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Transit Ridership Initiative

A TCRP Digest providing the results of Task 2, "Transit Ridership Initiative," of TCRP Project J-6, "Quick Response for Special Needs." The objectives of this task were to (1) identify and report on transit ridership success stories and (2) identify research needs to increase U.S. transit ridership. The research ideas presented in this Digest served as background material for a workshop sponsored by TCRP Project H-5, "Identification of Research Needs to Increase U.S. Transit Ridership."
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SUMMARY

Based on interviews with more than 40 transit system managers, a number of general observations can be made about recent ridership experiences and the factors that have contributed to ridership increases:

- Most systems experiencing recent ridership increases attribute the increases to various combinations of strategies, programs, and initiatives.
- Strategies and initiatives associated with recent ridership increases can be placed into five major categories:
  - Service adjustments,
  - Fare and pricing adaptations,
  - Market and information initiatives,
  - Planning orientation, and
  - Service coordination, consolidation, and market segmentation.
- External forces--population change, development trends, regional economic conditions, decisions of specific firms, other public policy decisions--frequently have a greater effect on ridership than system and service design initiatives.
- Service expansion is a primary factor in the majority of cases where recent ridership increases are largest, e.g., Flint MTA, Riverside RTA, Alexandria DASH, SamTrans, Orlando LYNX, Akron RTA. Increased ridership from service expansion, however, does not ensure increased utilization or market share, particularly in the short term.
- Significant breakthroughs are being made in ridership at the subsystem level for various market segments (defined by geographic area, by trip purpose, or by socioeconomic characteristics) but national reporting and policy analysis remain focused on aggregate, systemwide data.
- Most systems experiencing recent ridership increases have increased efforts to target specific market segments and broaden service mix.
- Attracting ridership is a somewhat fragile, ambiguous goal and a moving target. Overt ridership goals are not often specified. Increasing ridership is frequently in conflict with or not consistently reconciled with service utilization and budgetary goals. Trends in absolute ridership may be up, but utilization may be down, market share may be declining, or system revenues and costs may be diverging.
- The specific effect of each individual strategy and initiative on ridership is often not known or easily measured.
- Most systems experiencing significant recent ridership increases collect and maintain detailed data on utilization and rider characteristics.
- Data and analysis of ridership initiatives and trends below the aggregate system level are not systematically synthesized or regularly available outside individual systems.
- The most frequent general observation about research needs related to ridership increases and initiatives was a desire to have more information available about the experiences of other transit systems.
- Twenty-five potential research topics have been posed identified or implied from the examination of recent ridership increases and system interviews. The topics generally fall into one of two major categories: original, primary research or syntheses of ongoing experience.

OVERVIEW OF THE PROJECT

■ Project Purpose

The Transit Ridership Initiative under the TCRP Project J-6, "Quick Response for Special Needs," was undertaken to provide a summary assessment of the actions and approaches that have prompted recent increases in transit ridership among individual systems, and to outline a potential research agenda to enlarge the body of information available on issues considered critical to increasing transit ridership in the future.

The results of this assessment of selected ridership experiences and contributing factors are intended to assist the American Public Transit Association (APTA) Transit Ridership Initiative Steering Committee in its ongoing program. They will also assist Transit Cooperative Research Program (TCRP) staff and panels in the design of more extensive TCRP ridership research projects and activities.

■ Background

In recent years, annual aggregate transit ridership nationwide has declined slightly according to year-end APTA Transit Ridership Reports, with annual unlinked passenger trips ranging from 8.67 billion in calendar year 1990 to 8.45 billion in calendar year 1993. As reported in *Passenger Transport* February 7, 1994, however, the annual aggregate figures disguise critical facts and trends that are worthy of much closer examination. For instance, 1993 yearend figures reveal the following trends that should invite more detailed analysis of circumstances at the system and subsystem levels:

- Ridership declines are concentrated in approximately a dozen large urban bus systems;
- Ridership on rail transit modes was up; and,
- Ridership was also up in bus systems serving areas with populations less than 250,000.

Perhaps more significantly, national transit ridership increased for the third successive quarter (January through March 1994), with significant growth in rail, demand-responsive services, and small bus systems. This is the first instance since 1989 of three successive quarterly increases.

In recent years, the transit industry and public investment in transit have often been criticized by comparing national aggregate ridership figures with the growth in total travel demand. Census Journey-to-Work figures as well as data from the National Personal Transportation Survey (NPTS) indicate that on a national basis, transit's market share of total travel is continuing to fall despite increases in total ridership through most of the country. In addition, transit critics often point to national and system aggregate figures on transit utilization (passengers per mile or passengers per hour), as indicators of transit's declining relevance in today's world.

What critics and researchers generally have failed to acknowledge is that national aggregate figures disguise an extraordinary number and array of positive transit ridership trends and experiences at the system and subsystem levels in communities of all sizes. Using aggregate data, whether at the system level or the national level, it is easy to reach misleading conclusions, or entirely miss important circumstances and dynamics in the emerging patterns of transit development and use.

Like the information highlighted in the February 1994 *Passenger Transport* article, administration policy makers sought to reduce federal transit investment following release of 1980 census data by alluding to a decline in work trips by transit nationwide, from 1970 to 1980. (Similar data and findings have been noted for the 1980-1990 period.) Closer examination of the 1980 census figures revealed, however, that when data from several of the nation's largest and most transit dependent metropolitan areas were removed from the analysis, the ridership pattern for the rest of the country was positive--work trips by transit had, in fact, increased from 1970 to 1980 for the country as a whole outside of a few major urban centers, and the reliance on transit in these few larger areas remains high, with recorded declines in transit work trips directly associated with depressed local and regional economies.

Over the years, policy-related discussions of transit ridership patterns and trends have remained relatively superficial and have been dominated by consideration of gross aggregate data. There are, however, important positive stories to be told, new analyses and research to be launched and experiences to be transferred throughout the industry as this brief review suggests. Greater attention to ridership initiatives and experiences at the system and subsystem levels must be organized and sustained in the future for the industry to advance, and for national and community goals to be realized.

The transit industry, of course, remains aggressively dedicated to undertaking initiatives that will lead to significant and sustained increases in transit ridership as well as overall market share. This commitment led to the formation in 1993 of a Transit Ridership Initiative Steering Committee within APTA. Under the Steering Committee's sponsorship, TCRP initiated the current "quick response" study to look behind the national and

regionwide aggregate transit ridership figures, to better understand where major increases in ridership have been occurring, what factors may be responsible, and how successful ridership initiatives and programs could be more widely undertaken. In addition, the current study has also focused on identifying research agenda that can help support the commitment to increased transit ridership.

■ Project Approach

The project was carried out between February and July 1994 and involved three key steps. First, data and information on recent transit ridership experiences were collected and reviewed to identify those transit systems that have experienced significant ridership increases. Second, a series of telephone interviews was conducted with senior staff at those systems to arrive at a preliminary understanding of the factors and actions that may have contributed to the increases in ridership. Finally, the information and insights gained from the telephone interviews were reviewed and analyzed to better characterize the types of factors and actions that appear to result in increased transit ridership, and to suggest research topics and related activities that might have value in support of initiatives that increase transit ridership. Each of these three major steps is described in somewhat more detail below.

Where Have Ridership Increases Been Most Pronounced?

Data collection and information gathering to determine where the most significant ridership increases have recently occurred focused on statistics available from APTA and reports of ridership increases that routinely appear in the Association's weekly newspaper, *Passenger Transport.* The major statistical sources used were APTA Quarterly Ridership Reports from 1991, 1992, and 1993. In addition, APTA Operating and Financial reports for the same years were reviewed to understand how ridership changes may have been related to changes in levels of service over the same time periods.

To further identify specific *instances* where ridership has been increasing, "Passenger Transport Indexes" were used to locate reports of ridership increases appearing in the 1991, 1992, and 1993 volumes of *Passenger Transport.*

Using these sources, over 40 systems were identified that exhibited systemwide or mode specific ridership increases over the last 3 years of 3 to 5 percent or greater. Of these, 36 were contacted to discuss their respective experiences and 27 of these have provided the basis for the observations reported in subsequent section. Figure 1 lists the 27 systems in order of their percentage ridership increases, 1991-1993, as calculated from APTA's Quarterly Transit Ridership Reports. Many systems not included in Figure 1 experienced ridership increases but in these cases, a number of factors suggested the individual instances would be of less value to the study. System interview summaries for all 36 systems contacted have been included in Appendix A.1

Transit System Interviews

Having identified a number of transit systems exhibiting noteworthy systemwide ridership increases, researchers then initiated interviews with managers at each of the systems to develop general information about the factors and actions that were considered important in generating the ridership increases. The interviews were carried out using a loosely structured set of questions that allowed interviewers and respondents to address any circumstances or issues they considered important while focusing on factors contributing to increases in ridership. Appendix A contains capsule summaries of the 36 interviews completed during the course of the study, as well as the general questions used in the interviews.

In some cases, several individuals at the same system were interviewed; in most cases, a single senior manager or the executive director was interviewed. Often times supporting material and documentation were provided and reviewed as well. Appendix B contains a bibliography of sources used during the review.

While the interviews and the capsule summaries in Appendix A allow for a series of findings and conclusions to be drawn for the purposes of this study, they are by no means comprehensive in nature, nor has any attempt been made to independently confirm data or validate information from individuals or sources other than those noted. The system-by-system circumstances described should, therefore, be the subject of further verification and more rigorous analysis if formal reporting or publication is contemplated. Follow-up verification and more in-depth analysis of individual experiences past and future might be undertaken independently by APTA, or jointly in conjunction with TRB via the ongoing TCRP Project H-5, *Identification of Research Needs to Increase U.S. Transit Ridership.*

FINDINGS AND CONCLUSIONS FROM RECENT TRANSIT RIDERSHIP INCREASES

In addition to conclusions about the role and importance of specific programs and initiatives in increasing transit ridership, the literature that was reviewed and the interviews that were conducted led researchers to a number of observations about ridership-related issues and interests.

