate stops at locations that are easily accessible for your customers. Obviously, there are other considerations involved in deciding stop locations (traffic patterns, intersections, etc.); however, all else being equal, place stops at locations that are most convenient to your customers. The greater the number of stops per route mile, the less distance a customer must walk to access transit service. However, the greater the number of stops per route mile, the slower the average vehicle speed.

Many transit systems are using geographic information systems (GIS) to plan community-based service designs. For example, a study was conducted through Project ACTION to identify potential passenger origins and destinations in Broward County, Florida, a suburban-urban location with a high percentage of elderly residents. The study developed a series of community routes that allow Broward County Transit to provide more efficient inter-community trips with less trip deviation in neighborhoods, resulting in relatively high productivity and increased customer convenience.

In addition to designing fixed-route and/or demand-responsive services to maximize customer convenience, investigate opportunities to provide other types of transportation services that are needed in the local community. Hobbs Express in Hobbs, New Mexico, discovered that the local school district's transportation system did not transport elementary school children to places other than their homes after school. The system arranged to have their vehicles

A rule of thumb is to space stops at approximately 0.4-mile intervals, although this distance will be greater in rural or less densely populated suburban areas.
transport children from schools to destinations other than their homes for after-school care. Students may purchase passbooks at a cost of $10 for seven passes.

Bus routes were not changed in order to provide this service. In cases where a bus is scheduled to arrive at a school five minutes prior to the end of class, an arrangement was made to allow the children riding that bus to leave class early. The transit system also arranged for school supervision of those children who must wait 10 to 15 minutes after classes end for their bus to arrive. The result has been transportation for children to after-school care sites at no extra cost to either the transit system or to the school district.

Convenient Paratransit Scheduling and Reservations Policies and Procedures

A paratransit or demand-responsive transportation customer's first contact with a transit system typically takes place when making a trip reservation. This is the time at which a customer forms his or her first impression of your system. To help ensure that your system makes a positive first impression, take the following steps to make your reservations procedures as convenient as possible:

- Ensure that there are adequate hours when staff are available to take trip reservations.
- Answer your phones promptly and consistently.
- Use a voice mail or electronic messaging system to accept reservations during times when phones are not staffed.
- Implement a reservations system that requires customers to place only one call to schedule a trip (no call backs).
- When possible, install a telephone system that uses a voice messaging system or an automated keypad system, to avoid customers getting a busy signal when calling.
- Allow trip requests by fax.

Customers with disabilities who are eligible for ADA paratransit service may be provided training in how to request and take a trip, and an explanation of the transit system's rules for use of the system.

Real-Life Example

**ADA Certification Training**

Paratransit, Inc., the paratransit provider in Sacramento, California, provides mandatory in-person training to all clients after they have been certified as eligible for ADA paratransit service. The training is provided before these clients take their first trip, and covers the basics of requesting and taking a trip, as well as an explanation of the system's rules for use of the system. A photo identification card is also made and provided to the new clients at this time.

The purposes of this training are to help new paratransit passengers access the system more effectively and to reduce the number of missed trips and no-shows at the system. Staff time to conduct this training is minimized by offering the training periodically.
Service Coordination with Other Transportation Providers

Coordinating transportation services with other transportation providers offers a transit system significant opportunities to improve customer convenience and accessibility as well as to realize financial savings. Levels of service coordination may vary from joint transportation of clients of several human service agencies, to coordinated out-of-county non-emergency medical transportation, to transportation brokerage.

+ Chapter 7, on reducing costs and fares, discusses the mechanism for service coordination in more detail.

Some transit agencies have developed formal agreements with emergency services departments (fire departments, hazardous waste removal teams, etc.) to provide support transportation during times of emergencies. Columbia County Transportation in St. Helens, Oregon, uses transit vehicles which are located throughout the county to transport emergency support workers to mitigate natural disasters such as a forest fire, saving time and resources. As a part of the contract, the transit system's staff participate in training on effective emergency response procedures.

Transit systems are increasingly implementing trip brokering. Brokered transportation involves the coordinated provision of transportation services using both public and private resources. In addition to using the vehicles and drivers typically associated with a public transportation system, a brokered transportation system utilizes some transportation services from one or more other transportation providers operating in the service area. Those other providers may include vanpools, carpools, and taxicabs. To coordinate this mixture of transportation services, the transportation system typically serves as the contact for residents throughout the service area desiring transportation service.

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Real-Life Example

*Consolidation of Duplicating Transit Systems*

Merced, California, was served by four publicly financed or operated transit systems. Through careful joint planning, these systems were combined into a single, coordinated countywide system. The purposes of the consolidation were to provide more effective transit and paratransit services by eliminating duplicate, competing services; to achieve more efficient distribution of transit services through consolidated planning, management, and operation of services; and to reduce the level of public funding by eliminating redundant administrative and management systems.

A transit consolidation plan identified the operating parameters of the combined system and the levels of service to each city and community within the county. All fixed routes were redesigned to provide two-way service on 30-minute headways with timed transfers between routes. While the net result was an annual increase in service hours of approximately three percent, first-year operating cost savings are anticipated to equal approximately five to six percent of the total cost of operating the four separate transit systems.

The new system provides county residents with "one stop transit shopping"—one telephone number to call for transit information or service, one centralized dispatch center, and one countywide transit system. Ridership has increased since implementing the combined system, even though fares were raised by about 30 percent.
By using vehicles and drivers from several transportation providers, additional transportation options are available. Taxicab, vanpool, and/or other ridesharing services can be contracted for use during times when the public transportation system does not operate and to provide additional service at times of peak demand. For example, at times when the public transportation system's vehicles and personnel are not in operation, the system can arrange for passenger transportation using another transportation provider. In another instance, a resident living in a remote part of the service area could receive transportation from a taxicab operating under contract to the public transportation system or from a volunteer receiving financial reimbursement. The reason for using one of these other transportation providers is to realize cost savings from using a more efficient vehicle to make a trip, allowing the system's vehicles to serve areas with greater passenger loads.

Some transit systems expand the transit system's services by using existing non-profit agency transportation programs to supplement and augment services. This technique helps to maximize transportation services available within a community, serves a broader ridership base, and helps to ensure that non-profit agencies continue to maintain their own transportation programs. This practice can also help to prevent "client shedding," in which non-profit agencies suspend their own transportation programs and use public transit services at less cost to the agency (and increased cost to the community).
To implement this practice, a transit system must first determine the non-profit agency transportation services that are provided in the community and whether those services can feasibly expand and augment public transit services. In some cases, community-based non-profit agency transportation programs serve a more specialized clientele or a different geographic area of the community than that served by public transit. The transit system may not be able to effectively serve all such transportation needs. In that case, having the public system provide a subsidy to one or more non-profit agencies to assist in continuing their more specialized services may result in maintaining a higher level of transportation services within the community.

Useful Informational Materials for Customers

It is important to design informational materials that present information clearly in an easily understandable format. Schedules and route maps can be designed to be easy to read rather than confusing. Highlight areas of critical activities, such as transfer points. Use directional arrows to show how vehicles travel any one-way parts of a route. Displaying major destinations or points of attraction near stops on maps and indicating them on schedules can make it easier for customers to use transit.

It is also important to design marketing and informational materials to clearly convey information to individuals with disabilities. Avoid difficult-to-read fine print, and teach customer service representatives to speak clearly.

Make information accessible to customers; do not make customers come to you. Consider each of the following activities to make your system more convenient to customers:

- Develop a Web site to allow customers access to system information via computer.
- Place informational materials at locations frequented by current and potential customers, such as childcare centers, major employment centers, senior centers, laundromats, and shopping/recreation facilities.
Attend local job fairs, and work with employers to develop methods for providing transportation opportunities to employment sites.

Attend civic organization meetings and inform community leaders of your system's activities.

Keep local, state, and federal government representatives apprised of your successes and your needs.

