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Causes of Change: Internal and External Pressure

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The word "transit" is derived from the Latin verb *transire* meaning "to go across." The business of public transit is certainly now in a period of transition—a time of going from the way the business was established a century ago to the way it must be to survive in a new technological and demographic era.

The "golden age" of public transportation, the age in which transit systems were not only self-supporting but—almost unimaginably—profitable, is now a part of cultural history. The new role of transit managers in this country is to preserve, to anticipate, and to extend and to do so with the confidence born of superior data and analysis—not the golden age confidence that bigger is not only better but self-justifying.

The golden age of public transportation was the period between the turn of the 20th century and the end of World War II. This might also be referred to as the presuburban age, or the years before the sprawl. There was, at that time, a great dichotomy between urban and exurban areas; between places where transit could work and was needed and places where it could not and did not. In the golden age, Waukegan (a city of approximately 70,000 located 35 miles north of Chicago) was Waukegan, not the northern outpost of Chicagoland. Waukegan had its transit system, Chicago had its transit system, and on the pastures between the two stood cows, not malls, office parks, and housing developments. City and country stood out in brilliant, black-and-white contrast, without today's troublesome, challenging shades of grey.

In the beginning, in the years before the sprawl, the growth of major metropolitan areas in the United States and the growth of transit services were

closely linked. In most instances fixed-guideway transit systems were integrated into the existing development pattern of established urban areas; in others, residential and commercial concentrations followed transportation's lead and developed along commuter rail, rapid transit, and streetcar lines. In either case, capital investment in large-scale transit projects was justified, and often demanded, by population and employment densities sufficient to support such services.

This, coupled with generally widespread political and private-sector support of the new services, led to the establishment of extensive transit systems in these wonderfully distinct metropolitan areas. The lack of viable transit alternatives and the social acceptance of the affordable services established before World War II created the golden age of public transportation; postwar affluence brought it to an end.

In the 40 or so years since that unexpected and surprisingly abrupt conclusion, the public transportation business has been lost in the wilderness of suburbia, a landscape that transit managers are just beginning to adequately understand and through which I think we can eventually find our way. It is my intention to examine the topography of this landscape—its demography—to discuss how it got the way it is and where it is going, and to suggest various means by which this wilderness may be opened to the civilizing influence of public transportation.

DEMOGRAPHIC OVERVIEW

Transit ridership in the United States peaked during World War II at more than 23 billion rides per year as a result of the combined effects of wartime rationing programs, high civilian employment rates, greater concentration of urban populations, and less-than-universal automobile ownership. Transit ridership was still more than 17 billion in 1950, the last year of profitable transit operation in the United States, when national revenues exceeded expenses by a scant $1 million. The story since 1950 has been one of steady shrinkage in ridership and growth in cost. The latest figures available show 1984 national transit ridership at only 8.6 billion, with fare revenues covering only 37 percent of the industry's $10 billion operating cost.

Numerous reasons are cited for this decline, including the growing availability of the automobile, the construction of the Interstate highway system, and the expansion of the arterial and secondary road networks. All of these did, certainly, contribute to the decline of transit, especially insofar as they were part of the general suburban exodus of the G.I. Bill generation. Perhaps foremost among the reasons for transit's decline, however, is that we transit managers missed the trend and failed to respond adequately or on time; the suburbs grew without us. Transit was one of the aspects of city life left behind

in the migration and came to be viewed with increasing disfavor as the car culture flourished and urban decay accelerated into the 1960s. Transit was labeled intrinsic to that old, urban landscape that was being intentionally transformed in the mushrooming communities beyond. Some statistics will serve to illustrate exactly how large the trend was:

According to the Census Bureau, the population of the United States grew from 90 million in 1900 to 227 million in 1980, an increase of more than 150 percent. During this same period, the percentage of the total population residing in what the Census Bureau designates "urban territories" (those with more than 10,000 residents) grew from 24 million to 128 million, an increase of 433 percent. In 1900, the population of urban territories comprised approximately 32 percent of the nation's total; by 1980, 57 percent of all Americans lived in such areas.

More remarkably still, this population explosion has been not only paralleled but exceeded by employment growth. In 1900, total civilian employment in the United States was 29 million. By 1985, employment had increased by 265 percent to more than 106 million. This growth, too, was primarily an urban phenomenon.

Although 57 percent of the population of the United States now lives in the so-called urban territories more than 75 percent live in the broader category that the Census Bureau defines as "metropolitan areas." Population growth in the second half of this century has meant primarily metropolitan growth, and metropolitan growth has meant overwhelmingly suburban growth, with 86 percent of the population increase since 1950 occurring in the suburbs. As a result, suburbs, which claimed only 23 percent of the country's population in 1950, accounted for 44 percent by 1984, whereas central city shares of the national population remained relatively constant. Trends since 1980 have maintained this pattern, with central cities and nonmetropolitan areas continuing to lose population share to the suburbs.

