

# MASS TRANSIT MANAGEMENT:

A HANDBOOK FOR SMALL CITIES  
SECOND EDITION, REVISED

SEPTEMBER 1980

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# **MASS TRANSIT MANAGEMENT:**

## **A HANDBOOK FOR SMALL CITIES**

Volume 4: Marketing



**REVISED EDITION**

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## INTRODUCTION TO THE SECOND EDITION, REVISED

In most fields of transportation, management--rather than equipment, location, or operating rights--is the key to success. Urban mass transportation is no exception. Despite its importance, transit management has received surprisingly little attention, especially in terms of modern business practices. The aim of this handbook is to provide information for the management of mass transit, particularly for small-scale operations in smaller cities in the United States. For the purposes of this handbook, a small city is defined as one that operates 101 buses or fewer. This cutoff point for small transit systems is one used by the federal government. Because of the scale of transit enterprises involved, the handbook assumes that management faces two major constraints: (1) the amount of money available and (2) the degree of specialization possible with the limited manpower of a small enterprise.

Staff members at the Institute for Urban Transportation (IUT) in Bloomington, Indiana, investigated the practices of smaller transit systems in many parts of the United States to discover firsthand some of the methods and problems of such properties. The best methods used by these properties have been included in this handbook. In addition, a modern, systematic approach to the management of transit firms has been worked into the material as an improvement on the conventional practices of the transit industry. Extensive experience in providing local and statewide technical assistance in Indiana and conducting management performance audits of transit properties has provided IUT's staff with substantial insight into transit management.

The modern consumer-oriented approach to business is strongly emphasized in this handbook. The consumer-oriented approach is the major concept of business that has been pursued through the technique of marketing management by American business firms since the end of World War II. By adopting this powerful, strategic concept, this handbook is very much a marketing-oriented document. The justifications for this approach seem compelling because in general the transit industry admittedly suffers from a lack of marketing expertise and effort. Today, the transit industry still is primarily operations-oriented. However, in many parts of the United States transit properties of all sizes are becoming more marketing-oriented.

The handbook is divided into four sections. Part I: Goals, Support, and Finance (chapters 1-3) includes the important matters of establishing goals and objectives, understanding the consumer, gaining public support and public action for transit, institutionalizing transit as an integral part of the community, and financing transit. Part II: Management and Control (chapters 4 and 5) focuses on management itself and the control and information devices needed for effective management. Part III: Operations (chapters 6-10) covers important areas of day-to-day operation, coordinated as the product element in the marketing mix. Part IV: Marketing (chapters 11-14) deals with the marketing program and promotional activities.

Because this handbook is intended to serve as a reference work, not a textbook, care has been taken to produce chapters that are complete in and of themselves, which can be used independently. Some repetition is inevitable when using this technique, but every effort has been made to eliminate duplication as much as possible by cross-referencing and through providing a detailed table of contents. Appendixes are included with some chapters to give more detail on certain subjects without interrupting the flow of the text. A short but relevant bibliography is provided at the end of each chapter. A general bibliography is included at the end of the handbook.

Early in this handbook, the need to establish goals and objectives is stressed. Indeed, the concept of management by objectives (MBO) is treated in some detail. MBO recommendations are given for policy-making bodies as well as management. A detailed explanation of how to use MBO for transit management is provided.

The critical concept of consumer orientation through marketing is reflected throughout the handbook, but perhaps most strongly in Chapter 1 and Chapter 11. Chapter 1 is a discussion of the goals and objectives of a transit enterprise. It covers consumer behavior as it may be applied to mass transportation and a recommendation for the development of a general marketing-management strategy for transit management. In Chapter 11, the marketing program suggested for the small transit property is developed fully. The relationship of all parts of the transit enterprise is built around a marketing-oriented firm. The marketing mix--product, price, and promotion--is the concept that shapes managerial action in meeting consumer needs. MBO is the means by which results can be attained reasonably.

Throughout this handbook, careful attention has been paid to the consumer and to gearing management thought and the service provided by the transit firm to meet the desires and needs of consumers. Service quality is a key factor--not a minimum of service at the lowest possible

cost, concocted mainly to meet the needs of the transit firm, but service that meets consumer needs and desires at a cost carefully calculated and controlled. This seems a wise course for transit managers; publicly owned transit firms--of which the number is increasing rapidly--generally focus on service as their main reason for operation. Even privately owned transit firms cannot hope to generate long-run profits without providing good service to their clientele.

In addition to covering broad strategic concepts of management and matters of systematic, day-to-day operation, this handbook deals with critical factors including public support, finance, and various forms of public ownership. A fair proportion of the contents, therefore, is directed not only toward transit managers, but also toward public-spirited citizens and public officials who wish to inaugurate or improve transit services through public action.

This handbook should be considered a draft, as was the first edition. It combines the tried-and-true methods--where these appeared to be the best possible practices--with innovation, in the application of modern business techniques to transit. Thus, this handbook ventures onto untested ground. In a world of managerial as well as technical innovation, it would be surprising indeed if no major changes in modern business thinking and in transit occur in the course of 3 to 5 years. What is contained here may be subject to fairly rapid obsolescence.

We sincerely hope that by using this handbook managers of existing smaller transit properties will find many good ideas and suggestions that they may adopt easily. For the transit operation starting from scratch, this handbook provides as complete and usable a program as currently is available in published form. To be completely realistic, existing transit properties will be able to adopt the complete strategy and the major concepts suggested here only with some difficulty, because of vested interests, agreements, and other factors difficult or impossible to modify in a short time.



## PART IV

### MARKETING

Through the related concepts of market segmentation and the marketing mix, Chapter 11 provides the detailed basis for the systematic operation of a marketing-oriented transit enterprise. The marketing mix--product, price, and promotion--is geared to meet the needs of the consumer. The emphasis, however, is not on the entire public in a given city as a single, uniform mass of consumers. Rather, the emphasis is on different groups of consumers, or segments of the market, who can be identified by their different responses to the same mix of product, price, and promotional appeal.

The idea common to American business today is that consumers are better served, and the market more effectively developed, by this approach. As an aid to using the marketing mix effectively, sections on market research and pricing are included in an attempt to simplify the approach from the viewpoint of a small, consumer-oriented transit firm.

Chapters 12, 13, and 14 focus on advertising, public information, and community relations, developed from the viewpoint that these elements are essential and interrelated parts of the promotional program. All of these elements are necessary for the successful management and operation of a consumer-oriented transit firm.



## CHAPTER 11

### THE MARKETING PROGRAM

#### Introduction

Marketing is a vital part of a good transit system. To be successful, the transit marketing program must be a planned course of action aimed at a particular goal. In general, the goal is service maximization; marketing for transit should work to maximize service to the public by meeting consumer needs. This goal does not propose the aimless waste of money in an attempt to cover the largest possible number of bus-miles. Rather, this goal means finding needs and developing ways to meet those needs; it means finding ways to increase use of transit facilities, to spread costs, increase revenues, and reduce deficits.

The marketing program and its underlying strategy are important because of the role marketing plays in integrating all the parts of a transit firm to meet the goal of service maximization. Marketing poses the initial questions that must be asked and answered by any transit operation:

1. What service is desired and needed?
2. Who desires and needs service?
3. How shall service be provided?

Transit marketing is a creative effort, with major challenges in formulating and carrying out marketing ideas and the rewarding feeling of accomplishment when marketing plans are successful. Marketing may be the most exciting part of transit.

A key factor that must be implanted firmly in all thinking related to mass transportation is that marketing is an integral part of transit and must be treated as such. Too often in the past, transit managers thought of transit marketing as nothing more than advertising and that advertising was a luxury that could be turned on or off

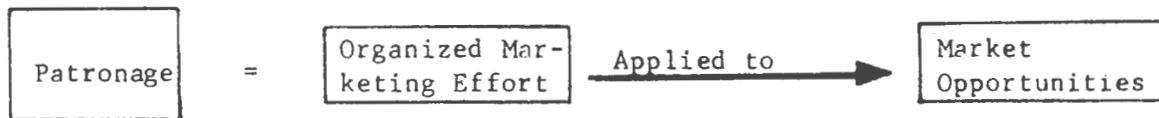


depending on the state of the budget. In today's competitive transit environment, transit marketing must be considered the core of the transit firm's activities, around which all else should revolve. As a consumer-oriented service--as transit must be--the situation cannot be otherwise.

### The Marketing Approach: Meeting Consumer Needs

The marketing program of a transit firm must be geared toward discovering opportunities for providing public service and taking advantage of those opportunities. The privately owned firm will analyze its service carefully and continue operations that are most profitable in the long run. The publicly owned firm, given the mandate to provide service, will continue to offer the services that are needed and desired by the public, and thus are worthy of public support in the long run. The publicly owned transit firm also will take all steps possible to understand and serve the transit market, so that revenues are maximized.

Thus, the concept behind the marketing program, stated as sales in terms of ridership, depends upon organized marketing efforts applied to market opportunities. The opportunities, of course, are the consumer desires and needs. The more careful the analysis of the various market opportunities and the better transit service is geared to those opportunities through a painstaking marketing effort, the greater will be the patronage and the satisfaction of that patronage.



### Considerations in Choosing Marketing Objectives

Perhaps the objectives of the marketing program in terms of service maximization can be identified initially by defining what not to do:

1. The transit firm should not concentrate management's efforts solely on operations. Operations are only part of meeting consumer needs; they are a means to an end, not an end in themselves. The costs associated with any one of the operating aspects of a company, such as routes, schedules, equipment, communications, personnel, and so forth, should not be the only factors considered.





2. Management should not concentrate its efforts on covering short-run costs out of the fare box. Experience has shown that this philosophy inevitably leads to disaster, because it concentrates efforts on fare increases and service cutbacks. In fact, given the current situation in the United States, it is not possible to offer regular urban mass transportation service at a profit or even to break even. As a result, most public transportation agencies rely upon financial assistance from local, state, and federal sources.
3. Management should not treat the public as a single consumer market for transit. The transit market is made up of many segments and a different approach in terms of service, price, and promotion is needed to meet the needs of these various segments.

Transit management has three areas of concern when developing objectives:

1. All parts and functions of the firm under the control of management should be aimed at meeting various consumer desires or needs through the product (service), price, and promotion elements of the marketing mix.
2. Cost considerations should not predominate in the initial thinking, but should be controlled carefully so that nothing unexpected happens. Any alteration of the marketing program should be done after considering the best cost and revenue information available, so that every risk is a calculated one.
3. The various segments of the transit market should be identified and served. Different kinds of people traveling for different reasons with various constraints on their time, effort, and money require different kinds of service, price, and promotion.

Meeting consumer desires is admittedly a difficult problem. Even under the best of conditions, accurately determining and meeting the needs of consumers or potential consumers of transit service is likely to be a tough proposition. In the real world, transit management faces three major constraints--cost, information, and flexibility.

### Cost

The first constraint is the cost of serving the various transit markets adequately. Obviously, this constraint can never be removed totally if available funds are limited in any way. However, this burden can be reduced by:

1. Knowing relevant costs. Information on cost must be precise enough to reveal expenditures per route, as well as for classes of service (regular route, special, charter) so that it is possible to estimate accurately the expenses for any given service. Knowing the cost of promotion allocated to each service or route is essential to measuring its benefits. (A total cost figure for advertising is meaningless unless it is apportioned to its actual uses.) The cost of no promotion in terms of lost patronage or loss of consumer satisfaction also should be estimated.
2. Knowing relevant benefits. Costs must be balanced against monetary revenues on the basis of routes and classes of service. Calculation of nonmonetary benefits, both to the transit enterprise and to the community, also should be estimated.

### Information

The second constraint is the lack of information on consumer needs and the opportunities that exist to meet those needs. However, this burden can be reduced by:

1. Researching the markets. Some determination of initial regular route and special service needs must be made on the basis of the various segments of the market for transit.
2. Securing continuous feedback of information. Data concerning actual daily operations and information from various activities and developments in the community have a bearing on the performance of the transit service.

### Flexibility

The third constraint is the lack of flexibility or adaptability. A transit enterprise, whether publicly or privately owned, either must have broad operating powers to begin with or a constant extension of its powers to serve the public. Included in these powers are such factors as:

1. Meeting demand. A transit enterprise must have the ability to change routes and schedules easily to meet variations in demand.
2. Serving the entire area. A transit firm also must have the ability to operate over an area relevant to the travel needs of the public. In many urban areas, large

and small, potential high-demand areas lie outside the jurisdiction of the local transit operation. Laws, written intelligently, will provide the powers needed to allow service for the entire area.

3. Providing adequate funds. Transit must have the funds to meet its needs, either through sufficient sources of private capital or through access to public support through taxation.

### Marketing Mix

#### Product

The product in transit consists of the types of service offered, the quality of service, and access to the service.

Type of service. The type of service may be divided into two broad categories: (1) regular route service and (2) special and charter services.

Quality of service. The quality of service is another product characteristic. Included are such items as air conditioning, seating, decor, reliability, safety, courtesy of personnel, need to transfer, and travel time. All of these factors can be adjusted to meet the needs of various market segments.

Access to service. The access to service is treated separately because of its importance. The old rule of thumb of half-mile spacing between routes is obsolete in this day of automobile availability. Access is really a dimension of the ease of using the transit service. In addition to the spacing of regular routes, access includes the various park-and-ride, special, and charter services that help make the use of transit easier for the public. (For more information on access as it relates to routing, see Chapter 9. Chapters 6 through 10 discuss transit operations in detail.)

#### Price (Fare)

Pricing is an important part of the marketing mix and cannot be considered alone. In other words, price is not totally independent of the other elements of product and promotion; together, the three form the package that consumers in the various market segments buy or reject. Fares must be considered as a promotional variable as well as a source of revenue.

Consistent packaging. Whether the public (or some segment of the public) views fares as high or low is related more closely to the value seen in the package of service

purchased than to an absolute sum of money. A high-quality service in terms of frequency and dependability, with clean, air-conditioned vehicles running on a fast schedule, may be seen as a high-value, low-cost package. In comparison, undependable, infrequent service, using old, dirty, decrepit vehicles may be judged as high in cost, even though the fare charged may have been the same in both cases. What is critical is that the package of service and the value of the service received by the consumer differed in each case.

Revenue maximization through service. People seem willing to pay for good service; research and demonstration programs conducted recently have proved this point rather conclusively. Charges above the regular base fare can be levied for extraordinary service. Moreover, if meaningful rider segments are discovered and special services developed to serve them, it should be possible to charge a variety of prices. This method offers the possibility of maximizing both service to the public and revenue to the transit firm.

Fare collection. Mass transit faces a number of competitive difficulties in trying to match the appeal of the private automobile. One of these is the fact that, in most transit operations, a fare is collected each time the service is used. The transit patron must give up something of value each time he boards a transit vehicle. On the other hand, many trips may be made in an automobile before stopping to buy gasoline or pay for licenses or parking or make some other overt, automobile-related expenditure. Indeed, if a credit card is used to purchase gasoline, stopping at the filling station is a "costless" operation. To compete with the automobile on a more equal footing, the means used to collect the fares has to be as easy and painless for the customer as possible. Appendix 11A covers the important issue of fare collection in detail.

Regular route/regular service. For many years, the common practice in the United States has been to collect a flat fare within a given municipality, regardless of the length of a journey or the time of day at which the trip was made. This system has the great virtue of being simple. Unfortunately, it usually means relatively high fares per mile for short rides. On the other hand, distance-based fares, which are common in many other countries, often are quite complicated and either require a conductor or impose upon the driver the headache of figuring distances, issuing tickets and rider checks, and otherwise monitoring the distance each passenger travels. Nevertheless, distance-based fares can be quite attractive to transit patrons and short-distance travel may be greatly encouraged.

Ideally, fares should be:

1. Simple and straightforward. The system should impose the least possible difficulty on the operator and the patron. Fares should be easy to collect, requiring the fewest coins possible. For example, a 25-cent fare is good because most patrons will be able to pay it with a quarter. Fares of 22 cents, 27 cents or 31 cents all require excessive change handling for both the operator and the patron. If transfers are used, they should be free, or the price charged should be payable with a single coin. Today, many transit agencies require an exact fare; the driver carries no change and the rider must have the exact fare to put into a locked fare box. This is inconvenient for the rider, but safeguards the driver against theft.
2. Realistic for firm and patron. The amount of the fare should reflect the objectives of the firm in terms of maximization of profit or service. The fares should not be so high as to discourage use or so low as to be hopelessly uneconomical for the transit system. Since the end of World War II, it has been obvious that maintaining a given or declining level of service and increasing the fare only drives patrons away from transit service. It also is clear that if the quality of service is improved, the fare generally can be increased without a loss of patronage. Probably the best course is to maintain a given fare level as long as possible and work at increasing ridership.
3. Standardized. Transit service should not be used as a welfare device. The service may increase the general welfare of the community and cast transit in a favorable light politically. Ideally, the transit enterprise itself should not be used to subsidize certain citizens at the cost of others. The transit operation should receive the full, standard fare for a given service provided for moving any patron. Of course, that patron may not pay the full fare himself. The subsidy could be paid by a governmental agency. For example, the difference between a low school fare and the standard fare should be made up by the school district. Needless to say, the practice today is to use transit as a welfare device, which is part of the problem of transit's poor image.
4. Relative to schedule and route. Fares should be based on distance and time of day traveled. Peak hours are the highest cost times and fares should not be reduced at such times. If discounts are to be given, they should be available only during off-peak hours. Fares based on distance are complicated to collect under current systems. If no better, more simplified means can be found, at the very least a system of zone fares should be introduced.

