Photo credit: American Society of Civil Engineers

Chapter 4
Local Governments: Where the Buck Stops

CONTENTS

Boxes

Figures

Tables

Chapter 4

Local Governments: Where the Buck Stops

If we can convince ourselves that light beer tastes better and is less filling, we ought to be able to convince voters to support higher quality services.[1]

Local officials and managers are on the firing line. They face day-to-day management problems and expenses for system operations and maintenance, complaints about inadequate roads and crowded airports, Federal penalties for environmental deficiencies, and constituent hostility to the tax increases needed to pay for resolving these problems. According to one method of calculation, over 83,000 local government units (see table 4-1) operate in the United States. These range from densely populated cities and rapidly growing urban counties to tiny towns and sparsely populated rural counties. They include a multitude of single-purpose special districts, among which are the Nation's 600 highway districts, 356 airport authorities, 163 port authorities, and numerous water supply districts.[2] Local governments encompass a staggering array of sizes, economic characteristics, and functions; in the Chicago metropolitan area alone, over 1,200 governmental units--6 counties, 113 townships, 261 municipalities, 313 school districts, and 501 special districts-may be found.

Officials of these local governmental bodies are deeply committed to improving aging public works facilities to support both essential services and local economies. To meet the relentless demands for better services, local officials from Weehauken to San Jose pursue the elusive dream of adequate, reliable, and politically acceptable financing. Finding that traditional strategies for funding public works are no longer enough, local officials are seeking to make projects more self-supporting and to involve the private sector. However, each community must match its plans to its political and economic framework-and abide by Federal regulations and State laws as well. Many are making extraordinary efforts, and some have been successful in developing and funding programs to meet their most pressing needs.

Table 4-1--Number and Types of Local Governments, 1987

County	3,042
Municipal	19,200
Township	16,691
School district	14,721
Special district 0	29,532
Total	63,166

SOURCE: U.S. Department of Commerce, Bureau of the Census, *Statistical Abstract of the United States, 1989* (Washington, DC: 1989), p. 266.

However, OTA did not find *any* jurisdictions that claim to be doing more than staying even on meeting public works needs. Local problems vary with the jurisdiction's size, age, and economic and geographic characteristics. Cities must maintain transportation networks built to serve commercial and residential areas developed years ago. As public works facilities age, maintenance costs rise, sapping funds that might be used for modernizing or rehabilitating their systems. Traffic congestion and delay are increasing frustrations for commuters and commercial activities, and affect the quality of life in major urban and suburban jurisdictions. Communities must also take steps to comply with new water quality and wastewater treatment requirements; a number still do not meet current air quality standards.

Yet to balance their budgets as required by State laws, local governments have had to cut expenditures, raise taxes, and tap a variety of alternative sources of revenue. With most attributing their actions to curtailments in Federal and State funds,[3] 52 percent of the Nation's cities reduced capital spending in 1987, 44 percent did so in 1988,[4] and

[1]Whit Van Cott, commissioner of water, Toledo, Ohio, in U.S. Congress, Office of Technology Assessment, "Transcript of Proceedings—Environmental Infrastructure Workshop," unpublished transcript, Sept. 14, 1989, p. 132.

[2]Douglas R. Porter et al., *Special Districts—A Useful Technique for Financing Infrastructure* (Washington, DC: The Urban Land Institute, 1987), *pp. 4-6.*

[3]Douglas D. Peterson, Ciry *Conditions in 1988*, Research Reports on America's Cities (Washington, DC: National League of Cities, 1988) p. iii.

[4]Ibid., p. 19.