For the most part, major metropolitan areas (those with more than 1 million inhabitants) absorbed the majority of the urban population boom, while metropolitan areas with fewer than 1 million residents grew at approximately the same rate as the total population. In 1950, 52 million people, representing 29 percent of the total U.S. population, lived in 14 areas with populations greater than 1 million. By 1980, metropolitanization had concentrated more than 108 million people, roughly 50 percent of the national total, into 35 such areas.

The pattern of suburbanization has been generally uniform across the nation. Although population growth has varied dramatically by region, the proportion of metropolitan-area workers living in suburban areas varies only slightly from the national average of 61 percent.

In 1960, metropolitan suburban areas accounted for 14 million, or 35 percent, of all metropolitan jobs. By 1980, suburban job concentration had

more than doubled to 33 million, or 47 percent of the metropolitan total. Currently the suburbs are home to about 60 percent of metropolitan-area workers and to approximately 67 percent of metropolitan job growth.

Suburban expansion was not and, quite obviously, is not a blip; it is a revolution. And if public transportation agencies did not simply miss it—which, of course, they did not—they did fail to capitalize on it, become part of it, and harness it. Transit stayed where transit was, which was where transit was known to work. This was not entirely unreasonable, given industry wisdom and experience, but it has left the industry with a lot of catching up to do.

EQUATION: POPULATION AND TRANSIT

In its early days, public transit arose as an integral part of its urban environment. During the early 20th century, as employment became more and more concentrated in urban areas, particularly in downtown central business districts (CBDs), transit became an increasingly popular, convenient, affordable, and therefore logical means of commuting to the work place. The combination of downtown employment growth and the consequent movement of the urban population away from the central city and to outlying neighborhoods early established the central-city work trip as the predominant transit market. Before use of the automobile was widespread, this linkage worked to the mutual benefit of, among others, employee riders, employers, downtown entrepreneurs, and the private providers of transit services.

Obvious as was its appeal, however, transit did not simply make its own success. The principal agent of transit establishment was land use policies of the period that fostered the clustering of economic activity into the growing CBDs. To support various modes and levels of traditional transit services, certain development densities were required in both downtown employment and residential service areas. Different density measures can be used to determine what type of transit service is the most cost-effective and suitable for a specific market.

Unfortunately, data with which to evaluate early 20th century density levels are not readily available. In more recent years, however, such data have been recorded, and, in a 1976 study entitled *Urban Densities for Public Transportation*, the Regional Plan Association (RPA) cross-indexed downtown nonresidential floor space and residential dwellings per acre to determine the appropriate transit modes for metropolitan areas of varying sizes and densities.

Significant use of commuter rail service in the United States was found by RPA to be limited to major urban areas with at least 70 million square feet of central, downtown, nonresidential floor space. Because individual commuter rail stations generally have large service areas (private automobiles and feeder

bus services are used to reach centrally located stations), areas with relatively low residential density (as few as two dwellings per acre) can support commuter rail services.

To support rapid transit services, according to RPA, the service area should include between 50 million and 100 million square feet of nonresidential floor space and have an average residential density of at least 12 dwellings per acre. Adequate feeder bus, automobile, and pedestrian access to the system must also exist. Understandably, residential densities are greatest close to the central city and greatly exceed the required systemwide average.

Smaller metropolitan areas, with downtowns of 35 to 50 million square feet of nonresidential floor space, service areas with more than ¾ million inhabitants, and residential densities ranging from 9 to 12 dwellings per acre are considered by RPA to be sufficiently concentrated to support light rail services.

Other modes of transit can be applicable to areas with significantly smaller amounts of downtown floor space and various residential densities. The shape and population size of individual metropolitan service areas also contribute to the appropriateness of a given transit mode and service level.

Historically, transit has managed to capture an adequate share of trips to central cities because it has had sustaining population densities along its routes. Transit's market share in the downtown-oriented travel market has been higher in larger metropolitan areas because of, among other reasons, maximal densities and the impracticality of automobile usage.

In Chicago, as in most other major metropolitan areas, the downtown-oriented travel market forms the backbone of the wider metropolitan system. For the past 20 years transit's share of the Chicago-CBD-destined travel market has averaged a dominant 68 percent.

The dynamic growth of suburban population and employment in the post-war era has had a profound effect on American commuting patterns. The traditional commute between suburb and central city is no longer the dominant variety. It is now only the third most common pattern, ranking behind suburb-to-suburb and central-city-to-central-city travel. Currently, nationwide about 25 million suburb-to-suburb work trips are made, representing roughly 33 percent of all commuting trips. Between 1960 and 1980, work trips grew by 58 percent in the suburb-to-suburb market and by 25 percent in the suburb-to-central-city market.