Promotional fares. Promotional fares are used either to promote the general use of transit or transit used for special purposes. Generally, such fares take the form of low, get-acquainted fares for all users, and are not intended as a subsidy to certain classes of patrons. In the first day or week of operation of a new route or service, the transit firm may wish to offer free service to help acquaint people with it. Promotional fares should never be used where they will increase the cost of providing service while diminishing revenues.

At times, promotional fares may be used in conjunction with some special event, such as a downtown sale or the opening of a new shopping center. The transit firm should be reimbursed completely by the merchants or whoever benefits from the promotion. Indeed, there are examples of downtown merchant groups hiring the whole transit system to provide free service on Sundays before Christmas.

In contemplating any promotional fare, the following points should be kept in mind:

1. Encourage off-peak use. Any fare cut generally should encourage off-peak use rather than riding the bus during regular peak hours.
2. Maintain a standard price. The fare should not be cut if the patronage will develop quickly anyway because of an increase in the quality of service.
3. Relate fares to patronage and quality. The promotional fare could be raised in the future. In this latter case, some speculation on the effect of increasing a fare should be considered. Experience has shown that a reduced fare and a sharp improvement in the quality of service can make an extraordinarily attractive promotional package. Once patronage begins to increase and riders fully grasp the quality and value of the service, it becomes possible to raise the fare to the regular level without sacrificing patronage. Generally, the fare reduction should not be in effect for more than a year or until ridership reaches a reasonable level.

Charter service. Running charters, where it is possible for a publicly owned transit system under federal regulations, is one of the most profitable services a transit firm can offer. Because the service is tailored to meet the needs of the group arranging for the charter, it is by its very nature high-quality service. At a minimum, the rates charged should cover the cost of operating the charter plus a reasonable rate of return on investment. The level

of the charter fare above this base level should reflect such factors as competition from other charter operators and regulations that set charter charges.

Special services. Special services are offerings beyond the regular route services and are aimed at reaching market segments untouched by conventional service. Special services should not be designed to divert patrons from regular routes, but to tap new market segments. Special services also may be used to provide extra value in the overall transit system. As such, these services should be priced to pay for themselves in terms of operating cost, capital cost, and a reasonable return on investment.

### Promotion

The promotional side of the marketing mix contains a number of elements. It includes advertising through the use of the media, ranging from radio and newspapers to circulars and handbills. Promotion also includes public information, such as maps, schedules, signs, and other forms of information on the service available and how it may be used. Community relations is the process of both meeting the public and keeping the public informed of the activities of the transit firm. It is a two-way street of communication and promotion, in that community relations processes also involve finding out what the community wants and returning that information to transit management so that it may be acted upon.

Each of the promotional activities is of such great importance in transit that separate chapters are devoted to each (see Chapters 12-14).

### Use of the Marketing Mix

As its name implies, various combinations of product, price, and promotion are blended to meet consumer needs, as identified by the market segmentation process. Through this mix, management has the opportunity to exercise its creativity in meeting market opportunities. In using marketing and the concept of the marketing mix, several factors should be kept in mind including the nature of transit, the influence of external factors, and the (underused) capacity of transit vehicles.

### The Nature of Transit

Transit is needed only because the buyer desires something else. The transit rider is not interested in the bus itself, except as it permits him to go to work or to shop or whatever purpose he has for traveling. This fact is important in the marketing strategy because it may be far easier to sell a destination than the bus ride as such. Use

of transit can be promoted as a means to an end, provided it is a better alternative than some other means of travel or than not taking the trip at all.

The transit firm must explore many destinations that are attractive to various segments of the market, especially if demand can be stimulated at off-peak times or on routes that are not enjoying sufficient patronage.

#### Influence of External Factors

One important element in segmenting the transit market is that the basic needs that exist among the segments may not be met by transit alone. For instance, elderly people often are lonely and feel a strong need for companionship. The availability of transit service convenient to older people can provide an opportunity for them to reach areas where they may find companionship. In reality, however, local social service agencies may not have sufficient resources to meet the needs of the elderly.

If transit management is trying to sell a companionship destination, it can be successful only if some social institution that satisfies the transit consumer is at the end of the trip. Churches, clubs, and other social institutions for the elderly are a necessary part of fully meeting the need. The transit firm should appeal to and deal with various organizations to help promote needed service. It is part and parcel of the community relations effort to deal with outside institutions to help complete the package of overall social, recreational, and other services that should be available in a modern community. It is also a vital part of the process of institutionalization.

#### Underused Capacity

One of the major efforts of the marketing program should be to take advantage of the underused capacities of the transit system. Many investigations of market segments and adjustments of the marketing mix should be aimed at generating off-peak traffic. Between 9 a.m. and 4 p.m., most transit systems have manpower and vehicles that are not being used fully. This time is ideal to sell special services and charters.

#### Maximizing Service and Self-support

The marketing program has the job of deciding which services are self-supporting. The information feedback of the data collection system and the constant monitoring of that system should reveal potentially profitable or self-supporting parts of the transit operation. Why these services are profitable or self-supporting should be determined, and the successful technique or conditions



should be transferred where possible to other services offered by the transit firm.

At the same time, it is the obligation of transit management to identify revenue-losing services and to find the needed changes to make the service either profitable, less costly, or more genuinely useful in serving the needs of the people. Even a transit operation geared to service rather than profit as a major objective should take all steps reasonable to minimize cost and maximize revenues as long as the principal goal of service is preserved.

By concentrating intelligently on the goal of service, it may be possible to operate profitably in the long run. Failure to serve the public can only cause transit to fail, both socially and economically.

### Marketing Strategies

#### Three Approaches to the Market

There are three broad approaches to transit marketing strategies: (1) undifferentiated marketing, (2) differentiated marketing, and (3) concentrated marketing.

Undifferentiated marketing. An undifferentiated marketing strategy is one under which a firm produces one product and attempts to appeal to the entire market with one marketing program. Marketing of soft drinks is one example; conventional marketing of transit service is another.

The undifferentiated marketing strategy assumes that the product or service is of such a nature that it has a universal appeal and that the market for the good or service is homogeneous. In such a case it is possible to appeal to everyone with the same marketing mix. This approach may work well for popular soft drinks, but this is not the case for transit.

Differentiated marketing. When using the differentiated marketing strategy, a firm still appeals to the entire market; however, differentiated marketing separates the market into different segments and appeals to these segments with different marketing programs. The automobile manufacturers have used this approach with great success, as have manufacturers of soap, cereal, cigars, and hair preparations. In essence, the differentiated market strategy relies on covering the whole gamut of the market, with variations of the same basic product. The products or services, while similar, have different images and different prices.

Concentrated marketing. A firm using a concentrated marketing strategy does not appeal to the entire market.

The marketing program does not attempt to be all things to all people. Instead, concentrated marketing focuses its efforts on a large share of a particular market segment. As with the differentiated strategy, the firm aims at a segment of the large market. This strategy is beneficial if the firm's resources are limited and, because the resources of small-scale mass transit properties are typically quite limited, a concentrated marketing strategy appears to be most sensible for transit.

### Selecting a Strategy

Which marketing strategy should a transit firm choose? Because of transit's typically limited resources, a concentrated marketing strategy should be developed. The marketing investment should be directed primarily at nonusers who are potential users.

Selecting a marketing strategy may not be a clear-cut decision in all cases. Some guidelines should be considered. The following guidelines are applicable to a transit firm.

Stage in life cycle. Nationwide, transit has been in the declining stage of its life cycle for many years, but recently has begun to turn itself around. The situation may be different on the local level.

Resources. Resources are definitely limited, especially for what may appear to be off-beat marketing schemes of doubtful value.

Product homogeneity. As it is generally operated, transit service is a homogeneous product. However, some techniques, such as operating express and local buses, or special services, such as subscription bus service, dial-a-bus, and charters, offer other opportunities.

Because of the relative homogeneity of transit service, methods of packaging transit service to appeal to various needs and desires must be explored thoroughly. For example, people's recreational and social requirements, and how transit service may help meet these needs, should receive careful consideration. The frequent need of older people for more social life presents a number of opportunities for transit tie-ins with senior citizens' clubs, church and welfare groups, and various social service organizations. The needs of young people for sports and recreational activities provide another set of opportunities. Many other possibilities exist in a given area; they have to be discovered. Transit management often will have to take the initiative in developing the tie-ins and relationships between the activity and the possible types of service available to meet those needs.

Market homogeneity. Although generally treated as such, it is unlikely that the market for transit is truly homogeneous. The problem is defining the segments and discovering the ones that can be served advantageously within cost constraints and within overall goals of the transit enterprise.

Any transit agency can divide the overall market it serves. Indeed, segmentation already has taken place in terms of the old, the handicapped, the young, the poor, and others who make up the basic captive market for transit. Although it is possible to stimulate demand for more and different types of trips among the captive riders, it is more important to cultivate new segments. Great care must be taken so that appeals to one segment do not counteract or sabotage appeals to other segments.

Competitive marketing strategies. This factor depends upon the business a transit firm sees itself in. If a firm sees itself in the public transit business, it generally enjoys a monopoly and therefore faces no competition. If, on the other hand, a transit firm sees itself in the transportation business (moving people for hire) it very definitely faces competition.

If transit firms are to be effective in their marketing efforts, they must see themselves in the transportation business, with the private automobile as the major competitor. As is well-known, the automobile appeals to many aspects of human need and desire apart from the need for transportation. This fact is a clue to the kind of creative marketing program transit must develop.

### Guidelines for Developing a Strategy

The complete strategy to be adopted by a transit firm interested in aggressively marketing its service should:

1. Develop a concentrated marketing strategy that appeals to the most accessible or easily reached potential-user segment. This theme either would be a psychological, status-upgrading theme, or a promotion of destinations and the use of transit to reach them. Whatever the theme is, it should revolve around solving problems and meeting the needs of the segments.
2. Hold on to the patronage in the first segment with the quality of the firm's services. All the factors, such as reliability, convenience, comfort, access, flexibility, and so forth, should be stressed and delivered.

3. Go after the next best segment and repeat the process. Up to a point, this outreach to other segments should get easier, assuming the level of service quality remains high, because word-of-mouth advertising from satisfied customers is an extremely powerful promotional device. Eventually, a point will be reached where the cost of reaching a new segment effectively becomes so great that it is beyond the capabilities of the transit firm.
4. Explore the possibilities of tying into other activities--recreation, social activities, and so forth--with transit service. A considerable amount of cultivation and development may be necessary to promote these activities.

After the transit operation has caught on and progressive development of new segments is underway, the means of appeal should stress:

1. Quality of service--especially dependability and the ease with which the public may use the service.
2. Advertising--promising no more than can be delivered.
3. Introduction of special services to meet special needs.
4. The use of promotional fares.

Quality is extremely important in marketing; the transit agency must be very hard-nosed on any expenditure. All action must be planned carefully and alternatives evaluated. The transit firm should make careful expenditures for advertising and other promotional efforts. There appear to be thresholds of effectiveness in advertising investments, or in the amount of promotional effort used on consumers. Precisely what this point may be is difficult to say for small-scale mass transit because experience is relatively limited; to invest in advertising below this threshold level is worse than not investing in advertisement at all. Advertising and promotional investment probably are more important to the transit firm than the investments in buses and facilities. Investments in hardware generally are passive; that is, they can only hold a rider after the active promotion investment has attracted him.

#### Segmenting the Market

The concept of market segmentation is a powerful tool and one that is used by many U. S. business firms. For

most producers of goods and services, the meaningful market segment is the smallest unit for which it is worthwhile to tailor a separate marketing program in terms of the product and the necessary promotion. Some important guidelines should be noted in determining the market segments:

1. Measurable. Measurability refers to the ability to find information on the market that is of value. Information may already exist on consumer characteristics (the census, for example) or it may require a fresh and separate research effort. The danger here is using certain information primarily because it is available, rather than because it is pertinent.
2. Accessible. After segmentation is effected, the firm must determine the degree to which it can effectively focus its market effort on the various segments of the market. For example, in analyzing the market for travel a transit agency may find segments not accessible to transit (for example, salesmen who cover the entire urban area carrying their samples).
3. Substantial. Each segment must be large enough to justify separate cultivation, in terms of service and promotion.

Once the market has been segmented, management can spot marketing opportunities more easily than if the market is treated as a single, large unit. The allocation of the marketing budget and adjustment of service, price, and promotion can be adjusted more easily to the opportunities available than would be possible otherwise.

#### Market Segmentation Model One

The best and probably the simplest segmentation method to use is one based on the strengths of the transit marketing mix. By providing a mix certain to have a fairly broad appeal, and then dropping back to find segments that actually use the service, the transit manager can find valuable clues leading him to discover other useful segments. In short, marketing-mix action leads to the discovery of opportunity. The question, then, is: What potential strengths should be developed in the marketing mix?

Market Segmentation Model One, shown in Figure 11.1, focuses initially on two broad categories of trips that are best served by transit in which dependability in performance and flexibility--in terms of service area--are stressed. This market segmentation model is used where transit service is already provided, not in start-up situations.

In the following discussion of the model the letters on each paragraph correspond to the letters in Figure 11.1.

- a. Begin with an effort to understand the trip maker through research on basic demographic information and general knowledge of the community served.
- b. Consider important factors in consumer decision making.
  - \*\* Dependability or reliability.
  - \*\* Time cost.
  - \*\* Effort cost.
  - \*\* Money cost.
- c. Consider transit image as a part of the filtering process in consumer behavior; the better the image, the easier it will be to attract riders.
- d. Consider the transit service.
  - \*\* Quality of service: frequency, schedule convenience, equipment, and support facilities to serve the customer.
  - \*\* Access: route structure, interchange facilities, and ease of use.
  - \*\* Price: fares, fare structure, and fare collection methods.
  - \*\* Promotion: advertising, public information, and community relations.
- e. Transit role: the transit agency's managerial and operational strategy and tactics.
- f. Market research: after service has been operated for a time, conduct research to understand riders and nonriders better.
- g. Segments served: from market research, determine the segments that are served successfully.
- h. Segments not served: from market research, determine the segments that have potential but have not been attracted by the marketing mix used.
- i. Determination of strategy and action: determine future strategy and action to reach additional segments and maintain those currently served. Return to e.

In a nutshell, the strategy of the transit firm is to take action that anticipates the potential transit rider's concerns of service attributes (routes and schedules, equipment, maintenance, and so on) to maximize dependability

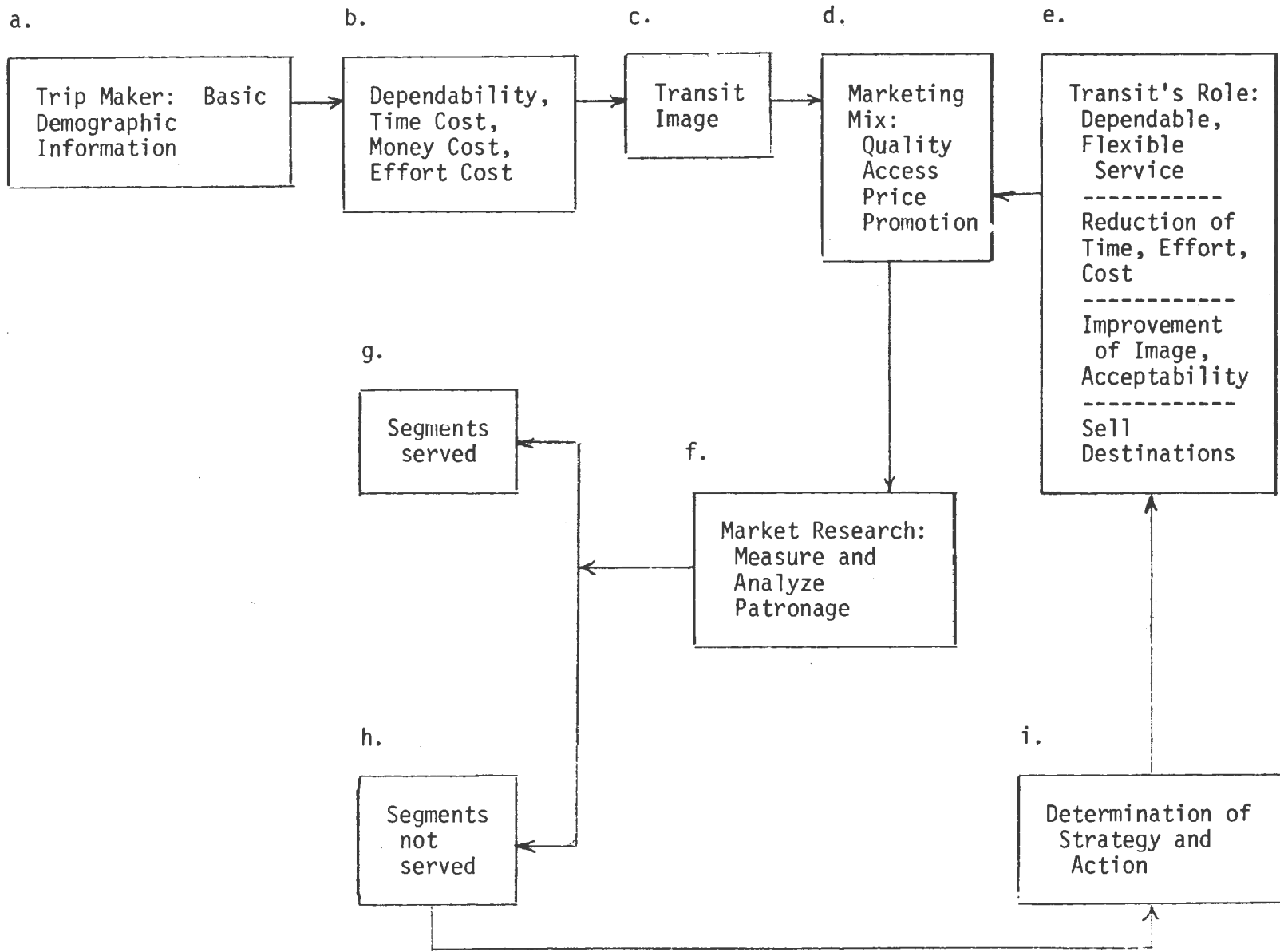


FIGURE 11.1 Market Segmentation Model One.

and minimize time, energy, and cost. Promotional work and pricing are manipulated in conjunction with the service to build image, inform the public, and encourage use.