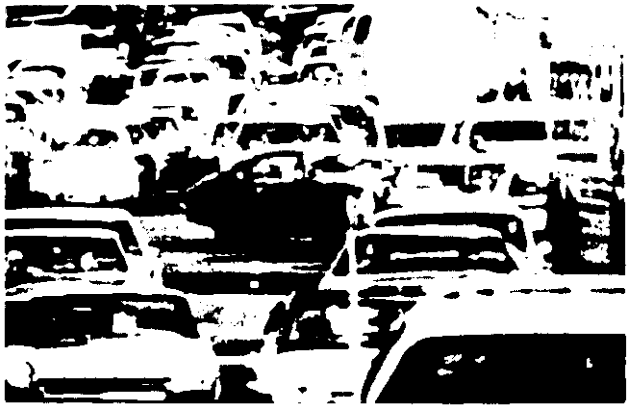
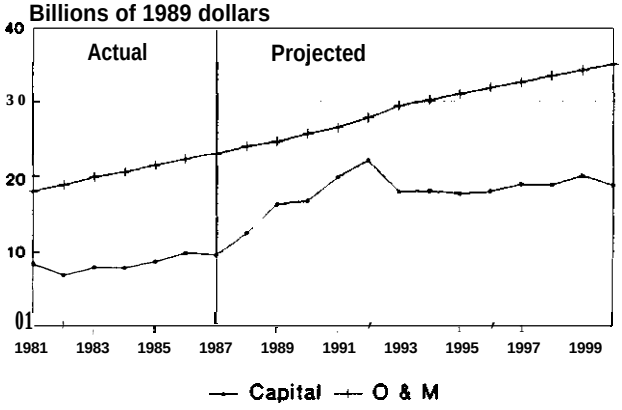


Photo credit: Department of Transportation

Traffic jams are so much a part of daily routine in urban regions that congestion-related words, such as bumper-to-bumper and rush hour, have become part of the American vocabulary.

Figure 4-1--Local Government Expenditures To Maintain Currant Levels of Environmental Quality and Comply With New Regulations



SOURCE: Office of Technology Assessment, 1990, based on reformation provided by Apogee Research, Inc.

one-third in 1989.[5] Counties also report a widening gap between public works needs and revenues, despite efforts to increase local receipts through special assessments, impact fees, and public-private partnerships.[6]

Local officials' public works responsibilities are complicated by Federal and State policies beyond their control. These include:

- New environmental requirements that will increase both local capital and operating expenses (see figure 4-l).
- Reductions in Federal support, on which local governments had come to rely, especially wastewater treatment construction grants and revenue sharing funds. The cuts have been major blows to local governments; in most cases, State support and increases in local taxes and fees have not filled the revenue gaps.
- Requirements to fund special social programs.
- Federal tax code changes in the 1980s that made public works partnerships less attractive to the private sector and increased the cost of borrowing.
- State limitations on property tax increases and borrowing. Such laws have thwarted local efforts to raise additional revenue to support public works.

Box **4-A** details tax, spending, and debt limitation issues confronting local jurisdictions.

Lacking both financial and management resources, small districts have been particularly hard hit, and their fiscal resources will be further strained by new environmental requirements. Although some small jurisdictions are wealthy, most have low tax bases, low per-capita incomes, and virtually no public resources or access to private investment funds. Their per-unit costs for public works are often higher than those for larger districts that benefit from economies of scale-it costs nearly four times as much to provide 1 gallon of clean drinking water in a community of 500 as it does in a city of 500,000, for example.[7] Because of their small size and economic characteristics, some jurisdictions find it difficult-almost impossible-to borrow money in commercial credit markets. Compounding their financing problems, small jurisdictions lack professional expertise and experience in managing public works. Officials are dependent on consultants-for evaluations of their systems and advice about technological options and financing strategies, because salaries in the private sector are so attractive that few engineers enter State and local governments (see figure 4-2). States do provide some technical and financial support (see chapter 3); however, not

[5]Douglas D. Peterson, *City Fiscal Conditions* in *1989,* Research Reports on America's Cities (Washington DC: National League of Cities, *1989),* p. v.