In the Chicago metropolitan area between 1970 and 1980, the city of Chicago lost 11 percent of its population and 17 percent of its jobs. During the same period population in the suburban areas of the region increased by 500,000, or 13 percent. The suburbs currently contain 58 percent of the region's population and 54 percent of the jobs, up from 53 and 40 percent, respectively, in 1970. Table 1 gives a comparison of daily work trip travel patterns by all modes for the Chicago region in 1970 and 1980.

TABLE 1 WORK TRIP DISTRIBUTION

	1970		1980	
Origin-Destination	No.	Percentage	No.	Percentage
Chicago-Chicago	1,097,944	39.8	971,357	31.2
Chicago-suburb	228,285	8.3	209,962	6.8
Suburb-Chicago	377,549	13.7	446,024	14.3
Suburb-suburb	1,054,458	38.2	1,482,849	47.7
Total	2,758,236	100.0	3,110,192	100.0

Consistent with national trends, the suburb-to-suburb travel market registered a 40 percent gain during this 10-year period and increased its share of total work trips from 38 to 48 percent. Conversely, trips with origins and destinations within the city of Chicago have declined as a result of suburban population and employment growth. Also representative of this trend is the decrease in reverse-commute trips from the city to suburban areas. Although it registered an increase of 70,000 actual rides, the traditional suburb-to-city commute only retained its share of total work trips.

The problem for the transit industry is obvious. It did not anticipate so drastic a change in commuting patterns; it does not have services in place to adequately serve the suburban market (assuming that anyone liked the product); and it does not have the capital reserves available to initiate fixed-guideway services in the suburban market should sufficient densities be attained to warrant them.

The seeds of the present dilemma—now so thickly grown—were sown quite unwittingly in the beginning of the transit era. Originally, government involvement in the transit industry was generally regulatory: local governments awarded exclusive operating franchises to private transit companies in exchange for their commitment to maintain prescribed fare and service levels. In the short term this arrangement worked well, and the private firms generally prospered as ridership levels steadily increased.

In the minds of some observers, however, even this level of governmental involvement stifled the competition that was needed to control costs and stimulate new and more attractive services. To these critics, the government's initial involvement in the transit industry set the stage for its expanded role after World War II, a role that contributed significantly to transit's eventual decline.

In contrast with the drastic shrinkage of transit ridership since 1950, operating costs have skyrocketed. The total national operating cost in 1965 for the transit industry, not including commuter rail, was $1.45 billion. By 1983, costs had risen to $8.74 billion. During the same period fare revenue increased by only $1.83 billion, and industry employment grew by 50,000 persons or 34 percent.

There are numerous reasons for these negative trends, most of them beyond our control: spiraling inflation, the suburban explosion, and growing reliance on the automobile for commuting are just a few. It is my contention, however, that we in the transit industry need to do a much more effective job of managing our business, and that the role of the federal government—the well-intentioned efforts of which may have exacerbated the very problems they were designed to alleviate—should be reexamined.

Although the infusion of federal capital-grant funds has allowed transit operators to experiment and to bring transit systems to a tremendous number of American municipalities, it has also permitted, if not encouraged, the initiation, expansion, and maintenance of major capital projects that should never have been undertaken. Certainly this is not true of all American transit systems, but in metropolitan areas where travel markets are changing, the routine federal allocation of block grants gives providers little incentive to carefully review emerging transit needs. Although they provide some monies for existing infrastructure needs, such funding policies do not sufficiently promote careful review of and response to emerging transit markets. Federal funding has been market oriented, not in the business sense of responding to perceived need but in the political sense of creating markets where they often did not arise on their own. The absence of a clear strategy based on operating criteria may have created transit businesses where they did not belong—transit businesses that continued to exist and to absorb yet more funding simply because they were there.

I most definitely am not calling for an end to federal funding of metropolitan mass transit. Transit, however, is product driven, not market driven, and this orientation requires that greater vision, imagination, and expediency be exercised in the application of federal funds.

TRANSIT'S FUTURE IN A CHANGING ENVIRONMENT

Although the suburb-to-suburb work trip has become the predominant travel market in metropolitan areas—and will, presumably, continue to increase its majority—the central-city-oriented trip will continue to be the market in which transit will perform best because existing urban density levels are expected to be maintained. Regardless of the growing preponderance of suburban populations and employment bases, central cities and the labor pools that serve them will remain more than large enough to warrant continued transit services, and the CBD-oriented trip will remain the travel market best suited to transit service.

This is not to suggest, however, that it can be assumed that a "business as usual" approach will guarantee transit's continued success in even this market. Instead, to maintain transit's existing share of the CBD-oriented market,

cost-effective service delivery improvements must be sought, tough decisions concerning the infrastructure needs of this market must be made, and funds must be prudently invested in such projects.