Investigate the feasibility of selling transit passes through local merchants, and do so wherever possible.

In short, make everyone in the community aware of your system's presence, successes, and willingness to seek solutions to mobility concerns.

Effective Communications Program

An effective communications program addresses three groups of people: external customers, internal customers, and peers. Effective communications between both external and internal customers are critical to developing a transit system that provides convenient and accessible services. Regularly update your external customers or community members on changes to services, fares, and other factors. Solicit input from external customers on a regular basis. In this way, you can keep abreast of changes within the community and revise services to better respond to changing needs.

Communications with external customers may take several forms. Some transit systems publish a monthly or quarterly newsletter. Systems with access to the Internet can develop a Web page to receive customer comments as well as to disseminate information. Having all transit system managers regularly attend meetings of local civic organizations can keep the local business community informed of plans and activities, and can build local support for the system.

Real-Life Example

Publish a "Shoppers Guide"

The Lehigh and Northampton Transportation Authority (LANTA) in Allentown, Pennsylvania, publishes a listing of all of the shopping centers in the system's service area. The guide identifies the shopping centers, categorizes them by area, and provides a brief description of the scheduled transit services available. The guides are distributed through ticket and pass sales agencies, the mail, and are placed on schedule racks, at information centers, and in vehicle schedule holders. A local printer assisted in developing the guide.

Real-Life Example

Dial-A-Ride Shopping Bags

Some Dial-A-Ride programs, like Santa Clarita Transit in California, have "two-bag" limits. With the advent of the small, plastic grocery bag; however, this has become a problem since a "two-bag" amount could easily fill four or five plastic bags and violate the limit. SCT solved this dilemma by offering customers free canvas shopping bags imprinted with the Dial-A-Ride logo. SCT garnered some free advertising while the customers can now adhere to the "two-bag" rule with ease, convenience, and environmental awareness.
Another aspect of communications with external customers involves responding to special needs of particular groups of customers. In order to increase use of fixed-route service in some transit systems, sponsor training sessions for potential users of ADA complementary paratransit. Attendees are able to get hands-on experience using both lifts and wheelchair tie-downs. After the session, participants are often given a free one-month pass in an effort to encourage usage of the fixed-route service.

To develop greater transit use among youth, the South Carolina Transportation Marketing Manual recommends developing transit-oriented school programs. Transit agency staff take buses to schools and familiarize kids with the way the transit system works. They teach kids how to read a schedule, how to know what bus to take, where to sit, where to wait, how much it costs, where buses go, and the all-important bus riding "etiquette." Programs like this make both children and parents more comfortable about riding the bus.

Don’t focus exclusively on your external customers. Internal customers, or transit system employees, are equally important. Developing an effective means of internal communications, such as holding regular staff meetings, forming work groups to tackle specific issues, publishing an internal newsletter, and sponsoring periodic social functions, helps to keep employees informed of changes at the system and helps to increase employees' loyalty. Such forums also allow your employees to provide direct input, suggestions, and ideas to management to improve transit services.

Every business periodically encounters a problem that is difficult to resolve. Maintaining ongoing relationships with other transit system peers may offer an effective means of discovering effective solutions to such problems.
Real-Life Example

"Trial" Fixed Routes

The Orange County Transportation Authority (OCTA) in Southern California implements many new fixed routes on a "trial" basis, using relatively small vehicles (e.g., 22-foot vans) operated by private providers under contract to the Authority. The objective is to test new routes in unserved or under-served areas where ridership levels cannot be predicted adequately. Routes are operated for a two-year period. Routes that successfully achieve target ridership levels are continued with the test vehicles operated under contract or by OCTA drivers with full-size buses.

To implement a trial route, the transit manager/planner first determines the parameters for the route, establishes the length of the trial period, and determines the target ridership level or other performance standard(s) that need to be achieved for continuation of service. The trial nature of the route is made clear to the community as well as policymakers in order that everyone understands the potential for termination or continuance of service.

Numerous OCTA routes have achieved success and have been continued, often with increased frequency, longer service hours, and/or larger vehicles. During the trial phase of some routes, major employers have helped subsidize routes benefiting their employees through efforts such as direct marketing to employees, and purchase of monthly passes for employees. The purpose of such efforts is to help the routes achieve "success" during the trial period and ensure continued provision of service.

Customer-Friendly Planning Program

To effectively provide customer-oriented services, involve your customers and gather their input as part of all planning activities. A comprehensive planning process actively involves customers and monitors service convenience at regular intervals, adjusting services as necessary to maximize customer convenience and accessibility.

+ REFER TO BIBLIOGRAPHY.

Effective Human Resources Program

Reservationists, drivers, and customer service representatives are your primary contacts with your customers. If transit service convenience and accessibility is to be maximized to customers, you must develop, implement, and regularly update your personnel policies and training to ensure that all front line employees provide convenient and accessible services.

Many of the best ideas for making your transit system more convenient and accessible to customers will likely come from your front line employees—reservationists, drivers, and customer service representatives. Conduct regular meetings with these employees to gather suggestions on how to improve service convenience and accessibility. Follow through by reporting back on those suggestions you used. For those suggestions you do not use, you may want to explain to your employees why such ideas were not used.

Fare Structure and Fare Media Program

You will also need to ensure that your fare structure is easy to understand and that fare media are easy for customers to use. The use of cash fares slows passenger boarding,
in addition to creating a safety and security concern. Using other fare media, such as transit passes, or magnetic or electronic fare cards offers customers a more convenient method of fare payment. Weekly, monthly, or annual passes reduce the need for customers to carry cash for fares, and for drivers to handle and monitor cash.

Magnetic or electronic fare cards offer transit systems methods to gather data on customers' travel as well as provide a means of reducing the need for cash on vehicles. Proximity fare cards can be read without direct contact with the card reader, allowing customers to keep the fare card in their pocket or purse, reducing the chance of loss or theft of the card. Some electronic fare cards function as debit cards, and can be used for purchases other than transit.

**Convenient and Accessible Bus Stops**

In addition to convenient routes and schedules, the convenience and accessibility of fixed-route service is largely determined by where bus stops are located along routes. Proximity to major trip generators and convenient pedestrian connections (including sidewalks and curb cuts) should be considered when deciding where to locate bus stops. In addition, each new or improved bus stop must meet minimum ADA accessibility standards. Other important factors include pedestrian safety (Is the boarding/alighting area solid and level, or will it be necessary to pour a concrete pad? Is standing water or mud a problem when it rains? Is the stop location near a crosswalk, or will it encourage jay walking? Is the waiting area well lit?), vehicle safety (Where is the stop in relation to the intersection? Will the bus pull off of the travel lane? If so, will it be difficult to see oncoming traffic?), local jurisdictional restrictions, and potential for installation of amenities, such as benches and shelters.

† Refer to the material titled "Facilities Maintenance Program" and "Passenger Amenities" in Chapter 5 for additional information.
Convenience and Accessibility Checklist .................................

You can review how convenient and accessible your services are by checking to see which of the following activities your system has implemented to provide convenient, accessible services for your customers. To make transit convenient and accessible:

- Design routes that allow for directness of trips.
- Minimize the percentage of passenger trips that require a transfer.
- Locate stops at locations that are easily accessible for customers.
- Orient schedules to put buses at stops when customers need them, e.g., orient schedules to local shift changes and/or class change times.
- Utilize a comprehensive planning process that actively involves customers (and potential customers) and that monitors service convenience at regular intervals and makes adjustments as necessary.
- Work with local planning and zoning officials to ensure bus stops are incorporated into new development plans.
- Implement an effective scheduling and reservation process for paratransit services with:
  - Adequate hours to make reservations (and voice mail messaging for non-staffed hours)
  - One call to schedule a trip (does not require call backs)
  - No busy signal (uses a voice messaging system and/or an automated keypad system)
- Interface with other transportation operators and services; offer inter-system transfers.
- Develop, implement, and regularly update driver assistance policies and training.
- Implement fare media that are easy to obtain and use.
Chapter 5: Managing for Clean and Comfortable Transit Services

In This Chapter

- What are comfortable and clean transit services?
- How are comfort and cleanliness of transit services measured?
- How can comfort and cleanliness of transit services be tracked?
- How can you manage your transit system to improve comfort and cleanliness?