In the successful use of the model, special attention should be paid to guaranteeing dependability and image building by use of well-trained drivers, well-maintained vehicles, and convenient schedules. Routes should be designed carefully to provide for maximum coverage of key residential areas and places of economic and social activity. The communication and control system is critical to maintaining dependable service. Transferring, when necessary, should be made as convenient as possible.

The action taken with the service attributes is strengthened by the promotional effort (advertising, public information, community relations); promotional effort is aimed principally at building an image of public acceptability, selling the dependability and flexibility of the service, and concentrating on the low time, energy and money costs of using the service. Strong thematic appeals should be aimed at overcoming the social stigma of using transit service.

This method of segmenting the market backs into the segments after the marketing action is taken. After the service is geared up and operating with the emphasis outlined above, marketing research is used to find the segments that are being served in terms of demographic, trip purpose, or other meaningful segmenting factors. Based on this research, transit management can determine what segments are satisfied and get clues about segments that are not being satisfied. Then decisions can be made on the elements of the marketing mix that must be adjusted to reach new segments or expand the grip of the transit enterprise on the segments of the market that do use the service.

#### Market Segmentation Model Two

Market segmentation also can be carried out by other methods. In general, they stress either (1) socioeconomic and demographic characteristics of the population or (2) trip purpose. Although more difficult to use effectively, models based largely on demographic characteristics are commonly used because some of the necessary information is usually easy to find. Use of models that rely heavily on demographic and trip purpose factors (often called modal split models by planners) are not recommended, unless they are modified by including behavioral-action constraints (time, energy and money costs of various actions), and by marketing-mix factors.

Market Segmentation Model Two is best used where no transit service is offered, or where substantial service



increases or major changes in a system are planned. census reports and local planning reports typically provide most statistical information on the demographic characteristics of a population. Trip purpose information is available from the routine origin/destination studies carried out by state highway departments. The major problem with using this approach is that often almost too much information is available and it can be used in so many ways that it may be difficult to handle. Furthermore, the categories useful to census takers, city planners, and highway planners may not produce segments of the market useful to a transit manager.

Moving from left to right in Figure 11.2 the combinations of demographic information (for example, a low-income, young woman, with a college education and access to a car, living on the north side of the city) are classified into discretionary and nondiscretionary trips, and then modified by estimated constraints on time, energy, and money. Many segment possibilities can be derived simply by figuring out various combinations of demographic factors and the general nature of the trip; estimates of the number of persons involved can be plugged in from available information. Speculation on the time, energy, and money cost of making a trip by transit, and the availability of time, energy, and money possessed by potential consumers, will provide clues to the product, price, and promotion necessary to tap selected segments.

If used before any transit service actually is operated--upon which firmer estimates may be based--the technique in Market Segmentation Model Two will provide ballpark estimates, but not precise information, on the number of persons who will use transit. Moreover, because the model depends on finding segments to deal with--none of them really certain before the fact--the transit manager may be confused or attempt to scatter his efforts too broadly. Nevertheless, Market Segmentation Model Two provides guidance and a place to start; it can be improved upon with experience, moving to the segmentation techniques shown in Market Segmentation Model One (see Figure 11.1).

#### Putting Market Segmentation into Action

An example of putting market segmentation into action will help explain the technique. The process begins by developing customer profiles of existing and potential user groups (see Table 11.1).

The proposed customer segments are picked out before putting market segmentation into use. The segments chosen are relatively broad but identifiable segments with sufficiently different characteristics for separation and segmentation. The proposed segments are:

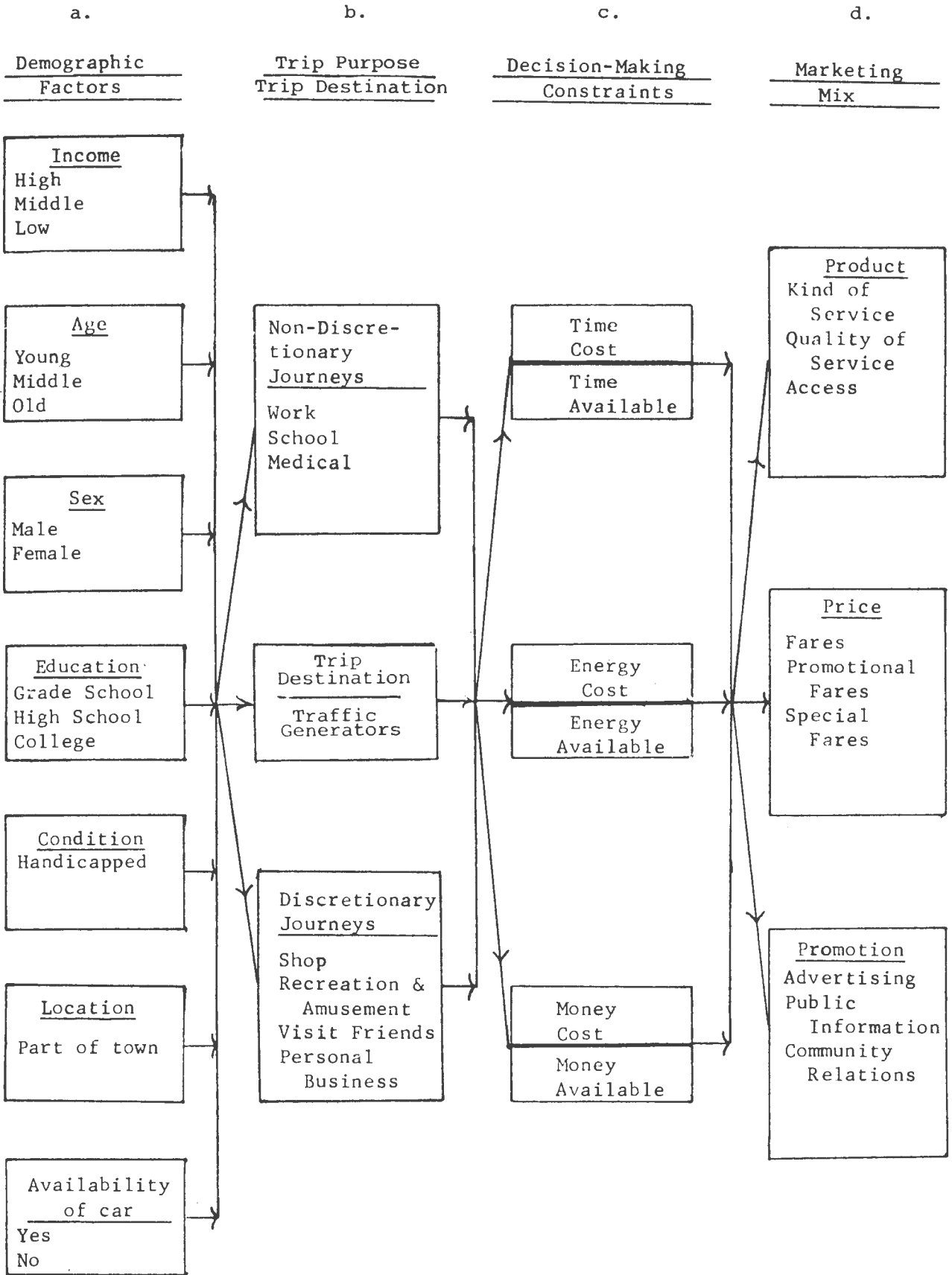


FIGURE 11.2 Market Segmentation Model Two.

TABLE 11.1 Customer Profiles of Existing and Potential User Groups

Segmentation Bases	Customer Segments				
	Manager/ Professional	Clerical	Inner City	Elderly	Suburban Housewife
Benefits					
Travel time savings <sup>1</sup>	H <sup>6</sup>	H	M	L	M
Dependability <sup>2</sup>	M	M	H	M	M
Cost savings <sup>3</sup>	L	M	H	H	L
Accessiblity <sup>4</sup>	H	H	L	H	H
Travel time options <sup>5</sup>	H	H	M	M	M
Purpose of trip <sup>7</sup>	work recreation	work shopping	work shopping	shopping medical	shopping recreation
Geography					
Origin <sup>8</sup>	suburb/cc	suburb/cc	cc	cc	suburb
Destination	CBD	CBD	suburb	cc/CBD	suburb
Potential frequency of weekly use					
Heavy (5 or more trips)	X	X			
Medium 2-4 trips)			X		
Light (1 trip)				X	
Nonuser (0 trips)					X
Usage time <sup>9</sup>	peak	peak	peak	off-peak	off-peak

TABLE 11.1 continued

Segmentation Bases	Customer Segments				
	Manager/ Professional	Clerical	Inner City	Elderly	Suburban Housewife
Demographics <sup>10</sup>					
Income (000)	\$15-20	\$7-9	\$3-5	\$3-6	\$12-16
Age	35-54	25-34	35-64	over 65	35-54
Education (years)	13-16	12-15	8-12	5-12	13-16
Availability of car	Yes	Yes	No	No	Yes

<sup>1</sup>Travel time savings: The reduction in the amount of time required for the user to travel from origin to destination.

<sup>2</sup>Dependability: the increase in the likelihood that the user's expected departure and arrival times coincide with the actual service provided.

<sup>3</sup>Cost savings: the monetary savings to the user from using transit service.

<sup>4</sup>Accessibility: the minimization of user effort required in getting to and from the transit stations.

<sup>5</sup>Travel time options: the number of alternative travel times available to the user for a given transit trip.

<sup>6</sup>Level of importance: H=high M=medium L=low

<sup>7</sup>Refers to primary trip of each customer segment.

<sup>8</sup>cc (urban area other than central business district), CBD = (central business district)

<sup>9</sup>Peak: 7:30 to 9:30 a.m. and 4:30 to 6:30 p.m.; off-peak: 9:30-4:40 a.m. and 6:30-7:30 p.m.

<sup>10</sup>Based on 1970 United States Census of Population.

1. Manager/professional: relatively well-off financially, educated, a car is usually available, time is of value, peak-hour travel, downtown-oriented trips from suburban or outlying urban area homes.
2. Clerical: white collar workers, generally middle class, car available, middle income, time is important, peak-hour travel, educated.
3. Inner city: low income, probably no car, little education, suburban job orientation, peak-hour travel.
4. Elderly: low income, relatively little education, difficulty in getting around physically, off-peak travel, probably no car.
5. Suburban housewife: middle to high income, car available, educated, off-peak travel.

Based on the customer profile and the proposed segments, strategies are developed that are expected to meet the varying needs of the different selected segments of the market. These are the basic elements of the marketing mix (see in Table 11.2). The use of this technique will allow the provision of service geared to the concept of market segmentation. The operations should, of course, be monitored continuously to find out exactly what is happening. With sufficient experience, changes may be made in the various schemes used to promote travel by mass transit. The segments may be more clearly defined, service and pricing adjustments may be made, different media may be tried to reach the segments, or the thematic material may be changed.

#### Market Research

In finding market segments, research is needed. Other informational needs, too, can be met only through research into the market served by a given transit firm. Some information, such as ridership and revenue figures, should be gathered on a routine basis and should not require special effort.

The more complicated research efforts are likely to require outside professional help, but simple information gathering probably can be handled by in-house personnel. Information on the city can be found by consulting the city planning agency--if there is one--or the census.

Conducting marketing research that involves digging out original sources often seems to be a mysterious process. Some research techniques are quite complex and require a

TABLE 11.2 Alternative Marketing Strategies--A Conceptual Format

Marketing Mix Elements	Manager/ Professional	<u>Customer Segments</u>			
		Clerical	Inner City	Elderly	suburban Housewife
<u>Service</u>					
Vehicle characteristics	standard capacity 40-60; air conditioned; carpeted	standard	standard	bus/van capacity; 10-25; air conditioned carpeted	bus/van
Routes	fixed	fixed	fixed	variable	variable
Hours	6a.m.-7p.m.	6a.m.-7p.m.	6a.m.-7p.m.	9a.m.-9p.m.	9a.m.-9p.m.
Direct/transfer	direct	primarily direct, except at major interchange points	transfer	direct	primarily direct, with inter-zone transfer
Arrival/departure times	fixed	fixed	fixed	flexible	flexible
Interval time (per route)	peak: 3/hour	peak: 3/hour	peak: 2/hour	2/hour	2/hour
Coverage	total metropolitan area	total metropolitan area	total metropolitan area	selected downtown locations	selected suburban locations

Shelter/ station density						
Origin	high	high	moderate	low	low	
Destination	moderate	moderate	moderate	low	low	
Availability of Station Parking	some	limited	unnecessary	unnecessary	unnecessary	
<u>Pricing</u>						
Fares	full	full	discount	discount	promotional	
Volume purchase discounts	yes yes	yes yes	no no	no no	no no	
<u>Promotion</u>						
Theme	service benefits, work activities	service, low price, social- izing	low price, dependability	low price, time flex- ibility, peer group inter- action	time/trip flexibility, cut auto use	
Media	spot television, business papers, local radio	spot television, local radio	local radio direct mail	direct mail, spot television	spot, TV, local radio, local newspaper	
Transit Information	Central metro- politan area information center	multiple ticket locations	mobile information centers	special operator	special operator	

highly skilled staff of researchers assisted by a computer. However, assembling original and otherwise unavailable information necessary for small-scale transit enterprises does not require the high degree of sophistication necessary in probing a national market. One major reason is that qualified managers understand their local market and its needs simply by being close at hand.

### Complaints

A useful source of information that may be forgotten is the complaint department. Any well-managed transit property should have a systematic procedure for handling customers' complaints. A simple analysis of the problems that crop up regularly can provide clues to needed service improvements.

### Information Requests

Another source of information is the telephone information service offered as part of the transit firm's public information program. An analysis of the requests for information might reveal marketing opportunities that might otherwise be neglected. For example, several hundred calls over a period of a month or two asking how to reach an ice skating rink is a sign that perhaps service should be provided if it is not offered already, or that promotional effort should be directed toward the pleasure of ice skating and how easy it is to get there on the bus. The inquiries also may be an indication that the maps, schedules, and other types of public information are not sufficiently clear.

Gathering the facts can be reasonably easy and inexpensive.

### Questionnaires

Probably the best data collecting device in terms of simplicity is a formal questionnaire, consisting of direct, undisguised questions. Any questionnaire must be pretested on a small-scale basis to make sure that the questions are properly worded and are not misleading. Relatively little skill is required to use questionnaires and, unless the questionnaire is used in an attempt to study the psychology of consumer motivation, it is generally not necessary to hire expensive, specialized outside personnel to interpret the data.

Designing the questionnaire. Designing good questionnaires is an art. Before discussing particular types of questionnaires to suit some basic information needs, it would be wise to discuss some guidelines:



1. Be brief. Only questions that relate to the objective(s) of the questionnaire should be asked. The shorter the questionnaire, the more likely one is to obtain cooperation from respondents. This fact must be balanced against the information required.
2. Ask realistic questions. Do not ask questions that cannot be answered either because they deal with information a respondent could not possibly remember (How many times did you say "hello" to the driver on Route 8 in 1956?), or because it is information the respondent would not answer (How many times have you had your driver's license revoked?).
3. Ask relevant questions. Avoid questions that are interesting but not relevant to the objective.
4. Word the questionnaire precisely. Choose a form easy to analyze. Close-ended questions have prescribed choices. (Which color do you like best: blue, orange, green or red?) Open-ended questions allow the respondent his own choice of words. (What is your favorite color?) Open-ended questions are much more difficult to analyze and must be used with considerable care in the absence of skilled personnel.
5. Choose wording carefully. Wording should be simple, direct, unambiguous, and unbiased.
6. Use an orderly sequence. The initial questions should help create interest; open-ended questions may be used here to get the respondent talking. Difficult or personal questions should be used toward the end. Neutral questions should be asked in a logical sequence.
7. Design an attractive format. Questionnaires that the respondent will see should be attractively printed.
8. Coordinate questions with other data. Income groupings, trip purpose data, and any other information on the questionnaire that is to be cross-checked with the Census, local planning reports, or state highway department reports, should be consistent with the categories used in those reports. For example, if local planning reports present income data in increments of \$2,000--such as \$0-\$1,999, \$2,000-\$3,999, and so on--the questionnaire should use the same breakdown.