In major metropolitan areas the capital investment in transit infrastructure is immense; in some, such as Chicago and New York, it is quite astonishingly large. Much of this capital asset base serves the traditional CBD-oriented market that continues to retain a large portion of total metropolitan-area work trips. To maintain the vitality of the nation's central cities and for transit to retain its hold on the CBD-bound market, capital investment decisions need to be made in accordance with a marketing strategy that balances shifting demographic characteristics, availability of capital resources, and the potential return on investment.

Given the federal government's current policies, capital funds will be more difficult to secure in the future for either new projects or refurbishment of existing assets. The dwindling availability of federal funds necessitates that alternative funding sources be secured and that alternative financing arrangements be reached if large-scale capital ventures are to be undertaken. Maintenance of the existing and most effective systems, therefore, will call not only for careful and traditional stewardship of resources but also for the discovery of new and innovative solutions to old problems.

Retention and refinement of its oldest, core business is essential to transit's continued well-being; the real opportunity, however, lies in the uncharted territories of suburbia. Although the primacy of the automobile in the suburbs is inimical to public transportation, it is only in the suburbs that transit can grow, for it is only the suburbs that have yet to settle on an effective, acceptable means of transporting their populations. This opportunity raises important new questions about federal policy thresholds.

Although, in most cases, development in the suburbs predated the offering of comprehensive transit services, it is by no means too late for transit to become an active partner in suburban development decisions. Of utmost initial importance for local transit properties is the need to clarify and rank what they consider to be their roles in developing suburban areas. When such roles have been established and suitable goals set, various strategies can be developed to achieve specific objectives.

Population not only makes transit possible, it demands it. In many instances the central-city problems associated with high density prompted employers' flight to the suburbs in the first place. These employers are now recognizing that big-city densities and attendant congestion have simply followed them to their new locations. It is in the interest not only of the transit industry but of local officials and the private sector as well to cooperatively foster adoption of zoning ordinances that encourage or mandate the concentration of employment centers and residential developments. This has been done to excellent

effect in and around the city of Toronto. If, in time, sufficient concentrations are attained, substantial capital investments in transit—investments rivaling those traditionally associated with central city travel markets—could be warranted.

Although more of a risk financially, especially with the current scarcity of funding, implementing new transit services in yet-to-be-developed suburban areas blends transit into the future development pattern of an area, makes it part of the socioeconomic landscape, and allows it to be more competitive with the automobile. Transit investments in fixed-guideway systems could even foster concentrated development in some corridors solely because such services exist. The presence of transit facilities in developing areas would, furthermore, give agencies a larger role in determining their continued evolution. I call this the "Weigle Theory of Quantum Leap." It requires that transit agencies take very high political risks and seek venture-capital-type funding.

In addition to, or perhaps in lieu of, large-scale investment in the suburb-to-suburb market, transit needs to work more closely with the private sector and suburban municipalities to identify and fill local market niches. In the Chicago area, for example, successful demonstration services have been initiated to foster reverse-commute transit use. Such demonstrations target specific employment centers and have been well received. More are being planned for future implementation.

In metropolitan regions throughout the country, city-versus-suburb squabbles over equity issues and jurisdictional responsibilities have become commonplace. The transit industry has not been spared these subregional frays. Political pressures from both city and suburban interests are intense, are frequently linked to legitimate concerns, and cannot be minimized. Suburban population growth has recently caused control of several regional transit agencies to shift from the cities to the new, more populous suburbs. In many instances such shifts have worsened the problems facing transit officials who must balance resources between the conflicting needs of the traditional city-oriented market, where transit is most at home, and the growing, politically empowered suburban market that is difficult and less cost-effective to serve.

The political pressure emanating from the cities is to maintain and improve the systems serving CBD areas. Such a strategy, although it promises a relatively high return on investment given transit's historical share of travel in this market, is costly because of the sheer size of this market's asset base. It also becomes increasingly difficult, given suburban control of regional boards, to gain support for capital projects serving markets that are solely city oriented.

The political pressure coming from suburban interests, on the other hand, is for transit agencies to "do something" in the suburbs. This, it must be admitted, is a legitimate concern, especially in light of suburban financial

contributions to regional systems. Suburbanites waiting in citylike traffic congestion on their roads find it difficult to believe that transit will not work in their areas because of insufficient density levels.

For reasons of equity, as well as political compulsion, transit agencies must find ways to effectively service their suburban constituencies. Individual suburban market niches suitable to transit services must be identified through extensive and intensive outreach programs, and services must be developed to meet the requirements of large employers.

To ensure that transit and traffic considerations are included in site-design decisions, transit agencies must become active players at the design stage of suburban development projects. They must be aggressive in their efforts to market themselves in suburban areas if suburban ridership increases are to be achieved and, of equal importance, suburban political interests placated.