What Does Transit System Comfort and Cleanliness Mean?........................

Your customers deserve a comfortable and clean environment at all times, whether they are on board a vehicle, in a facility, or at a stop. Your employees also need a comfortable and clean work environment in order to deliver the best possible service to your customers. Bus stops, transfer stations, and other pick-up and drop-off points should provide adequate seating and waiting areas that are both comfortable and clean. Drivers and other personnel should be clean and appropriately groomed when they are at work to instill comfort and confidence in your customers regarding your services.

Measuring Comfort and Cleanliness...............................................................

The comfort and cleanliness of your vehicles and facilities is relatively easy to ascertain by considering the following:

- Visual inspection of vehicles and facilities by managers, such as regular and random inspections to look for dirt, odors, and graffiti
- Visual inspection of drivers
- Passenger perceptions, as shown in surveys or complaints
- Percentage of fixed-route stops with shelters and benches

Tracking Measures of Comfort and Cleanliness...........................................

Several methods can be used to track the levels of comfort and cleanliness that your transit service provides to its customers.

One method is for managers to hold regular as well as random inspections of vehicles and facilities. This will allow you to see if your vehicles and facilities are routinely comfortable and clean. In your inspections, address several aspects of cleanliness, such as checking for the absence of litter, odors, and graffiti in vehicles and facilities. Track
the results of inspections over time using a spreadsheet. List items/areas to check in a column. List inspection dates in a row at the top of the spreadsheet. Note cleanliness/comfort problems revealed during inspections and corrective actions taken in appropriate cells. If there are consistent problems with vehicles or facilities, change your policies or programs to resolve these problems.

Customer surveys are another method of tracking the comfort and cleanliness of your transit system. Provide surveys for customers to complete at appropriate locations, such as at transfer facilities, on vehicles, and at major trip generators (major employment sites, large apartment or residential complexes, etc.). If your system has a Web page on the Internet, you may want to include a survey for customers to complete electronically. Gather customers' opinions about vehicles, facilities, and drivers' appearances from surveys. Track survey responses over time to determine both recurring and unique problems. Tracking survey responses over time will also reveal if customers believe your system's comfort and cleanliness are improving, maintaining a consistent level, or declining.

Real-Life Example

Creating a Comfortable Environment for Passengers

Island Transit in Washington State has a philosophy that riders should feel as comfortable as possible on their buses, and that the experience of riding a bus should be a normal, regular part of their customers' lives. For that reason, the system does not place advertising inside or outside of vehicles to maintain a clean, attractive atmosphere for riders. Vehicles are washed nightly. Also, to reinforce customers' feelings of comfort and safety, drivers make it obvious that they are checking their mirrors and watching the road.

Managing to Increase Your Transit System's Comfort and Cleanliness

If you find that the comfort and cleanliness of your system is not what you or your customers would like, improvements in these areas can be achieved through:

- Effective vehicle cleaning and maintenance programs
- An effective facilities maintenance program
- Appropriate furnishing of facilities and vehicles with customer amenities
- Appropriate dress and behavior of transit system staff
- Including comfort and cleanliness concerns in the planning process
- Appropriate passenger behavior policies
Vehicle Maintenance Program

Conducting regular cleaning as a part of your vehicle maintenance program is a good first step toward ensuring that your customers have clean, comfortable vehicles. Establish policies and procedures to ensure that vehicles are properly serviced and cleaned on both the interior and exterior. Provide a form to vehicle cleaners on which they can note problems with seats, flooring, windows, and interior trim for correction by maintenance staff. Stress that it is all employees’ responsibility to look for vehicle defects or problems in order that they may be corrected as quickly as possible.

Provide quiet vehicles by ensuring that vehicles are operating within noise design specifications. Regularly check engine mufflers and exhaust systems, and other mechanical components, such as heating and air conditioning equipment, to ensure they are performing properly. Finally, ensure that all mechanical systems are functioning properly. Regularly inspect doors, ramps, lifts, or other boarding assistance equipment, and air conditioning/heating systems.

Facilities Maintenance Program

Customers deserve clean, comfortable facilities as well as vehicles for the comfort of both passengers and the surrounding neighborhood. This means having clean, well-lit facilities with appropriate amenities in proper working condition (trash receptacles, telephones, restrooms, etc.), and clean, comfortable seating in waiting areas. Systems with transit centers typically maintain those facilities to a high standard, particularly if the system's offices are located in that facility. However, transit systems also need to develop and implement a program to regularly inspect, clean, and maintain their remote facilities, such as shelters, signs, etc., as well as facilities that house their general offices.

Real-Life Example

**Service Crew Incentive Program**

The Ann Arbor Transportation Authority in Michigan implemented an incentive program for its maintenance workers in order to preserve a high standard of quality in the upkeep of its vehicles. The Service Crew Incentive Program offers quarterly bonuses for outstanding work in proper fueling, cleanliness, farebox probing, and data entry into the fleetwatch system. Maintenance employees are rewarded for their good work and passengers enjoy the high quality of vehicle cleanliness and performance.

Real-Life Example

**Adopt-A-Stop**

In a creative way to improve the bus stop environment, some transit systems implement an "Adopt-A-Stop" program. Individuals, civic groups, and businesses provide tax-deductible contributions of plants, benches, trash cans, and other amenities. In return, participants gain recognition for their contribution with their name at the site as well as publicity for their business or organization. Not only does this program foster community support, but it also reduces direct maintenance costs for the transit agencies and improves the passenger environment.
**Passenger Amenities**

Passenger amenities such as seating, lighting, trash receptacles, telephones, and restrooms should be provided when appropriate and feasible. Develop a profile of the customers you want to attract to specific services. Providing amenities such as individual seatbacks, reading lights, beverage holders, complementary beverages and/or newspapers can help to attract choice customers, and can help some transit services to compete more effectively with private autos.

Bus stops at which benches and shelters are most warranted are generally those with high numbers of boardings (especially by senior citizens and persons with mobility disabilities who may not be able to stand for long periods of time), those located near major trip generators and transfer points. Local climate, customer requests, neighborhood interest, adjacent land use, planned development, jurisdictional requirements, neighborhood equity, and marketing goals are other important factors for consideration when deciding where to install shelters and benches.

**Appropriate Staff Appearance and Behavior**

People are generally most comfortable when your staff are neatly dressed and avoid extremes of dress and personal grooming. To create a more comfortable atmosphere for your customers, develop and implement policies for employees' personal grooming and cleanliness.

Policies for clean clothing may include a requirement to wear a uniform. Uniforms do not have to look institutional. Providing employees with a distinctively colored shirt with the company's name and/or logo readily identifies an individual as a member of the transit system team and increases the system's visibility to the community. Awarding jackets with the system's name and/or logo to employees who have provided exemplary service or useful suggestions to the system can increase morale as well as promote the system.

If your transit system operates service by means of a contract to a private management company, it is important to include requirements for ensuring that vehicles will be clean and comfortable when in service.