Examples of various types of questionnaires, and how they may be used, are shown in Appendix 11B.

Drawing survey sample. The sample to be used in conducting survey research is important in terms of cost and accuracy. The sampling plan for a survey answers three

important questions regarding the sample unit, size, and procedures:

1. Who is to be surveyed, the decision maker or the person most likely to know?
2. How many persons are to be surveyed? For accurate estimates, use .5% to 1% of the total population of the relevant urban area; in the test work, a small sample of 50-150 people.
3. How will those surveyed be selected? For exploratory research, almost any rough means of finding the desired respondents will do. For accurate estimation, a probability sample is usually used. The small transit firm probably should use a good questionnaire and a reasonably fair means of getting a random sample (use of telephone book; 50th name in center column of every third page, for example), rather than spend money for a highly accurate probability sample. The extra accuracy is not likely to be worth the cost.<sup>1</sup>

Administering the questionnaire. There are several ways to conduct a survey: telephone, personal interview, mail, and panel discussion questionnaires.

- 1 Telephone interview. The telephone interview provides a quick and inexpensive way to gather information. A major defect is the limited amount of information that may be collected over the telephone, because a call rarely should take longer than 5 minutes to avoid too much intrusion into a respondent's time. Another problem is the bias that is involved in any telephone sample. Many residents in a community do not have a telephone, and many of those who should be reached do not have their numbers listed. Other means have to be used to reach them. Balanced against the deficiencies, the telephone interview technique has the advantages of being able to gather quickly a relatively large sample at low cost and to interview in the evening, when it is often difficult to get people to respond to a personal interview. Furthermore, experience shows that people are often more willing to talk over the telephone than at a face-to-face interview.
2. Personal interview. The personal interview gives the researchers a better opportunity to obtain an accurate sample of the population or of a particular population. More information usually can be gathered in a personal interview, and sizing up the respondent personally offers the opportunity to alter the questions slightly

to meet a given situation. On the minus side, personal interviews are more costly to conduct than telephone interviews because it takes more interviewers to complete the interviews and there usually is considerable time needed to travel from interview to interview. The interviewer also may bias the response by his personality or through lack of training. Great care must be taken in selecting interviewers, not only for their skill, but because they will represent the transit enterprise to the public.

3. Mail. The mail questionnaire often is advocated as being a low-cost way of gathering data. Such questionnaires provide a means of asking for a considerable amount of information that the respondent may give at his leisure. Unfortunately, there is little control over the sample, and the response rate to such questionnaires is generally quite low. Typically, only those persons with strong opinions will bother to complete the questionnaire. Response can be increased substantially by follow-up mailings, telephone calls, or the offer of some reward for completion. On this latter point, a transit firm could offer a reward of, for example, four free tokens for every completed questionnaire returned. By the time extra mailings, telephone calls, and premiums are paid for, it may turn out that the mail questionnaire is not so inexpensive after all.
4. Panel. The use of a panel provides another means of gathering information. A continuing panel set up by the transit agency could be used to monitor the firm's effectiveness in all aspects of its performance. The panel should be a random sample of the population including both users and nonusers. This group would be quizzed regularly. The questioning might be accomplished in person, by telephone, or mail, or through a weekly travel diary, in which the panel members might record their trips, impressions, and so forth. The usual problems of sample selection and response bias would be present, but the panel could provide a regular flow of information at relatively low cost.

The methods briefly outlined above are effective for gathering basic factual information fairly accurately and easily. None of these methods is likely to provide an accurate reading of the motivation behind the actions of the respondents.

In terms of getting maximum mileage for the research dollar, probably the best methods are the on-board type of personal interview, the telephone interview, and the panel.

The bus interview provides direct contact and feedback from known patrons of transit service. The telephone method is a means of covering a more general population quickly. The use of a panel may reveal trends over time that may be highly important to transit management. Home interviews are likely to produce the greatest amount of information, but it must be remembered that they are relatively costly.

If great accuracy and depth are believed to be necessary, a professional research firm may be hired. Such firms can design a questionnaire, conduct a survey and analyze the results. Another means of getting professional help, especially for a publicly owned transit undertaking, is to use the services and professional skill of the city's planning department.

Note for Chapter 11

<sup>1</sup>Many books have been written on sampling and sampling procedures. It is impossible to do justice to the subject in this brief space. A book discussing simple and straight forward sampling methods should be consulted. See the bibliography for this chapter.



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The numbers in parenthesis are NTIS order numbers.



## APPENDIX 11A

### THE MARKETING PROGRAM: FARE COLLECTION

#### Introduction

The actual act of collecting the fare is as much a part of the total pricing package of the marketing mix as is the fare itself. As noted earlier, the overt nature of usual fare collection methods may make the charges seem more burdensome than they actually are. There must be steady progress toward less irksome collection systems through the use of passes, credit cards, and so on.

#### Cash Fares

Cash fares may be collected by hand, where all money is handled directly by the driver. However, the use of a fare box is probably the most common method of fare collection in the United States. Some fare boxes provide only a locked vault from which the driver cannot withdraw any money to make change. Other fare boxes contain counting devices that register the amount of money deposited and recirculate the change; the driver does have access to the money in such a fare box.<sup>1</sup> Still other fare boxes will register the fares deposited, but the money goes into a locked vault that is inaccessible to the driver.

Because of violent attacks on bus drivers in a serious wave of robberies in larger cities during the late 1960s, many transit firms have moved to an exact-fare plan. Under such plans the driver does not carry change. Persons without the exact fare to place in the locked fare box are given a receipt, which they must take or send to a disbursing agent to receive their change. The advantages and disadvantages of such exact-fare plans are:

1. It has increased the safety for drivers. At one time, drivers may have carried \$100 or more in change, which made the robbery of a bus fairly lucrative. The use of locked fare boxes makes it impossible for even the driver to get the money out. The fare box vault can be removed only at the garage.

2. The exact-fare plan speeds passenger flow.
3. The necessity of having the exact change may discourage some occasional riders from using the service.
4. Special personnel and facilities are needed to store and handle the lock-type fare boxes.

### Tickets and Tokens

The use of tickets and tokens is common in many parts of the United States. Tickets and tokens usually are offered to the consumer at a slight reduction in the price per ride. They offer some advantages for the transit operator:

1. Money is collected in advance of the actual ride, which can improve the transit agency's cash position.
2. Faster loading of vehicles is possible because the exact fare is always on hand for token or ticket users.

A slight reduction in the price per ride for tokens or tickets may be justified as payment for use of the patron's money before he uses the service. However, if tickets or tokens do provide for a considerably reduced fare, the question must be raised as to whether their use merely adds to peak demand. Perhaps the use of low-cost tickets and tokens should be restricted to off-peak uses of the service. In any event, the use of such means should be considered carefully in terms of how it fits into the marketing mix and how it affects costs, revenues, and ridership.

### Passes

Passes sold for a given time period and permitting an unlimited number of rides are not used to a great extent in American transit operations, yet they offer some notable advantages in helping to provide an attractive package of transit service. The patron need not part with cash or a cash substitute (token or ticket) each time a trip is made. Because passes usually are merely shown to the driver rather than being punched or marked in any way, their use speeds loading and is about as painless a means of collecting a fare as is possible.

As with tokens, if passes are priced too far below the regular fare for an average number of rides, they may seriously dilute revenue, unless they help create a great increase in the number of patrons. It is, however, quite

reasonable to charge passholders a bit less per average ride because the patron is asked to surrender a large sum of money when the pass is purchased. As with tokens and tickets, the transit firm has the advantage of use of the patron's money in advance of the time he actually uses the service.

If passes are to be used as an important part of the marketing mix, it is wise to consider the various classes of passes and the proper sets of pass prices to match the service involved.

1. Unconditional passes. Some passes may be good for use at any time of the day, any time of the week. Because these provide the greatest advantages and flexibility for the patron, they should not be priced at too low a rate.
2. Peak-hour passes. Except perhaps as a promotional device for services just getting underway, it seems unwise to use passes to promote peak-hour travel. To the transit operator, the main advantage of passes would be in making the overall package of transit more attractive to patrons in general and also in speeding loading. If the average time to load pass-holding patrons at rush hour is considerably less than the norm, it may act to improve the quality of the ride by making the trip faster. It may also cut the cost of providing the service if increased operating speed leads to reduced manpower and equipment needs.
3. Off-peak passes. Such passes, which may offer a considerable reduction from the standard fare, would be good only in off-peak hours, say from 9:30 a.m. to 4 p.m. on weekdays, or on weekends or Sundays only. They would help to increase the use of the transit service during generally slack times of patronage. An alternative would be to reduce all fares at off-peak times.
4. Pass/cash combinations. The pass, purchased either on a weekly or monthly basis, is used in conjunction with a cash fare, which is lower than the regular base fare. The pass is shown and the fare deposited in the fare box. Such a system can lower the average fare substantially for riders who use the service 10 or more times per week.
5. Daily passes. This type of pass is good for one day only and is usually priced at twice the regular fare. It may be in the form of a ticket that is shown to the driver on subsequent trips, or as a transfer that may be used for an entire day. Such a pass can encourage use

of transit during the lunch hour by patrons who regularly ride the bus to and from work and who wish to do some shopping at midday. It may not increase revenues from a given patron, but it provides another means of making transit use attractive. Some transit properties use this device on Sundays or holidays, perhaps allowing two persons to travel on one daily pass, to stimulate patronage at otherwise low periods of transit use.

If the use of passes is to be a major part of the marketing mix, acquiring a pass should be made as easy as possible. Passes should be available in a number of businesses around the city, perhaps for sale by each driver, and through the mail from the transit firm. A terminal or major information center located in a busy spot is an excellent place to sell passes. In some places, passes are sold to major employers who may give them to their employees or sell them at a discount. In addition to being an excellent promotion of transit use, free or discounted passes can help an employer provide a fringe benefit for employees, or provide equity where free parking is available to employees owning cars.

Obviously, the use of passes entails certain problems, such as monitoring their use. Passes usually are sold for use by one person; this provision can be abused very seriously. It is not unknown for one pass holder to board a vehicle and hand the pass out the window to another rider, who in turn hands it out the window to another, and so on. One way to control this situation would be to charge a lower price for passes that include the patron's picture. Current methods of providing identification cards quickly and inexpensively could make buying a picture pass not much more difficult than buying an ordinary one. One problem, of course, is that they are not sold easily on board buses.

Another problem with passes is the loss of revenue. Unless the sale of passes is promoted strongly, passes may not encourage enough patrons to make up the possible loss of revenue. This matter must receive careful consideration, and action on the use of passes should be well-planned and subject to painstaking control and reevaluation. Management and policymakers should have a definite objective of either increasing patronage or increasing revenues before embarking on a pass program.

#### Credit Card and Other Electronic Systems

Like the use of passes, the use of credit cards is attractive because it does not involve the act of parting with cash at the time of the ride. Unlike the pass, however, the credit card fare collection system would levy

the charges after the act of travel, probably on a monthly basis. In use, the card would simply be inserted into a fare register, which would note that a ride was being taken by a particular patron.

The advantage of the credit card system goes beyond that of mere fare collection. Traffic data could be collected by the registering of patron numbers along with the date and place of boarding and alighting. The credit card system would permit differential pricing by time of day, discounts and incentives on certain trips and, by keying in boarding and alighting places, a distance-based fare system. Furthermore, if the credit card system is part of a general credit card program in a given city or region, it would have the advantage of the promotional effort by others who use the credit card system. This factor would greatly ease the burden of promotion and advertising for the transit operation.

The use of credit cards seems to offer many advantages. However, whether the credit card system would encourage use and increase the value of transit service enough to make it worthwhile to the consumer is a question that should be answered. Another question is whether it is easier to use a credit card, registering device, and computer printout billing, rather than some other system, such as the ordinary pass. Currently, no operating credit card systems are in use, although several are expected to be developed shortly.<sup>2</sup>

Notes for Appendix 11A

<sup>1</sup>Some registering fare boxes are capable of storing data on the various kinds of passenger and fares; they can be used as part of the data collection system.

<sup>2</sup>Several automatic fare collection systems are in use in conjunction with rapid transit systems, but these are based on the principle of a prepaid fare value, stored on a magnetic card. The collection device subtracts a fare each time a ride is taken.

## APPENDIX 11B

### QUESTIONNAIRES FOR MARKET RESEARCH

The five questionnaires shown below are examples of various types that may be used. They are shown only as examples and are not intended to be either definitive or as an exhaustive display of questionnaire variety.

Questionnaire 1 is an example of the close-ended type (see Figure 11B.1) [1]. It is intended to be administered by an interviewer in the home of the respondent. It is structured so that only a limited number of answers are possible for each question, thus simplifying collection and categorization of the data. This type of questionnaire can be used to find out who is using transit and who is not. It can also be used to discover at least some of the reasons for use or nonuse. Personal household interviews tend to be relatively long, but this kind of questionnaire is adapted easily to any reasonable length. It should be noted that the form is coded so that a keypunch operator can work directly from it. Electronic data processing is not necessary in analyzing questionnaires, but it can speed up the work and make it much easier.<sup>1</sup>

Questionnaire 2 is an example of an open-ended questionnaire (see Figure 11B.2) [1]. It also is intended for use in home interview situations. In this type of questionnaire, the respondent is free to give any answer he wishes. This method has the advantage of digging out responses that might not fit neatly into the close-ended type of questionnaire. It may provide valuable insight on who is not using transit service and why not. However, the open-ended questionnaire is more difficult to analyze than the close-ended type because of the variety of responses possible. Much editing is required, as well as considerable subjective judgment on the part of the editor. Sometimes this type of questionnaire is used in a small-scale, preliminary survey to help in the preparation of the close-ended questionnaire that is to be used in the main survey.

Questionnaire 3 is an example of a short questionnaire designed to be administered by an interviewer to a bus

passenger (see Figure 11B.3). This kind of questionnaire is used to find out more information about the patrons of a given route, and it can be used to develop patronage profiles for an entire system. This kind of approach is needed to find who actually is being served. It is limited to the amount of information that may be collected at one time because of the circumstances of the interview. A series of related interviews with many respondents, conducted over time on a wide variety of questions, can provide a broad base of information, without overburdening any one patron. Note that the response possibilities are coded. The street intersections involved in questions 1, 2, 4, and 5 also are coded when the questionnaires are edited. Code numbers may be assigned to principal intersections and to various parts of a city for quick identification and easy analysis by computer.

Questionnaire 4 is designed to be filled out by a respondent on his own, either while on the bus or later at his home (see Figure 11B.4). No interviewer is involved; the driver hands the questionnaire to each passenger who boards the bus. Therefore, the form is necessarily short and to the point, and is designed to be as unambiguous as possible. The completed questionnaire may be placed in a box on the bus or returned by mail. (The reverse side of the questionnaire card is a business reply postcard.) This means of collecting information is relatively easy; but, because there is no way to control the sample, the results are somewhat uncertain.

Questionnaires 3 and 4 can be used only to find out more about patrons of transit. Home, telephone, or other kinds of interviews of nonusers are necessary to do a complete research job.

Questionnaire 5 is designed for use in a telephone interview (see Figure 11B.5). It is short and to the point to save time. Again, the form is coded to ease the checking and keypunching process.

The usefulness of a questionnaire depends upon the relevance of the questions asked and the ability to tabulate and analyze the results. A clear idea of the objective of a given questionnaire, plus experience, will help in formulating questions. The use of electronic data processing, easily and inexpensively handled by the many computer service bureaus across the country, is an aid to tabulation. Analysis is easier and more meaningful if care is used to collect data that can be compared with data from other sources.



HOME INTERVIEW QUESTIONNAIRE

Area: \_\_\_\_\_  
 Interviewer No.: \_\_\_\_\_

Date: \_\_\_\_\_  
 Time: \_\_\_\_\_

Hello, is this Mr. (Mrs.) \_\_\_\_\_ (head of household)? I am \_\_\_\_\_ from the \_\_\_\_\_ Transit Authority. We are making a study of transit and we need your opinion. Would you please respond to the following questions?

- Where do members of your family travel to most often? Or, where do you travel to frequently?  
 What is the purpose of the journey?  
 How often do you go there?  
 What time of day do you travel to these places? Return?  
 How do you travel?