Local Context and Dynamics Are Critical

Ridership increases at selected systems over the 1991-1993 period have taken place during a period when aggregate transit ridership for the nation as a whole was flat or declining slightly, coinciding with lagging economic performance nationally and throughout many regions of the country. Under

Figure 1. Transit Ridership Increases on Selected Systems: 1991-1993

System/City	1993 Total Annual Ridership (millions)	% Increase 1991–1993
MTA - Flint, MI	6.62	90.6
RTA - Riverside, CA	7.03	44.0
DASH - Alexandria, VA	2.06	41.7
SamTrans - San Mateo, CA	26.37	34.6
LYNX - Orlando, FL	11.13	44.5*
Metro RTA - Akron, OH	5.90	21.9
MTD - Champaign-Urbana, IL	8.70	21.8
Blackburg, VA Transit	1.73	17.3
RIDE-ON - Montgomery Co., MD	16.99	17.8
FAX - Fresno, CA	8.15	15.6
MARC - Baltimore/Washington	4.90	14.8
Roaring Fork - Aspen, CO	2.44	14.0
Ames, IA Transit	2.73	13.4
Metro Dade - Miami, FL	82.18	13.0
PenTran - Norfolk, VA	6.17	12.2
Broward Transit - Ft. Lauderdale, FL	22.95	11.1
Citifare - Reno, NV	8.71	11.1
SCAT - Sarasota, FL	1.35	9.4
TALTRAN - Tallahassee, FL	2.74	9.2
NJ Transit - Newark, NJ	173.96	8.0
HART - Tampa, FL	7.82	6.2
Utah Transit - Salt Lake City, UT	22.80	5.8
C-TRAN - Vancouver, WA	3.44	4.1
Metro-North - New York, NY	59.41	3.7
Escambia County Transit - Pensacola, FL	1.10	3.1
Greenville, SC Transit	1.07	2.0
MBTA - Boston, MA	269.88	1.7

*1990-1993

Source: APTA Quarterly Ridership Reports: Fourth Quarter 1991, Fourth Quarter 1993

these conditions, relatively few systems have shown significant, sustained ridership gains. As noted earlier, there is evidence that ridership is increasing with improved economic conditions in most areas, or that declines are slowing. Unexpectedly, however, there was a suggestion made in one or two areas that the reverse phenomenon may be occurring, i.e., ridership is declining as the economy improves and people can afford to increase private vehicle ownership and use. This set of relationships may be worthy of further exploration within the TCRP program.

Two other salient facts emerge from observations about variable local conditions and context. The first is that forces traditionally outside the control of transit planners, managers and even policy makers may have greater impacts on ridership than any combination of traditional fare, marketing, service design, or operational initiatives. This point has been emphasized in recent work by Professor John Pucher, who has stated, "Yet even dramatic increases in the amount of quality transit services in the United States have produced only small increases in ridership...," and despite the expectation that better transit service will attract more riders, "...that will not be enough.... Public policy is almost certainly the key to improving the performance of transit in the United States." *(Passenger Transport*, Volume 52, Number 27).

This notion continues to call into question the balance of effort and energy devoted internally to system and service improvement strategies compared to effort and abilities of transit managers and policy makers to impact and influence forces, conditions, and policies outside the immediate operating environment that have substantial impacts on transit use. If ridership continues to increase modestly but market share continues to decline regardless of how traditional service adjustments are made, to what extent should nontraditional initiatives and activities be introduced into an agency or industry agenda?

The experiences revealed in the course of the current project seem to reinforce the notion that increasing the relevance of transit requires broadening the traditional transit service planning and operations agenda while attempting to enhance the quality and attractiveness of the transit product in more traditional ways. Significant increases in ridership can be realized with aggressive adjustments in traditional services and operational regimes, yet even modest ridership success may not result in increased market share. The introduction of nontraditional services and planning initiatives in many areas seems to suggest, however, that progress can be made in terms of both absolute ridership and market share, even in the short term. This is particularly true in communities that are pursuing strategies that better match an increasing variety of services with diverse markets.

A second factor that is obvious in comparing experiences around the country is that a "new" initiative in one area may be standard practice in another. An example is found in the consolidation of school bus and transit services in some areas. While such a notion may be a breakthrough in parts of the midwest, it is a *fait accompli* in many areas of California where Proposition 13 tax limitations have forced school districts to abandon independent bus service. Public transit systems have taken up the slack as a matter of necessity. Regardless of the motive, however, there may be a great deal that can be synthesized and shared throughout the industry.

Related to the notion of variable circumstances is the problem that initiatives that work in one area may not be well suited or transferable to other areas. In some respects, however, 'unique local conditions or circumstances' may not be as compelling as first thought and overreliance on this notion clearly can impede efforts to bring nontraditional strategies into play. Regardless of these difficulties, it is apparent that a great deal more needs to be learned and shared about ridership-related initiatives.

What Constitutes Success?

Increasing absolute ridership levels is not the sole or even primary criterion for 'success' across the industry. Success can be and is defined in a variety of ways. Frequently, ridership is combined with or even subordinated to financial and budgetary objectives. Relatively few systems are free to pursue increased ridership with unconstrained resources; relatively few systems can sustain the quality and performance of expanded service without increased funding. As a result, success is often defined informally as minimizing the ridership losses from measures taken to increase revenues or constrain costs. Importantly, the study has noted some instances in which these often conflicting goals have been served simultaneously.

Similarly, in a number of cases significant increases in absolute ridership have resulted from service expansion, as would be expected. Utilization of service (passengers per mile or hour), however, has declined in many of these instances, raising the question to what extent do increased ridership and declining utilization constitute success? Several transit managers interviewed have recognized patterns of lowered utilization in periods following the introduction of new service, with slow recovery of utilization rates as expansion services become better recognized throughout the community.

Another measure of "success," as implied earlier, may have less to do with immediate ridership increases and more to do with enhancing the longterm relevance of transit, including broadening the support for transit generally. Many of the actions described result in significant ridership increases at a micro level or for a specific market but seem inconsequential at the overall system level in the short term. Added value comes, however, in building positive,

supportive links to other parts of the community. Integration of conventional transit services with school and human service agency transportation provide an example where the long-term relevance and support for transit are enhanced beyond the measure of current ridership counts.

Balancing conflicting goals and objectives is difficult, and sometimes impossible under particular conditions. The current review of ridership experiences and the findings highlighted below, however, do not attempt to evaluate or draw conclusions about related financial, utilization, or other measures or factors that may be important at the local level.

Competing goals aside, it remains a critical objective for the industry and for the communities served by public transit to attract as many users as possible to the service.

Aggregate Data Disguises Critical Relationships and Effects

The current ridership assessment began from a review of systemwide ridership and utilization information reported to APTA. As described earlier, however, system-level aggregate data disguise important actions and effects that take place within systems where there are a variety of experiences to be documented and shared. While total system ridership may not have changed significantly, transit use a) in specific geographic subareas, b) in particular corridors, c) by specific types of users, d) for particular trip purposes, or e) for individual transit modes may have increased significantly in response to a variety of factors or initiatives. Many of these types of circumstances have come to light as researchers have discussed aggregate ridership changes with transit managers.

One clear implication is that any sustained effort to monitor, analyze, and learn from the types of initiatives that are described subsequently and in Appendix A require that ridership and related data be collected routinely in a disaggregated form or that periodic, focused reviews be done on particular types of initiatives using disaggregated information. Individual systems have large amounts of disaggregate data, yet what these show and how they are being used seldom escape the board room or planning department. Analyses at a disaggregate level should be done regularly as a means to inform colleagues or shape broader policy or public opinion.

Funding Constraints

A final topic of obvious concern to the industry as a whole and the management and staff of most systems interviewed is the lack of a financial base to launch or sustain major ridership initiatives. Funding constraints inhibit service expansion, suppress service innovation and experimentation, limit the scope of even 'back-to-basics' product enhancement initiatives, and dramatically reduce critical market research functions and activities. Ridership increases do not usually come without added cost, and increased financial support is every bit as critical as operations, planning, and other ridership initiatives. The role of financial constraints in pursuing increased transit ridership and market share is clearly an overarching research topic of considerable importance.

Categorizing Ridership Initiatives and Effects

Based on interviews with transit managers, activities and initiatives that are considered to have had the greatest positive effect on ridership fall into one of five broad categories. In virtually every case examined in the current study, transit agencies are, in fact, carrying out initiatives in several categories simultaneously. The five major categories of ridership-oriented initiatives include

1. Service Adjustments

   Service adjustments refer to any of a series of changes that tangibly alter the nature or character of services as sought or consumed by the riding public. Service adjustments mentioned by interviewees included changes in route structure, service frequency, vehicle type, service type, actions to increase reliability, security, amenities, and improvements to station areas and parking facilities.

2. Fare and Pricing Adaptations

   Fare and pricing adaptations include any of a variety of actions that have the effect of altering the absolute or relative price or cost of transit services for existing or prospective riders. Among the types of actions mentioned by interviewees were changes in base fares, passes and discounting practices; transfer policies; and cooperative programs with businesses or other organizations or institutions.

3. Marketing and Information Initiatives

   Marketing and information initiatives include approaches ranging from broad public information programs to precisely targeted programs tailored to specific riders or specific services. They generally increase the level of available information about services, with or without actual changes in the character of the services themselves. Interviewees noted the following types of marketing and information initiatives: general public relations/ education efforts, market research, enhanced information for current riders, and efforts targeted to new residents and first-time riders.

4. Planning Orientation

   Efforts identified under the heading of planning orientation include processes and initiatives that elicit more input and new perspectives from local citizens and leadership.

Among the most noted changes in planning orientation have been the introduction of "community-based" planning initiatives, greater involvement in "strategic" planning programs, and planning efforts focused on developers, employers, or other institutions in and around the community or region.

5. Service Coordination, Consolidation, and Market Segmentation

   Service coordination, consolidation and market segmentation initiatives are intended to highlight instances in which integration is occurring across a broad spectrum of transportation services provided by transit agencies and others, or where the needs of specific markets or user groups are being addressed aggressively and on a somewhat unique basis. Examples from the interviews include programs directed at public school students, university communities, human service agencies and clients, reverse commuters, off-peak travelers, special event attendees, etc.

Successful Initiatives and Strategies

Among the transit agencies experiencing significant recent increases in ridership, most are pursuing strategies and initiatives in several of the five categories outlined above. Figure 2 provides a capsule summary of selected activities under way in individual systems that are thought to have played a role in recent ridership increases.

Service Adjustments. As might be expected, virtually every system interviewed has directed special attention to activities intended to improve or enhance the quality and reliability of current or new services on a sustained or consistent basis. This "attention to the basics" and striving for consistent quality in the transit product is a well-established theme throughout the industry. As Figure 2 indicates, however, the focus on service adjustments extends well beyond the notion of simple route and schedule adjustments. Of the 23 systems noted in Figure 2, one-third have rethought the notion of minimum acceptable headways or service frequencies. A number of systems have implicitly or explicitly concluded that 60-min headways are unacceptable, or otherwise moved to reduce headways. Examination of what constitutes a minimum headway from the standpoint of offering meaningful transit presence or viability appears to be an important element in current thinking that may be an important research topic with considerable policy, financial, and legislative implications.