It should, by this time, be all too clear to major metropolitan transit managers that the federal government cannot be expected to bankroll improvements to aging physical plants and rolling stock. Nor can Washington be expected to fund new initiatives in the suburban market. In the latter instance especially, the federal role would, of necessity, be minimal because new suburban initiatives will require short turnaround times from project planning to project implementation. Whereas the private sector, which often participates in such suburban efforts, is capable of moving rapidly when necessary, the federal government does not operate on a short turnaround basis. The transit industry must, then, become more innovative and market conscious when making financial decisions. It must be willing to create the kinds of public-private brokerage strategies necessary to participate in these markets.

And, in this era of decreased federal transit spending, a reevaluation of how the Urban Mass Transportation Administration (UMTA) allocates it funds should, perhaps, be undertaken: Do all areas currently receiving UMTA funds actually need that support? Do all urban areas really need and use their current levels of transit service? Should a larger portion of federal funding be granted to large metropolitan areas with large transit-dependent urban populations and growing suburban traffic congestion problems? Are transit needs greater in the old, transit-traditional cities such as New York, Chicago, and San Francisco or in developing cities with populations of 50,000 to 100,000? How would most existing transit systems fare under a 50 percent cost recovery requirement? Should the market set its own prices?

Transit agencies must solicit and inspire vigorous private-sector participation in the design and funding of transit services. Private firms are the direct beneficiaries of transit services and are currently subsidizing their employees' work trips through construction and maintenance of large parking facilities; they are becoming increasingly aware of the problems that arise from traffic congestion as well as the difficulty in linking blue-collar workers with suburban employment centers.

For these reasons the private sector must be made a contributing partner in transit development, and for these reasons transit officials will find their private-sector counterparts increasingly open to joint private-public ventures aimed at solving individual-employer and corridorwide commuting problems. Transportation management associations (TMAs); tax incentive programs; and specialized, nontraditional transit services are all public-private ventures that can, and will, work in suburbia.

Unless it is to be shut out of the future expansion of the nation's metropolitan areas, transit must become an inherent part of the suburban landscape. To accomplish this, transit managers must enlist the talents and insights of those who live there. Until such time as concentrations allow traditional transit modes to be effective in suburban regions, transit must do as the suburbanites do.

CASE STUDY: THE CHICAGO METROPOLITAN AREA

I cannot suggest that my own agency, the Regional Transportation Authority (RTA) of Northeastern Illinois, has found all of the answers to transit's present problems. Neither the board of directors, my cognitive faculties, nor our riders would permit me to do so. I can, however, freely assert that for the past several years—since the RTA was drastically restructured in 1983—special attention has been concentrated on these issues and, I believe, much progress has been made in the directions they point. It may be useful to examine the RTA, a fairly representative U.S. transit agency, its service area, and some of the efforts it has made to stay, or to get back, on top of the transportation business in its region.

The six-county area of Northeastern Illinois served by the RTA comprises approximately 3,700 square miles surrounding the city of Chicago. In 1986, this area, which is roughly as large as the state of Connecticut, had 7.3 million residents and an employment base of 2.6 million jobs. During the 1970s, the region experienced a 1.8 percent population gain and a 7.4 percent increase in employment. Forecasts for the year 2005 predict population and employment growth rates in excess of those attained during the 1970s; population and employment are expected to total 8 million and 3.7 million, respectively.

Consistent with national trends, suburban areas of the region are absorbing the bulk of this growth. During the 1970s, the city of Chicago's population and employment actually decreased by 11 percent and 17 percent, respectively. Between 1980 and 2005, the city's population is expected to remain relatively constant at just over 3 million, and its employment total is expected to regain some of the loss experienced during the 1970s. The pattern of suburban population and employment growth that gave Chicago's suburbs 58 percent of the region's population and 54 percent of its jobs is also expected to

continue because large suburban residential, commercial, and employment developments will lead to an anticipated suburban population increase of 24 percent and an employment gain of approximately 32 percent between 1980 and 2005.

The RTA was established in 1974 after approval of a referendum in its six-county region to coordinate and financially support the suburban bus operators and commuter railroads. In addition, the RTA was to provide a local funding source for both the suburban services and the Chicago Transit Authority (CTA), which was established in 1947 from a conglomeration of private bus and rail operators. During the 1970s and early 1980s, the RTA consolidated and initiated direct operational control over a number of suburban bus companies. Commuter rail operations were either funded by RTA under purchase of service agreements or directly operated by RTA after the conclusion of bankruptcy proceedings in the cases of two rail carriers.

