1. In Des Moines, employers routinely offer subsidized transit passes to employees. The program is so widespread that discounted transit passes are no longer stressed as an employee benefit.
2. In Grand Rapids, Michigan, Transnational Motors, Inc., pays 40 percent of the total premium for employee group automobile insurance.
3. G.D. Searle in Skokie, Illinois, is experimenting with a program of selling used company cars (acquired at fleet prices) to employees to help beat the high cost of automobile ownership.
4. Numerous companies all over the country have implemented car and vanpool programs. At the present rate of formation, the National Association of Van Pool Operators predicts 100 000 vanpools operating by 1985.

Private citizens will have to adjust to the fact that traditional transportation is likely to cost more. To reduce some of those costs, they may have to become vanpool riders or drivers, participate in neighborhood automobile cooperatives, or occasionally rent automobiles or use taxis as alternatives to purchasing second cars.

A variety of private transportation providers may once again become party to the transportation social contract. There is evidence that developers, too, may become party to the contract. In an attempt to make their suburban residential and commercial space more attractive, many developers are underwriting bus or shuttle services or arranging van and carpools.

Given the position and needs of the various principal actors, it is likely that private employers and providers will become much more involved with the direct provision of surface transportation in the future. In the best and worst of extremes, an individual could face a variety of options and a maze of prices depending on the mode, time of travel, destination, and the number of people traveling. The solution to these new transportation problems may define the future role of the public sector. Rather than owning and operating systems, the public sector may become more of a travel information broker, a facilitator, a technical adviser, and a manager of a set of service contracts.

There is little question that the process of renegotiating the transportation social contract has begun. Each party is slowly exploring and carving out a new niche. The process will be long and progress slow. We feel certain that at the outcome, when we speak of public transportation, our concept will have grown to include a range of services and providers: rapid rail, bus, vanpools, commuter clubs, subscription services, taxis, jitneys, apartment shuttles, the private and the rental automobile, each serving the trip length, type, and density that are most cost-efficient.

Changing Concepts of Urban Public Transportation

C. Kenneth Orski

Urban transportation in America is undergoing a major reappraisal. In community after community concerned citizens and local officials are beginning to question the validity of traditional approaches to service delivery and to reexamine the logic of existing transportation arrangements. Although these reappraisals are usually sparked by the need to cut local expenditures and balance local budgets, pressures to reassess the state of local transportation have been mounting for some time. Behind these pressures lies a growing sense of unease about the adequacy of our present urban transportation systems. There is concern that bridges and highways are deteriorating at a faster rate than they can be reconstructed; that the operation of traditional public transit systems is becoming prohibitively expensive; that conventional transit no longer satisfies the needs of a vast majority of urban residents; and that, despite 12 years of sustained national efforts and an infusion of 18 billion dollars in public subsidies, public transit is teetering on the verge of financial insolvency. We are also becoming aware that government can no longer shoulder the full financial burden of taking care of all these problems, and that other resources will have to be mobilized if an effective transportation system is to be preserved.

Emerging from these grassroot reappraisals is a wealth of innovative ideas about the ways local transportation can be more effectively managed, provided, and paid for. By challenging the conventional wisdom, these ideas promise to bring about profound changes in the organization, financing, and delivery of local transportation. These new approaches can be grouped under seven headings:

1. Developer involvement in transportation improvements,
2. Private-sector sponsorship of transportation services,
3. Transportation management associations,
4. Downtown transportation management,
5. Private operation of transit services,
6. Decentralizing service delivery, and
7. Private financing of transit infrastructure.

Running through the seven topics listed above is a common thread that provides a unifying theme for this conference. That central idea is that provision of public transportation is increasingly being regarded as a shared concern and responsibility of the public and private sectors. There is growing support for this position among both private and public leaders. Problems of traffic congestion and parking, access to downtown and suburban jobs, decaying infrastructure, and inadequate transit service, all have immense economic consequences of which the business community is acutely aware. The private sector understands that it must, in its own self-interest, assume an active role in the solution of local transportation problems, lest those problems overwhelm business' ability to function effectively. The business community also understands that a well functioning transportation system can be a positive force for economic development. It can help employers gain access to an expanded labor

pool, stimulate downtown retail activity, and enhance real estate development.