*Refer to the Contract Management Section for more detailed information.*

**Comfort and Cleanliness Included in Planning Program**

Clean and comfortable service doesn't just occur; it is the result of a careful, deliberate planning program. Attractive, comfortable vehicles and facilities require creative planning in order to become reality, a comprehensive, ongoing maintenance plan to remain in that condition, and long-range planning to ensure adequate replacement.
When planning facilities and vehicle purchases:

- Design and include appropriate amenities, e.g., benches and shelters at selected bus stops
- Design to facilitate ease of cleaning and maintenance
- Develop a comprehensive, ongoing maintenance routine
- Identify long-range replacement/rehabilitation strategies

**Passenger Behavior Policies and Procedures**

Clean, comfortable facilities and vehicles do not, in themselves, ensure a comfortable environment for transit customers. In order to provide comfortable public transportation, it is essential that all passengers display appropriate public behavior. To ensure that all your customers enjoy a comfortable trip, develop, implement, and enforce policies on appropriate passenger behavior.
The following activities can help your transit system to provide a comfortable and clean environment for your customers:

- Provide clean, attractive vehicles with an attractive color scheme.
- Establish policies and procedures to ensure that vehicles are properly serviced and cleaned, on both the interior and exterior.
- Provide quiet vehicles.
- Ensure that air conditioning/heating systems are properly functioning (part of a good maintenance program).
- Provide comfortable seating on vehicles and in waiting areas.
- Provide clean, well-lit facilities with amenities, such as trash cans, telephones and restrooms.
- Ensure that well-groomed and clean drivers are wearing clean and neat uniforms.
- Establish and enforce policies on passenger behavior.
Chapter 6: Managing for Understandable and Intelligible Transit Systems

In This Chapter

⇒ What does understandable and intelligible transit systems mean?
⇒ How are understandability and intelligibility measured?
⇒ How can understandability and intelligibility be tracked?
⇒ How can you manage your transit system’s understandability and intelligibility?

What Does Transit System Intelligibility Mean?.................................................

Understandability/intelligibility means that all customers can easily and quickly learn how to use the transit system. Current passengers (including occasional passengers), potential passengers, and the community should be able to easily understand how to access your services, how to pay, and how to conduct themselves in accordance with system policies.

Route schedules and information about your transit system need to be easily accessible to customers. Both regular customers and visitors to your area should be able to understand easily the transit system schedule, including stop times and locations. If you provide paratransit service, state clearly the procedures for making a reservation. Ensure that your system policies are readily accessible and easily understandable. Train employees to communicate effectively with passengers to explain transit system policies and procedures, as well as to answer specific questions to promote better understanding of the system and its services.

Measuring Intelligibility..................................................................................

You can track the understandability of your system to customers in a number of ways:

Focus groups are an effective method of tracking how well customers understand your transit system. A focus group can include both users and potential users of your system. Ask focus group participants their opinions about informational materials, such as schedules, route maps, and brochures, explaining service policies and procedures. In addition to providing opinions on current informational materials, focus group participants may suggest changes to improve those materials and make them more understandable.

Remember to update informational materials on a regular basis. Outdated information does not serve your customers’ information needs. Update informational materials on a regular (one- to two-year maximum) basis. 

Management Toolkit for Small Urban and Rural Transit Operators
Real-Life Example

Newsletter to Community Leaders

In Atlanta, Georgia, MARTA’s general manager writes a bi-monthly newsletter and sends it directly to community leaders. The newsletter features items such as new developments, how transit affects the community, and the importance of supporting public transit. Using this technique, a transit agency can communicate important information to community leaders without a news media filter.

Focus groups can also be used to pre-test a new schedule or informational material prior to distribution to help ensure the material is understandable. If focus group participants do not easily understand schedules or other materials, revise those materials and re-test.

Passenger surveys are another method of examining and tracking the intelligibility of your transit system. Passengers can describe problems they have experienced understanding your transit system’s information or policies. Passenger surveys can be used to determine if your staff members are understandable when responding to customers’ questions. Surveys are also a means of gathering suggestions for methods to make the transit system more understandable. By tracking responses to surveys over a period of time, you can determine if your system is becoming more or less understandable to your customers.

Do you attend community events to educate the public about your services? Transit system staff should conduct community outreach activities by appearing at community events on a regular basis. Promote your system by regularly informing the public of the system’s activities. If community leaders believe that your system is an integral part of the community and is effectively meeting community transportation needs, those leaders will be more likely to support the transit system.

Real-Life Example

Surveys

The Ontario Urban Transit Association has published a report, “Survey Your Way to Success,” designed to help managers and planners collect and use survey data effectively. The report outlines methods for addressing community needs, and assessing attitudes and perceptions of the transit system. Surveys can also be used to forecast future trends, and they enable managers to justify any necessary changes that result from those projections. Surveys are effective tools for not only making a transit system more efficient; they also help the system serve the public more effectively.

Managing to Increase Your Transit System’s Intelligibility

Managers can increase the understandability/intelligibility of their transit system by:

- Providing clear, current, and easy-to-read informational materials at convenient, appropriate locations
- Providing clear information via electronic media (phone, Internet, and intelligent transportation systems [ITS] technologies)
- Using understandable fare structure and fare media
- Training drivers and other staff in effective communications techniques
- Conducting regular outreach activities in their community
- Installing clear signage
- Responding to special community considerations

**Developing and Distributing Clear Materials**

A comprehensive marketing and public information program is essential to making a transit system understandable to both current and potential customers. An effective marketing program can attract and retain riders, create community support for public funding of transportation services, and establish an environment in which public transportation is viewed as a beneficial community service. Accessible formats should be developed.

Marketing is often thought to include only advertising and promotion activities. A successful marketing program takes a broader approach, and includes all forms of communication between your transportation system and community members. No system is too small, nor is funding too limited, to plan and implement an effective marketing program.

Marketing is a series of actions designed to increase your ridership. Marketing typically involves establishing an identity for your system; developing and providing clear, easy-to-use passenger information; maintaining a customer service program; conducting public relations activities and community outreach activities; and developing and implementing advertising and promotional activities. A marketing program usually involves conducting market research, designing a marketing plan, implementing that plan, and monitoring and evaluating the effectiveness of your marketing strategies.

A public information program should provide clear, up-to-date, and easy-to-read printed materials—schedules, maps, and "how to ride" guides, as well as system policies and procedures. Distribute this information at convenient locations and through appropriate media.

**Using Electronic Media (Telephone, Internet, ITS Technologies)**

Printed schedules and fare rates used to be sufficient means of providing customer information. Electronic media are increasingly being used to convey information to customers. Telephone systems should now include voice mail or automatic voice message capability in order to allow customers to conduct trip or information requests...
Real-Life Example

Policy and Procedures Manual and Checklist

Compile a policy and procedures manual to serve as a single reference point for employees and to streamline existing policies. This manual can either be created by existing staff, who can troubleshoot easily, or be contracted out to an outside group that may be able to suggest new approaches and bring objectivity to style and content. Policy and procedure manuals not only provide a tool for training new employees, but also can identify and eliminate outdated or redundant policies.

Another helpful practice is to develop a checklist for managers that sets out all critical practices, documents, and facility and safety requirements. This checklist can serve as a means of training new managers, a guideline for ensuring uniform inspection of facilities, and a standard to which managers are held. Remember to periodically update the checklist, as well as all manuals.

Creating an Understandable Fare Structure and Fare Media Program

To reduce customers' confusion on how they may pay for services, develop clear instructions for the purchase and use of all fare media. Locate this information so that the public may reach it easily. Don't forget to provide information on how to contact the transit system if there are questions regarding fares or fare media options.

![Refer to Chapter 4 for more information on Convenience and Accessibility.]

Distributing information at appropriate locations and through appropriate media may mean rethinking your public information strategy. Do you provide printed information at locations used by special target groups, i.e., at senior centers, childcare centers, employment information centers, supermarkets, shopping malls, etc? Do you have information listed on the local community access cable TV channel? Have you provided information to local community colleges, and other colleges and universities? If not, provide information to relevant institutions, organizations, and businesses in your service area in order to make both current and potential customers more aware of your services.

Does your fare structure make sense? Do your fares reflect the differences in cost to provide different services? Are demand-responsive customers paying a flat fare, or is your fare distance based? Fares should ideally reflect the difference in cost to provide different quantity or quality of service to some extent, while remaining easily understandable by the public.