[6]Apogee Research, Inc., *Counties: Public Works* Leaders (Washington, DC: National Association of Counties, July 1987), p. 6.

[7]Apogee Research Inc. and Wade Miller Associates, *Problems in Financing and Managing Small Public Works* (Washington, DC: National Council on Public Works Improvement, September 1987), p. ii.

Box 4-A—Tax, Spending, and Debt Limitations

During the 1960s and 1970s, local governments increased property taxes substantially to finance both services and their bonding debts for public works construction. Angered by rising taxes, taxpayers in a number of States pushed through legislation to limit local government use of the property tax. Local jurisdictions in 25 States faced limits before 1970 on the tax rates they could impose on local property owners; 8 more States had set limits by 1985.[1] California's Proposition 13 and Massachusett's Proposition 2 1/2 are the best known. Proposition 13 precludes local jurisdictions from increasing property taxes for nondebt purposes and, until modified, precluded any new debt obligations supported by property tax revenue. Proposition 2 1/2 limits local property tax rate increases in cities and towns to 2 1/2 percent per year until the rate reaches 2 1/2 percent of real estate market value. Communities with tax rates exceeding the ceiling have to reduce their tax rates 15 percent annually until they reach the 2 1/2 percent ceiling.[2] (See chapter 3 for further information.)

Arizona, California, Iowa, Maryland, New Mexico, and Oregon also restrict increases in assessments, requiring local governments to increase tax rates rather than relying on automatic revenue increases resulting from rising property values. California, Iowa, and New Mexico exert even stronger control over localities by limiting both the tax rate and assessment increases.

Local governments have successfully persuaded some States to mitigate the impact of such property tax limitations. For example, Massachusetts increased aid to local governments by 12 percent annually between 1981 and 1988 as a means of compensating local governments for much of the revenue lost as a consequence of Proposition 2 1/2 as well as the loss of revenue sharing.[3]

In addition to property tax caps, localities in a handful of States must abide by either general revenue or expenditure limits. Maryland, Minnesota, Mississippi, and Missouri set limits on the amount of revenue that local governments are allowed to collect from property tax and other nonproperty tax sources. Arizona and California restrict the amount of money that a jurisdiction can appropriate or spend annually.[4]

Many States impose constitutional and statutory constraints that limit the ability of local governments to issue general obligation bonds. Although most municipalities maintain levels of indebtedness far below the imposed limits, jurisdictions with low or declining credit ratings find that the limits figure in their discussions with credit analysts. The impact of State ceilings is less significant when jurisdictions have the option to choose between general obligation bonds and revenue bonds that do not fall under State regulations.

By 1986, 42 States had imposed some type of constitutional or statutory limits on local government's ability to issue general obligation bonds. The typical forms of regulation are a cap on debt levels or referenda requirements. While a few States tie debt limits to tax revenue, most tie them to a percentage of the value of a municipality's real property. In several States, the established debt limit can be exceeded for water and sewer construction, economic development, or other specified purposes. A few States tie debt limits to tax revenue.

General obligation borrowing is also constrained by interest rate limits and/or referendum requirements. Interest rate limits are not always crucial, since States frequently are willing to adjust limits as needed to respond to the credit market.[5] On the other hand, referendum requirements, imposed by the majority of States, can be strong constraints on local borrowing. For example, although Virginia counties have no limits on local borrowing, voters must approve every general obligation bond issue—a very effective restraint. California requires voters to approve all bond issues by a two-thirds majority.

A few States have neither debt nor interest rate limits and require only a simple majority vote of elected officials or the electorate. The per capita general obligation debt of these States does not show a consistent pattern compared to each other or to the national average. Willingness to borrow is thus more a reflection of State philosophy than of restrictions incorporated in constitutions or statutes.

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[1]Advisory Commission on Intergovernmental Relations, *Significant Features of Fiscal Federalism*, 1988 ed., vol. 2 (Washington, DC: 1988), p. 102.