DESTINATION	PURPOSE	HOW OFTEN	WHAT TIME OF DAY		HOW DO YOU TRAVEL
			Go	Ret	
1. Downtown	1. Work	1. 5/week	1. 5:00AM-7:00AM		1. Car
2. North Side <input type="checkbox"/> 1	2. School <input type="checkbox"/> 2	2. 2/week <input type="checkbox"/> 3	2. 7:00AM-9:00AM	<input type="checkbox"/> 4 <input type="checkbox"/> 5	2. Car Pool <input type="checkbox"/> 6
3. South Side	3. Medical	3. 1/week	3. 9:00AM-11:30AM		3. Bus
4. East End <input type="checkbox"/> 7	4. Visit <input type="checkbox"/> 8	4. 2/month <input type="checkbox"/> 9	4. 11:30AM-1:30PM	<input type="checkbox"/> 10 <input type="checkbox"/> 11	4. Taxi <input type="checkbox"/> 12
5. West End	Friends	5. 1/month	5. 1:30PM-4:00PM		5. Walk
6. Other <input type="checkbox"/> 13	5. Amusement <input type="checkbox"/> 14	6. 4/year <input type="checkbox"/> 15	6. 4:00PM-6:30PM	<input type="checkbox"/> 16 <input type="checkbox"/> 17	6. Other <input type="checkbox"/> 18
	6. Shopping	7. 2/year	7. 6:30PM-11:00PM		
	7. Other		8. 11:00PM-5:00AM		

- How many people are there in your household over 16 years of age?
- How many people are there in your household under 16 years of age?
- How many people are there in your household over 65?

NO.	MALE	FEM
<input type="checkbox"/> 19	<input type="checkbox"/> 20	<input type="checkbox"/> 21
<input type="checkbox"/> 22	<input type="checkbox"/> 23	<input type="checkbox"/> 24
<input type="checkbox"/> 25	<input type="checkbox"/> 26	<input type="checkbox"/> 27

5. How many blocks is your house from the nearest bus stop? (NOTE: 1 Mile = 12 blocks)  28,  29

FIGURE 11B.1 Questionnaire 1: Example of close-ended questionnaire.

6. How many usable cars do you have at home? (IF ANSWER IS ZERO GO TO QUESTION 13)

7. Who is the principal user of CAR #1?

8. Who is the principal user of CAR #2?

9. Who is the principal user of CAR #3?

10. What is the primary use of CAR #1?

11. What is the primary use of CAR #2?

12. What is the primary use of CAR #3?

13. What do you dislike most about the kinds of people who might be seated next to you on the bus?

<input type="text" value="37, 38"/>	<input type="text" value="39, 40"/>
-------------------------------------	-------------------------------------

(limit two)

14. What is your biggest complaint about the transit system?

<input type="text" value="41, 42"/>	<input type="text" value="43, 44"/>
-------------------------------------	-------------------------------------

(limit two)

1. Husband  
2. Wife  
3. Son  
4. Daughter  
5. Other (specify) \_\_\_\_\_

1. To go to work downtown  
2. To go to work other than downtown  
3. For business  
4. To go shopping downtown  
5. To go shopping other than downtown  
6. To go to school downtown  
7. To go to school other than downtown  
8. Other (specify) \_\_\_\_\_

1. Smoking  
2. Drinking  
3. Racial or Ethnic Origin  
4. Health  
5. Old People  
6. Children  
7. Teenagers  
8. Rude  
9. Nasty  
10. Dirty  
11. Loud  
12. Pushy  
13. Nothing  
14. Don't Know

1. Cost  
2. Undependable  
3. Crowded  
4. Schedules  
5. Routes  
6. Weekend Service  
7. More Buses  
8. Slow  
9. Stops  
10. More Suburban Service  
11. Discourteous Drivers  
12. More Off-Peak Service  
13. Nothing  
14. Don't Know

FIGURE 11B.1 Questionnaire 1: continued.

15. Does anyone in your family find it difficult or impossible to get to locations for employment, medical services, recreation, or for visiting friends?

1. Yes  
 45 2. No

If the answer is yes, would you please describe two trips which members of your family find difficult?

DESTINATION		PURPOSE		HOW OFTEN		WHAT TIME OF DAY Go		HOW DO YOU TRAVEL	
1. Downtown		1. Work		1. 5/week		1. 5:00AM-7:00AM		1. Car	
2. North Side	46	2. School	47	2. 2/week	48	2. 7:00AM-9:00AM	49	2. Car Pool	50
3. South Side		3. Medical		3. 1/week		3. 9:00AM-11:30AM		3. Bus	
4. East End	51	4. Visit Friends	52	4. 2/month	53	4. 11:30AM-1:30PM	54	4. Taxi	55
5. West End		5. Amusement		5. 1/month		5. 1:30PM-4:00PM		5. Walk	
6. Other		6. Shopping		6. 4/year		6. 4:00PM-6:30PM		6. Other	
		7. Other		7. 2/year		7. 6:30PM-11:00PM			
						8. 11:00PM-5:00AM			

16. What age group are you?

1. Under 16      3. 26-35      5. 51-65      7. No response  
 56 2. 16-25      4. 36-50      6. Over 65

17. Are you a licensed driver?

1. Yes  
 57 2. No

FIGURE 11B.1 Questionnaire 1: continued.

18. And finally Mr. (Mrs.) \_\_\_\_\_, about how much is the total annual income of your household?

58
----

- |                       |                       |                          |
|-----------------------|-----------------------|--------------------------|
| 1. Less than \$2,999  | 3. \$5,000 to \$7,999 | 5. \$10,000 to \$11,999. |
| 2. \$3,000 to \$4,999 | 4. \$8,000 to \$9,999 | 6. More than \$12,000    |

Thank you very much! (PLEASE FILL IN THE FOLLOWING INFORMATION AFTER THE INTERVIEW)

Name \_\_\_\_\_ Race \_\_\_\_\_ Phone \_\_\_\_\_

Street Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

REMARKS \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

FIGURE 11B.1 Questionnaire 1: continued.

Interviewer _____ Date _____ <p style="text-align: center;">TRAVEL SURVEY QUESTIONNAIRE OF HEAD OF HOUSEHOLD</p>	
Information is to be completed by the interviewer: circle the correct answer or fill in the blank in response to each question.	
Name of Interviewee: Mr. _____ Phone _____ Miss _____ Mrs. _____ Street Address _____ City _____ State _____ Age _____ Race _____	
1. Have you noticed any changes in the public transportation system during the past year? <span style="float: right;">Yes No</span>	4. What particular types of changes or modifications in the existing public transportation system would be of immediate benefit to you? _____ _____ _____
2. What kinds of changes have you noticed? _____ _____ _____	
3. Do the existing public transportation services satisfy most of your travel needs? <span style="float: right;">Yes No</span>  If no, why? _____ _____ _____ _____	5. If you were to make a trip in the city to a destination you had never been to previously, how would you find out how to get there and how would you get there? _____ _____ _____
_____ _____	6. What is the size of the household or family where you live? (The number of persons.) _____

FIGURE 11A.2 Questionnaire 2: Example of open-ended questionnaire.



TO MEASURE THE SUCCESS OF Route \_\_\_ WE NEED YOUR ANSWERS TO THE FOLLOWING QUESTIONS. SINCE WE WANT TO RECORD THE TRIPS IN BOTH DIRECTIONS, WE'LL BE ASKING YOU TO FILL OUT A QUESTIONNAIRE COMING AND GOING. THANK YOU FOR YOUR PATIENCE AND COOPERATION!

1. Where did you come from before getting on the Route \_\_\_ bus?  
 ..... & ..... 1-3  
 Nearest Street Intersection City  
 Was this your home? Yes  1 No  2 4

2. Where did you get on the Route \_\_\_ bus?  
 ..... & .....  
 Nearest Street Intersection City 5-7

3. How did you get to the bus stop where you got on the Route \_\_\_ bus?  
 Walk  1  
 Auto  2  
 Other bus  3  
 If other bus, what line? \_\_\_\_\_ 4 8-9

4. Where will you get off the Route \_\_\_ bus?  
 ..... & .....  
 Nearest Street Intersection City 10-12

5. Where is the place you are going?  
 ..... & ..... 13-15  
 Nearest Street Intersection City  
 Is this your home? Yes  1 No  2 16

6. How will you get to the place you are going after leaving the Route \_\_\_ bus?  
 Walk  1  
 Auto  2  
 Other bus  3  
 If other bus, what line? \_\_\_\_\_ 4 17-18

7. What are the reasons for your travel today? (If appropriate, check more than one box)  
 Work or related business  1  
 Shopping  2  
 School  3  
 Recreation or entertainment  4  
 Personal business or appointment  5 19

8. How many cars in operating condition do you have in your household?  
 No cars  1  
 One car  2  
 Two cars  3  
 3 or more  4 20

(PLEASE TURN OVER)

FIGURE 11B.3 Questionnaire 3: Example of on-board questionnaire.

<p>9. Could you have used a car to make this trip?  Yes <input type="checkbox"/> 1 No <input type="checkbox"/> 2 <span style="float: right;">21</span></p>	<p>15. How many persons, including yourself,  live in your household?  (Please write number in box) <input type="text"/> <span style="float: right;">28-29</span></p>
<p>10. Do you have a driver's license?  Yes <input type="checkbox"/> 1 No <input type="checkbox"/> 2 <span style="float: right;">22</span></p>	<p>What is your total household income per month?  \$200 or less <input type="checkbox"/> 1  \$201 to \$500 <input type="checkbox"/> 2  \$501 to \$800 <input type="checkbox"/> 3  \$801 or more <input type="checkbox"/> 4 <span style="float: right;">30</span></p>
<p>11. How frequently do you ride the Route _____ bus?  4-6 days per week <input type="checkbox"/> 1  1-3 days per week <input type="checkbox"/> 2  Less than 3 days per month <input type="checkbox"/> 3 <span style="float: right;">23</span></p>	<p>Are you? <span style="margin-left: 100px;">Mexican-American</span> <input type="checkbox"/> 1  <span style="margin-left: 100px;">Black</span> <input type="checkbox"/> 2  <span style="margin-left: 100px;">Oriental</span> <input type="checkbox"/> 3  <span style="margin-left: 100px;">White or other</span> <input type="checkbox"/> 4 <span style="float: right;">31</span></p> <p style="text-align: right;"><b>THANK YOU!</b></p>
<p>12. Are you? Male <input type="checkbox"/> 1 Female <input type="checkbox"/> 2 <span style="float: right;">24</span></p>	<p>Bus Schedule No. ....32-34  Destination.....35-37</p>
<p>13. To what age group do you belong?  17 or under <input type="checkbox"/> 1  18 - 24 <input type="checkbox"/> 2  25 - 44 <input type="checkbox"/> 3  45 - 64 <input type="checkbox"/> 4  65 or over <input type="checkbox"/> 5 <span style="float: right;">25</span></p>	<p>Time bus left end of line _____ <span style="margin-left: 20px;">AM</span> <span style="margin-left: 20px;">PM</span> 38-42</p>
<p>14. Are you? (If appropriate, check more than one box)  A student <input type="checkbox"/> 1  A housewife <input type="checkbox"/> 2  Retired <input type="checkbox"/> 3  Unemployed or seeking work <input type="checkbox"/> 4  Employed <input type="checkbox"/> 5 <span style="float: right;">26-27</span></p>	<p>Interviewer's name ..... 43</p>

FIGURE 11B.3 Questionnaire 3: continued.



YOU CAN HELP IMPROVE BUS SERVICE BY ANSWERING ALL OF THE FOLLOWING QUESTIONS. THEN DROP IN CONTAINER AT DOOR, OR RETURN TO INTERVIEWER. (IF YOU DO NOT COMPLETE CARD HERE, PLEASE FINISH LATER AND DROP IN ANY MAIL BOX. NO POSTAGE REQUIRED.)

THANK YOU

1. WHERE DID YOU GET ON THIS BUS?  
 \_\_\_\_\_ & \_\_\_\_\_  
 STREET INTERSECTION CITY OR TOWN

2. HOW DID YOU GET TO THE BUS STOP WHERE YOU BOARDED THIS BUS? (Check One)  
 WALK  1  
 AUTO  2  
 OTHER BUS  3

3A. WHERE DID YOU COME FROM BEFORE GETTING TO THE BUS STOP? (STREET ADDRESS OR NAME OF BUILDING)  
 \_\_\_\_\_  
 STREET ADDRESS OR NAME OF BUILDING CITY OR TOWN

3B. WAS THIS YOUR HOME? (Check One) YES  1 NO  2

4. WHERE WILL YOU GET OFF THIS BUS?  
 \_\_\_\_\_ & \_\_\_\_\_  
 STREET INTERSECTION CITY OR TOWN

5. HOW WILL YOU GET TO YOUR DESTINATION AFTER LEAVING THIS BUS? (Check One)  
 WALK  1  
 AUTO  2  
 OTHER BUS  3

6A. WHERE IS THE PLACE YOU ARE GOING? (STREET ADDRESS OR NAME OF BUILDING)  
 \_\_\_\_\_  
 STREET ADDRESS OR NAME OF BUILDING CITY OR TOWN

6B. IS THIS YOUR HOME? (Check One) YES  1 NO  2

7. WHAT IS THE PURPOSE OR YOUR TRAVEL TODAY? (If appropriate check more than one box)  
 WORK OR RELATED BUSINESS.....  29  
 SHOPPING.....  30  
 SCHOOL.....  31  
 SOCIAL, RECREATION OR ENTERTAINMENT  32  
 PERSONAL BUSINESS OR APPOINTMENT...  33

8. HOW MANY CARS IN OPERATING CONDITION DO YOU HAVE IN YOUR HOUSEHOLD? (Check One)  
 NO CARS.....  1  
 ONE CAR.....  2  
 TWO CARS.....  3  
 3 OR MORE.....  4

9. COULD YOU HAVE USED ONE OF THESE CARS FOR THIS TRIP? (Check One) YES  1 NO  2

10. DO YOU HAVE A DRIVERS LICENSE? (Check One) YES  1 NO  2

11. HOW FREQUENTLY DO YOU RIDE THIS BUS? (Check One)  
 4 - 7 DAYS PER WEEK.....  1  
 1 - 3 DAYS PER WEEK.....  2  
 LESS THAN 3 DAYS PER MONTH.....  3

12. ARE YOU? (Check One) MALE.....  1 FEMALE.....  2

13. TO WHAT AGE GROUP DO YOU BELONG? (Check One)  
 17 OR UNDER.....  1  
 18 - 24.....  2  
 25 - 44.....  3  
 45 - 64.....  4  
 65 OR OVER.....  5

14A. ARE YOU? (If appropriate check more than one box)  
 A STUDENT.....  40  
 A HOUSEWIFE.....  41  
 UNEMPLOYED OR SEEKING WORK.....  42  
 RETIRED.....  43  
 EMPLOYED.....  44

14B. IF EMPLOYED, EXACTLY WHAT DO YOU DO?  
 \_\_\_\_\_

15. HOW MANY PERSONS LIVE IN YOUR HOUSEHOLD? (Write number in box)  46

16. WHAT IS YOUR TOTAL HOUSEHOLD INCOME PER MONTH? (Check One)  
 \$200 OR LESS.....  1  
 \$200 TO \$500.....  2  
 \$500 TO \$800.....  3  
 \$800 OR MORE.....  4

17. ARE YOU? (Check One)  
 MEXICAN - AMERICAN.....  1  
 NEGRO.....  2  
 ORIENTAL.....  3  
 WHITE OR OTHER.....  4

FOR OFFICE USE ONLY

In Out Time Sched. No. No 00001

30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49

421

FIGURE 11B.4 Questionnaire 4: Example of on-board, self-administered questionnaire.