Local government, for its part, has an equally strong interest and incentive to seek private-sector involvement. Civic organizations can help mobilize broad community support for better transportation, and business involvement can help financially strapped municipalities and transit systems to deal with some of the budgetary pressures brought about by cutbacks in federal programs and voter-imposed tax and spending limitations. In short, local transportation offers the public and private sectors a logical common ground and rallying point for mutually beneficial cooperation.

DEVELOPER INVOLVEMENT IN TRANSIT STATION IMPROVEMENT

In the field of transit, private-sector involvement often takes the form of participation in transit station development. Thus, in Toronto, New York City, Washington, D.C., Denver, Atlanta, Baltimore, San Francisco, and Miami, transit agencies have leased air rights over transit stations or land adjacent to stations to private developers, who then pay the transit agency an annual rent (plus, in some cases, a percentage of retail sales). As transit authorities gain sophistication in the real estate market, the "deal-making" is becoming more creative. For example, the New York Metropolitan Transit Authority (MTA) has negotiated an "amenity package" with the developers of Lincoln West, a 12-block, 5000-unit residential development in Manhattan. The agreement calls for a $30 million contribution from the developers toward the cost of reconstruction of the 72nd Street subway station, which will bear the brunt of the new development. In return, the City has agreed to zoning changes that will allow the development to proceed. New York City has also just enacted a new general zoning code for midtown Manhattan that provides density bonuses in return for major subway improvements, such as subway connections, easements through buildings, and relocation of sideway subway entrances. The development bonuses are expected to generate $15-20 million in private funding for station improvements, according to MTA officials.

PRIVATE SECTOR AS A TRANSPORTATION PROVIDER

Until recently, capital contributions were the only form of private-sector involvement in local transportation. Lately, however, business has also been stepping in as a sponsor and provider of transportation service. Its best known manifestation is, of course, employer-sponsored ridesharing programs, some of which date back to the 1960s. Today, some 800 employers offer some form of company-sponsored transportation to work--from simple carpool matching service to elaborate company-subsidized commuter bus programs.

Now, privately sponsored provision of transportation service is spreading beyond the world of large corporate employers. Private residential communities, retirement villages, resorts, amusement parks, and universities (e.g., Reston, Virginia; Las Colinas near Dallas; Leisure World in Orange County; Busch Gardens, Virginia; historic Williamsburg; and the ski resorts of Keystone, Vail, and Sun Valley) operate their own bus systems. Suburban office parks, medical centers, and other large employment centers run their own shuttle buses to close-by town centers and communter rail and rapid transit stations. Merchants and restaurants have occasionally joined in cooperatively sponsoring free downtown "shoppers' shuttles"; hotels often offer "courtesy cars" to their patrons; and condominiums run shuttle buses for their tenants. Several large-scale activity centers, such as University Circle, Inc., in Cleveland, run comprehensive transportation management programs that involve an array of TSM actions, such as vanpools, staggered work hours, shuttle buses, subscription bus service, parking management, traffic flow improvements, and motor vehicle pools. Individually, these privately sponsored transportation systems serve relatively limited markets. Collectively, however, they are beginning to play a significant role in the life of American communities.

PUBLIC INCENTIVES FOR PRIVATE-SECTOR INVOLVEMENT

Where self-motivation for private-sector involvement is insufficient, local government has been known to step in and offer private developers special inducements using the mechanisms of municipal land regulation, codes, and permit procedures. Thus, several cities (Los Angeles, Seattle, and Sacramento) offer density bonuses and zoning incentives in exchange for developer assurances to support ridesharing programs for their tenants. The City of Palo Alto encourages builders to provide "effective alternatives to automobile access" in return for reduced parking requirements. Dallas has negotiated with the developers of the suburban Galleria a broad package of alternative transportaton actions in exchange for less stringent parking requirements. The City of Orlando, Florida, offers developers reductions in the number of required parking spaces in exchange for cash contributions to a "Transportation System Management Trust Fund" that will be used to support expanded transit service and other transportation improvements. The cash contributions are set at 80 percent of the cost savings realized on the parking spaces. San Francisco is thinking of enlisting developers of all major downtown office buildings in the provision of a broad spectrum of alternative commuter transportation services for their tenants, in order to mitigate the impact of new development-induced traffic on downtown congestion. And Placer County, California, has enacted a far-reaching ordinance that requires employers and developers to take an active part in the solution of local transportation problems, as a condition of obtaining zoning and building permits.