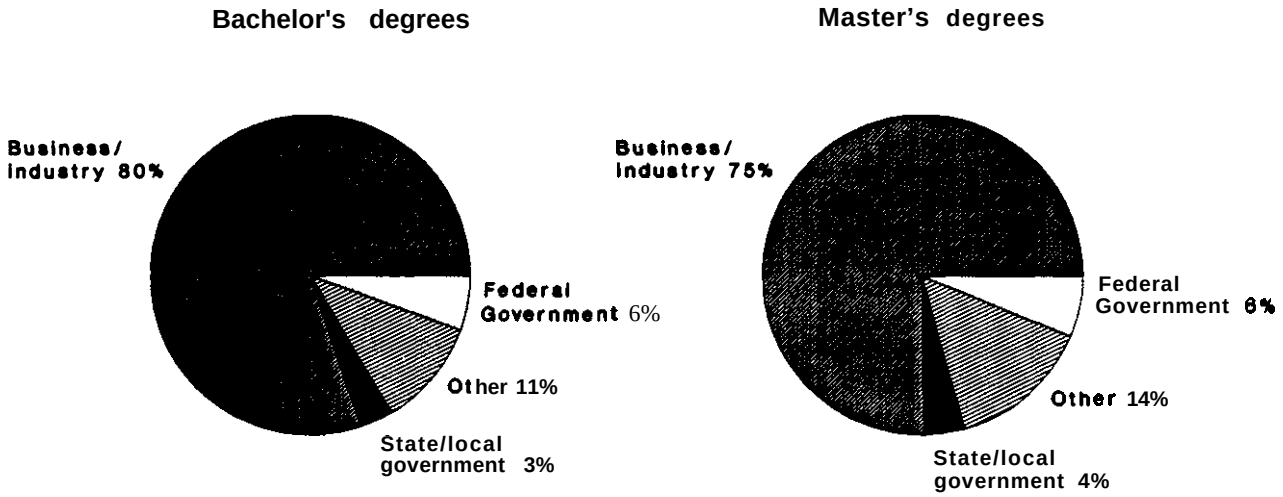
[2]Sophie M. Korczyk, "State Finance for Local Public Works: Four Case Studies," OTA contractor report, December 1989, p. 59.

[3]Ibid., pp. 59-60.

[4]Advisory Commission on Intergovernmental Relations, op. cit., footnote 1, p. 102.

[5]Government Finance Research Center, *Constitutional, Statutory, and Other Impediments to Local Government Infrastructure Finance*, prepared for the National Council on Public Works Improvement (Washington, DC: October 1987), p. 42.

Figure 4-2--Destinations of Engineering Students



SOURCE: Office of Technology Assessment, 1990, baaed on 19S2 National Science Foundation data.

all States have sufficient programs, and small districts' difficulties are compounded when the State is also struggling economically and cannot help. Rock Springs, Texas, typifies the multiple problems **facing** such towns (see chapter 1, box l-A).

LOCAL TRANSPORTATION RESPONSIBILITIES

Local officials have long known what their State and Federal counterparts often appear to overlook—that local public services must function smoothly as a system for the national economy to remain healthy. If local businesses falter, the economic health of the State is affected, and eventually the economic vigor of the Nation is sapped. The international market for citrus provides one example of the interconnections between local infrastructure and the national economy. Grapefruit is picked and placed in intermodal containers in Florida groves. The containers are loaded on tractor-trailers for the trip by local and State roads to a railroad yard, where they are transferred to a special container train. Once or twice **a week, these** special trains speed across a tier of southern States to a rail transfer facility near a major local port on the west coast. Within hours, the containers are transferred once again to tractor-trailers, trucked over local roads to the port's dock, and loaded on a waiting vessel. If the transportation system is functioning properly, 5 days after being picked in Florida, the grapefruit may be crossing the ocean on the way to Japan, providing a valuable boost to the U.S. balance of trade.