Interviewer _____	Date _____																
<p>TELEPHONE INTERVIEW QUESTIONNAIRE OF HEAD OF HOUSEHOLD</p> <p>Good (morning, afternoon, evening); I would like to speak to the head of the household please. I am _____ calling for the _____ Transit Authority. I would like to ask some questions which will help us provide better transit service.</p>																	
<p>1. How many people in your household are:</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border: 1px solid black; width: 50px; height: 20px; text-align: center; vertical-align: middle;">1</td> <td style="padding-left: 10px;">Over 16 years of age?</td> </tr> <tr> <td style="border: 1px solid black; width: 50px; height: 20px; text-align: center; vertical-align: middle;">2</td> <td style="padding-left: 10px;">Over 65 years of age?</td> </tr> <tr> <td style="border: 1px solid black; width: 50px; height: 20px; text-align: center; vertical-align: middle;">3</td> <td style="padding-left: 10px;">Under 16 years of age?</td> </tr> </table>	1	Over 16 years of age?	2	Over 65 years of age?	3	Under 16 years of age?	<p>5. How often do you use the bus?</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border: 1px solid black; width: 50px; height: 20px; text-align: center; vertical-align: middle;">9</td> <td style="padding-left: 10px;">1. Five times per week</td> </tr> <tr> <td></td> <td style="padding-left: 10px;">2. Two-four times per week</td> </tr> <tr> <td></td> <td style="padding-left: 10px;">3. Once a week</td> </tr> <tr> <td></td> <td style="padding-left: 10px;">4. Less than once a week</td> </tr> <tr> <td></td> <td style="padding-left: 10px;">5. Never</td> </tr> </table>	9	1. Five times per week		2. Two-four times per week		3. Once a week		4. Less than once a week		5. Never
1	Over 16 years of age?																
2	Over 65 years of age?																
3	Under 16 years of age?																
9	1. Five times per week																
	2. Two-four times per week																
	3. Once a week																
	4. Less than once a week																
	5. Never																
<p>2. How many blocks is it to the nearest bus stop? (NOTE: 1 mile = 12 blocks)</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border: 1px solid black; width: 50px; height: 20px; text-align: center; vertical-align: middle;">4-5</td> </tr> </table>	4-5	<p>6. Where do you most frequently go when you use the bus?</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border: 1px solid black; width: 50px; height: 20px; text-align: center; vertical-align: middle;">10</td> <td style="padding-left: 10px;">1. Downtown</td> </tr> <tr> <td></td> <td style="padding-left: 10px;">2. North Side</td> </tr> <tr> <td></td> <td style="padding-left: 10px;">3. South Side</td> </tr> <tr> <td></td> <td style="padding-left: 10px;">4. East Side</td> </tr> <tr> <td></td> <td style="padding-left: 10px;">5. West Side</td> </tr> <tr> <td></td> <td style="padding-left: 10px;">6. Major shopping center</td> </tr> <tr> <td></td> <td style="padding-left: 10px;">7. Other (specify) _____</td> </tr> </table>	10	1. Downtown		2. North Side		3. South Side		4. East Side		5. West Side		6. Major shopping center		7. Other (specify) _____	
4-5																	
10	1. Downtown																
	2. North Side																
	3. South Side																
	4. East Side																
	5. West Side																
	6. Major shopping center																
	7. Other (specify) _____																
<p>3. What bus route is that?</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border: 1px solid black; width: 50px; height: 20px; text-align: center; vertical-align: middle;">6-7</td> </tr> </table>	6-7	<div style="height: 100%;"></div>															
6-7																	
<p>4. Do you use the bus? (If no, go on to Question 8.)</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border: 1px solid black; width: 50px; height: 20px; text-align: center; vertical-align: middle;">8</td> <td style="padding-left: 10px;">1. Yes</td> </tr> <tr> <td></td> <td style="padding-left: 10px;">2. No</td> </tr> </table>	8	1. Yes		2. No													
8	1. Yes																
	2. No																

FIGURE 11B.5 Questionnaire 5: Example of telephone interview questionnaire of head of household.

7. What is the usual purpose of your most frequent bus trips?

1. Work
2. School
3. Medical
4. Visit friends
5. Amusement
6. Shopping
7. Other (specify) \_\_\_\_\_

8. If you don't use the bus, why not?

1. Cost
2. Undependable
3. Crowded
4. Schedules
5. Too far from route
6. Slow
7. Discourteous drivers
8. Doesn't go where I want to go
9. Don't like other passengers
10. Other (specify) \_\_\_\_\_

9. How many automobiles in operating condition do you have?

1. None
2. One
3. Two
4. Three

10. How many licensed drivers are there in the household?

11. Is your address correct as shown in the telephone directory? (Fill in name, address, and telephone number.)

Name \_\_\_\_\_

Address \_\_\_\_\_

Telephone No. \_\_\_\_\_

THANK YOU FOR YOUR COOPERATION.

REMARKS: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



FIGURE 11B.5 Questionnaire 5: continued.

Note for Appendix 11B

<sup>1</sup>All questionnaires must be checked for mistakes or missing information; this is especially necessary for self-administered questionnaires. If a form is not precoded for keypunching, it must be coded during the checking process, which adds to the time and labor costs.

Source for Appendix 11B

- [1] Transportation Research Institute, Latent Demand for Urban Transportation, Pittsburgh, Pa.: Carnegie-Mellon University, 1969.



## CHAPTER 12

### THE ADVERTISING PROGRAM

#### Introduction

Advertising is any paid form of nonpersonal presentation and promotion of ideas, goods, or services by an identified sponsor. It is essentially a one-way form of communication; its basic function is the cultivation of demand. Advertising accomplishes this function by stimulating prospective buyers' desires for a given good or service to satisfy some need or desire.

Studies show that the average consumer is exposed to hundreds of advertisements every day. Every time someone reads a newspaper or a magazine, listens to the radio, watches television, rides to work, or goes shopping, he encounters many forms of advertising. Research studies and, more importantly, income statements indicate that advertising can increase sales. For this reason almost every successful business, especially in the service industry, devotes a sizable portion of its promotional budget to advertising.

Advertising has a definite and creative role to play in the marketing of transit service, as do the promotional activities that are allied closely to advertising.

#### The Purpose of Advertising

The purpose of advertising is to make potential buyers respond more favorably to a firm's product. Advertising achieves this purpose by providing information to the consumer to make him aware of alternative goods or services, by modifying consumer desires, and by supplying reasons for the consumer to prefer a particular company's product or service.

For the transit agency, specific advertising objectives are:

1. To expose the public to the service and to maintain the public's awareness of the service.

2. To attract riders by stimulating a desire to satisfy transportation needs through transit service.
3. To develop and project a favorable image of the transit agency to the public.

How these objectives are achieved depends on the advertising message, the media, and other factors that are discussed below.

### Developing an Advertising Program

#### Defining Advertising Goals and Objectives

The many occasions for the use of advertising makes it essential that management develop a clear conception of exactly what it wants to achieve through its overall advertising effort, as well as through particular advertising campaigns, right down to the specific ads. Defining goals and objectives for the marketing and advertising program is a key requirement for effective advertising planning and the measurement of results.

Advertising goals should be stated as specifically as possible. Three basic criteria should be followed when establishing advertising goals and objectives: (1) the condition of the advertising program, (2) what effect the advertising is intended to have, and (3) the desired result, which should be clearly identified and quantified if possible.

The objective, "To increase ridership," would be better stated, "To increase ridership by 30% during the Christmas campaign, December 1 through January 15." The more specific the goals and objectives, the better they will guide management in developing an effective message, choosing the appropriate media, and evaluating achievement.

It should be remembered, however, that advertising is only one part of the marketing function. Well-planned advertising campaigns and clearly defined goals and objectives will not compensate for a bad product or service or other faults in the marketing program. Effective advertising and a sound product are necessary components for increasing ridership.

#### Determining Advertising Strategies

A clear-cut statement of advertising goals and objectives makes finding solutions to the remaining problems much easier, although it cannot be expected to resolve these problems. Major decisions are needed to determine:



1. How much money should be spent for advertising.
2. Which themes should be used for the general advertising program and for programs aimed at specific segments of the market.
3. Which media should be used.
4. How the advertising should be timed during the year.
5. Which ways should be used to evaluate and control advertising effectiveness.

### Developing Advertising Budgets

Advertising is essential to the small transit operation if it is to gain and maintain the ridership necessary to sustain itself as a useful public service. Advertising is the key to consumer awareness and, just as important, advertising has the power to decrease or eliminate negative psychological associations and to strengthen the positive image of the operation.

The transit industry is faced with a dilemma. The industry desperately needs a stronger approach to advertising, public information, and community relations; yet, it also faces financial constraints that inhibit a strong advertising effort.

The question arises: How much should a small transit operator spend on advertising its service? Advertisers always have been interested in the most efficient and effective use of advertising dollars. Advertising mass transit successfully means attacking the difficult task of gaining the greatest possible return on a limited investment. Some promotional activities closely associated with advertising may be carried out at little or no cost. How to blend paid and inexpensive or free advertising and promotion is a ticklish question.

In theory, a business should spend money on advertising until the benefits from the last dollar spent equal the benefits from the last dollar spent on any alternative use of funds. The economic truth of this reasoning cannot be disputed, but neither can this reasoning be practically employed to solve the budgeting problems of a small transit property. It just is not feasible to compile the data that could make such an idea workable, because the returns of benefits generated by advertising expenditures simply are not specifically identifiable in quantitative terms.

There are several other methods of determining the extent of an advertising budget that are widely used.

Arbitrary allocation. Some companies simplify the advertising budget decision by arbitrarily assigning a particular amount of money. Usually, the budget is set on the basis of "what the company can afford," although the decision-making process is seldom clearly defined. The arbitrary method admits a lack of understanding of the costs and returns of advertising, and in no way (except coincidentally, perhaps) does the outlay match the promotional tasks of the firm.

Percentage of sales. Using this method of budget allocation, a company's advertising budget varies with what it can afford, in that prior profits (or lack of profits) dictate the amount spent on advertising. In nonprofit transit undertakings revenues rather than profits would be the factor used. This method could have advantages for a company whose growth and rising profits (or revenues) were assured from year to year. The difficulty arises when revenues drop. As sales fall, so do advertising expenditures, in spite of the increased need for advertising. It is clear that any lengthy cutback could spell disaster. This method also has the disadvantage of being unrelated to long-range programs that are dependent on periodic budgeting.

Citing the disadvantages of the above methods, how is the small transit operator to determine what should be spent for the advertising program? The answer involves yet another approach.

Objectives and tasks. This method simply suggests that the advertiser should decide on the objectives to be accomplished through advertising and then estimate a budget that would include the expenditures necessary to achieve the objectives. The objective and task method has an appeal to logic. It seems sensible to analyze and appraise various opportunities and to formulate objectives. It follows that, once the objectives are outlined, management should prescribe the several tasks involved in attaining the objectives and, once the tasks have been formulated, the cost of achieving those objectives. In the case of the small transit property, the budget probably will be limited. With this constraint in mind, management must choose to go ahead with the tasks associated with the most important objectives.

#### Developing Advertising Themes

Advertising effectiveness is a function not only of the size of the budget but also of what is said, how it is said, and where it is said. This section discusses the first of these factors; it involves the content and design of the advertising message.

Message content and design must be based on the image that the transit property wishes to present. The message must be formulated to meet the stated objectives, and it must be geared to accomplish the tasks of the action plan by which the objectives will be met. The starting point in determining the content of the advertising message for transit management is analysis of its intended audience in one or more segments of the market.

Much of Chapter 11 dealt with the nature of the market for mass transit. The market is described as anything but homogeneous. Nevertheless, the market can be broken down into segments by various criteria. The purpose of segmenting the market is to arrive at some conclusions concerning the response of various groups of consumers to different marketing mixes of product, price, and promotion.

Theme. Marketing research techniques employed by experts can provide invaluable information with regard to the segments' responses to different kinds of appeals (such as rational, emotional, associative, and so on). Further, the experts often can indicate which specific appeal will be most useful in reaching given segments of the market, or the whole market, on the basis of sample information. Examples of some of the many appeals include:

1. Service characteristics--the kind of service, whether it is regular, flexible, and convenient; the quality of service, its dependability, safety, and speed; and the cost of service, in money, time, and effort.
2. Advantages of using transit--saving money and avoiding conflicts.
3. Company image.

Message. Once the themes have been selected, the advertiser's next job is to consider how to put the message across to its intended audience. First, the message must be designed to gain the attention of the intended audience. To accomplish this end the message should be simple, direct, and designed with the target audience in mind. One would expect to use different strategies for advertisements directed at those 16 and younger than those used for people 55 or older. The number of themes per ad should be kept to one or two for maximum effectiveness. Second, the message must arouse the needs and desires of the target consumer and suggest ways to meet those needs. Third, the message must relate to the experiences (backgrounds) and characteristics of the potential riders.

One natural theme for transit advertising is saving money. That subject itself is rather bland; it has to be pointed out to the target market by some suggestion of how the savings accruing from the use of transit might be used. For example, advertisements aimed at white-collar, middle-class people might stress the fact that an average of \$1,370 may be saved each year by using transit for work trips. It then could be pointed out that \$1,370 can be used for a vacation, saved to send the children to college, used for a new dishwasher and other appliances, or saved for the down payment on a house.

Translating the theme. The advertisement translates themes into words, symbols, pictures, sounds, and colors that stand for those themes. Today, this sort of translation is more of an art than a science. It requires a highly developed and specialized creative skill, and an understanding of the psychology of motivation and communication. Perhaps it would be best for the management of a small transit operation to seek out professional or semiprofessional talent to assist in this important task. Several sources of experienced talent are available for translating promotional themes into effective marketing packages. The most obvious is a professional advertising agency. The advantages of hiring one of these firms are many. The one serious drawback, however, is the expense involved in hiring a professional advertising agency. Because financial constraints are very likely to play a restricting role, other, less expensive, sources may be sought.

One such source is the training ground of the advertisers--a university or college. Working on the design of an advertising campaign for a small transit company could be an interesting project for a graduate class or an individual student in marketing or advertising. In addition, expertise in related disciplines, such as psychology and sociology, is readily available on a university campus.

Finally, a source of advertising advisers that may be extremely useful to a transit operator with limited financial resources is employing the staffs of local media. Many newspaper and radio stations are able to provide assistance in designing ads for their customers. Although perhaps not as experienced as some of the professional advertising agencies, media advisers generally can do an adequate job of designing effective ads because they usually are well-acquainted with their audience. The hazard of this approach lies in the chance of creating an ineffective, piecemeal effort, instead of an integrated campaign. Much of the program's success depends on the skill of the local media people and the development of a close working relationship between transit management and media personnel.

In terms of results, an outlay for skilled professional or semiprofessional assistance in advertisement design very likely will prove a worthwhile investment. It is apt to be less expensive than a transit manager's effort as a "do it yourselfer."

### Selecting a Medium

The objective of selecting a medium is to ensure that messages are received in the intended way by the intended audience in an efficient manner. This objective implies two criteria for selecting media: (1) the medium should be a suitable vehicle for the intended message and (2) the coverage of the medium should be as extensive as possible, without wasting coverage.

Regarding the first criterion, all advertising media are suited to carrying some sort of message. However, not all messages are alike and, similarly, not all media are equally suited to carrying a particular type of message. For example, newspapers and circulars are useful for showing detailed information on the location and schedule of a new route, but it would be almost impossible to give the same information over the radio. Radio and television may be useful in selling certain ideas about transit and advertising a telephone number that the public may call to receive more detailed information.

With respect to advertising coverage, the market served by a transit agency usually is located within a well-defined geographical area, described by the extent of the franchise granted or the area served by a publicly owned property. To use promotional dollars most efficiently, advertising has to be directed to this specific market area. To reach the mass transit market, an advertising medium that serves a much larger geographical area may have to be used. This can be justified if the medium chosen is particularly effective in presenting the message. The main point, however, remains: Wasted coverage must be kept at a minimum.

In choosing the particular medium to use, management should take relative costs into account. Not only should rates be considered, but effectiveness as well. Very often, relative costs are compared in terms of cost per 1,000 persons reached. Media that traditionally have been most effective for the presentation of transit advertising include city and community newspapers, local radio stations, outdoor billboards and bus cards, direct mail (high cost, but often highly effective), circulars (good if well-distributed), and space in the Yellow Pages.

Television must be considered and used with care because such advertising generally is too expensive for a small transit firm. Television also has a high probability

of wasted coverage. The broadcasting range of many television stations extends far beyond the community served by the transit firm. Much of the money spent on television advertising may be wasted because of coverage that is too broad, unless the advertising is very effective on the relevant audience.

Often, advertising dollars can be stretched by applying some of the tricks of the trade. "Crossplugging" is one such device. This technique involves the support of both the transit agency and another entity--a radio station, a local newspaper, a shopping center, or a sports organization, for example. Both the transit company and the other entity derive benefits in terms of advertising. Very often a trading agreement can be worked out, whereby a radio station will advertise the transit system for a comparable amount of advertising by the transit system on behalf of the radio station. Advertisements for such outside entities can be placed in the car card racks or on the exterior of the vehicles. In this way, out-of-pocket advertising expenditures are reduced, while coverage is increased for both parties.

Promotional ideas often can be used as a medium for advertising. Tie-ins with local events is a natural for promoting and advertising transit. If downtown merchants are having special sale days, they can be joined with a nickel day transit promotion scheme; that is, "Transit returns to the good old days when a ride cost only a nickel." Some retailers might join with the nickel promotion by bringing back the nickel ice cream cone or the nickel beer. The whole affair can be beneficial to the business community and to the transit agency, by providing an inexpensive way for more customers to reach the stores and the sales and at the same time introducing more people to the transit service.

#### Timing Advertising Expenditures

The timing of advertising expenditures has two aspects: (1) the macro-scheduling problem and (2) the micro-scheduling program. The macro-scheduling problem involves deciding how the total advertising appropriation should be allocated over the year. The micro-scheduling problem involves the best media phasing of, for example, a monthly advertising appropriation.

Macro-scheduling problem. During the course of a year, periods occur when transportation demand increases. Increasing customer awareness at these times helps to increase ridership (especially in off-peak hours) of people who do not ride the bus habitually. It should be remembered that advertising is expected to have a delayed effect, as well as an immediate effect. For this reason, the peak in

advertising expenditures should come before the expected peak in ridership, and the trough in advertising expenditures should come before the expected trough in ridership. Despite the expected ups and downs in ridership, there should be a stable band of advertising that continues throughout the year.

In any case, advertising must be regular, so that each advertisement reinforces the others. Spasmodic advertising is not as effective a use of resources as is a regular program of messages. Therefore, there should be a regular base level of advertising contained in every marketing plan.