The ordinance requires every employer to encourage ridesharing among his or her employees by establishing preferential parking for carpools and vanpools and designating an on-site "ridesharing coordinator." As for developers, the ordinance requires them, as a condition of approval of building permit applications, to design transportation programs that will achieve a 20 percent reduction in traffic generated by their development below the level that would have occurred if all trips were made in single-occupant cars. The ordinance specifies the use of such "mitigation measures" as payment of subsidies to carpool, vanpool, and transit riders; provision of vans to groups of employees for commuting purposes; and other forms of ridesharing facilitation.

TRANSPORTATION MANAGEMENT ASSOCIATIONS

Another manifestation of private-sector involvement is the emergence of Transportation Management Associations (TMAs). These are voluntary nonprofit organizations, formed by local property owners, developers, builders, major employers, and retailers, to cooperatively serve the transportation interests and needs of their members. Similar in status to property owners' associations, TMAs gener-

ate revenue through voluntary assessments or membership fees and, with the money thus raised, support needed transportation improvements. Depending on local circumstances, TMA activities may involve the management of ridesharing programs, administration of shared parking, operation of internal circulation services, administration of staggered/flexible-work-hours programs, operation and maintenance of motor vehicle pools, maintenance of pedestrian amenities, and local traffic flow improvements. Some TMAs are organized around a single activity center, such as a suburban office park or an in-town institutional complex; others are areawide in scope. Some TMAs operate their own services, others contract with professional service providers. Some are single-purpose organizations formed specifically to deal with transportation concerns; others are parts of broader multipurpose organizations. But whatever their scope or geographic location, all TMAs share a common philosophy: They pool private resources in the interest of improving public mobility.

Let me describe one such association--the Tysons Transportation Association--that has been one of the early pioneers in this rapidly growing field. Some 25 years ago Tysons Corner in suburban northern Virginia consisted of a small general store and a gasoline station. Today, with more than 9 million ft^2 of office and commercial space, Tysons is a bustling suburban minicity. In addition to a large regional shopping mall it contains two office parks and a host of hotels, restaurants, banks, and even several residential high-rise apartment buildings. Tyson's daytime population is 25 000 people, who come to work in 20 000 automobiles, creating gigantic traffic jams twice a day. On Saturdays and Sundays the offices are closed but the shopping mall, cinemas, and restaurants become major traffic generators. Tysons is thus in a state of perpetual congestion, seven days a week, 365 days a year.

This situation, reinforced by the prospect of even bigger traffic problems ahead, has sparked the local business community into action. Some 50 of the largest companies doing business at Tysons, together with the major developers, have joined, with the support of the County, to form a nonprofit association for the purpose of improving the transportation conditions within the zone. The Association collects an annual assessment (currently $6/employee and 1 cent/$ft^2$ of interior office space), and with the money thus collected has launched a twin program that includes an areawide vanpool program for the employees working at Tysons and a free internal bus system within the Tysons area for the daytime convenience of employees, residents, and visitors. The Association's target is to remove 4000-5000 cars from the road by 1986, while expanding internal mobility within the center.

Other TMAs can be found at El Segundo (El Segundo Employers Association), at City Post Oak near Houston (City Post Oak Association), in Santa Clara County, California (Santa Clara County Manufacturing Group), in Stamford, Connecticut (Metropool), in Boston (MASCO-Medical Area Service Corporation), in Cleveland (University Circle, Inc.), and in Pleasanton, California (Hacienda Business Park Owners Association). Several other TMAs are in the process of formation in other parts of the country.