Approximately one-quarter of the systems whose experiences are summarized in Figure 2 also have moved aggressively a) to introduce smaller or nontraditional vehicles into their service mix, b) to increase provision of less traditional types of service (for them), i.e., route deviation, feeder, contract, services, and c) to make significantly larger commitments to improving passenger amenities--both on-board and at terminals, stations, and transfer facilities. It is interesting to note the lack of comparable emphasis on security initiatives as a major factor in recent ridership increases, although several systems have comprehensive programs under way to enhance passenger security in the future.

Fares and Pricing. Fare and pricing adaptations were noted by approximately half of the interviewees. The combination of deep discounts, passes, and employer-based pass programs--presumably triggered by recent favorable changes in federal tax law--are most commonly associated with ridership increases. In addition, efforts to sell fare media through a wider network of outlets are noted as elements in several ridership success stories. To a lesser degree, special, limited fare-related promotions and "free fare" events are perceived to be an important avenue to increased ridership, particularly where special attention can be paid to rider retention programs.

Finally, outside of the fare policy and structure adjustments being made to transit services, there is clear evidence that higher pricing of auto use can have a strong impact on transit ridership. However, most of the evidence and experience to date arises out of the relatively unique circumstances surrounding university communities and their inability and unwillingness to support the expense of Single Occupancy Vehicle (SOV) parking. Nonetheless, inroads are being made on the basis of auto pricing and related disincentives and these experiences need to be more rigorously examined and reported.

Marketing and Information Initiatives. Over half the interviewees made special reference to marketing-related initiatives as major factors in their increased ridership. A variety of philosophies and strategies create heightened emphasis on various aspects of marketing in different locales. The effort to carry-out extensive, regular market research programs is evident in many of the systems interviewed. Larger systems in particular have moved into sophisticated market research, but have admittedly had some difficulty translating market research results into service improvement programs.

In addition, most systems tend to focus or concentrate marketing activities around new service and service expansions, as they are introduced. Interestingly, aside from one or two mentions of the existence of transit-supportive local coalitions, the notion of broad-based public advocacy and education did not arise as a factor associated with the ridership increases being explored.

Planning Orientation. More than one-half of the systems employees interviewed noted that their overall approach to service planning was a factor in gaining ridership in recent years. In contrast to "planning-by-the-numbers" in a technical sense, respondents generally cited efforts to engage in more "community-based"

Figure 2. Ridership Initiatives

System/City 1993 Ann. Riders (mil)	1991-1993 Percent Increase	Interview Summaries: Major Initiatives and Programs				
		Service	Fares/Pricing	Marketing	Planning	Market Segments
MTA Flint, MI 6.62	90.6%	Service expansion			Strategic plan Community based plan Local Adv Councils	School serv. consol. Health serv. consol.
RTA Riverside, CA 7.03	44.0	Service expansion to meet pop. growth Service, vehicle mix increased frequency	Deep discount passes	Custom surveying Community-based info New resident programs	Community-based planning Strong pop. growth	Service allocation by community type
DASH Alexandria, VA 2.06	41.7	Metro route takeover	Multiple pass outlets	Hotels Business/res. complexes	Coord. w/developers	Tourist/hotels Business/res. complex
SamTrans San Mateo, CA 26.37	34.6	Maintenance Reliability focus Contracting Special events Small vehicles		Aggressive mktg. of service quality	Neighborhood responses	
LYNX Orlando, FL 11.13	44.5 ('90-'93)	Service expansion Van services	Pass programs	Aggressive "retail" marketing	Merger w/committee rail authority Business coordination	Elderly School service
Metro RTA Akron, OH 5.90	21.9	Service, area expansion Route deviation Small vehicles Increase frequency		Multi-faceted surveying		Rural route deviation
MTD Champaign-Urbana, IL 8.70	21.8	Univ. serv. consol. Park & ride	Univ. pass prog. Univ. parking moratorium			University market
Blacksburg, VA 1.73	17.3	Univ. serv. expansion Park & ride Shelters	Univ. parking fees			University market
RIDE-ON Montgomery Co., MD 16.99	17.8	Metro route takeover Contracting Small vehicles Route adjustments Increase frequency "1,000 eyes" amenities		Neigh. "save-the-route" program/progress	Strong development coord.	
FAX Fresno, CA 8.15	16.6	Increased frequency Paratransit expan			Economic recovery effect	

System/City 1993 Ann. Riders (mil)	1991-1993 Percent Increase	Interview Summaries: Major Initiatives and Programs				
		Service	Fares/Pricing	Marketing	Planning	Market Segments
MARC Baltimore, MD 4.90	14.8%	Service expansion				
Roaring Fork Aspen, CO 2.44	14.0	Increased frequency	Discount passes Employer pass programs			Transit-oriented immig. Dispersed res. pop.
Ames, IA 2.73	13.4		Univ. pass program Reduced student off-pk fares			University market
Metro Dade Miami, FL 82.18	13.0	Limited stop service Small vehicles Passenger/ped. amenities Incr. rail feeders		First time riders		First time riders School serv. coord. Medicaid serv. consol.
Pentran Norfolk, VA 6.17	12.2	Route adjustments Increased frequency Late hour serv. expan.		Naval serv. mktg.	3-5 year oper. anal. Business partnerships	Inner city serv. workers, students
Broward Transit Ft. Lauderdale, FL 22.95	11.1	Route restructuring Service expansion			Strong pop. growth Act. center focus	
Citifare Reno, NV 8.71	11.1	Increased frequency	Discount passes		Large transit depend. pop. Strong pop. growth	Casino workers
SCAT Sarasota, FL 1.35	9.4	Routes, sched. adjustments Vehicle improvements		New service mktg.		
TALTRAN Tallahassee, FL 2.74	9.2	Service expansion	New pass program		Univ. coord.	University market
NJ Transit 173.96	8.0	Incr. maintenance, reliability comfort		Aggressive mktg. Extensive surveying		Suburban/reverse commute
HART Tampa, FL 7.82	6.2	Lg. scale system reconfiguration Automated dispatch	Expanded pass outlets	Extensive mktg., outreach	Enhanced monitoring	

System/City 1993 Ann. Riders (mil)	1991-1993 Percent Increase	Interview Summaries: Major Initiatives and Programs				
		Service	Fares/Pricing	Marketing	Planning	Market Segments
UTA Salt Lake City, UT 22.8	5.8	TQM/customer-oriented training Employee selection process DR Hub/spoke system		Aggressive, creative advertising around news, sports; targeted to 25-50 age group	Comprehensive service monitoring	Medicaid coordin. School coordin.
C-TRAN Vancouver, WA 3.44	4.1	Expanded vanpools Rte. reconfig. to major employers School-based "safewatch" program	Transit check		Pop. growth from supportive Portland area	Mall users Youth Portland commuters
Metro-North New York, NY 59.41	3.7%	Reliability Amenities Increased LOS Feeder service Expanded parking	Reduced fares for price-sensitive trip types	Extensive mkt res. Targeted and general marketing	Intergovernmental service agreements for feeder Internal interdiscip. planning	Off-peak weekday Weekend Intermediate trips Reverse commute
Escambia Co. Transit Pensacola, FL 1.10	3.1	Service expansion (airport/ naval station) Centralized transfer center	Reduced fares for school field trips Employer pass-hospital	Mktg director Special event mktg	Coalition advocacy	Coord. w/Navy
Greenville, SC 1.07	2.0	Vanpool program				Suburbs/large institutions
MBTA Boston, MA 269.88	1.7	Maintenance, rehab.				

planning, as well as "strategic planning," often conducted with a strong focus on neighborhood-level involvement.

A related factor in those areas that have made the greatest inroads in integrating transit with school and human service agency transportation has been the formation of 'local advisory committees.' These are largely made up of service managers or providers themselves, who have taken on a relatively informal, but effective role of examining means to provide overall services more effectively.

Finally, several interviewees made special mention of outreach efforts to engage business and private sector interests more aggressively. In many areas, these efforts are long-standing, but in many more they are being stepped up in the aftermath of changes in the federal tax law on transportation benefits, and the introduction of employer trip-reduction requirements at the state and local levels resulting from clean air concerns and legislation. In each of these areas, there is a mounting desire for increased information and analysis.

Service Coordination, Consolidation, and Market Segmentation.

Nearly two-thirds of the respondents made special note of efforts that have been made to understand and design better service for particular segments of the market, or to actively consolidate shared-ride services within a region. In particular, ridership increases are associated with efforts directed at public school students, university students and employees, and human service agency clients. More aggressive attention to visitor and tourism travel demands and special event services are also a prominent feature of several recent ridership increase experiences. While the concept of 'niche' marketing is not new to the industry, an increasing number of experiences are unfolding that need to be systematically tracked, analyzed, and synthesized more comprehensively and continuously.

FUTURE RESEARCH AND RELATED AGENDA FOR ACTION

A number of potential follow-up research and related initiatives have been noted or implied from the discussions held with system managers. In some cases, respondents have specifically noted information and analyses that they believe would be beneficial in the interest of expanding ridership. In other instances, new research and information needs were implied during the course of conversations.

Perhaps most importantly, the research ideas and information needs that have been noted fall into two broad categories. The first is work that requires new or updated primary research. This interest generally focuses on issues and questions that are not fully or adequately addressed in current literature or in current practice.

The second category of ridership-oriented research and information needs covers topics that may best be covered through more comprehensive analysis, synthesis, and dissemination of experiences in specific areas of emerging interest and activity throughout the industry. Primary research may or may not be important in any of the areas in question, but the fundamental need is to provide better synthesis and access to emerging experiences than is now available.

With respect to how progress on topics in each of these categories might be made, it is the sense of the research team that, generally speaking, topics in the first category--those issues requiring new primary research--might best be advanced through the TCRP program and its well-developed agenda-setting and project management procedures. With respect to issues and topics that require the closer examination of current or emerging practices, there is a potentially important role for either the industry, through APTA, or the FTA, independently or in combination. Traditional TCRP/NCHRP "synthesis" studies might also be useful here, but it is the sense of the researchers that work and products of this type must be produced in a somewhat more flexible and more fast-moving pace to meet audience needs.

Figure 3 highlights 25 potential research topics that have emerged from the current study and characterizes them by the extent to which each project might be pursued as a primary research effort or as a synthesis effort. Using this distinction, seven topics appear to be focused on primary research, six might be carried out as a combination of research and synthesis with the emphasis on the research aspects, five might be carried out as a combination but with the emphasis placed on synthesizing current practice, and seven are logical candidates for pure synthesis work, at least initially.