Micro-scheduling problem. Again, market research may be helpful in this area. Often the issue in micro-scheduling is to determine how much advertising repetition a particular segment of the market should be exposed to if a message is to be effective. A low number of repetitions may be a waste because memorable (favorable) identification cannot be established. Frequent advertising repetition also may be wasted if it does not bring about further increases in awareness, message familiarity, or positive feelings toward the service. Repetitious advertising is very harmful if it brings about boredom or irritation. In the case of transit, although many people see buses in operation, the service often is overlooked. In general, frequent reminders of the economy and convenience of riding the bus and the area (destinations) that the company serves are good policy.

### Evaluating and Controlling Advertising

Advertising must be planned carefully to be effective. As noted above, advertising objectives must be developed, and specific tasks must be designed and implemented to achieve those objectives. Management should evaluate the advertising effort continually to develop an idea of how effective the promotion has been. This sort of appraisal is yet another function of the marketing research department.<sup>1</sup>

In general, advertising effectiveness breaks down into two measurable components: (1) the measurement of communications effectiveness and (2) the measurement of sales effectiveness. To study communications effectiveness, marketing researchers use tools, such as memory tests, recognition tests, and so forth, to determine whether the attention of the reader, viewer, or listener was arrested by the advertisement. In this manner, the researchers can determine if the messages that the advertiser is attempting to communicate to the audience are, in fact, received by that audience.

The sales effectiveness of the advertising message can be measured only after it has been determined that the

individual has received the ad. By using various interviewing techniques and reviewing ridership (sales) data, the marketing researchers can judge the direction and, in some cases, the impact of the advertising message upon the target individuals.

Measurement of this sort is both reasonable and important. In an industry such as mass transit, most factors affecting sales remain fairly constant. Advertising is probably the single most important management-controlled variable affecting ridership. Thus, it is vital to know as much as possible about the communications and sales effectiveness of the advertising being directed at the public.

### Company Image

Company image is a vital force in marketing theory and practice today, and its importance is increasing. Image is the combination of objective perceptions and subjective attitudes that people hold, related to a product or entity. An image creates an implied meaning or symbol that transcends the actual product or service.

Too often, and with too much validity, the image of transit is laced with negative aspects such as choking exhaust fumes, dirtiness, commercialism, lack of courtesy, and the unfavorable connotations of the word "public" in public transportation. It should be understood that if a transit operation is saddled with a negative image, even the most realistic and functional qualities of the service will be tarnished and people will find reasons to reject the service and will seek another alternative. The development of an image, therefore, must create positive associations if it is to be effective.

One way to overcome a weakness in product personality is to inject completely new elements into the image and sail off in a new direction. If the image becomes exciting and full of rich new meanings, the deficiencies are buried and forgotten. Instead of wasting time and effort in defensive actions, the advertiser quietly can erase negative associations with an important new halo of positive overtones.

Such an advertising innovation was carried out in Los Angeles, where the Southern California Rapid Transit District began to advertise bus service around the idea of an "Extra Car." The advantages of having an "Extra Car" were promoted, rather than the idea of simply riding a bus. Destinations were sold; the ride on the bus was incidental to reaching the destination. This new promotional approach proved successful and ridership increased.



Note for Chapter 12

<sup>1</sup>For those interested in an example of specific techniques of the analytical process, Blattberg and Stivers have published an article that deals with one aspect of transit promotion: "A Statistical Evaluation of Transit Promotion," Journal of Marketing Research, VII (August 1970), pp. 293-299.



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The numbers in parentheses are NTIS order numbers.



## CHAPTER 13

### THE PUBLIC INFORMATION PROGRAM

#### Introduction

Public information complements the advertising and community relations functions of the promotional program. All three work together to help inform the general public of available services and how to use them. Advertising should be used to attract interest through the use of various media, and community relations acts as a two-way street of communication in selling the service and in finding out what the public wants. Public information is aimed mainly at helping people use the transit service. Without an effective public information program, the transit firm has failed to perform a critical task. Failure to provide adequate public information is one reason that service is likely to be underused, regardless of how good it may be.

#### The Role of Public Information

The job of public information is to answer the public's questions concerning six major aspects of transit service including:

#### Question

#### Answer

What kind of service is offered?

Information on regular route service, special service (dial-a-ride, subscription, charter, contract, and so forth).

Where does it go?

Maps.

When can I use it?

Schedules.

Where can I catch the bus?

Shelters and bus stop signs.

How much does it cost?

Fare schedules and promotions.

How can I use it?

Schedules, maps, signs,  
promotional material.

Some of this information will, of course, be made available through the maps and schedules typically provided by transit firms. Other information can be made available through brochures or through a telephone information service. Regardless of the type or format of public information used to answer the public's needs and questions, enough detail must be provided to be useful, and yet not so much detail that it is confusing.

### Conveying Information

In conveying information to the public, certain guidelines should be followed:

1. All information should be simple, both in design and presentation.
2. Transit information should stand out and be instantly identifiable by the public, through the use of symbols, color schemes, and other means.
3. A sufficient amount of information should be presented, so that the public is informed adequately.
4. Cost should be kept at a reasonable level by using inexpensive techniques and materials, cost sharing, and avoiding useless coverage.

### Identification Scheme

An important consideration in developing a product or company image is establishing an identification scheme to ensure rapid and distinctive recognition of the product or company. Three basic parts comprise an identification system: (1) color, (2) logo, and (3) typography.

Color. The use of color is certainly attention-catching and interesting. Color can arouse feelings and associations, and give life and energy to an advertisement. Eye-catching color schemes can be used on the buses and carried over into letterheads, advertisements, and everything associated with the transit service.

Logo. The logo is a representative symbol for a product or company. It usually is a visual design or trademark, but it can be a sound pattern or jingle. A logo is a shorthand summary of meaning and feeling. It communicates the message faster than words can.

Typography. Whether the company or product is identified with script, block, or another kind of type face, the typography should be legible and consistent from one promotion to another.

### Major Means of Conveying Information

Schedules. Printed schedules should be available to riders. The schedules should be clear and easy to read so that the rider has no doubt as to when service is available. The goal in preparing the schedules as public information is to provide optimum simplicity and maximum information. The key characteristics must be simplicity in design format, presentation of information, color combinations, schedule listings, and instructions.

Some guidelines for schedule format include:

1. The schedule title should show the route number and route name clearly. All major points served should be noted. If color-coding is used on routes, the proper color should be used in printing the schedule, being sure to assure readability through sufficient contrast between the color of the print and the paper.
2. The logo and other symbols should be displayed clearly.
3. Schedules should show times for all major points along a route, not just the terminal points.
4. Different type faces or column shading should be used to avoid confusion between a.m. and p.m. schedules.
5. Each trip should be shown separately.
6. Reference symbols (for example, \* means: "Runs only on Saturdays") should be kept at a minimum.

The schedule for each route should be prepared separately and printed on a card or made into a folder small enough to fit into a pocket or purse. Most patrons will need schedules only for one or two routes. If only a few routes are operated, they all may be combined into one timetable. However, combining four or five routes is likely to provide needless information and add undesirable complexity to the schedule.

Transit systems often use separate schedules for the drivers, which may include some additional information. Often, the only major difference is the inclusion of the run number. When possible, the schedule used by riders also

should be usable by drivers and supervisors, to avoid extra preparation and duplication costs.

To preserve clarity and to minimize cost, an electric typewriter with changeable type balls may be used in preparing schedules. Great variety is available in type balls, so it usually is possible to use the same type style that was chosen for other graphics. This will help reduce the cost of typesetting.

Schedules should not look cheap--thin paper, poor reproduction, crude maps--but there is no need to go to great expense in duplicating. The schedules may be reproduced on different colors of paper, or various colors of ink may be used in the printing process. The multilith process is inexpensive and provides work of excellent quality. When used in conjunction with a changeable type typewriter, the multilith process is flexible enough to permit other forms and documents used by the firm to be prepared and duplicated quickly, easily, and inexpensively.

To help defray some of the cost of publishing the schedules, advertising space may be sold in the schedule folders. Indeed, the entire cost of preparing the schedules may be recovered in this fashion. Care should be used in the preparation and reproduction of the advertising segments of the copy so that it does not compete with the schedule information or contradict the image the transit firm is trying to build.

Maps. Maps should be clear, easy to read, and should use good graphic techniques. The simplest and easiest way to convey map information on route location is through the use of simple line drawings, often called strip maps. The strip map should show not only the streets on which a given route operates, but also the points at which connections and transfers can be made to other routes (see Figure 13.1). Some symbol (such as the letter T in a circle) may be used to indicate transfer points. If the scale of the map is sufficiently large, other features may be included, such as major traffic generators (shopping centers, businesses and so forth). The maps should be included as a part of each route schedule folder.

A full transit system map and city map also should be available. To help share the production cost of the system map, it should be prepared in cooperation with the city government, the chamber of commerce, or other local organization that prepares and distributes maps. If possible, a system map should be included as part of the Yellow Pages in the local telephone directory. The telephone company usually will provide this service free.



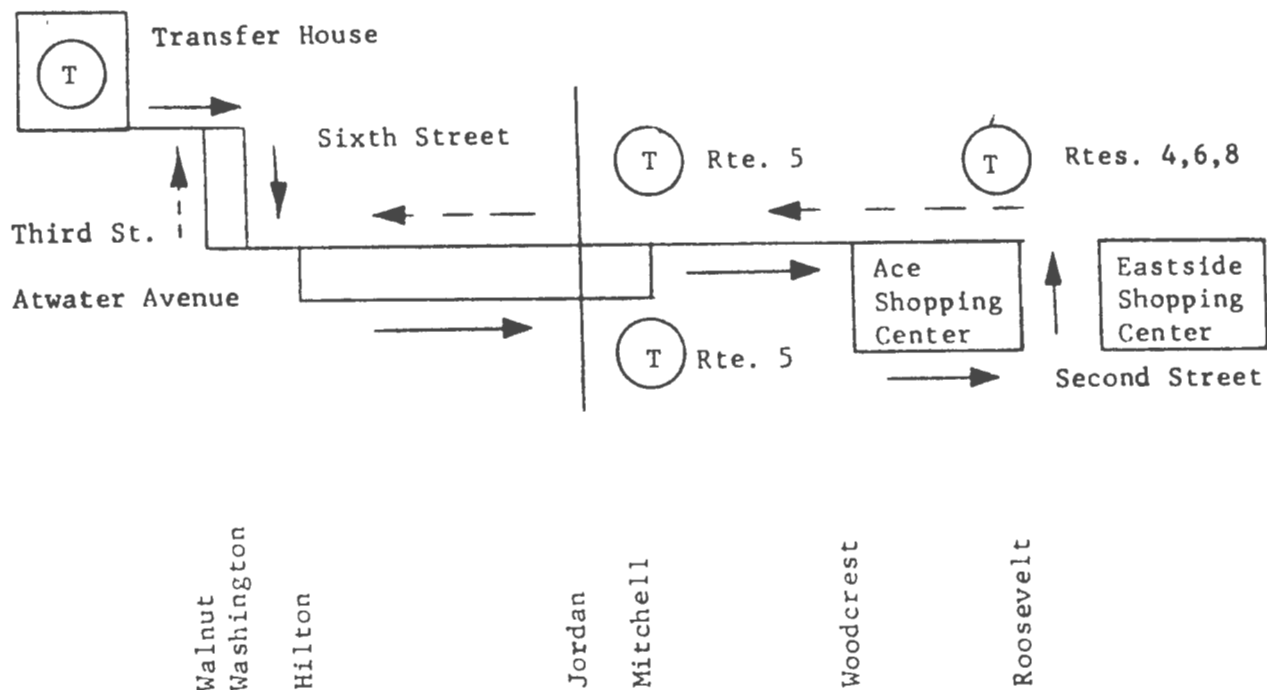
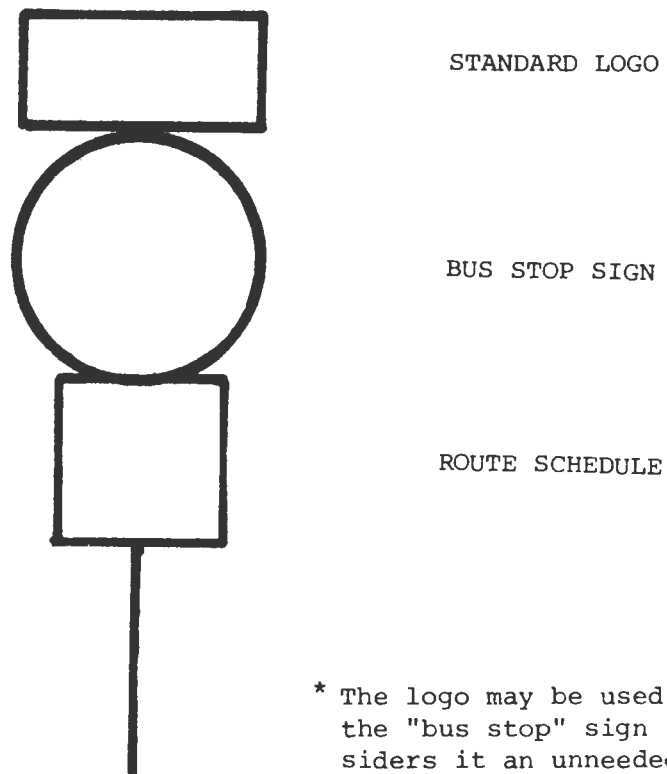


FIGURE 13.1 Example of strip map.

Some transit systems publish a bus book, which contains maps, schedules, and other information about transit service. A price may be charged for such a book, with coupons for free rides equal to the price of the book included as an incentive for purchase.

Bus stop signs. Each bus stop should be clearly marked with a distinctive sign carrying the logo of the system and any other graphics, such as color, that identifies the transit system or the route. At a minimum, each bus stop sign should include a route schedule, plus a map of the route and the telephone number to call for more information. The schedule posted may be either the regular route schedule distributed to patrons, or an individually typed schedule showing the times when buses pass a given stop. The schedule and map may be mounted easily on pressed wood board or a thin aluminum plate and sealed from the weather with plastic. The standard graphics used in the signs may be printed on pressure-sensitive adhesive plastic mounted on aluminum plates. A suggested sign format is shown in Figure 13.2.

Information tablets. Information tablets differ from regular bus stop signs in that they provide considerably



- \* The logo may be used alone, without the "bus stop" sign if the firm considers it an unneeded duplication.
- \* The schedule portion should be low enough for easy reading, but not so low as to encourage vandalism.
- \* The sign should be designed to attach to a free-standing pole or to existing poles or standards.

FIGURE 13.2 Bus stop sign format.

more information. For example, information tablets would include a map of the entire system plus many or all of the route schedules. Information tablets only would be installed at major terminal and transfer points and stops serving major traffic generators. Information tablets also should be placed at points where many persons new to the system are likely to be found, such as hotels and motels.

Telephone information. Telephone information service is a necessary part of any public information program. The telephone number to call for information should be displayed conspicuously on all information tablets and on all maps and schedules, as well as on the advertising copy used by the transit firm. Anyone needing information should be able to call that number and find a knowledgeable and cheerful person, specially trained and ready to help solve his travel problems.

Guidelines for telephone information service include:

1. Sufficient telephone lines and personnel should be made available, so that no one desiring information will have an overly long wait. Probably only one person, who could also handle some other matters, would be necessary to provide telephone information at a small transit property. Extra personnel should be available at times when inquiries are expected to be heavy.
2. The information operator should have complete knowledge of the system, and be trained in good telephone techniques. (The local telephone company usually will handle this training at no charge.)
3. The information operator should be stationed close to the dispatcher or controller of the system operation, to know the status of system operations.
4. Telephone information operators should keep records of the types of questions asked. If certain questions are repeated often it is a sure sign that more complete information is necessary on maps and schedules.
5. Where desired, and as a follow-up to each information call, a map and schedule should be sent to the party requesting information. A mailing list for distribution of public information may be developed in this way.
6. Complaints also may be handled by the telephone information service.

Handbills and direct mail. The use of handbills or circulars delivered to a particular neighborhood can be a

valuable way of distributing information at low cost. By direct delivery of route schedules and maps in the market of a given route, it is possible to pinpoint distribution and avoid waste. Maps and schedules for a given route also may be distributed at stores and shopping centers served by the route.

Direct mail also may be used to distribute public information. However, it is far more difficult to pinpoint the particular coverage of the information. Nevertheless, direct mail affords a relatively easy and inexpensive means of distributing systemwide information directly to potential users. It may be used most effectively at the time service is initiated, or when major systemwide changes occur in routes or schedules. Direct mail also can be used effectively and with a minimum of waste, when the mailings are based on telephoned requests for information.

Personal contact. Uniformed employees delivering information to residents and businesses may convey a good transit image. However, the process is costly. Such personal contact also may be carried out as part of a market research survey, so that the interviewer would not only gather information, but also leave some information as an integral part of the visit.

Newspaper advertising. Public information can be incorporated into a regular newspaper advertising campaign. For example, a different route might be featured each week as part of the marketing program. In addition to the map and schedule, the ad might include information on points served along the line.