DOWNTOWN TRANSPORTATION MANAGEMENT

Private coalitions are also forming in the downtown areas. A new term, "Downtown Management", has been coined to describe comprehensive programs to strengthen downtown economy and improve downtown environment, in which the business community plays an independent entrepreneurial role. Often, these efforts include creating special assessment districts that provide a source of private revenue, enabling the business community to finance independently various capital improvements and supplementary city services.

Transportation often serves as a prime focus of downtown management efforts. Thus, Denver is in the process of creating a special assessment district to manage and maintain its new 16th Street Mall. In Pittsburgh, private businesses have founded a Cooperative Maintenance Association, to renovate Grant Street, Pittsburgh's principal downtown street, and to assume responsibility for the maintenance of street improvements. In Seattle, waterfront property owners have organized a special local improvement district and raised $1.2 million as their contribution toward a new streetcar line along the waterfront. In Miami, a special assessment district is being formed to underwrite a $27 million private-sector contribution toward the cost of Miami's downtown people mover. In a score of cities--Hartford, Los Angeles, Houston, Atlanta, and Washington, D.C.--the business community, working through their own downtown organizations, is assuming transportation management responsibilities, such as coordination of shared parking, organization of downtownwide ridesharing and variable work hours programs, operation of downtown minibus circulators, and management and animation of public spaces.

PRIVATE OPERATION OF TRANSIT SERVICES

Private enterprise has also become more aggressive in pursuing opportunities to operate local public transportation services. In some communities private carriers have been brought in by local government under service contracts or franchise agreements. In other localities private carriers engage in independent entrepreneurial activities, providing totally unsubsidized services. A belief is growing that government need not operate all of the services that the public requires, especially when such services can be delivered more effectively and at a lower cost by the private sector.

One example of this type of private involvement is the substitution of private taxicabs for regular buses at night and on weekends, when demand for public transportation service is too light to justify regular bus operation. The City of Phoenix, for example, is saving some $600 000/year by contracting with private taxicab companies to provide transit service on Sundays. Cities also contract with private bus operators to augment peak-hour commuter services. In Houston, one-third of all public bus service is contracted to private bus companies. The Golden Gate Bridge and Highway Transportation District contracts with four private bus operators to run its highly popular "club bus" service from Marin County into downtown San Francisco. San Diego contracts with a single private bus operator who carries 44 000 passengers/month in 14 buses.

In some jurisdictions, the operation of entire local bus systems has been contracted to private firms. This is the case with certain local systems in California (e.g., Yolo County, Antellope Valley, and Santa Clarita Valley systems) and in Westchester County, New York, which contracts with 16 private bus companies to operate its countywide public transit system, retaining only overall management and policy setting functions, such as deciding on fares, schedules, and routes, and engaging in marketing and promotion activities.

In other cities, private carriers run independent for-profit services. Thus, in Chicago, 10 private companies currently carry 5000 daily commuters from the southern suburbs to the Loop. In Los Angeles,

14 private bus companies operate 140 buses on 132 routes, carrying 6000 daily riders. And in New York City, 700 private buses bring 100 000 daily commuters into Manhattan every day from destinations in Long Island, Westchester County, and northern New Jersey. Similar services are being provided in Boston, Newport News, Kansas City, and Hartford. Private entrepreneurs are also reviving the concept of the jitney, which has been largely regulated out of existence during the past 50 years. Indianapolis, San Diego, and, most recently, Los Angeles, all have private, unsubsidized jitney services, operating in competition with publicly owned transit.

MOVEMENT TO DECENTRALIZE TRANSIT SERVICE DELIVERY

Facilitating the return of private operators is a movement toward decentralizing transit operations, creating smaller service districts, and encouraging multiple-service providers. This movement, which is gathering strength around the country, rests on two grounds. First, decentralized service delivery offers local residents more control over how their money is spent, what kind of service they get, and from whom they obtain it. In a system of decentralized service provision, communities can more easily tailor service according to their individual needs and desires rather than be bound by decisions made by distant officials who, however well intentioned, may not necessarily have the best appreciation of local needs. Furthermore, each community can decide on a different mix of services rather than be obliged to accept a single, uniform type of service, dictated from above.