A number of financial problems, which plagued RTA between 1979 and 1983, led the Illinois General Assembly, in 1983, to make significant changes in RTA's organizational structure, function, and funding sources. Foremost among these changes were the establishment of *(a)* a Commuter Rail Division and a Suburban Bus Division as operating arms of the RTA with functions parallel to that of the CTA; *(b)* RTA as the central financial and planning oversight agency for the three operating divisions; and *(c)* a mandatory, systemwide recovery ratio: all RTA services are required to recoup at least 50 percent of their operating costs through farebox revenues. Also contained in the legislation was a formula for allocating most nonfarebox revenues among the service boards, with RTA retaining control over a set percentage of operating revenues for discretionary purposes.

Coincident with RTA's transformation from operating agency to oversight body was the shifting of control of its board of directors from the city of Chicago to the surrounding suburbs.

RTA and its three service boards control an asset base worth more than $14 billion and expend nearly $1 billion annually in operating costs. On an asset basis, RTA is the second largest business entity in Illinois, ranking only behind Amoco. The combined operations of RTA's three service boards constitute the second largest rail transit system and the third largest bus system in North America.

In addition to using fare revenues, federal grants, and state funds that match federal monies and local tax dollars to cover its operating and capital costs, RTA levies a sales tax throughout its six-county service area.

Annual ridership on all RTA services in 1986 was 750 million. Daily ridership of RTA vehicles exceeds the populations of 19 of the 50 states and, in 1985, represented about 10 percent of all American transit ridership. The RTA and its service boards control and operate more than 5,000 passenger

vehicles and provide almost 175 million miles of service annually. The commuter rail and rapid transit systems have more than 1,500 track miles and serve 375 stations.

In an attempt to avoid a recurrence of the financial crisis of the early 1980s, when systemwide ridership decreased by 112 million or 14 percent, and as a first step toward establishing a businesslike manner of operating the Chicago region's transit system, the RTA board contracted with the consulting firm of Booz-Allen & Hamilton to formulate a strategic plan. This effort, initiated in 1984, was to provide a better understanding of the market in which RTA operates and to develop sound recommendations to guide the board in handling its responsibilities. Some of the major findings of this effort are described next.

During the next 30 years, total RTA capital needs will be $13.5 billion. This represents an annual capital cost of $450 million merely to keep the existing capital asset base in reasonably good operating condition. Between 1980 and 1985, the RTA's capital program averaged $233 million per year, with the 1986 and 1987 programs averaging $286 million—far short of the system's requirements. The federal share of the capital program has ranged from $230 million to $180 million between 1980 and 1987 and has declined since the 1983 high of 84 percent.

The consultants' study identified the following five major market clusters into which the RTA region's commuter population falls, and provided strategies to pursue in each cluster. These strategies are designed to balance financial risk with the greatest potential gains in ridership and fare revenue.

1. The traditional Chicago-CBD-oriented market cluster, in which transit had a 68 percent market share in 1985, is similar to clusters in other major metropolitan areas. This market cluster forms the backbone of the Chicago transit system and represents 54 percent of total transit use in the region. Depending on prevailing socioeconomic trends, this market cluster is expected to experience overall travel growth of from 6 to 23 percent. It is anticipated that transit's share of this market cluster will remain high even under a pessimistic socioeconomic scenario.

Transit has done extremely well in capturing trips originating within Chicago, but commuter rail has historically competed with the private automobile for trips destined for the CBD but originating in outer suburban areas. Recommended investment strategies in this market area are to selectively prune some elements while protecting and promoting the network that essentially consists of commuter rail and rapid transit lines and a number of CTA bus routes.

2. The traditional city-oriented market cluster consists of trips destined for points inside Chicago but outside the CBD. In 1985, transit's share of these trips was 30 percent, which accounted for approximately 30 percent of all

transit trips taken. Overall travel change in this market segment is expected to range from −15 to +9 percent, depending on employment and population trends. The consultants recommended that services in this market be maintained because of transit's relatively high share of all trips, but some reorganization and rationalization of services are deemed necessary.

3. The growth suburban market cluster consists of trips made between outer suburbs. In 1985, transit's share of these trips was only 5 percent during the morning rush hour. The consultants considered this to be the area's growth market because overall travel in this cluster is expected to increase from 59 to 88 percent in the coming years. Only 3 percent of the total trips on transit are currently provided in this market area. Because of the large travel growth anticipated in this area of the region, transit could realize a large appreciation in ridership if it were to gain only one or two market share points. Because residential and employment developments are not sufficiently concentrated in this market area, provision of transit service is, obviously, expensive; for this reason, the investment strategy recommended is to establish new intersuburban transit services based on the results of various demonstration projects.

4. The stable suburban market cluster comprises trips bound for Chicago's older, inner suburbs. Transit's current share of these trips is approximately 7 percent (again, morning work trips) and represents 12 percent of all trips provided by transit. Given the amount of fixed-route and feeder bus service, as well as commuter rail and rapid transit services, available in this area of the region, it is disappointing that transit has not performed better here than it has. Overall transit growth in this market is expected to range from −2 to +16 percent, and the recommended strategy for transit is to consolidate and better coordinate some services and selectively expand others.