The topics in Figure 3 also can be differentiated with respect to broad differences in content. Of the 25 topics, 10 are directly related to increasing knowledge about markets and improving the use of better information, 11 relate directly or indirectly to the effect of service-related changes on ridership, and four reflect continuing interest in the effect of "external" circumstances in the pursuit of ridership increases.

Each of the topics in Figure 3 is described briefly as follows:

Topic 1: 1990s Factors in Mode Choice

Interest was expressed in an updated, comprehensive analysis of the factors that influence mode choice today. In particular, the role of proximity to service, service reliability, service comfort, personal security, and transportation costs were noted. Where recent information is being collected and analyzed at a system or regional level, it does not appear to be systematically synthesized, broadly reported or readily available. This is one aspect of a larger concern about the

Figure 3. Potential Ridership-Related Research Topics

Research Topic	Primary Research	Synthesis
1. 1990s Factors in Mode Choice Choice vs. Captive riders Role of proximity to service Role of service reliability Role of service comfort Role of security Other factors	O	
2. 1990s O-D Data for Metropolitan Areas: Status and Findings	O	
3. 1990s On-Board Data: Rider Characteristics	O	
4. Ridership Impacts and Elasticity of Reduced Fare Strategies	O	
5 Ridership Impacts of Preferential Treatment of On-Street Transit	O	
6. Federal Process Impediments to System Growth and Innovation	O	
7. Issues in Ridership Data and Definition Standardization	O	
8. Role of Financial Constraints in Building Transit Ridership	O	X
9 Ridership and Associated Impacts of Deep Discount Pass Programs	O	X
10. Ridership Impacts of Employer Transit Pass Tax Changes	O	X
11. Ridership and Utilization at Varying Headways: Are 60-Min Headways Outdated?	O	X
12. Niche and Market Segment Definition for the 1990s	O	X
13. Role of Fare Collection Strategies and Technology in Building Ridership	O	X
14. Role of Public Education and Advocacy in Building Ridership	X	O
15. Ridership and Operating Implications of Small Vehicle Use	X	O
16. Role of Passenger Amenities in Building Ridership	X	O
17. Goal-Setting in Ridership, Market Share, and Cost-Effectiveness: Rationales and Reconciliation	X	O
18. Circumventing Rail Capacity Constraints to Meet Rising Demand	X	O
19. Niche Marketing and Ridership Impacts		O
20. Town and Gown: Ridership Prospects and Initiatives in Public Transit and University Service Coordination		O
21. Ideas from Transit Labor: Soliciting and Applying Ideas		O
22. Periodic Reporting/Synthesis of Submarket Ridership Initiatives General/Overview School Markets Universities Human Service Clients Major Employers The Development Community Paratransit and Demand-Responsive Markets Other		O
23. Developing Marketing Strategies: Options, Approaches, and Impacts		O
24. Market Research and Survey Programs: Objectives, Techniques, and Application		O
25. Integrating Vanpool Operations as a Ridership Expansion Strategy		O

O primary emphasis
X secondary emphasis

currency, quality, and availability of ridership-related data throughout the industry.

Topic 2: 1990s O-D Data for Metropolitan Areas: Status and Findings

While census Journey-to-Work data and the NPTS provide a great deal of material on current (1990) travel behavior at a relatively gross level, the currency and quality of detailed metropolitan-level origin and destination data may need improvement along with the traditional models for forecasting travel demand. Increased understanding of current travel behavior at the metropolitan system planning level could be greatly facilitated by new studies as well as synthesis of recent O-D surveys.

Topic 3: 1990s On-Board Data: Rider Characteristics

Most systems conduct regular onboard ride surveys either systemwide or on a more limited scope to monitor performance and trigger service changes. Data on rider characteristics are increasingly critical to support ridership strategies aimed at market segmentation. Limited data have been developed from census and APTA work on transit rider characteristics, largely at the aggregate level. Less has been done on systematically synthesizing the results of recent on-board surveys, or regular reporting of results from ongoing surveying. Transit managers and supportive interest groups and users might be well-served by a more systematic approach to reporting current results, or possibly a comprehensive, well-structured series of uniform onboard survey exercises and analyses across a sample of metropolitan areas.

Topic 4: Ridership Impacts and Elasticity of Reduced Fare Strategies

Classic fare elasticity analyses and results have been in use for a number of years. Recent updates have been carried out by APTA using data collected from selected systems. For the most part, these analyses are designed and carried out to determine the ridership loss and revenue impacts of fare increases. Less work has been done on the elasticity of ridership with respect to fare reductions. Most work on reduced fare impacts has been directed to the potential to increase revenues from discount pass sales. Added research on the ridership impacts of fare reductions of various types may be of value in light of growing interest in "free fare" programs, marketing to first-time users, and retaining ridership in the aftermath of such efforts.

Topic 5: Ridership Impacts of Preferential Treatment of On-Street Transit

A significant amount of analysis has been done on the ridership and related impacts of various types of HOV facilities, including busways, transitways and HOV lane use by shared-ride vehicles. Because travel time and delay are major factors in mode choices, and because of the travel-time effects of operating transit service in mixed traffic, it may be important to carry out more comprehensive research on the ridership impacts of preferential treatment options for transit. New analyses may provide important added perspectives in evaluating high-capacity, shared-ride vehicle and service options.

Topic 6: Federal Process Impediments to System Growth and Innovation

Reaction and objection to unfunded federal mandates has recently become a focus for state and local officials. Constraints on transit planning and operation imposed by federal legislation, regulation, and administrative practice have long been recognized and grudgingly accepted in the industry. The combination of increased attention to unfunded mandates and the heightened emphasis on transit from ISTEA and the Clean Air Act Amendments may provide a reasonable opportunity to carry out a more comprehensive assessment of the limits on ridership growth that flow from federal transportation and other policies. Some independent research as well as current TCRP projects (e.g., Project H-4C, *Institutional Barriers to Intermodal Policies and Planning in Metropolitan Areas)* have begun to explore some aspects of this issue but more focused research may be needed.

Topic 7: Issues in Ridership Data and Definition Standardization

There are definition and consistency problems across the industry in the effort to determine and project levels of transit use. In addition, there are distinctions among the categories and characteristics of riders, fare structures, and performance measures that make synthesis and comparison of data and experiences more problematic than may be desired. Research might be directed to developing an agenda for resolving key definitional issues.

Topic 8: Role of Financial Constraints in Building Transit Ridership

The largest recent increases in absolute ridership have come as a result of aggressive service expansion, suggesting that latent transit demand is considerable in particular circumstances. In addition, demand-responsive service is one of the areas of largest current growth because of ADA requirements. The ability to respond to these markets--both existing and latent--is severely hampered, however, by the shortage of transit resources, a long-standing theme of industry public education and lobbying campaigns. Currently, the needs of one market, i.e., the disabled, are being increasingly traded-off against the needs of the general riding public because of funding shortfalls, most significantly on the operating side. Explicit analyses of the ridership impacts of funding constraints may be a timely way to continue to

explore the issue of appropriate balance in transportation funding and investment.

Topic 9: Ridership and Associated Impacts of Deep Discount Pass Programs

Frequent reports are made of the implementation of various forms of deep discount pass and related fare programs. In the past, some efforts have been made at consolidating and synthesizing results and conclusions from these types of programs. It may be timely, given the activity taking place following adjustment of federal tax provisions on employer-provided transit subsidies (see Topic 10, below), to conduct a new comprehensive assessment and initiate a systematic, regular synthesis and reporting process related to fare initiatives in general and deep discounting in particular.

Topic 10: Ridership Impacts of Employer Transit Pass Tax Changes

Initial efforts by APTA to describe the progress being made to implement local programs to capitalize on recent federal tax changes proved valuable to the industry. A regular, more systematic program should be initiated to synthesize and capture the progress and effects of continued activity. Such a program could be carried out independently, or as part of the broader pass program effort (see Topic 9, above).

Topic 11: Ridership and Utilization at Varying Headways: Are 60-Min Headways Outdated?

Considerable interest was expressed in the current study concerning the ineffectiveness of 60-min headways. In addition to ridership and utilization effects, there are significant implications for budgeting and public perceptions in posting a "maximum" headway of 30 min or less. The relationship of headways, ridership, and utilization, as well as public perceptions and attitudes might be examined with some rigor to determine if a new concept of "minimum levels of service" is emerging and what the current experience and future ramifications may be.

Topic 12: Niche and Market Segment Definition for the 1990s

Considerable attention has been paid to the concept of market segmentation in the transit industry. Most transit systems have formally or informally adopted strategies that focus to an increasing degree on differentiating the travel needs and service mix required to serve varying segments of the travel market. Ridership data and reporting, however, indicate significant variation among transit systems, including the means by which market segments or niches are defined or characterized; their respective size and significance; the effectiveness of associated service strategies; and the process of balancing investment among them. Examining current approaches and potentially moving toward some standard market definitions may be of value. Current TCRP projects on future market characteristics (Project H-4B) may provide a useful opportunity to address this topic.

Topic 13: Role of Fare Collection Strategies and Technology in Building Ridership

Fare levels, fare structure, and the means of collecting transit fares play significant roles in fostering transit ridership. Until recently, the examination of fare collection technologies has focused on operational issues, e.g., cost, reliability, maintenance issues. Increased attention to IVHS applications in transit has expanded interest in fare technologies to address ease of use for patrons and related monitoring applications. Current work on management systems and intermodalism required by ISTEA has further expanded interest in fare collection technology as a central feature of a future "seamless" transportation network. A new, comprehensive look may be needed into the relationship of fare technologies, mode choice, and ridership.

Topic 14: Role of Public Education and Advocacy in Building Ridership

Public education has traditionally been an industry function. The focus of typical public education efforts has been to build recognition of transit's importance generally and encourage transit use specifically. Development of local and regional transit advocacy programs is a more recent phenomenon, focused primarily on efforts or investment to adopt new funding mechanisms or to embark on major new service initiatives. The actual impact of these efforts on ridership levels, past or future, has not been examined in a comprehensive way. To the extent that these and related functions will play a more important role in increasing both transit's ridership and relevance, the nature and impact of these types of programs should be examined in greater detail.

Topic 15: Ridership and Operating Implications of Small Vehicle Use

Increasingly transit systems are introducing a broader range of services and equipment to meet varying travel needs and desires. Among the fastest growing strategies is the deployment of smaller vehicles. Most research on small vehicles has focused on design and operational characteristics of a technical nature. The value of small vehicles with respect to attracting increased ridership and related operating implications has not been assessed recently or thoroughly. An effort to examine this relationship more directly may help guide future service design and investment decisions.