Local governments have responsibility for 70 percent of the Nation's roadway mileage.[8] They receive funding support from the Federal Government, which provides 24 percent of total national highway expenditures, and State governments, which provide an additional 52 percent.[9] State and Federal programs are usually administered through State Departments of Transportation (DOT) or Highways. When additional capital funds are necessary, local governments depend on their own general revenues, and increasingly on dedicated taxes. Most communities have backlogs of road and bridge maintenance and repair projects and seek greater State support or permission to levy user fees, such as the local gas taxes allowed in 16 States.[10]

To be eligible for Federal aid, local street and bridge projects must conform to categorical grant requirements; these requirements and concerns about liability are strong incentives to utilize traditional designs and technologies, rather than innova-

[8]Federal Highway Administration *Our Nation's Highways—Selected Facts* (Washington, 1987), p. 4.

[9]Ibid., p. *m*.

[10]Thomas Cooper and Judith DePasquale, Federal Highway *-~, "Local Option Motor Fuel Taxes," unpublished manuscript, 1988.

Photo credit: Jeff Stine courtesy of E-470

To comply with Federal requirements, contractors in Colorado replaced a wetland, filled in during highway construction, with this man-made pond.

tive solutions. Moreover, with the exceptions of the 3- and 4-R programs,[11] Federal funds are restricted to new capital projects, precluding their use to finance traffic management improvements that could reduce congestion, such as upgraded signals, ramp metering, and real-time traffic monitoring. When adjusted for inflation, Federal expenditures in 1989 for highways and bridges were at the same level as in 1980 (see chapter 1, table 1-2), although construction and repair *costs* have escalated. Yet the Federal Highway Trust Fund, fed by motor fuel taxes, had a $9 billion balance in 1988;[12] this balance was estimated to rise almost another $1 billion during 1989. In this context, local officials deem it unfair that Federal fuel taxes collected from their jurisdictions are being held in the Trust Fund and are not returned to them for the intended purpose.

In addition, State and Federal planning and construction requirements, such as detailed environmental impact studies and construction wage rate standards, delay projects, increase costs, and discourage innovation. Although streets and highways are essential to intermodal connections, local highway departments have little incentive to seek intermodal solutions to areawide transportation problems since Federal and State funds are allocated by mode, and interjurisdictional coordination is difficult to achieve.

Weak land-use planning and development controls in many growth areas have resulted in traffic that exceeds the capacity of even new roads. Officials in rural areas face the dilemma of maintaining many miles of lightly traveled roads and numerous bridges at service standards necessary for heavy trucks carrying seasonal agricultural products only a few weeks a year.

Convenient automobile transportation and the lure of suburban living bring with them crowded highways and air pollution in metropolitan areas. Peak-hour congestion occurs daily, and gridlock strikes in the case of an accident or when repair work is necessary; indeed, when asked what he would change to improve his business, an official of a large international shipping line replied:". . . reduce local traffic congestion."[13] Routine maintenance must be carefully scheduled and managed to avoid major disruptions. The New York State DOT routinely adds 40 to 50 percent to the budget for each major highway improvement project to cover the costs of measures to maintain traffic flow during construction.[14]

While new technology can bring some short-term improvements to traffic congestion problems,[15] changes in lifestyle and institutional arrangements will be necessary for long-term solutions in regions where problems are most severe. In southern California where a one-way commute to work can take almost 2 hours on a bad day, several major employers have begun telecommuting programs under which employees work at home or in a regional office and communicate electronically.[16]

[11]In 1976, a special category of Interstate highway funds was authorized for Resurfacing, Restoration, and Rehabilitation (3 R). In 1981, the fourth R, Reconstruction was added.

[12]U.S. General Accounting Office, *Highway Trust Fund: Condition and Outlook for the Highway Account* (Washington, DC: May 1989), p. 4.