Use of fare media such as prepaid passes or “smart” cards can help simplify
payment, validation, and convenience concerns. These types of fare media eliminate the need for providing change or for stipulating payment of exact fare, can identify customers to eliminate questions of trip validity, and offer greater convenience to customers by reducing the need to carry cash and speeding boarding.

Developing Good Internal Communications

Good means of internal communication help to make a transit system more understandable to all employees. Compiling a policies and procedures manual can create a single reference on all system policies and procedures for employees, and may help to streamline existing policies. To create a policies and procedures manual, document all existing policies and procedures, and develop new policies and procedures for areas that lack them. It may also be useful to create operations manuals for specific system operations.

The use of policies and procedures through manuals and written directives from management must, however, be tempered by the ability of management to "listen" to employees. Effective internal communications must be two-way, so that employees have (and follow) policies and procedures that are provided by the manager, but also are provided opportunities to communicate back up to management. In addition to establishing policies and procedures, employees should be effectively trained and empowered to make good decisions based on your system's vision and values.

Once transit system policies have been written, service standards may be developed from the goals, objectives, and performance targets outlined in those policies. Service standards help guide decision making at all levels of a transit system. Service standards may include: performance criteria for managing existing routes, planning and design guidelines to assist with new service consideration and implementation, and evaluation criteria to assist in choosing alternative options for new routes or route changes.

Service standards typically also include indicators, which are used to gauge the system's performance in meeting the established standards.

Real-Life Example

Special Words and Tactics

In response to recurring communication problems, Laidlaw Transit Systems developed a training program called Special Words and Tactics, or SWAT. SWAT stresses the importance of communication both in the workplace and with transit passengers. Participants are taught sensitivity in communication as well as strategies for improvement. The program includes role playing sessions, discussions of actual experiences, and practicing alternative communication methods. Incidences of communication problems are believed to have decreased since development of the SWAT program.
Real-Life Example

Systemwide Job Descriptions

In order to make its organization run more smoothly, Paratransit, Inc., of California developed systemwide job descriptions for each employee. These descriptions provide employees with specific guidelines as to what is expected of them. It also gives supervisors a means through which they can evaluate employees. Job descriptions are instrumental in hiring in that they allow the most suitable person to be identified and outline the education, training, and skills necessary. Such guidelines allow employers to better assess performance and employees to effectively perform the duties outlined in their job descriptions.

Phone tag and scheduling conflicts can be persistent problems in any organization. Implementing an internal electronic mail, or E-mail network among managers allows communications with the ability to respond to messages within each manager's schedule and without the inconvenience of leaving phone messages. E-mail systems require that one person be designated as a coordinator to compile address lists and to add new members to the group. E-mail letters can be addressed to individuals, an entire group, or subsets of the group. Including maintenance managers, trainers, etc., within the network can facilitate communication among all functional areas of a transit system.

Another area in which clear communications can help to avoid misunderstandings is that of employees' job descriptions. Too often, we only develop specific job descriptions as positions open and must be filled. Developing and distributing job descriptions for typical positions informs employees of responsibilities required in each position, and helps avoid misunderstandings of what is expected of an employee or from management.

Real-Life Example

Involvement and Response Team

In order to build morale and include employees in decision-making and problem solving, Salisbury Transit in North Carolina developed an Involvement and Response Team (IRT). When the transit system identifies a target or experiences a problem, an IRT meeting is held with all of the employees. The team identifies elements that will help and hinder the organization as it moves toward its goal. Then an action plan is developed that addresses those elements. A professional facilitator assesses the organization every two years and trains supervisors. The program has been highly successful because it incorporates all employees into the decision-making process and provides a forum for the development of creative solutions that please everyone.

Staff Training in Effective Communications Techniques and Procedures

Transit system employees provide important links both externally to customers, and internally within the system. Train staff so they become familiar with the entire system and its range of services in order that they can make the system more understandable to community members and so that all employees understand the system's internal policies and procedures.

All staff members should also be trained in effective communications
techniques and procedures. In addition to verbal communications, train staff to communicate effectively in both written and graphic techniques. Customer service staff must be able to effectively respond to comments and complaints from the public; all staff must be able to write effective memos, letters, and reports. Effective graphic communications are essential to present information to local political and community leaders, and can help to communicate information clearly to the public through the media.

Effective verbal communications skills are particularly important for customer service and reservations staff. Making a reservation is typically the first point of customer contact with a paratransit system; therefore, it is important that reservations personnel communicate clearly with passengers and be trained in proper telephone etiquette. When taking trip reservations, system staff should:

- Take the trip request and repeat it back to the customer for confirmation.
- Determine the number of passengers to be transported, to ensure that there is sufficient space available on your vehicles.
- Minimize the amount of time the customer is placed on hold.
- Communicate information on when the trip is scheduled. If a trip cannot be scheduled at the desired time, suggest at least one alternative time.
- Inform the customer of the pick-up window and other pertinent information.

Schedulers/dispatchers and the transportation coordinator should establish a constructive working relationship with their customer organizations and with their individual passengers to communicate the system's capabilities and limitations. This will help everyone to understand what type of service they can reasonably expect.

**Community Outreach Activities**

Conducting community outreach activities is critical to increasing community understanding of, and support for, your transit system. When meeting with community members, be sure to inform them of what your system has recently done or is planning to do, when and where the activity will take place, how the activity will affect the community, and who will benefit from/be affected by the activity.

Incorporating a management philosophy that places the customer first can lead to improved employee cohesion as well as increase courtesy and service to customers.

*When starting a new transit system, to generate greater public interest, you could hold a contest to name the new transit system. This idea could also be used when starting a new type of service.*
Real-Life Example

*Management Philosophy and Approach*

The LINK Transit system in Wenatchee, Washington, worked to instill a team spirit among its employees from the very beginning. LINK used a combination of hospitality and team management both to improve employee cohesion as well as to enhance courtesy and image. "Hosts and Hostesses" participate in orientation and training activities that stress team playing. LINK also sponsors quarterly employee spirit award programs, picnics, and sporting events. Operators and road supervisors, called "off site hosts," are included in the team through team meetings, posters, and uniforms. Passengers are treated as guests, welcomed with smiles and greetings. This has resulted in increased ridership, improved community support, and reduced vandalism of bus stops as well as fewer employee grievances, reduced use of sick leave, and increased employee dedication.

Installing Clear Signage

The intelligibility of your system is also affected by the signage posted at facilities and on vehicles. Clear signage with adequate information assists customers in identifying where to board the bus they wish to catch as well as which bus to board when a stop is served by more than one route. Basic bus stop signs should display the name and logo of your transit system, the telephone number, and the route that serves the stop. It is also helpful to display a timetable for that stop as well as a route map at each stop. Vehicles should display the route and destination or direction on the front and passenger-boarding side of the exterior. It may be useful to display your system's passenger policies (for example, no eating or drinking on board) on the interior of each vehicle. Don't forget to comply with ADA signage requirements when developing signage for your system.

Responding to Special Community Considerations

Printed materials must be made available upon request in accessible formats (such as audiotape, large print, and Braille) for individuals with disabilities. It will be easier for deaf customers to access your system if you offer TDD (Telecommunications Device for the Deaf) or TTY (Tele-Typewriter) telephone communications as well as email. It is also helpful for operators and other staff members who interact with customers in person to have at least basic American Sign Language (ASL) skills. Complying with the ADA requirement of announcing major stops and transfer points along a fixed route is helpful in orienting all customers on board the bus, not only those with disabilities. Don't forget the ADA requirement of announcing the route to customers waiting at stops served by more than one route; again, this service is helpful to all customers, not just those with disabilities. Finally, it is important to consider bilingual communications if English is not the only commonly-spoken language in your community.
Intelligibility Checklist

You can check that your system has taken the following actions to provide as understandable a transit system as possible for your customers by:

- Providing clear, current, easy-to-read, and accessible printed materials—schedules, maps and "how to ride" guides that include understandable fare information, system policies and procedures.