Topic 16: Role of Passenger Amenities in Building Ridership

The role of comfort and convenience in attracting transit ridership is well established and has been generally documented. Increasingly, however, systems that are attracting increased ridership are devoting more attention and resources to a variety of passenger and pedestrian amenities. Parallelling this trend is increased attention to the notion of "transit-friendly" environments, "liveable communities," and "sustainable development." In addition, many transit systems with the best recent ridership experience have increased efforts to engage the public at the community and neighborhood levels. A new, comprehensive effort to establish the value and impact of enhanced passenger amenities may provide important insights into service design, investment, priorities, and public involvement strategies.

Topic 17: Goal-Setting in Ridership, Market Share, and Cost-Effectiveness: Rationales and Reconciliation

Absolute ridership is perhaps the most obvious among several measures of transit performance and value. Relatively few systems, however, have adopted specific ridership goals, and fewer yet have adopted formal market-share goals. Indeed, ridership is frequently subordinated to managing a transit system's financial and revenue requirements. The bridge between ridership and revenue goals has traditionally been a series of performance or utilization measures and standards applied on a route-specific basis. These are typically used to leverage adjustments in service to bring revenues and costs into better balance. Forces such as the Clean Air Act Amendments, however, are forcing more specific goal-setting and more precise specification of performance. It may be of strategic as well as practical importance to thoroughly explore the use and implications of more specific, ridership-oriented goal-setting in the industry and possibly to link the examination of goals to future analysis of market segments.

Topic 18: Circumventing Rail Capacity Constraints to Meet Rising Demand

Rail systems, particularly commuter rail, are experiencing a new spurt of ridership growth in many locales, and significant new rail-system development remains on the books across the country. Capacity on rail systems may be severely constrained, however, especially where right of way is shared with freight operations or expansion is physically or financially impractical. In the face of these constraints, new strategies are being implemented to better accommodate rising demand. These strategies could be more comprehensively documented, synthesized, and disseminated.

Topic 19: Niche Marketing and Ridership Impacts

There is mounting interest in examining in detail the approaches and effects of marketing and designing transit services for niche markets. In conjunction with Topic 12 (better defining niche markets) and Topic 22 (sustained synthesis of experiences in specific markets), or independently, better information and data are needed on the effectiveness of and balance between niche marketing and broad-based service delivery.

Topic 20: Town and Gown: Ridership Prospects and Initiatives in Public Transit and University Service Coordination

Several of the most significant recent ridership increases have taken place as a result of breakthroughs in coordination and service planning among colleges, universities, and local transit agencies. The impetus has come largely from the growing inability of universities to meet campus-oriented parking demand, and reconsideration of the need to run services separate from existing community-based transit systems. Either independently, or as part of a broader synthesis effort (Topic 22), these experiences should be analyzed systematically in greater detail, and results disseminated more aggressively to the hundreds of communities that are home to colleges and universities.

Topic 21: **Ideas from Transit Labor: Soliciting and Applying Ideas**

Whether through TQM-type programs designed to enhance the customer-oriented provision of services, or through specially designed initiatives, e.g., Ridership Improvement Teams in Pittsburgh, "1,000 Eyes" program in Montgomery County, there is growing evidence of employee-directed programs whose objective is to increase ridership and system performance. TCRP Project F-3, *Total Quality Management in Public Transportation*, is examining current TQM experiences in detail. Additional effort might be made to assess the scope and nature of programs to engage transit employees in efforts to attract riders and improve performance.

Topic 22: Periodic Reporting/ Synthesis of Submarket Ridership Initiatives

Transit systems with the largest recent ridership increases have successfully directed energies to a variety of specific markets, submarkets, or market niches. Specific research on several of these has been described and suggested in various topics previously. It also may be useful to initiate a broader based, continuous status reporting or synthesis program that covers a wide range of these experiences, including the following:

- Public school markets
- University markets
- Human service agencies and clients
- Major employers

- The development community
- Paratransit and demand-responsive markets

Topic 23: Developing Marketing Strategies: Options, Approaches, and Impacts

The transit industry, through APTA, has a history of active attention to the marketing of transit services. More recently, that interest has spawned broader public education and advocacy programs at the local level. There is some question, implied in interviews with system managers, however, whether the transit industry has moved as effectively as it might into the realm of "retailing" its product and services. A research program might be designed around a structured effort to describe and examine the most effective, state-of-the-practice marketing strategies from outside the industry and evaluate their potential for transit.

Topic 24: Market Research and Survey Programs: Objectives, Techniques, and Applications

Regular programs of market research and surveying are being carried out by most systems that have exhibited the largest recent increases in ridership. In several larger systems, the efforts are highly sophisticated. Even in these cases, however, the tie back to service development and planning is not as effective as it might be. Under these conditions, it may be useful to conduct a comprehensive, structured research project on the state of the practice in the industry, by examining market research tools, their structure, substance, cost, schedules, and application.

Topic 25: Integrating Vanpool Operations as a Ridership Expansion Strategy

Vanpool operations are well established in most metropolitan areas at some level. In most cases they are being administered independently of traditional transit services with varying degrees of coordination with transit. With the increased focus on intermodal system development and "seamless" operations from a user standpoint, it may be timely and useful to conduct a careful analysis of how these basic services are being integrated into broader transit operations and regional mobility planning.

NOTES

1. Significant ridership increases are being experienced in demand-responsive systems around the country. Because of activities necessitated by the Americans With Disabilities Act and the significant changes taking place in paratransit and demand-responsive services and utilization, the current study focused on bus and rail transit services, and circumstances surrounding ridership increases in demand-responsive services were not examined.

APPENDIX A

SUMMARY OF TRANSIT SYSTEM INTERVIEWS ON RIDERSHIP

Telephone interviews, and in some cases face-to-face interviews, were conducted with over 40 individuals at 36 transit systems. One-page summaries of these interviews are incorporated herein.

The following general questions were pursued with transit system managers in an effort to identify the factors and initiatives that have contributed to ridership increases in the past several years:

Q1 Confirm the general magnitude of increases as drawn from APTA data.

Q2 What factors do you think have contributed to the increases?

Q3 To what extent has service expansion been responsible for increases?

Q4 To what extent have new programs or initiatives been responsible? What specific actions or initiatives? Can you describe them briefly?

Q5 What actions are being contemplated in the future to increase ridership?

Q6 What research or information would be helpful to you in considering new initiatives to increase ridership?

Q7 Is there anyone else at the system that we should talk to about your recent experiences or programs?

Q8 Is there written material describing your recent ridership trends and initiatives that may have contributed to increases? Can it be sent for review?

Mass Transportation Authority
Flint, MI

Contact: Bob Foy, General Manager

SUMMARY

The MTA has undertaken several related initiatives that have produced substantial increases in ridership in the last year or two. At the center of the MTA program is a "community-based strategic planning" program begun in 1990.

Between 1990 and 1994, passenger boarding increased from 3 million to 6.5 million annually. With an increase in service miles of 114% service utilization (passengers/mile) has increased as well. In 1992 and 1993, overall system ridership increased 55.6% and 22.5%, respectively.

The key to these positive experiences has been a broad-based commitment to build a larger ridership base by consolidating all government-funded transportation services, including transit, human service agencies transportation, and school transportation. The rationale for proposing such a strategy was based on the potential cost-avoidance for both the school district and local human service agencies.

"Local Advisory Councils" have been set up to guide development of consolidated services for both human service agency transportation and pupil transportation. The largest school district in Flint now is served by the MTA; three other nearby school districts have also expressed interest.

Riverside Transit Agency
Riverside, CA

Contact: Susan Hafner, General Manager
Scott Richardson, Marketing Manager
Cis LeRoy, Planning Manager

SUMMARY

Phenomenal growth in the outlying portions of the Los Angeles region has fueled major increases in transit ridership on the RTA. Annual ridership has increased 21.8%, 7.6%, and 12.8% respectively, from 1991, 1992, and 1993. First quarter increases for 1994 are estimated at 11.7%. The system is described as still "chasing" growth in regional travel demand, despite the ongoing recession throughout California. The basic transit infrastructure is still being established in the 18-community RTA area.

Ridership growth is exceeding the growth in service levels, in part because of a "continuous daily peak" that runs from 7 am to 2 pm, and an improving jobs and housing balance in the Riverside area. Recent ridership increases are consistent across all fare categories, all subareas, and all services. Factors associated with the continuing increases in ridership include the following:

- Access to twin job markets in San Diego and Los Angeles, as well as local employment, i.e., external economic conditions;

- New service initiatives, including

  - expanded use of bike racks,
  - service hour allocation scheme based on the characteristics of the local community,
  - broad mix of services, equipment (electric shuttles, propane dial-a-ride, route deviation in low density retirement communities),
  - addition of intercity express services, and
  - headway reductions from 60 to 30 min in key corridors;

- New fare and pricing schemes, including

  - fare increase with deeper pass discounting;

- Community based planning initiatives, including

  - strong working relationship with locals and developers in service design,
  - custom designed survey work for major generators, and
  - new efforts to coordinate with individual businesses that are moving locations; and

- Marketing and information initiatives, including

  - "new look" design scheme,
  - "community-based" schedule and information based on accessing activity centers, and
  - special marketing to "new" residents.

Alexandria Transit Company (DASH)
Alexandria, VA

Contact: (Ms.) Sandy Modell, General Manager

SUMMARY

Ridership was up 29% in Fiscal Year 1993 and up an additional 15% in early 1994. Weekday figures have increased about 17% and weekend ridership is up over 20%. The most significant initiative has been a tourist outreach program with local hotels in which hotels distribute brochures and a commemorative token. This seems to be responsible for weekend ridership increases because service is unchanged.

A second initiative is the Transit Management Outreach Program involving businesses and residential complexes. Monthly transit passes are sold on site. Some employers are discounting passes for their employees. Expanded sales outlets for passes (including Nordstrom at Pentagon City) have increased the convenience of transit. Also, parking is so scarce that employers find sites with good transit more attractive to lease.

A city ordinance requires developers of new sites to work with transit when new development is undertaken.

Finally, DASH took over a major route from the regional Metrobus system in 1991 and reduced costs while improving feeder service to a local Metrorail station.

Service expansion as well as possible takeover of additional Metrobus routes is expected to increase ridership in the future, if facility expansion can keep pace.

San Mateo County Transit District
San Carlos, CA

Contact: Gerry Haugh, General Manager

SamTrans has registered a 34.6% increase in ridership from 1991-1993. The addition of commuter rail service is responsible for the majority of the increase. Otherwise modest annual increases are believed to be the product of close attention to consistent high levels of service quality.