At certain times, particularly when new service is to be offered or when service is to be made available for a special event (county fair, circus, athletic event, and so on), newspaper advertising should contain special schedules and maps. Newspapers also should be used to provide information when a new system is started or when a large influx of new people is expected. The latter situation might occur when a new industry goes into operation or when many new students arrive during the fall in a university or college town. Periodic advertising of system maps and schedules in newspapers is another way of distributing information, but more wasteful than other means of dissemination in terms of coverage. Complete maps and schedules may be run as part of the Sunday supplement in local papers; this may be part of the annual report of the transit agency to the citizens.

Public displays. Major businesses should have maps and schedules available in attractive counter or wall display racks. Information tablets, including a system map and, at the very least, schedules of nearby routes should be posted

in major public buildings and in large apartment buildings. Airports, railroad and intercity bus stations, factories, schools, and hospitals are other places where information should be readily available.

Community services. Social and welfare agencies are other places where public information may be disseminated. For the elderly and for persons in lower income groups, transit information may be extremely important. Certain persons at these agencies should be instructed in how the transit system works, so that they may provide guidance on the use of the system, as well as maps and schedules.

The Welcome Wagon and other newcomer greeting services are one of the more cheerful ways new residents can be greeted by a community. Among the many bits of information provided to new residents, Welcome Wagon hostesses should include a copy of a transit system map, schedules, and other promotional materials.

Another major place to distribute public information is on the buses, in the form of "take one" schedules and maps. Maps of the route on which the bus is operating also may be included in the car card space above the windows. However, these cards would have to be changed if the bus were assigned to different routes during the day.

Special promotions. A pass good for a week and complete schedule information can be sent out to the first person listed alphabetically under each letter in the local telephone directory. Each week the next person listed receives the information and pass. This method may attract new riders, build goodwill, and disseminate public information in a novel way.

Adoption of the suggestions for the dissemination of public information obviously will depend on the human and financial resources available--but failure to have an effective public information program is false economy, and the temptation to cut back on this program should be avoided.



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## CHAPTER 14

### THE COMMUNITY RELATIONS PROGRAMS

#### Introduction

The third promotional element of the marketing program is community relations, which is, in essence, the transit agency's dealings with people and government. In the normal course of events, a transit firm has literally thousands of dealings with people every day, ranging from contact with the public by bus drivers and other employees, to participation of transit employees in community projects and newspaper items about transit service. Community relations represents all organized forms of communication and contact with the company's riders and potential market, apart from advertising.

Community relations may be defined as a planned program of policies and conduct that strengthens public awareness of the transit system and its benefits. Moreover, if community relations can be viewed on the one hand as "telling" the public, on the other hand it also is a means of "listening" to the public. A good community relations program is a system that provides a flow of information in two directions, bridging the gap between the transit property and the community, in a way that usually cannot be achieved through advertising or public information. Figure 14.1 illustrates the role of community relations in the transit firm.

Favorable relations with the community and particularly with its various organizations and groups, is absolutely essential for the success of a firm offering a public service. Gaining public acceptance and support for a transit agency is an important managerial function and an important part of the process of institutionalization.

In building public confidence and understanding, community relations works primarily with people's attitudes and the company's image. As with most convictions, it takes time to develop positive attitudes. For this reason, community relations should be a continuous effort, not a spasmodic or one-shot affair. By keeping the communications

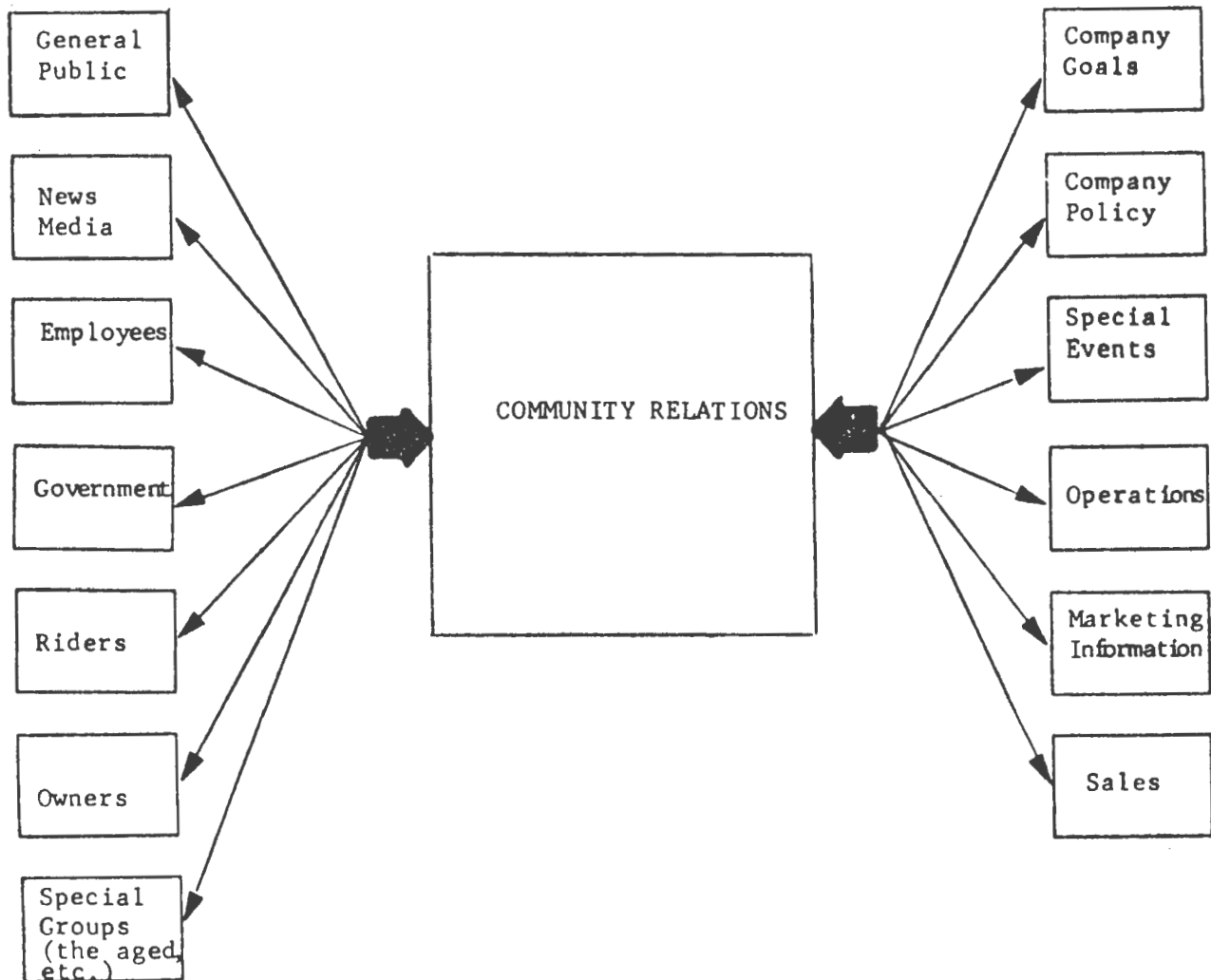


FIGURE 14.1 The role of community relations.

flowing both ways, company policy and conduct can be guided and adjusted to the developing attitudes and desires of the public.

#### Effective Community Relations

The community is composed of several publics, which are distinguishable from one another and form a basis from which to develop an effective community relations program. The segments comprising the whole of the community may be classified generally as transit employees, customers, the general public, government officials, stockholders (in the case of a private company), and the media (newspapers, radio, and television). Some communities may vary slightly from this pattern if, for example, they are dominated by a

single business or institution (such as a government agency), but this breakdown usually will be valid. The remainder of this chapter deals with these segments.

### Transit Employee Relations

Good community relations begin at home, with the establishment of good relations with the employees. If the employees are convinced that the transit company is working for them as they work for it, they will endeavor to put something extra into the job. This extra effort constitutes "esprit de corps" and results in a momentum that propels an enterprise ahead and sets it apart from those where such employee enthusiasm is lacking.

Employees are able to sell service by their actions and by word of mouth. A friendly word from the bus operator, the sincere and sympathetic handling of a complaint, or information cheerfully and courteously given are but a few of the many ways that transit employees can positively affect customers--and the community in general. To maximize the good that employees can render to the company, management must devote some effort to establishing and maintaining a genuine interest in the employees and their work, as well as ensuring that employees are well-versed on company matters. Moreover, employee involvement in the transit property is an integral part of institutionalizing transit in the community and in implementing management by objectives (MBO). The most effective process of institutionalization starts with the employees of the transit agency. They have to know what management is trying to do and to understand its importance.

Employees can be the greatest promoters of community relations, for they deal with the public daily. Ensuring that employees are knowledgeable about the transit property can be taken for granted or overlooked easily. This problem can be overcome through information, training programs, and two-way internal communications. Employees also can provide a quick and ready barometer of public attitude and reaction to service changes through day-to-day feedback to supervisors and managers. Therefore, it is important to cultivate high company morale. When this goal is accomplished, the employees will significantly increase their value as promoters of company goodwill.

Some of the most effective means by which good relations with employees may be established and maintained include:

1. Employees' well-being. Management's concern for employees' well-being can be conveyed through safety awards programs, the establishment of a company credit

union, a suggestion system for employee response to management action, the formation of a labor-management committee, company club or recreational activities (bowling, softball, and so forth), picnics, employee "open houses," Christmas parties, and so on.

2. Employee information. Management can promote unity of purpose among its employees by setting up information meetings (on safety, courtesy, and so forth--best handled in small groups and on a continuing basis), regular meetings with top management, employee manuals for new workers, an employee news publication, an information rack or bulletin board, and an annual report (one that is understandable, readable, and available).

### Customer Relations

The transit property exists to serve its clientele. Yet, because of the severe competition of the automobile, this group must be reassured continually that its decision to ride the bus is a wise one. This aim can be accomplished through a positive approach to public relations. The public should be informed of the positive benefits of transit to the community and of the efforts of the transit agency toward the people it serves. Riders will become skeptical if all they hear about the transit agency is financial problems or declining ridership. The positive approach extends through the entire service. Some suggestions for increasing its impact include:

1. Employee courtesy through training (neatness and cleanliness required).
2. Clean, dependable equipment.
3. Full and accurate coverage through news releases on accidents and other events, which if handled poorly may damage the company's image.
4. Courteous telephone information service (and lost and found).
5. Procedures for handling complaints that include: (1) a sincere letter of regret and full investigation into the cause of complaint and (2) a program to lessen complaints through better training.
6. "Take-one" schedules in vehicles, with newsletter, schedules, and so on.
7. Simple fixtures, such as a neat trash receptacle, to help keep equipment and stops free of litter.

## 8. Mailing list for schedules, maps, and so on.

The community relations program also provides an opportunity for actively selling transit service, particularly charter and special services. At least one member of the management team should develop a presentation adaptable virtually to any group or situation--women's clubs, Rotary, Jaycees, and so on. This program should be informative as well as entertaining and should contain what may best be described as a sales pitch. The program should build positive attitudes toward the transit firm. Moreover, the contacts made with key people in various organizations are critical in ensuring that the charter chosen to take the Boy Scouts camping, the Golden Age Club to a picnic, or the local Kiwanis to the state convention, is that of the local transit firm.

### General Public Relations

The objective of good relations with the general public is to have the transit firm identified as a good neighbor in the community, a source of opportunity, a promoter of the community, and most of all, as part of the process of building transit into a true community institution--an essential element of the community. Being all of these things requires more than just lip service. An active effort to be a leading force in community activities must be exerted at every opportunity, not only by management but by employees on all levels.

Cooperation with community leaders is of utmost importance when making any kind of contribution to the community. Furthermore, municipal authorities, the press, union leaders, educators, and leading businessmen are much more likely to support transit activities if they believe they have prior knowledge of the firm's efforts.

In addition to providing the very best bus service possible, a small transit company can be of service to the general community in many ways. By acting as a good neighbor, the company soon will find itself enjoying the reputation of a leading citizen. A few suggestions for worthwhile projects include:

1. Lead in all efforts to solve traffic congestion problems.
2. Cooperate with charity drives through financial aid from employee and management contributions, participation (this form of cooperation may require large amounts of time), and public assistance--a bus specially painted supporting the local United Fund drive, for example.

3. Assist in accident prevention programs.
4. Aid police with safety checkups.
5. Help in community planning.
6. Distribute annual report to community leaders.
7. Help in local vocational education programs to train diesel mechanics.

Full press coverage of the transit firm's role in community affairs will depend on providing news media with adequate information, in advance of the project.

#### Government Relations

A good relationship should be developed with all levels of government, whether a firm is privately or publicly owned. It is especially important at the local level, for it is far too easy for transit to become the favorite whipping boy of politicians. For example, the transit system probably will have daily problems with police and traffic departments. Frequently, these problems can be solved far more easily before they become emotional issues of debate by the city council (or in the news media), through the development of rapport with the proper officials.

Management must be open and positive in all dealings with government. Management must cultivate an attitude of mutual trust with local government officials. All reasonable steps that can be taken to enhance the status of the transit agency in the eyes of public officials should be taken. The transit firm should never be in the position of publicly butting heads with government officials. Difficult or controversial matters should be worked out in advance, if possible. While it is true that the public transit company generally must adhere to certain regulations regarding relations with public officials, usually the transit firm can do much more than the minimum required to win the trust and support of municipal officials and others. The extra effort will pay off in various ways.

Establishing good government relations starts by keeping the list of key personnel up to date; when personnel changes occur, they should be noted. As many contacts as possible with public officials, either personal or indirect, should be developed. Transit operators also should:

1. Brief government officials on all important transit actions.
2. Mail proofs of important ads, pertinent speeches, articles, and so forth.
3. Forward copies of the transit system's annual report to government officials.
4. Invite officials to important company affairs.
5. Invite public officials to tour the property to gain firsthand insight into what it takes to operate an effective transit service.
6. Sponsor community service projects.
7. Participate in community activities.

However, the transit firm should never become embroiled in partisan politics. The company should never carry election campaign posters or slogans for any cause, unless they are in the form of paid advertisements.

#### Stockholder Relations

As with government officials, stockholders of a privately owned firm should be provided with more than the bare minimum of information. Even though the number of stockholders may be small, they cannot be ignored. To foster good relations and maintain support, stockholders can be accommodated in several ways:

1. Publish and distribute readable and interesting annual reports, even if only in mimeographed form.
2. Use the annual meeting of stockholders to better acquaint stockholders with management.
3. Invite letters from stockholders on company goals and policies.
4. Send letters of welcome to new stockholders.
5. Disseminate a newsletter when an important event occurs.
6. Consider sending general publicity, printed matter, and company publications to stockholders occasionally.

## Media Relations

Like community leaders, newspaper, radio, and television personnel are more likely to support (or at least not oppose) a transit agency's activities if transit-related events are made known to them in advance, in an honest, open, and convincing manner.

In dealing with the media, two rules should always be followed: (1) be frank in all discussions and (2) play fair with all of the media representatives in the community. If these rules are observed, the media will never have a legitimate complaint against the transit company, and the transit company will earn the respect and goodwill of the media representatives who report to the community.

Observing these two rules will be simplified if the transit firm establishes one-person responsibility for liaison with the media. This person should know every detail of the operations and, to lend more authority to the company voice, should be a member of upper management. With this situation, chances of a mistake are minimized. Fact sheets and news releases will aid in accomplishing the assigned tasks, but they cannot replace media contact with a responsible, open, and honest person.

At least once a week, and more often if possible, the transit agency should supply the media with news releases. There are many subjects appropriate for news releases but the best items focus on service to the community. Under this heading are items relating to route extensions, new equipment and facilities, traffic congestion, training programs, and so on, all producing improved service in terms of location, time, or comfort. A human interest item on one of the employees also is a good idea.

When an important story is about to break, the newspaper, radio, and television representatives should be notified in advance. If on-the-spot coverage is anticipated, such as the introduction of new service or new buses, as much help as the media needs should be provided by the transit agency. Electrical power for cameras and equipment, protected space for sheltering tape recorders and other components, and suitable elevation and lighting for cameras should be provided where necessary.

Maintaining contact with editorial writers also can help the firm. Although editorial writers make their own decisions about what to write, they often are receptive to good suggestions, and they need facts to do their jobs properly.

Finally, management should try to keep abreast of all that goes out over the air or in print concerning the



transit property. In this way, management has a means of measuring the kinds of information the public receives.

#### A Comprehensive Program

Community relations can bolster public support of a transit firm, and can help to create a favorable image of the transit system. Community relations links various segments of the community with the transit agency. Community relations starts within the company among all personnel and is maintained from within by management--which must be at all times a sympathetic listener to complaints, an honest and accurate information service, and a clear line of communications with leaders outside the company. The people responsible for community relations must be ambidextrous, in that they must be able to see transit as the rider and general public see it and, at the same time, be sympathetic to the problems of the transit personnel and management. Combined with advertising and public information, community relations completes a comprehensive and constructive marketing program.



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+Type of report:

NCHRP/SHP=National Cooperative Highway Research Program/  
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TRR= Transportation Research Report

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