- Distributing information at convenient locations (don't neglect the Internet).

- Providing good, clear information over the phone and ITS information.

- Providing trained, easily accessible staff members who are familiar with the entire system and its range of services.

- Establishing outreach into the community—the system manager and staff members represent the system to the public and provide information to civic groups, school children, etc., on a regular basis.

- Developing an internal electronic mail (E-mail) network to facilitate communications among transit system staff.
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Chapter 7: Managing for Affordable Transit Systems

In This Chapter

⇒ What does transit system affordability mean?
⇒ How is transit service affordability measured?
⇒ How can transit service affordability be tracked?
⇒ How can you manage your system to improve affordability — or what makes your transit system affordable?

What Does Transit System Affordability Mean? ...........................................................

Your public transportation system should not only be a convenient transportation option for your customers, it should also be an affordable option. Fare rates should account for various customers' different "abilities to pay." For example, lower fares are required for persons with disabilities and senior citizens during non-peak hours under Federal Transit Administration grants. You may also allow students to ride for a reduced rate. Reduced rate coupon books or tokens provide savings to regular customers. Your customers should feel that you are striving to keep costs down to make using the transit system as affordable as possible.

Measuring Affordability........................................................................................................

Affordability can be measured in terms of:

- Passenger perceptions of affordability, as measured by user surveys
- Number of fare media and special fares for users with limited ability to pay
- Relationship of transit costs to driving costs
- Trends in operating costs (keeping costs down can keep fares down)

Tracking Measures of Affordability..................................................................................

Methods of tracking transit system affordability include passenger surveys, monitoring trends in operating costs, peer-to-peer cost comparisons, and the number of fare media offered.

Passenger surveys can be used to gain information about various customers' "willingness to pay" for transit services. Enter survey responses into a database. You can then utilize that information when setting fares. In addition to helping determine the basic fare, customer information can help determine markets for special services, such as express service.
Another indicator of affordability is the number of fare media offered. Since different customers have different abilities to pay, a greater number of fare media increases the potential to maximize revenues. A word of caution—do not offer such a wide variety of fare media that the fare structure becomes confusing to customers. Fares can vary by age (reduced fares for seniors and children), by distance traveled (through use of zone fares or distance-based fares), by time of travel (weekday vs. weekend, peak vs. non-peak), and type of service (local vs. express, basic vs. amenities, etc.).

Studying fares and operating costs in relation to comparable transit systems and other modes, such as driving a car, will show if your costs and fares are reasonable and efficient in comparison to similar systems and alternate transportation modes.

Monitor trends in operating costs by tracking operating costs and changes in costs over time. You can enter data in a database and calculate changes in costs over one or more periods of time. This will allow you to monitor increases in operating costs that may affect fares. You may then evaluate potential changes to operations to lower costs, and decide on a course of action.

Managing to Maximize Your Transit System’s Affordability

To maximize the affordability of your transit system, you may want to consider the following management requirements:

- Design a fare structure that accounts for customers’ varying abilities to pay
- Use fare media matched to your customer needs
- Provide effective communication to service area residents on changes to fares
- Practice good financial management (including an effective risk management program)

Appropriate Fare Structure and Fare Media

Your system should have fare policies matched to different customers’ varying abilities to pay. This is the rationale behind reduced fares for senior citizens and persons with

Real-Life Examples

Using Volunteers to Limit Costs

Many transit systems use volunteers to help keep services affordable. **James City County Transit** in Williamsburg, Virginia, utilizes volunteer drivers as well as college interns to work on the computer system to lower personnel costs. **OATS, Inc.**, in Columbia, Missouri, has made effective use of volunteers to provide the services of dispatchers, planners, and schedulers for demand-responsive services operating in rural Missouri counties. The system is coordinated, planned, and maintained at the county level by volunteers who are often transit riders themselves. The volunteers also participate in fundraising activities to help purchase replacement vans.
disabilities, and the concept can be applied to other groups as well. For example, fares can vary according to time of travel (peak/off-peak), trip distance (zone fares), type of service provided (express/local), or other criteria.

Design fare media matched to customers' needs. Offering a multi-ride pass is of little use to customers if the pass is available only at an inconvenient location. "Smart" cards allow the option of tie-ins with local merchants through the card's debit feature. Smart cards are electronic debit cards from which fares are subtracted by readers on board vehicles. Allowing customers to pay for transit as well as other types of purchases with one fare instrument is one method to provide more convenient service. This method of fare payment also combines transit with other purchases, reducing the perception of transit as a separate expense.

**Communicate Fare Changes to Customers**

Every transit system experiences fare changes. When planning to implement a fare change, in addition to soliciting input from customers on fare changes, it is important to communicate that change to customers -- both to explain a proposed change, and to build community understanding of the need for such a change.

**Rely on Good Practices to Keep Costs (and Fares) Low**

There are many financial and operating practices that keep costs and fares as low as possible. This section highlights many diverse practices covering a wide range of activities including: service coordination, implementation of new services for which there is customer demand, contracting for services, seeking voluntary donations, adopting new technologies, using revenues from advertising, and other funding innovations.

**Coordination of Services**

Coordination of services among transportation providers is an effective means to reduce costs. By coordinating services, two or more organizations are able to reduce service duplication and allocate resources more efficiently. Service coordination runs the gamut from two human service agencies agreeing to transport each other's clients on each agency's vehicles, to transportation systems that provide brokered transportation through multiple transportation providers.

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**Real-Life Example**

**Free School District**

In Decorah, Iowa, the Northeast Regional Transit System developed a scheme for reducing costs to taxpayers by coordinating transit for Head Start and Early Childhood Development program attendees with local school districts. School buses pick up pre-school aged children along their regular routes. The children are then dropped off at a child development center near the school or on the route. The transit system handles all of the attendance, disciplinary, and other paperwork. This saves the transit system money since it does not actually operate the service, and it saves the child development programs money since school districts agree to operate the service for free and are only charged for the administrative work done by the transit system.
Real-Life Examples

Contractual Subsidy with Private Services

Mendocino Transit Authority (MTA) in California subsidized a private operator to service a string of coastal communities. The private operator, who was primarily a courier service, was guaranteed a certain ridership. The Transit Authority agreed to subsidize the difference between actual fare revenues and the revenue amount that would result from ridership at the guaranteed level. The operator, in turn, agreed to accept MTA passes and to redeem them at the end of each month. The cost of the subsidy was less than the actual cost of directly operating that service as an MTA route.

Monmouth County DOT in New Hampshire establishes contracts with various nonprofits, such as hospitals, dialysis clinics, and senior centers. The DOT provides services at a lower cost than the agencies were able to when they operated them. Transit services are not subsidized, but they are offered at a break-even cost to the DOT. Because of the non-subsidized structure, the DOT is able to expand service at any time with no additional cost burden.

For example, the City of Excelsior Springs, Missouri, was forced to make tough decisions when faced with the need for both additional services and a limited budget. The funding problem was overcome by coordinating services to maximize the use of personnel and vehicles. Routes were designed to minimize dead time while drivers switched vehicles when operating two different services. Planners also took advantage of differences in demand throughout the day by using the same vehicles on the midday school routes as were used for early morning employment transportation. The system also worked closely with patients and clinics to group appointments for people on each route serviced by the medical transportation program in order to maximize the number of riders per trip. As a result of these efficiency improvements, Excelsior Springs was able to offer transportation services that otherwise would not have been possible due to financial limitations.

Rural areas with multiple dispatch sites can benefit from dispatch consolidation. Hill Country Transit and the Capital Area Rural Transit System, both in Texas, experienced problems with various dispatch sites due to inefficiencies in staffing and equipment, and a lack of control in the management of the operation. Placing all of the dispatch sites under a single operations site solved many of these problems. The system was then able to offer centralized telephone scheduling and reservations through an 800-telephone number. Management was able to control the system more closely, improving efficiency and customer service.