5. The final market cluster identified is the Chicago CBD circulator market, which contains all trips with origins and destinations within the CBD. Transit currently carries 50 percent of total trips in this market and is expected to maintain this share under all socioeconomic scenarios. Because large-scale development is taking place in Chicago's CBD and the area is increasing in both size and employment base, travel within this market cluster is expected to increase by from 83 to 146 percent during the next 30 years. Because 54 percent of all transit trips in the RTA region are currently destined for the CBD, the provision of a modern and convenient CBD distribution system is of paramount concern to the region's transit industry.

Since accepting the Booz-Allen report in January 1987, the RTA has been engaged in two major efforts that were recommended by the consultants. The first is a series of engineering, financial, and planning studies designed to determine the actual future capital needs of the RTA before an appropriate level of financial support is sought from the state and other sources. The second effort is a series of suburban initiatives that includes the use of public and private funds and relies heavily on local expertise and input.

For its capital program the RTA has adopted a policy of bringing capital assets to a "good" condition by the year 2000. The assets that meet this criterion in the year 2000, however, may or may not be the same as those extant in 1987 because RTA has also adopted a policy that allocates resources on the basis of the needs and ridership trends of the five markets.

It has been estimated in two independent studies that RTA's capital needs during the next 10 years will average $600 million—nearly double the level of spending under the current capital program. RTA is seeking to attain this funding level in two fashions. The first is by soliciting traditional sources—UMTA, the Illinois State Legislature, and other government grant sources. The second, more attractive, and considerably more challenging route is that of innovation: using operating surpluses in the capital program, developing public-private partnerships and other nontraditional financing methods, maximizing financial return on all assets including joint property development, and instituting multiyear funding contracts with UMTA as well as state and local funding sources.

Before venturing into the suburban terra incognita in which growth is expected to continue, RTA recognized the need to establish an informed suburban strategy. To that end RTA hosted, within a period of 6 months, three multiday Transportation Options conferences in the three suburban counties hardest pressed by growing traffic problems. Each conference sought to address the unique, transit-related problems of the county in question by drawing on the collective experience of local and national leaders representing a variety of public and private interests.

RTA's goal in hosting these conferences was to focus attention on the region's growing traffic congestion and land use problems; to solicit local input; to determine what transit services were desired by local governments and private businesses; and, generally, to drive home the idea, somewhat alien to most suburban residents, that the RTA was a partner in answering the region's changing transportation questions—that its intention is to be part of the solution not part of the problem.

A series of suburban-oriented new initiatives based on the conferences and other past efforts has been proposed and implemented. Through a suburban vanpool program to be initiated in 1988 RTA will help to defray the cost of leasing a van during the first 6 months after a vanpool is established. RTA is also considering purchase of a parcel of land along one of the fastest growing suburban employment corridors in the region to be used for joint development including a new rail station–transit center.

The agency has also provided a sizable challenge grant to Transpart, a newly formed association of public and private organizations in suburban Cook County where traffic congestion problems have threatened future development. Under this arrangement, RTA funds are to be matched by local

public and private contributions; Transpart, in turn, will be responsible for identifying local market niches where transit services can be successfully implemented, providing technical assistance for traffic abatement measures, and developing a model land use zoning ordinance that encourages transit use. A number of other services, which are specifically tailored to serve suburban markets, have been implemented in recent months. These include reverse-commute trips from Chicago and suburban bus routes designed to link employees of major area employers with their places of work.

CONCLUSIONS AND CHALLENGES

The word "transit," with all of its connotations of movement and transformation, is related to the word "transient"—something we must ensure that public transportation does not become.

Whether or not it manages to adapt to its new environment, transit will continue to exist through the 21st century. Of this there is little doubt. The constituency presently served by traditional transit services is more than ample to support those systems and, for the most part, has few viable transportation options.

If, however, transit is not to be parochialized—if its boundaries and possibilities are to be extended beyond those envisioned by the 19th-century builders—it must find, or create, its place in the suburban future.

It is in the suburbs that the daily travel market has had its greatest growth for the past 40 years and where the majority of economic and population growth will continue for at least the next 40 years. It is in the suburbs that present transportation modes are proving inadequate, and new answers will have to be found to maintain socioeconomic vitality. It is also, unfortunately, in the suburbs that the transit industry has proven least effective, been shown to least advantage, and lost a great deal of time and ground.

The single, inescapable fact with which transit managers will have to deal in the suburbs is that the private automobile is the travel mode of choice. This will be true throughout the foreseeable future. As long as the suburbs retain anything like their present complexion and flavor, transit will not replace the automobile. What the transit industry must seek to do is complement and direct existing transportation modes. It must be not only market driven but also market creating. To do this, the nation's transit authorities must behave not only as professional field tacticians, which we must do better and more creatively than ever, but as master strategists.