[13]Richard Powell, regional director for Southern California, American President Lines, personal communication, Nov. 8, 1989.

[14]New Jersey Transportation Coordinating Council and New York Metropolitan Transportation Council, "Regional Transportation: Current Conditions and Future Prospects," unpublished document, April 1989, p. 64.

[15]For further information, see U.S. Congress, Office of Technology Assessment, "Advanced Vehicle/Highway Systems and Urban Traffic Problems," science, Education and Transportation Program staff paper, September 1989.

[16]John Seymour, vice president, Pacific Bell, at "Technology for Tomorrow's Transportation, A Policy Conference," Costa Mesa, CA, unpublished remarks, Nov. 9, 1989.

Mass Transit

Local governments manage transit systems as an operating department or through a public transit authority. During the 1980s, ridership increased for rail systems, but decreased 11 percent for buses.[17] Nationally, farebox revenues cover less than 40 percent of operating Costs; [18] and service is subsidized from general funds, from earmarked sales or employment taxes, and from State sources (see chapter 3). Federal capital grants have financed a large proportion of bus and subway car purchases, bus maintenance facilities, and the renovation or construction of rail systems. Growing numbers of express bus lanes and crowded "Park and Ride" facilities show intermodal linkages will be used when they are provided and convenient

Federal grant categories and a community's most critical transit needs do not always fit smoothly. Some cities receive more capital funds than they need, discouraging operating efficiency and proper maintenance, while others, often those with older rail systems, are in desperate need of capital equipment and track rehabilitation, and are underfunded.[19] Transit operators find it hard to understand why Federal transit aid is declining when a $5.2 billion balance exists in the Mass Transit account of the Highway Trust Fund.

Transit benefits are diffuse, affecting many only indirectly through easier access to downtown and reduced air pollution and auto congestion. These indirect benefits make it difficult politically to establish an adequate and reliable local revenue base. The French Government addressed this issue by levying a local payroll tax, with rates ranging from 2 percent in Paris to 0.5 percent in small jurisdictions, on all businesses with nine or more employees. Receipts are dedicated to transit and finance about one-third of all capital and operating costs. Major improvements in French transit service over the past 15 years are attributed to the revenues from this broad-based tax.[20]

In contrast, many public policies in the United States are disincentives to support for mass transit.

Photo credit: American Society of Civil Engineers

The frustrations and fatigue of commuting in heavy traffic can take atoll on productivity in the workplace.

Transit officials are not typically an integral part of local and regional transportation and land-use decisionmaking, and in many communities, land-use policies allow metropolitan sprawl, creating transit needs unsuited to conventional fixed-route bus and rail service. Policies that require employer-provided parking make it difficult to increase transit ridership and improve productivity. Even Federal tax policy favors auto drivers, because employer-paid transit subsidies are considered taxable benefits, while parking privileges are not. State and Federal motor fuel taxes are relatively low, suppressing the cost of gasoline to motorists and providing a further disincentive to transit use.

Airports

Over one-half of the Nation's large and medium commercial airports and a greater percentage of small commercial facilities are owned and operated by municipal and county governments. Most major airports are largely self-supporting, except for the essential air traffic control services provided by the Federal Government They use landing fees, airline rents, and revenue from parking and concessions to fund facilities and services. Nonetheless, they must comply with Federal, State, and local regulations and be responsive to airline and passenger concerns

[17] J.F. Hornbeck, *Federal Policy* *Surface Transportation Infrastructure* (Washington, DC: Congressional Research Service, p. 5.

[18] Thomas D. Hopkins, "Benefit Charges for Financing Infrastructure," OTA contractor report, July *1989.*

[19] Congressional Budget Office, *New Directions* for *the* *Public Works* (Washington, 1988), p. 37.

[20] Slobodan Mitric, "Organization of urban Public Transport in France: Lessons for Developing Countries," paper presented at the Transportation Research Board meeting, Washington, *DC,* January 1987.