An example of coordinated non-emergency medical transportation is shown in the state of Vermont’s contracts with the Vermont Public Transportation Association (VPTA) to provide transportation for Medicaid recipients throughout the state. The state pays the VPTA to administer all claims for Medicaid transportation and acts as a central clearinghouse for processing all Medicaid transportation services. Trips may be within one county or between two or more counties.

The VPTA submits an annual transportation service proposal to the state to provide a specific number of Medicaid trips. The number of trips is based on an amalgamation
of the number of trips each of the ten member vendors provided the previous year. Each vendor records the number of trips provided, then submits a bill to the state and a copy to the VPTA. The VTPA administers the program and ensures the billing statement is correct. The state pays the VPTA, which pays each vendor. The state pays the VPTA a flat fee for administrative services. This process has reduced the administrative responsibilities of the individual transportation providers, and implemented centralized bill processing for the entire state.

**Broaden Constituent Support through New Services**

Many rural and small urban transit systems find themselves stuck in a rut with a relatively fixed set of rider groups. To gain more riders, Parker County Transit System in Texas decided to diversify and expand the services it offered. After some research and service planning to identify potential markets, the system began offering seasonal fixed-route services for students, festivals, and special events in addition to airport and sporting events services already offered. This action not only increased ridership, but also enlarged the system's constituent base, and created a favorable perception of the system among additional residents, broadening support for funding requests from public officials.

**Contracting Services for Cost Savings**

Sometimes the easiest way to offer high-quality service at a low cost is through contracts. Service contracts typically involve operation of one or more services at a prescribed level for an established cost over a specified period. Two unusual contracting practices are described in the accompanying real-life example.

Contracting with other transportation providers in the local service area for specific transportation services offers a means of increasing access without expanding a transit system's personnel or equipment budget. Many small urban and rural transit systems contract with local taxicab companies for transportation services. For example, Eagle Transit in Kalispell, Montana, offers coupons for a subsidized taxi service to riders with medical needs and those who cannot easily negotiate the steps on buses. Passengers purchase books of tickets for taxi rides, and must place a reservation for this service one day in advance. The taxi company bills the transit system for both the cost of the ticket and the subsidy. Subsidies typically amount to roughly $5 per ride. The service costs about $620 per month for 140 rides. This is reportedly more economical than using an in-house reservation system, and has provided affordable and convenient transportation to customers with special needs.
Some transit systems are simply too small to warrant a full-time manager, and they contract for manager services. Such was the case in Anderson, South Carolina. A lead driver oversaw daily operations. A private management firm, however, was contracted to conduct planning, reporting, performance review, and grant application activities. This allowed these tasks to be done by individuals with special expertise and the city was able to minimize management costs. In addition to contracting with outside entities, transit systems may want to become contractors that perform activities for others. This can be a valuable source of income.

**Voluntary Donations**

Another method of developing affordable service is to seek voluntary donations from the local community or businesses. Voluntary strategies have been effective in both fundraising and in maintaining financially weak routes, as described in the accompanying real-life examples.

**New Technologies**

New technologies also offer methods to reduce costs and make transit services more affordable. Technologies such as computer-assisted scheduling and dispatching (CADS), mobile data terminals (MDTs), geographic information systems (GIS), and automatic vehicle location (AVL) systems are being increasingly adopted in order to obtain more reliable ridership and employee data, and to automate data collection for agency billing.

For example, Arc Transit, Inc., of Palatka, Florida, took its fleet into the 21st century by installing AVL, odometer readers, card readers, and radio interfaces in all of its coordinated transportation vehicles. These improvements allowed for more accurate reporting and billing of Medicaid riders as well as eliminating problems in payroll hour tracking, such as overtime abuse.

Riders pass state-issued Medicaid cards over an on-bus card reader when
boarding and alighting from vehicles. The system records the mileage, time, and location at each passenger stop and sends that information via radio to the dispatch office. These data are compiled into agency bills with substantially less effort and greater accuracy than was possible when trips were recorded manually. Monthly transportation service provider bills are easily verified with the data generated by the system. The system hired a sole-source vendor to purchase and install the equipment, and to integrate the new software with the system’s existing software. Arc Transit estimates savings of over $3,000 per vehicle per year.

Advertising
Placing advertisements on vehicles and facilities offers another means of generating revenues. The transit system in Ludington, Michigan, had purchased double-decker British buses for a tourism project. Advertisers found these buses very attractive as unique and visible moving billboards. The Municipal Transit Authority in Clinton, Iowa, has developed deals with local radio and television stations, newspapers, and billboard firms. In exchange for discounted transit advertising, these firms are given discounted prices for advertising on the inside and outside of buses.

Other Funding Innovations
State support may come in forms other than funding assistance. Salt Lake County Aging Services in Utah worked with the state to reduce its vehicle purchasing and maintenance costs. The county then pays only for the vehicle depreciation over the time of use. Since the state has a large fleet, maintenance costs are low, and when a vehicle is damaged, the county faces a deductible cost of only $350.

Transit systems may also seek funding contributions from retail establishments. For example, Monmouth County, New Jersey, offers a weekly shopping trip Real-Life Example

Developing an Advertising Cooperative (Co-op)
The Transit Authority of River City, Kentucky, found a way to cut advertising costs by taking the lead in establishing a direct mail marketing link with a low income, high transit ridership area. The agency encouraged a local entrepreneur to create a co-op advertising package (like a “valuepak”) with the transit agency as the first co-op advertiser. This provided the Authority with a way of reaching the low-income, high transit-riding segment of the population without costly advertising campaigns. The transit system was able to reach 33,000 households through the co-op at a fraction of the projected cost without the co-op.

Real-Life Example

Innovative Funding
The SunLine Transit Agency in California developed several unique funding plans. SunLine shares fueling revenue from a jointly developed compressed natural gas facility. They reduced their utility bills by installing solar-power lights in bus shelters. By purchasing the shelters themselves, SunLine was able to increase advertising revenue. In addition, they contract out the shelter cleaning crew as a graffiti removal service.
service to elderly riders. In order to expand funding sources, the transit system solicited funds from the shopping centers on the weekly service route. Not only was this a highly successful campaign for the transit system, the shopping centers received additional positive publicity and an enhanced image in the community.

In sum, when seeking to develop innovative funding strategies, look for a win-win situation in which all parties benefit.
Affordability Checklist

To keep your transit system affordable for your customers, check that your system has implemented:

- Fare structure and fare media matched to user needs.
- Effective financial management--keeping costs down can keep fares down.
- Effective communications with customers--if it is necessary to increase fares, explain to customers that the increase is a measure to maintain or improve transit system services.
- Innovative financial strategies--look for effective new ways to increase revenues in partnership with state and local agencies and businesses.
Chapter 8: Managing for Empathetic Transit Systems

In This Chapter

⇒ What is an empathetic transit system?
⇒ How is empathy in a transit system measured?
⇒ How can transit system empathy be tracked?
⇒ How can you manage your system to increase empathy — what makes your transit system empathetic?

What Does It Mean to Have an Empathetic Transit System? ......................

Customers should feel that their local transit system cares about, and will endeavor to meet, their public transportation needs in a variety of ways. For example, all staff members should be knowledgeable about the transit system and its services, and should also be available to answer customers' questions. Listening and communication skills are key elements to creating an empathetic transit system. The transit system should be sensitive to all customers, including those customers with special needs. Good customer service and community relations convey that a transit system is empathetic to its customers' needs.

Measuring Transit System Empathy..............................................................

A manager can measure how empathetic the transit system is to customers through the following means:

⇒ Passenger perceptions through surveys or focus groups
⇒ Complaints and complaint responses/commendations
⇒ Manager observations of staff members
⇒ Press coverage of the transit system

Tracking Measures of Empathy.................................................................