Students constitute one-third of the current ridership as SamTrans has absorbed the role of school provider in the aftermath of Prop 13 property tax limitations that resulted in the elimination of school-operated transportation services.

LYNX
Orlando, FL

Contact: Paul Skoutelas, Executive Director
Deborah Cooper, Manager of Marketing and Public Relations

SUMMARY

The LYNX system serving Orlando has experienced annual double-digit ridership increases each year since 1990, with the trend continuing in the first quarter of 1994. A report in May 1994 indicated that ridership increased 34% over the prior 18 months. The most significant factor in recent ridership increases is the aggressive ongoing expansion of service and service types. In addition, two closely related phenomena are at work.

First is a widespread and growing recognition that transit services, broadly defined, will play an increasingly important role in the region in future years.

This sentiment has arisen in large part because of the comprehensive marketing and outreach program that has substantially increased the viability, public awareness, and support for the system and services. One of the principal underlying philosophies of the program has been the importance of marketing the LYNX services in a bolder, "retail" mode that adds "entertainment" value and "fun" to the traditional efforts to provide service-oriented information to customers.

A wide variety of bold initiatives have been launched to assure that "every experience is enjoyable," i.e., that the quality of the travel experience is high. "Jewel-tone" vehicle paint schemes, informal driver uniforms, and the name change to "LYNX," are a few of the overt, creative steps that have been taken.

Along with aggressive marketing, the attention has been placed on the quality and differentiation of services, responsive customer contacts and service monitoring that are used to make rapid adjustments in services that are customer driven. A variety of specific programs have also been developed to target specific markets more effectively, including an "Advantage Program" for seniors, the KISS program (Kids in School) for students, local area circulators, demand-responsive services and others. Finally, pass programs and promotions have led to expanded sales and expansion of sales outlets.

These activities are being pursued according to a recent strategic plan and Transportation Development Program that has garnered the support of citizens and local officials and led to the consolidation of LYNX and the regional commuter rail authority.

Metropolitan Regional Transit Authority
Akron, OH

Contact: J. Barry Barker, General Manager

SUMMARY

A 25% ridership increase on the heels of a successful sales tax referendum has been driven by a combination of service expansion into all of surrounding Summit County, necessitated by the referendum, and service adjustments made in recognition of the needs of varying market segments. Among the service design initiatives are flexible, route-deviation services in the rural portions of the county and the introduction of small vehicles. In addition, an effort will be made to double the frequency of service on a specific route during peak hours to evaluate ridership response.

The most noteworthy aspect of the RTA program is that the ridership increases were registered despite a fare increase from 65 to 85 cents.

The RTA also runs a multifaceted survey and opinion-polling program that includes a 3-year schedule of general telephone surveys; demand-responsive-use household surveys; on-board rider surveys; and focus groups done with community residents, drivers, and customer service representatives.

Champaign-Urbana Mass Transit District
Champaign-Urbana, IL

Contact: Bill Volk, Managing Director
Tom Costello, Assistant Managing Director

SUMMARY

Ridership in the Champaign-Urbana area increased 24% in 1993 as a result, in large part, of collaboration between the Transit District, the University of Illinois, and the student government on consolidation of city and university service.

Following a $10 per semester pass experiment for students and faculty, the University concluded that it was cheaper to underwrite the cost of annual student passes than to build required parking spaces and maintain a separate transit service. As a result, students now pay $30 for an annual transit pass and the university contributes $120.

With the assumption of service by the Transit District, service changes have been made, including intracampus services that focus on residence halls, perimeter parking, activity centers and other major activity patterns. University-based service runs from 6 am to 2 am throughout the week and weekends during school sessions, but is cut back in the summer. In addition, the campus is served by three "community" (intracity) routes.

When the university is in full session, perimeter parking facilities are served on 5-min headways. Campus circulator service runs every 15 min during the day and every 10 min in the evenings in response to security concerns. Articulated vehicles are being added to selected campus routes to increase productivity.

Blacksburg Transit
Blacksburg, VA

Contact: Mike Connelly, Transportation Manager

SUMMARY

Blacksburg has shown consistent ridership increases in recent years, including an 8.1% increase in 1992 and an 8.6% increase in 1993. Figures for the first quarter of 1994 show a 2.9% increase.

Major ridership initiatives have focused on a university partnership, providing service to and on campus. University-related trips account for 92% of the total systemwide ridership. Three years ago the university instituted fees for on-campus parking to reduce parking demand. Some of the revenue is used to contract for fare-free bus service for students, faculty, and staff.

Bus shelters have also been added to satellite lots.

Future plans include

- Equipping all buses with bicycle racks using ISTEA enhancement funds.
- Increasing service frequency during peak periods.
- Eliminating close-in campus parking and expansion of satellite lots, adding extra bus service.
- Adding bicycle racks at transit points near bike trails.

Montgomery County Ride-On
Montgomery Co., MD

Contact: Gordon Aoyagi, Chief, Division of Transportation Services

SUMMARY

A wide range of factors and actions have been cited as responsible for limiting ridership declines and spurring ridership increases of 12.8% and 4.4% in 1992 and 1993, respectively. Among the most significant has been the increased takeover of routes formerly run by Washington Metro. Other important steps and strategies have been put in place:

- Changes in service "mix," including the takeover of Metro routes, increased service contracting, and use of smaller vehicles to demonstrate higher utilization.

- Increased responsiveness to market inputs, e.g., an overly long route that exhibited slow travel times was reconfigured as two routes and headways were cut in half on both. The increased reliability resulted in an immediate 3% ridership increase.

- Focus on the "home-owned" nature of system and positive driver attitudes.

- "Save-the-Route" campaign that engages local neighborhood residents when ridership falls to levels requiring possible reductions in service, and an "endangered species" list of low-performing routes that is regularly communicated to the public and specific neighborhoods.

- A planning and service design philosophy based on the notion that frequency begets ridership. Maximum headways are 30 min. Service increases are justified by ridership, and priority is given to the following strategies, in order:

1.	peak-hour service	5.	late evening weekday service
2.	increases in shoulders of peak	6.	Saturday service
3.	increases in peak frequencies	7.	Sunday service
4.	base and mid-day service	8.	late evening weekend service

In addition, Montgomery County is the home of strong development controls. Transit officials feel that the "transit friendly" environments served by transit exhibit 7% to 45% more ridership than do neighborhoods not oriented to transit and pedestrian use.

Finally, a strong customer orientation is acted out through a program called "1,000 Eyes," in which employees as well as patrons are invited to spot and report "indignities" suffered by riders. The organization goal is to respond to the reported indignities within one week.

Fresno Area Express
Fresno, CA

Contact: John Downs, Transit Planner and ADA Coordinator

SUMMARY

Recent ridership increase around 10% is just regaining lost ground from the 1990-91 recession. Current ridership is still below 1990 levels. Service is "sketchy" in parts of the community and inconvenient if connections are needed. As a result, transit is not yet popular.

Some adjustments in service have occurred including an increase in headways from 30 to 35 min to keep on schedule in an area of increased congestion. Paratransit ridership increased substantially (from 36,000 to 40,000 in 1990 to more than 60,000 currently) as the number of paratransit buses nearly doubled from 10 to 19.

Planners believe the recent ridership increase may be a trickle down effect of increased family incomes due to economic growth. While the wage earner(s) may still commute by car, other household members may have more money for increased travel and turn to transit.

A major O-D study is under way as part of the long-range 2020 Master Plan. The belief is that many riders are not commuting but using transit for social, recreational, and shopping trips, and there is a desire to gain a better understanding to target service better in the future.

MARC Commuter Rail (MTA)
Baltimore, MD

Contact: Kathy Waters

SUMMARY

Ridership increased from 1989-1992 as service rose from 14 trains/day to 42 trains/day on the Penn Line, including midday service. An 8.4% ridership increase was registered in 1992 and an increase of 5.9% in 1993 despite a fare increase in the fall. Service expansion has been the major impetus, including introduction of off-peak service on Brunswick and Camden Lines, including later evening service, in January 1994.

Future initiatives include potential extension of service to Frederick (long term plan) and "folding in" evening and weekend services with the baseball service (Camden Yards).

Difficulties have arisen regarding use and cost of the existing CSX and AMTRAK lines. MARC's growth may conflict with the railroad's own revenue-generating uses of the lines.

Roaring Fork Transit
Aspen, CO

Contact: Gary Gleason, General Manager

SUMMARY

Aspen transit ridership has increased consistently in recent years, including a 12.8% increase in 1993 and reports of a 15.6% increase in the first quarter of 1994. Ridership increases have resulted from several factors

- Real estate prices have priced out local residents who have moved to outlying areas.
- A large influx of residents from Mexico, and Central and South America who are "transit-oriented" even if they have cars available (about 70% of all riders indicated cars are available).
- Increased service frequency over the last 4 years (30-min headways are run throughout the day, down from 2 hours).
- Increased discount on fare passes ("punch pass" discounts went from 35% to 50% with much publicity).
- Many employers are providing unlimited-use monthly passes free to employees.
- Increased restriction on parking in the resort areas.

Future initiatives include increased parking costs and free transit shuttle service between an "intercept lot" at the airport and downtown.

Ames Transit Agency
Ames, IA

Contact: Bob Bourne, Executive Director

SUMMARY

Ridership figures for 1991-1993 show a 13.4% increase although ridership through the first quarter of 1994 has declined 14% as a result of a fare increase in May 1993. Fares reductions were scheduled for May 1994 to try to recover the losses. Previous fare increases had not affected ridership because of fairly inelastic demand, but the latest increase and ridership loss were a surprise. The adult fare will be returned to 75 cents from 90 cents.

A campus parking shortage has led to a new transit initiative--free bus passes for 6 months beginning June 1994 then reduced fare passes will be available. Buses run on 5-min headways on campus.

Reduced student fares have been tested for off-peak and weekend use and found to be very successful. Student fares will be rolled back to $.35 peak and $.25 off-peak from the current $.40.

A decline is expected in transit use among disabled persons as paratransit dial-a-ride (with 1-hr response time) is replaced with an advanced schedule basis to conform with ADA.

Metro-Dade Transit Agency
Miami, FL

Contact: David Fialkoff, Chief Service Planning and Scheduling

SUMMARY

Metro-Dade has shown significant ridership gains over the 1991-1993 period. In 1993, systemwide ridership increased over 9.6%, with bus ridership up 11.4% and heavy rail ridership up 6.2%. This continues a pattern of somewhat more modest increases from 1992. A number of factors are thought to have contributed to the recent ridership increases, including the following:

- Implementation of "limited stop service" along several major corridors, connecting major activity centers, that increased stop spacing from 1/8 mi to 1/2 mi to 1 mi, therefore increasing vehicle speeds and reducing travel times;

- Use of alternative equipment, e.g., mini-buses in selected corridors to present a more cost-effective and comfortable service until volumes rise requiring standard equipment;

- Increasing "customer service orientation" through capital improvements (walkways, shelters, safer pedestrian access at transfer sites, new bench design, etc.), increased dialogue between engineers and passenger service staff internally, increases in signing and information (field graphics and telephone);

- Emphasis on first-time riders via special events, etc.;

- Improved bus-rail and rail feeder connections to facilitate south-bound reverse commute on Metro Rail.