Second, decentralization can improve the efficiency and quality of service and reduce the cost of service delivery. Small-scale service districts are generally less costly to operate and more efficient to administer. Because the districts are smaller, they can more easily enter into contracts with private firms and this, in turn, can stimulate more competition and lead to greater responsiveness and improved performance among existing service providers. Small-scale service districts might even be able to organize volunteer transportation services or transportation cooperatives, and thus be able to avoid the expense of professional service provision altogether.

It is thoughts of this type that have led the Minnesota legislature to authorize suburban governments in the Twin Cities region to "opt out" of the regional transit system, i.e., to retain 90 percent of the taxes their residents used to pay to the Metropolitan Transportation Commission, and with that money to fund their own replacement services that are more responsive to local community needs. This has also been the motivation behind the recently enacted Proposition A in Los Angeles County, which stipulates that 25 percent of the new countywide sales tax should be returned directly to the local jurisdictions for transit improvements that are locally determined. A two-tiered approach is also emerging in the metropolitan Washington, D.C., area. Alarmed by the escalating cost of transit service provided by the regional transit authority, several suburban jurisdictions are striking out on their own. While they will continue to avail themselves of Metro's line-haul services, they plan to run their own local circulation systems under contract with private operators. A similar movement is under way in Kansas City, where the regional transit agency, the ATA, has been progressively divesting itself of service delivery responsibilities in favor of individual suburban jurisdictions.

This is not to say that the issue of decentralized service delivery is devoid of controversy. Many officials view the prospect of independent suburban service districts with considerable alarm, as a prelude to an eventual "balkanization" of the carefully assembled metropolitan transportation systems. They perceive the efforts of suburban jurisdictions to achieve a measure of independence not as a welcome sign of political maturity, but as a selfish move that will hurt the central city and subvert the cherished principle of regionalization.

I wonder whether these sentiments are justified. Transit authorities that are truly bent on improving service and raising productivity should welcome an opportunity to divest themselves of costly suburban routes. Withdrawing from the task of providing suburban service might not only eliminate the most serious source of operating deficits, it might also allow the transit agency to concentrate more of its resources on the traditional markets--the high ridership routes of the central city, where the cost of operation can be recovered from the farebox. In other words, metropolitan areas would do well to strive for a certain division of labor, letting each level of government do what it knows best.

PRIVATE FINANCING OF PUBLIC INFRASTRUCTURE

Finally, and most intriguingly, there are signs of a reawakening of interest by the private sector in the construction of new rail transit systems. In Dallas, a syndicate of prominent local developers has offered to share in the cost of building a 23-mile light rail line that would link major residential and commercial developments in the suburbs with downtown Dallas. Similarly, suburban businesses and real estate interests in Denver are considering the possibility of raising a 10 percent private-sector contribution toward the cost of a proposed regional light rail system. The latest evidence of interest in public-private financing of rail transit comes from Orange County, Florida, which has invited expressions of interest from the private sector to "design, finance, construct, and operate" a rail system that would connect the Orlando International Airport, a complex of hotels, tourist attractions, and employment centers, and the Orlando central business district. The county's invitation has focused on the lack of federal funds for new rail systems, emphasizing that only the private sector has "the necessary resources to marshall the financing support needed for implementation."

Will the private sector once again assume a major role in the financing of new transportation infrastructure, as it once did in the days of Henry Huntington, Sam Insull, and the Van Sweringen brothers? The jury is still out on this question, but there is ample historical precedent in the United States, as well as numerous contemporary examples in foreign countries, to support this thesis.

In the United States, much of the early suburban development would not have occurred had it not been for heavy private investment in "interurbans" and electric street railways that opened up land on the urban periphery to development and led to the creation of "streetcar suburbs." Abroad, private involvement in public infrastructure financing, construction, and operation continues to this very day. In France, a portion of the national network of modern autoroutes has been built with the help of private capital and is being operated by private for-profit "concessionaires". French municipalities award contracts or franchises to private firms to manage, maintain, and operate publicly funded infrastructure, such as water systems, requiring them to amortize the facilities over the term of the franchise and repay the initial capital cost to the government. The same type of public-private ar-

rangements prevailed in the United States at the turn of the century: in Boston, Chicago, and New York City the municipal governments sold bonds to finance the cost of subway construction, and then leased the completed facilities to private companies for operation, with the debt serviced out of the rental payments.