You can track how empathetic your transit system is towards its customers in a number of ways:

Develop and distribute surveys to passengers to gauge their perception of your transit system's empathy towards customers. These surveys can measure a variety of aspects of your transit system. For example, do your customers feel that the system is responsive to their questions? Are drivers and other staff members friendly towards customers? Do customers receive a quick response when they register a complaint or ask a question? Do customers with special needs feel that your transit system meets
their needs? What are the most positive aspects of your transit system's relationship with your customers? If customers have a low level of satisfaction, develop and implement changes to increase their satisfaction. If customers have a high level of satisfaction, repeat the actions and behaviors that satisfy customers in order to maintain their approval. Distribute rider surveys annually, and track a record of the responses. This will allow you to see if changes that you have instituted have made a difference in your customers' perceptions of the transit system's empathy towards them.

Share the results of your passenger surveys with your employees. After all, positive results and responses reflect well on your employees' performance. For any problem areas, employees may have suggestions and ideas for solutions, and their input can be solicited through regular staff meetings or special work groups targeted to identify potential solutions. If you track the results of passenger surveys over time, changes in such results can also be shared with your employees so that they, too, can see improvements (or lack of improvement) in customer satisfaction.

Track commendations as well as complaints. In that way you will know what customers think you are doing right as well as where they see room for improvement. A spreadsheet or a database makes keeping track of commendations/complaints easy. To effectively track complaints, don't forget to enter follow-up information--indicate what action was taken to respond to the complaint, and the date of all actions.

Transit managers' personal observations enable them to keep in touch with the day-to-day conduct of transit system employees. Observations by managers should also be recorded. In this way, managers will be able to follow up on observed shortcomings or exemplary actions of staff and customers, and follow through with appropriate action. If an employee is observed to interact with a customer without showing empathy for the customer, the manager must decide on an appropriate course of action. Is corrective action such as a reprimand necessary? Will additional/follow-up training be needed? Are both actions appropriate?

Press coverage of the transit system often reveals public perceptions toward the system. If press coverage typically contains testimonials from satisfied customers, it is a safe bet that system employees are generally empathetic toward customers. If, on the other hand, the system has received several scathing mentions in the press, managers should determine if system personnel are being as empathetic toward customers as possible. Has the system practiced effective communication and community outreach?

Refer to Chapter 6 for strategies and practices to improve communications and community outreach.

Managing to Increase Your Transit System's Level of Empathy

You can improve your transit system's empathy toward customers by addressing customer concerns and needs, by developing policies and procedures that reflect empathy toward customers, and by listening and responding to customers' needs.
Clearly communicate both within the system and to external customers, train staff to be empathetic and provide exceptional customer service, and provide a manager in the field. This can affect your:

- Marketing and public information program
- Human resources program
- Operating procedures

Following is a discussion concerning how to make these programs more empathetic to customers at your system.

**Building Empathy Into Your Marketing and Public Information Program**

The first step toward developing empathy with customers is to listen carefully to customer questions, concerns, and complaints. Train all staff to become good listeners. Train all staff members to also communicate comments, complaints, and praise from customers to management. If managers are unaware of customer attitudes and needs, then they are unable to effectively respond or to follow up to ensure that a staff member has responded appropriately.

Ensure that an appropriate staff member responds to each customer question, concern, and complaint within a short time period. If your customers believe that your system is responsive to their needs, and cares about their well-being, those customers will be more likely to provide support for the system in its times of need.

**Building Empathy into Your Human Resources Program**

Some transit systems have implemented programs to train staff to respond more sensitively to customers, creating a more empathetic environment and fostering increased customer satisfaction.

Another means of demonstrating empathy with customers is to respond to changing customer travel needs by making adjustments to routing and scheduling on a relatively frequent basis. Residents of Downey, California, have reacted positively to this idea; customers feel that they are being heard and that the transit system is responsive to their needs.

**Real-Life Example**

**Training Staff to Respond Sensitive to Customers**

In response to recurring communication problems, Laidlaw Transit Systems developed a training program called Special Words and Tactics, or SWAT. SWAT stresses the importance of communication both in the workplace and with transit passengers. Participants are taught sensitivity in communication as well as strategies for improvement. Role playing sessions, discussions of actual experiences, and practices of alternative communication methods are included in the program. It is believed that incidences of communication problems have gone down since the development of the SWAT program.
Implementing incentive programs that stress the importance of providing exceptional customer service and that reward those who provide exceptional service can also lead to increased employee empathy towards customers.

You should also train all staff in procedures to respond effectively to customers with special needs. For example, transit systems serving communities with non-English speaking customers may want to follow the lead of SCM Community Transportation in implementing a telephone reservations service for non-English speakers. When a non-English speaking customer calls to request a ride, the reservationist contacts AT&T's language line and the parties work together to determine the caller's language. AT&T then puts a translator on the line who translates for both the caller and the reservationist.

Real-Life Example

“Transit Ambassadors” Training Program

The Canadian Urban Transit Association (CUTA) has developed an innovative training program for vehicle operators and other front-line staff in customer relations. Based on the approach taken by the airline industry, the Transit Ambassador program was developed according to customer service management principles that encourage front-line staff to assume greater responsibility for service delivery. The training requires the commitment of staff time, and would likely be possible in smaller areas only if the course were offered on a regional basis and included several systems.

Building Empathy Into your Operating Procedures for Drivers, Dispatchers, and Customer Service Staff

When developing operating policies and procedures guidelines for drivers, dispatchers, and customer service staff, put yourself in your customer's shoes. How would you like to be treated as a passenger? To increase ridership and customer satisfaction, the LINK transit system in Wenatchee, Washington, turned their riders into "guests." Drivers are hired with strong records of customer service experiences and are then trained in the "guest philosophy." Since transit is funded solely by sales tax, drivers are free to be hosts instead of fare collectors, allowing them to focus on driving and the customer. Drivers are monitored periodically, and if they perform well, they are given an incentive in the form of a wage increase for a specified period of time.
Listening and Responding to Customers’ Needs

To effectively respond to customers' needs, it may be necessary to develop and implement outreach activities. Along with bus operator training, many transit systems sponsor outreach programs targeting people with disabilities. These activities include mobility fairs, door-to-door visits and personalized mailings to senior citizens' communities and homes for people with disabilities, and speaking engagements that highlight transit services for those with disabilities.

Establishment of a consumer advisory board, which meets regularly to discuss problems and suggest solutions, is an excellent means of gathering feedback, solving problems, and building empathy in the process. Inclusion of consumer representation on your higher board is also recommended.

Real-Life Example

Community Outreach to Persons with Disabilities

Several transit systems have implemented outreach programs targeted to persons with disabilities. The objectives are to familiarize persons on the services available to them and to increase usage of the system by those individuals. The process of increasing awareness and ridership of those with disabilities has included:

- Personalized mailings explaining the use of the lift for standees.
- Door-to-door visits to senior citizens' communities and homes for individuals with disabilities explaining services for standees.
- Mobility fairs where standees can gain positive experiences riding lifts on a lift-equipped bus.
- Speaking engagements at meetings of organizations for persons with disabilities, advertisements on radio and billboards, along with publicity in local newspapers for outstanding service to patrons with disabilities.
- Training of standees on the lift through handing out pamphlets on "How to Use the Lift," and mobility fairs.
Empathy Checklist ........................................................................................................................................

You can help to ensure that the system staff cares about customer needs and that customers feel that empathy by engaging in the following management activities:

- Include empathetic customer service policies and procedures in the employee manual.
- Listen closely to customer questions, concerns and complaints.
- Provide prompt individual responses to passenger needs and complaints.
- Clearly communicate between drivers, call takers, and passengers.
- Train drivers and other staff to be sensitive to customer needs, and implement incentive programs that stress the importance of giving exceptional customer service.
- Train each staff member in procedures to respond to customers with special needs.
- Provide a manager in the field.