Photo credit: Massachusetts port Authority

Paking fees area key source of income for major airports.

as well. While over one-third of the Federal Airport and Airway Trust Fund annual appropriation goes for air tile control improvements, a little over one-quarter is allocated directly to airports for expansion and renovation.[21] Nearly 90 percent of capital improvements at reliever and general aviation airports are paid for from the Trust Fund.[22] Other Federal- and State-aid programs are targeted at small airports important to communities for economic development.

Capacity and noise problems and ground access difficulties (inadequate parking, highway access, and mass transit connections) beset many large airports. Reliever and general aviation airports are targets for developers seeking large sites for commercial and residential developments. The aviation trust fund balance was $5.8 billion in 1988, and is expected to reach $6.8 billion in 1989,[23] to the frustration of airline operators and airport managers. However, even when ample funding is available, airport expansion plans often draw hostile reactions from citizens who fear that increasing airport capacity will bring more traffic and higher noise levels. Friction between airports and citizens has put many local airport improvement plans on prolonged hold.

Local governments have minimal direct responsibility for railroads, because the private sector operates freight service, and intercity passenger trains are run by Amtrak. However, rail facilities are strategically located and an integral part of most cities. Many believe that they represent a neglected option for moving people or goods within and between metropolitan areas.

Trains could play a large and important role in improving urban and national mobility, as the success of Amtrak's Metroliner between Washington, DC, and New York City, and the important commuter rail services in States like California, Illinois, and Pennsylvania illustrate. However, rail companies claim that trains cannot compete, except in a few situations, with cars, trucks, and planes, which can use public rights-of-way-that is, highways and airports. Recently, a few private companies, seeking profitable opportunities to use abandoned track, have begun to plan new commuter service in heavily traveled corridors. Before railroads can play a larger role in local transportation, rail service must be integrated with other transportation modes, and public and railroad executives must learn to work harmoniously. Numerous institutional and legal issues affecting public and private sectors, such as liability for accidents, must also be addressed.

Ports and Waterways

Ports and waterways can be of major importance to local economic development. Coastal port competition in the East is particularly vigorous, because of the major shift in international trade to the Pacific rim. Generally, port facilities are owned and managed by a municipality or a public authority; inland waterway terminals are frequently privately owned. Ports raise operating funds primarily from user fees and use revenue bonds to acquire capital; some also receive local and State general fund appropriations.

[21] Congressional Budget Office, *The Status Airport Airway* (Washington, DC: 1988), P. xi.

[22] National Council on Public Works Improvement, Fragile *Public Works* February 1988), p. 90.

congressional Budget Office, op. cit., footnote 21, p. 36.

Photo credit: Port Beach

introduction of double-stack container cars has revitalized many freight railroads and is a fast growing type of commercial transportation.

Federal funds cover the majority of navigation infrastructure costs.

Many older ports are at a critical juncture; they need to modernize and expand facilities to remain competitive, but cannot support the necessary investment without raising fees substantially, which would undermine their competitive position. Under the Water Resources Act of 1986, costs for channel dredging must be partially borne by the local port operator; previously, the Army Corps of Engineers had full responsibility for dredging. Furthermore, the disposal of dredged material has become a major environmental and cost issue for industrial ports.

The Nation has more ocean and inland ports than required by modern shipping equipment and goods transport patterns. Industry officials advocate the targeting of limited public funds for facility improvements for high-priority, deep-water ports and main-system projects on the waterways. However, decisions on which ports have the highest priority and what constitutes the main inland waterway system are controversial and problematic.

The transportation linkages between ports and the pipeline, rail, and truck services that move products over land to terminals are critical to the efficiency and attractiveness of the port to shippers. However, despite the obvious importance of these connections, few ports have integrated transportation systems, and port officials often find negotiating with private carriers difficult. Furthermore, frequently only one rail carrier serves a port, curtailing the options for shippers of bulk products if service is unsatisfactory.