In addition, other unique initiatives have been launched on a limited scale to coordinate and consolidate services and markets in the county as follows:

- The state requires students to be bused if their school trip exceeds 2 mi. School buses formerly traveled from suburbs directly to "magnet" schools. Today, transit passes are provided to magnet students and school buses deliver them to rail stations only;

- Formation of a "Local Coordinating Board" for service to the transportation disadvantaged;

- A limited (700-person) medicaid agency experiment has substituted separate medicaid agency transportation costing $15 per one way trip, with a monthly Metro-Dade pass good for any trip. Medicaid agencies save money, Metro-Dade receives added revenue and passengers.

Peninsula Transportation District Commission (Pentran)
Hampton, VA

Contact: Michael S. Townes, Executive Director

SUMMARY

Pentran has experienced two significant periods of ridership increase in recent years. Following completion of a Comprehensive Operational Analysis (COA) in 1988, a wide range of service changes were made and as a result ridership increased 13% in the succeeding year.

Changes included new customer information initiatives, route simplification and rationalization, increased service frequency and an aggressive marketing campaign. The essence of the program was service adjustments in response to changes in the market. Pentran managers are now committed to undertaking COAs every 3 to 5 years. It is believed that over that span of time, services require review and adjustment because of shifts in both markets and accumulated service changes.

The second major upsurge in ridership--14.4%--occurred over the period 1991 to 1993. Unmet needs were identified during regular surveying activity. Specifically, service was not being run late enough to accommodate a significant portion of potential users that attended night educational classes or held food service and related jobs ending late at night. The market was largely lower income young minority central city residents.

A 19-month demonstration program was instituted to add later night service on Pentran's 12 regular routes. (Regular routes carry approximately 80% of total system revenue. Other services include specific employee-oriented services to selected major employment centers and open door services catering largely to local public schools.)

The 19-month program increased operating costs by $1.8 mil and was supported by Board action to commit funds being escrowed for self-insurance purposes, after a reanalysis of insurance needs showed the expenditure was prudent. The program led to a 19% ridership increase on regular routes over 2 years and was permanently instituted with support from local governments. The key notion in this experience was the willingness of the Board members to take a risk in the effort to improve services and increase ridership.

During both these programs, marketing budgets were increased for the initial year for radio, advertising "trade-outs," and other mechanisms with a specific focus on business community. Pentran believes that with a solid, positive relationship already existing with the business community, its next significant opportunity to increase ridership will come from new employer pass programs.

Broward County Division of Mass Transit
Broward County, FL

Contact: Elyse Heyman, Associate Planner

SUMMARY

Transit ridership in the Ft. Lauderdale area has shown consistent increases in recent years. Ridership increased 11.1% from 1991-1993, with a 5.3% increase in 1993 and a 2.9% increase registered for the first quarter of 1994.

Major initiatives have included restructuring routes to decrease travel time and initiating service to the new Sawgrass Mills Mall that opened in 1990. Restructured routes no longer "meander in the neighborhoods" but have been "straightened out" to provide faster service into the CBD. The Mall has three new routes serving it.

Citifare - Regional Transportation Commission
Reno, NV

Contact: David Jickling, Transportation Planner II

SUMMARY

Ridership increased on the Citifare system 11.1% from 1991 to 1993 but declines have been registered through the first quarter of 1994.

The casino industry and its associated lower-paid jobs produce a relatively transit-dependent population. In addition, the economic slowdown encourages even greater transit use because transit is more affordable than alternatives. Recent ridership increases have been the result of population growth (about 2.5% annually), weak economy, and some minor headway adjustments (15 min reduced to 10 min) on two routes along the primary trunk corridor.

The transit system is generally viewed positively in the community. However, September 1993 fare increases have led to a recent decline in ridership of 4% to 6%. This has been mitigated somewhat by new daily and weekly discounted passes which have been well received. Fares rose from $.75 to $1 for adults, $.30 to $.50 for seniors, and $.50 to $.75 for youths; passes were discounted 20%.

Economic growth is likely to reduce ridership somewhat as cars become more affordable.

Sarasota County Area Transit (SCAT)
Sarasota, FL

Contact: Jay Goodwill, Director of Transportation

SUMMARY

Ridership increases have been running about 5% per year but have been flat since October 1993. Increases had been spurred by the following:

- Better connections resulting from route and schedule adjustments leading to reduced wait time.
- Additional buses (added in 1989, 1992).
- Upgraded buses in 1991 improved image and reliability.
- Extensive marketing and promotion.

Indications are that the fuel price increases resulting from tax increases and during Desert Storm also increased ridership. Recent flattening of ridership may be weather-related. Managers would like to increase service 20-35% but this may not be feasible in the near term.

TALTRAN
Tallahassee, FL

Contact: Bill Carter, Administrative Specialist III

SUMMARY

Ridership has increased 4.3% in 1993 on top of an 8.4% increase in 1992. While the population growth rate has been stable, the city has increased in size through annexation. Despite ridership increases, service has not kept pace with annexation growth.

Taltran has a mandate to increase service by 1% per year but pressure to reduce revenue shortfalls may take precedence.

Major initiatives include the following:

- Delivery of 25 new buses in 1994.
- $5 monthly passes for those under 18 years old to encourage ridership habit.
- Contracts with the two universities (Florida State and Florida A&M) to provide fare-free services. The universities are trying to encourage transit ridership because parking space on campus does not meet demand and is costly to increase. The universities pay Taltran to provide the fare-free service to members of the campus communities.

New Jersey Transit Corporation (NJ Transit)
Newark, NJ

Contacts: Shirley DeLibero, Executive Director
Jim Redeker, Manager of Business Development

SUMMARY

NJ Transit ridership has been increasing consistently over the last 2 years--1.0% in 1992, 5.2% in 1993 and 7.1% for the first quarter of 1994. Among the principal reasons are increased attention to upgrading and maintaining facilities and equipment as well as service quality and performance. In addition, NJ Transit is carrying out an aggressive awareness and advertising program, based on comprehensive, sophisticated market research data and analysis.

Other factors that are thought to be influencing increased ridership are the repopulation of older housing stock by a growing immigrant population, and possible declines in employer support for auto users.

The increases in NJ Transit ridership are more remarkable because both employment and population have declined, relative gas prices are down and service levels have remained relatively constant.

Hillsborough Area Regional Transit Authority (HART)
Tampa, FL

Contact: Sharon Dent, Executive Director
Nancy M.Peterson, Director of Marketing

SUMMARY

HARTline experienced a 31.7% increase in ridership in 1993 after completely reorganizing the system in August 1992. Along with increased responsiveness to travel patterns, service reliability has been increased as well through improved monitoring, and automated dispatching.

Another factor in the increase has been extensive expansion of outlets for discount pass sales, including a local day pass, and an employer pass promotion campaign. Extensive marketing and outreach programs also have played a role in recent ridership increases.

Utah Transit Authority
Salt Lake City, UT

Contact: John Pingree, General Manager

SUMMARY

From 1990 through 1993 UTA experienced an 11.1% increase in ridership along with increased service utilization. Ridership has been relatively flat through early 1994.

A series of well-developed initiatives are under way at UTA that are felt to be important contributors to recent ridership increases, including the following:

- Implementation of a TQM program that has emphasized customer orientation and resulted in a substantial increase in commendations and a substantial decrease in complaints.
- Five week, Disney-like customer orientation training.
- Sophisticated employee selection process.
- Increased emphasis on safety and security, including the use of video equipment.
- Aggressive and very creative advertising focused around news and sports events and targeted to the 25-50 age group.
- Pass use by medicaid clients that has cut medicaid transportation costs by 75%.
- Service coordination with schools.
- Curb-to-curb hub and spoke system of demand-responsive services using low floor vehicles that is having an impact on job access and welfare cost reduction.
- Comprehensive route-by-route/trip-by-trip data and monitoring.

Clark County Public Transportation Benefit Area Authority (C-TRAN)
Vancouver, WA

Contact: Les White, Executive Director

SUMMARY

Over the past 2 years (1991-93), C-TRAN has had a 4.1% ridership increase. In 1993, the increase was 6%, and for the first half of 1994 ridership is up more than 10%. The increases are reported to be relatively uniform across the system.

During this time no extraordinary ridership-oriented initiatives have been launched. Ridership increases are associated with a series of external factors including the following:

- Population increases ranging from 6-9 percent.
- Increased viability and support for transit in the ongoing debate about light rail service as part of the Portland area network; and,
- An influx of Oregon residents to the Washington state portion of the area who are supportive of transit because of familiarity with the Portland experience.

During this period, however, C-TRAN has undertaken several actions that have played a role in the continued ridership increases:

- Expanded vanpool services.
- Training for employers who are subject to employee trip reduction requirements beginning in 1995.
- Modification of specific routes to better serve selected large employers.
- Implementation of a transit check, employer pass program.
- Targeted marketing for major mall patrons, Portland-bound commuters, and the area's youth.
- A region-wide 'Safewatch' program for young children that features bus drivers as the primary contact if children find themselves in trouble or difficulty, and
- A contribution to local bicycle police security patrols from dedicated transit sales tax and license fee revenue.

Along with increased ridership, system utilization has increased as well. New service is added as needed at staged intervals, at which time utilization falls somewhat as riders 'grow into' the system. Approximately 64% of the riders are 'choice,' and nearly 60% are women.

Despite the ridership growth and increased utilization, market share continues to fall because of the large population growth. The only market where transit is increasing market share is in peak hour, Portland-oriented commuter trips.

Metro-North Commuter Railroad
New York, NY

Contact: Howard Permut, Vice President Planning and Development

SUMMARY

Ridership on the Metro-North commuter system has increased over 25% in the last decade, including a 5% increase in the first quarter of 1994 over 1993 levels. At the present time Metro-North is carrying the highest level of ridership since World War II--a situation that may be unique among major metropolitan area rail systems.

Commuter ridership focused on Manhattan. The system's largest market has grown but the rate of commuter rail ridership growth in other markets has eclipsed Manhattan-bound increases as a result of aggressive market development by Metro-North.