In Great Britain, a proposal has been made to let the private sector build, maintain, and operate roads and other public facilities with privately raised capital. Local government would then lease back the facilities from their private sponsors. At the end of the leasehold, after the private investment has been paid off, the facilities would revert to the public. The major road between Dallas and Fort Worth was financed and operated this way.

In Japan, private real estate development companies, such as the Tokyu and Hankyu Corporations, still construct and operate suburban commuter rail lines that link their developments to city centers--and manage to return a healthy profit on their investment. The automated guideway transit system in the City of Kobe was built by a consortium using a combination of public and private financing. The consortium issued stock, roughly half of which was bought by the City of Kobe and the other half by 42 private Japanese companies, including banks, shipping companies, and construction firms. Stockholders in the system expect no return on their investment until all capital costs have been recovered, and treat it as an investment in Japan's industrial future. The system is expected to be profitable after 10 years of operation and to begin paying dividends after 20 years.

Could similar approaches work in the United States? The question raises some intriguing possibilities for jurisdictions such as Los Angeles, Houston, Dallas, Denver, and Orange County, whose appetite for new infrastructure has outstripped their capacity to raise new revenues.

CONCLUSION

All this seems to suggest that local transportation is being increasingly considered as a shared responsibility of the public and private sectors. Precisely how this responsibility will be allocated between the two sectors will vary from place to place. In many circumstances the public sector will remain the dominant force. In others, the private sector may emerge as an important service provider. One thing, however, is certain: In virtually every community conscious attempts will be made to reexamine the roles of the public and private sectors and to redefine their respective obligations. Out of this process, let us hope, will emerge financially stronger, more responsive, and affordable systems of public transportation for tomorrow's urban America.

Financing Government Enterprises

Franklin D. Raines

The financial problems that have plagued general government operations over the past 20 years have begun to dramatically affect government-operated enterprises. Publicly owned sewer and water systems, energy generation and transmission, and transit systems are common. What is new is the financial travail that many public enterprises now face.

These enterprises, businesses that could be run by private owners, are different from other local government operations because they were supposed to be supported, in part or in whole, through user fees.

The ideal public enterprise, from an accounting standpoint, would be virtually indistinguishable from a privately operated business. Its revenue would be generated by rendering services for which the public would pay on a use basis; expenses would be recognized on an economic basis, including depreciation; debt would be supported through earnings; and the surplus of the enterprise would be reinvested to ensure long-term economic survival. Many public enterprises fit this description, but others are something of a hybrid. Some give away services to certain users without charge, receive subsidies from tax funds, use standard government fund accounting, serve as tax collection instruments, or use their equity to support unrelated activities. This diversity should not, however, obscure the overwhelming similarities. On the whole, public enterprises depend for their financial viability on the willingness of customers to buy goods and services rather than the power to require payment through taxes regardless of whether any services are delivered or used.

This exposure to market forces is greatly tempered by the fact that most public enterprises constitute monopolies with few readily available substitutes. The exceptions--mass transit, convention facilities, and occasional competitive circumstances such as Muni Light in Cleveland--are also the cases where one is most likely to find tax subsidies required to maintain the enterprises.

Public enterprises are beset by a wide range of financial difficulties. First, rising operating costs fueled by employee wages and energy costs have created widespread opposition to rate increases necessary to produce a positive net income. The tax revolt has spread to user rates and citizens are forcing public-enterprise governing bodies to consider issues beyond the financial viability of the enterprise.

Second, public enterprises are affected by the growing public suspicion of large development projects and are subject to the full panoply of development regulation. This problem is compounded by the increasing complexity of planning for service facilities by public businesses where need is measured by energy consumption forecasts where a 1 percent difference in growth rates can equal two or three nuclear plants, or where transit ridership is determined by OPEC oil-pricing decisions. Because of these difficulties in planning and execution, the costs of large developments have escalated at rates