On a tactical level the mass transportation systems that best suit the needs of new and rapidly expanding suburban areas must be developed. It is not inconceivable that they will grow into more traditional transit services, but for the present and for a long period of concentration, tailor-made, responsive

answers to specific transportation needs must be the goal. These tangible, "ground-level" responses will integrate transit into the suburban landscape, demonstrate to suburban users that transit managers are aware of—and can respond to—their needs, and establish the crucial foundation for further development.

Simultaneously with these efforts in the trenches, however, transit agencies must also be thinking and operating on the broader, more visionary, and more important level of regional strategy. The concept of the regionwide transportation authority is a good one; it is a farsighted approach, realistic about and sensitive to changing social and political realities. Making such organizations out of long-established, urban-based transit agencies, however, has been difficult and has met with varying degrees of success and resistance. A regional transportation authority cannot afford to behave as a monopolist, as a bureaucratic monolith, or as a defender of status quo interests. It must establish itself as a full partner with local and regional governments and, perhaps most important, with private corporate and development interests in mapping the broad and conscious evolution of metropolitan areas.

Through the Transportation Options workshops it has hosted in suburban counties, RTA has begun this effort, as have other agencies around the country. The response has been swift and positive. Suburban editorialists have begun to notice and to discuss the new, regional focus of what they long thought of as a system that was regional in name only. The attention and goodwill it has attracted by these efforts has helped place RTA back in the middle of planning and development efforts in its region, allowing it not only to participate in but to shape future decision making.

Optimists, of course, can always be accused of naivete. I do not believe, and do not mean to suggest, that all of these things can be achieved simply because we want them to be, or that they can be achieved easily. There are many vital questions that we cannot definitively answer: Why, for instance, have we in this country shied away from land use planning policies favorable to transit, and will we, as I believe we must, embrace them? Will the public respond as we hope to our outreach and educational efforts? Can consensus be reached between transit and the other partners in regional planning? Transit can only work in the suburbs if there is widespread local involvement in all stages of the planning process and financial cooperation between public and private elements; are we willing to explore these new ways of conducting our business? How can we in the transit industry become more, and more quickly, responsive to private-sector offers of financial cooperation?

There is a need to rethink the role of the federal government in local transit matters. Can the apportionment procedures used to distribute Section 3 and 9 funds be improved to ensure that older metropolitan areas with large, transit-dependent populations receive an equitable share of existing funds? Given the

age of rail facilities in many metropolitan areas, should not more federal monies be spent on rail modernization? To facilitate local discretion in the use of federal funds and to allow local transit properties to take advantage of local private-sector initiatives, should not federal regulations governing UMTA grants be relaxed?

How and when can we learn to compete effectively with a global automobile marketing strategy that has made a car as intrinsic to the American family as the roof over its head? Despite universally lamented congestion, high fuel prices, and occasional shortages, the automobile continues to hold its huge market share. When transit had a once-in-a-century opportunity to seize market share, during the fuel crisis of 1973, even Detroit—not renowned, in recent years, for its responsiveness, dexterity, or ability to innovate—beat transit to the punch by turning out smaller, more fuel-efficient automobiles in a surprisingly short time.

And, perhaps most important, the transit industry must make cost containment a primary objective in providing services to both its traditional and emerging markets. Controlling operating costs at or below the prevailing rate of inflation prevents the damaging cycle of fare increase followed by ridership loss. Are we in the transit industry willing to take tough, often politically unpopular, positions in labor negotiations to keep a lid on cost growth? Are we willing, in these negotiations, to push for more private-sector involvement and greater competition in the delivery of services?

Are we, finally, ready to "go across" into the landscape of the future? To do so we need not forsake our past, but we must recognize it as past, take what is useful from it, and proceed. The transit industry stands, as 1988 approaches, at a crossroads. One road wanders through randomly developed office complexes and housing developments and is congested with automobile traffic; the other leads through well-planned, healthily concentrated, multiuse communities, and is traveled by a free-flowing combination of automobiles, vanpool vehicles, well-occupied fixed-route buses, and employer-designed delivery systems.

The first road is the way of the status quo. The second road, the one we must travel, is the way of positive growth through "proactive" strategic planning. We in transit must be strategic in our thinking. We cannot, simply because we are government agencies, be bound by the old philosophy of "everything for everybody." At any given time, there will be losers in the public transportation business. This is inevitable. It is not inevitable that they remain losers, but their status will change only as individual developments and recognition of the appropriateness of transit grow. We cannot afford to base a fleet in Lake Erie simply because there is water there. Equity is important, but necessity must come first.

We are in transit to a new role in our service areas. I am confident that, if we decide to get it there, public transportation will arrive on time, in comfort, and at a reasonable fare.

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