Substantial growth has been experienced recently in off-peak weekday ridership, weekend ridership (+30-50%) and intermediate, station-to-station/non-CBD ridership (+2-300%).

Actions that have led to these increases include the following:

- Improved quality of service, i.e., 96% to 98% on-time performance, reliable A/C and heating performance, cleanliness, and service levels that cut standees to zero;

- Expanded service for key stations and markets including reverse peak hour service, off-peak service, and express service;

- Fare reductions for selected markets in which there is a high sensitivity to fare levels and user cost, including reverse commute trips and intermediate travel; additional riders have been attracted while fare revenues have continued to increase;

- New feeder service partnerships to rail stations, including agreements with both private operators and local government systems (Westchester, ConnDOT), initiation of an internally operated feeder bus service, and expanded parking programs with local governments;

- Aggressive marketing based on extensive market research, major advertising programs undertaken jointly with other regional operating agencies, and campaigns targeted to specific markets.

The availability of stable capital funding has been essential in improving the quality of the system and service. The effort to attempt to run the system "like a business" with respect to attention to customers needs, and internal interdisciplinary planning and coordination have also been critical.

Escambia County Transit System
Pensacola, FL

Contact: Mary Beth LaCoste, Marketing Director

SUMMARY

Transit ridership increased over 18% in the first quarter of 1994. Several major initiatives have been made possible through a grant for a new route from the airport to the Naval station. The grant has enabled or spurred the following:

- Hiring a full-time marketing director.
- Increased presence at community activities.
- Attendance at the Naval indoctrination sessions where transit schedules are provided.
- Formation of Citizens for Better Transit, providing a voice for the community.
- Increased advertising.
- Reduced rates for teachers on school field trips.

Other changes occurred in 1992:

- Acquisition of 12 lift-equipped buses.
- Centralization of the main transfer station to improve convenience.
- Employer-paid transit pass for hospital employees with plans for expanding the program to other employers.
- Government Relations Day in which state and local officials will be invited to tour facilities, ride buses, etc.

Greenville Transit Authority
Greenville, SC

Contact: Pierre Osei-Owusu, Planning

SUMMARY

Greenville transit ridership has increased 2% from 1991-1993, including an increase of 7.2% in 1993. Ridership in the first quarter of 1994 is up 6.2%.

Transit ridership increases have resulted from an "innovative vanpool program," which is described as a cross between dial-a-ride and a traditional van pool. The service began 2 years ago when a Federal grant was received for handicapped vans and a state grant for traditional vans. Service has grown from 1 to 15 vans over 2 years. Focus has been on trips from suburbs to large institutions, including the site of a new BMW plant.

Fixed-route schedules and routes are reviewed every 3 months and fine tuned. Transit is positively perceived, and there is a belief that the potential exists to increase ridership an additional 40%, given adequate funding.

Massachusetts Bay Transportation Authority (MBTA)
Boston, MA

Contact: Alan Castaline, Chief Planning Officer

SUMMARY

Modest recent ridership increases--3.6% systemwide in 1993--are largely a function of the turn-around in the economy and the end of an era of significant rebuilding of the capital plant. No overt, special actions or programs were identified.

Significant reinvestment, particularly in commuter rail, has resulted in even higher recent ridership gains--8.1% in 1993 and 12.1% from 1991-93. The result of "renewal of the system" has been a more positive public image and perception, and improved reliability of service.

NOTES ON SELECTED OTHER SYSTEMS

Metropolitan Transit Authority of New York
New York, NY

Contact: Bernard Cohen, Director of Policy and Planning

SUMMARY

The MTA has initiated a "Fare Deal" program throughout the various operating agencies directed at achieving a combination of goals simultaneously, including ridership increases, increased service utilization, and increased revenue.

The Fare Deal projects are designed for specific locations or specific routes/lines in the MTA system, and range from a comprehensive package of improvements on the A-line subway in Manhattan, to fare strategies, to enhanced security, to measures aimed at increasing customer information, comfort and convenience, i.e., actions in the categories of "service improvements," "information," and "fare/pricing."

There is no complete report of results at this time, but a comprehensive monitoring and analysis process is in place to gauge the results of the Fare Deal program.

The Fare Deal program is also based on the premise that customer satisfaction with the basic transit "product" is an essential precondition for realizing increased ridership.

Metropolitan Transit Authority of Harris County
Houston, TX

Contact: Cynthia McMullan, Director of Marketing

SUMMARY

Although systemwide ridership has not grown because of economic conditions and continued dispersion of jobs in the region, Houston Metro has initiated several programs that are intended to spur ridership in specific situations and circumstances.

Subscription bus services, ridesharing coordination, and contract vanpool services are being marketed to private businesses on a "pilot" basis. Houston Metro will "subsidize these programs at the normal rate," with the company paying the balance in costs.

Attention is also being focused on attracting first-time riders based on data from a 1993 "free fare day" program that indicated a 37% increase in ridership for the day and a 17% retention rate.

Also, a CBD circulator program coordinated with local merchant promotions during the noon hour (11 am to 3 pm) has prompted increased transit use downtown.

Additional efforts focused on market segmentation are being undertaken, including neighborhood level surveys, studies at the University of Houston and Texas Southern University, and Medical Center Shuttle services.

Port Authority Transit (PAT)
Pittsburgh, PA

Contact: B. J. Leber, Manager of Marketing
Christine McSorley, Community Relation Coordinator

SUMMARY

Ridership success in the Pittsburgh region is measured by the recovery of lost riders from recent years. The recovery is supported, in part, by a combination of creative service planning and aggressive marketing.

In one instance reassessment of the market and travel patterns allowed a single new route to replace three former routes. Total vehicle hours remained unchanged but a four-fold increase in ridership was achieved.

PAT has also initiated Ridership Improvement Teams (RITs) at each operating location. Staff volunteers from operations, scheduling, and marketing come together in the RITs to redesign service in selected areas. In one instance, the service redesign proposed by an RIT makes better use of existing vehicle hours and identified vehicle hours of savings adequate to add a new express route that has increased its ridership by 4.5 times since it was started.

Pierce County Public Transportation Benefit Area Authority
Tacoma, WA

Contact: Don Monroe, Executive Director

SUMMARY

New service and service restructuring have resulted in increased ridership and service utilization in the Tacoma area in 1993 after several years of stagnant or declining ridership.

Service was dropped in the less productive areas, headways were increased from a minimum of 60 min to a minimum of 30 min, and a new transit center was established. As a result, ridership was up 2.1% in 1993 and is up 7.8% through the first quarter of 1994.

Transit Authority of River County (TARC)
Louisville, KY

Contact: Perry Jacobs, Marketing Director

SUMMARY

No recent increases in ridership. 1994 ridership is steady following a 2% ridership decline in FY '93. A new fare structure offering deep discounts for 10-ride coupons while increasing the cash fare has increased revenue around 20% without any significant changes in ridership. Future initiatives include an outreach to employers to market passes to employees. At the same time, service reductions are planned for fiscal reasons.

Sun Tran
Albuquerque, NM

Contact: John Parker, Development Manager

SUMMARY

Ridership is up about 5% in the second half of 1993 vs. 1992, and about 4% for the first quarter of 1994. Increases have resulted in part from population growth. Ridership suffered in Fiscal Year 1993 because of an increase in the cost of the monthly commuter pass from $19 to $21. It appears as though $20 may have been a psychological barrier.

Other initiatives included:

- Highly publicized "free ride" days in 3rd quarter of 1993; 4 such days have been held so far with 3000-5000 additional riders each day. The first had a one day increase of 31%. It is believed that some increase in paid ridership results from the free days.

- Special events-oriented services such as

  - State Fair (88% increase in ridership in '93 vs. '92),

  - Balloon Fiesta (15% increase over 1992), and

  - Special tours on Christmas Eve (sold 5000 tickets) and free shuttle vans between malls for holiday shopping (Thanksgiving-Christmas).

Activity and employment centers are scattered (downtown, university, Kirtland AFB) and all draw from a large area so it is hard to target routes or corridors. Current guidelines require that a bus go within 1/4 mile of every residence but this is being reevaluated. Service cuts, with some restructuring, may occur in the future along underused routes. The overall goal is to double ridership in 4 years.

Brazos Transit System
Bryan, TX

Contact: John McBeth, Administrator

SUMMARY

Ridership in the Bryan, Texas area increased 5.4% in 1993.

A major initiative, in cooperation with other operators and the MPO, focuses on Employee Commute Option programs for Houston employers. Commuter services also have increased into the Houston Metroplex. Ridership has also been aided by overall economic recovery and increased hiring by major employers. Little change in routing or scheduling has been undertaken. Paratransit ridership has also increased.

Future initiatives include two new park and ride facilities scheduled to open in the next 12-18 months, providing service into Metroplex. It is expected that service will double and utilization will be high.

Central Oklahoma Transportation and Parking Authority
Oklahoma City, OK

Contact: Hugh E. Kierig, Manager of Service Development

SUMMARY

Ridership has fallen over the past 6 months after previous increases. Decreases have resulted, in part, from cutting back two routes. Increases had occurred in Norman when a route was added between the Postal Training Center and the U of OK dorms, but the training center subsequently opened its own dorms so the route was suspended.

A major initiative was scheduled for trial implementation on May 21--switching from a radial system to a modified grid with small transportation centers outside the CBD. Headways will decrease as well. The motivation for the change in configuration was two-fold: surveys indicated that people did not wish to travel downtown; and, the downtown transfer center is being demolished to make way for a new sports arena. The latter provided the immediate impetus to redesign the transfer points. Trial implementation was scheduled for Saturdays only with the intent of serving shopping centers outside the CBD.

Corpus Christi Regional Transportation Authority
Corpus Christi, TX

Contact: Tom Niskala, General Manager

SUMMARY

In 1991 and 1992, transit ridership in the Corpus Christi area increased 9.9% and 9.8%, respectively. After declines in 1993, ridership is again on the increase in 1994. The overall positive trend is attributed to a combination of efforts to engage in community-based planning and more targeted market segmentation.

The absence of congestion and wide-spread, low-density employment distribution makes the commuter market a poor target. Instead, the Authority has established ridership as its major goal and is targeting the dependent population, youth, and tourists. To serve these markets better, a series of "artificial" transit centers are being created throughout the area that are intended to facilitate service interconnections, establish greater viability for the transit system, and encourage "mini-renewals" in the immediately surrounding areas. Each center is planned and developed with a high degree of local community participation, including charities, focus groups, and the involvement of various local interest groups.

Finally, the continuing surge in immigration is helping to fuel increasing ridership in the border communities in Texas.

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APPENDIX B

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