LOCAL ENVIRONMENTAL RESPONSIBILITIES

Funding and supply of environmental services is provided almost solely at the local level; historically service fees and general taxes have supported these public works. New Federal standards and the phasing out of Environmental Protection Agency (EPA) construction grants will increase costs (see table 4-2), most of which will be passed on to individual users. Local governments financed 76 percent of these services in 1981,82 percent in 1987, and their share is expected to rise to 87 percent by the year 2000.[25] Lack of funds led many cities to postpone both rehabilitation of old plants and new construction, and now costs have risen dramatically. This situation does not bode well for large, older cities, like New York and Boston, which face huge infrastructure maintenance deficits and major costs for upgrading outdated wastewater treatment facilities to meet EPA standards.

Drinking Water Supply

The Nation's drinking water is provided by a few large municipal systems, by special districts, State-chartered corporations, independent nonpolitical boards, homeowners associations, and a variety of public and private companies. More than 43 percent of the population is served by 0.5 percent of all systems, while 64 percent of the systems together seine less than 3 percent of the U.S. population. Over 80 percent of large systems are publicly owned; privately owned systems and private wells serve almost one-third of the Nation's population. Control of the water supply system is a significant local political issue because it is closely tied to local land development.[26]

[24]Brian Frennea, director, Inland Rivers Ports and Terminals I.Ix., personal communication, Nov. *28,* 19s9.

[25]Apogee Research, Inc., The *Cost Environmental* (Washington, Us. Environmental Protection *Agency, in press),*

[26]Information derived *from* Miller Associates, Inc., T' *Nation's Works: Report on Waser Supply.* prepared for the National Council on Public Works Improvement (Washington, DC: May *19S7).*

Table 4-2—Increase[a] in Household User Charges in Municipalities Attributable to Environmental Regulations[b]

Size of municipality	Number of municipalities	Distribution of municipalities (in percent) (up to 50 percent increase in charges)	(50-100 percent increase in charges)	(over 100 percent increase in charges)
Up to 2,500	26,315	45	35	20
2,500-10,000	6,279	90	10	0
10,000-50,000	2,694	80	20	0
50,000-250,000	463	100	0	0
Over 250,000	59	80	20	0
Percent of all municipalities		56	29	15
Percent of total population living in incorporated areas[c]		83	15	2

[a]No jurisdictions will have lower costs.
[b]Because of many simplifying assumptions, the potential increase in user charges may be underestimated.
[c]According to the 1982 Census of Governments, approximately 15 percent of the U.S. population live in unincorporated areas.

SOURCE: Office of Technology Assessment, 1990; based on data in U.S. Environmental Protection Agency, Office of Policy Planning and Evaluation, *Municipalities, Small Business and Agriculture* (Washington, DC: 1988), p. 2-14.

Capital for water supply facilities comes from a variety of sources, including general funds, user charges, debt issues, stock issues, and intergovernmental aid. Tax levies can be based on property, income, earnings, and special assessments, and Federal funding has generally supported less than 10 percent of total expenditures. Service is financed from hookup and user fees and general tax revenue without any substantial subsidy from State government.

Many communities face drinking water supply and quality problems. For some, water supply is either threatened by pollution or is inadequate. Local governments in the Western States compete for limited regional water supplies. Older cities, particularly in the Northeast, must replace obsolete treatment facilities to meet current standards. Moreover, most communities will have to revamp their treatment systems to meet **EPA's** new water quality standards. Although the standards are not yet final, local officials estimate that the costs of filtration to remove specific contaminants and to monitor water quality will be massive. Some local officials contend that their existing systems provide an acceptable level of purity and that Federal requirements to test for contaminants may not be necessary for public health needs.

Policies of pricing water at low, subsidized rates, particularly in the Northeast and Midwest, have contributed to current revenue shortfalls, the absence of capital reserve funds, and overconsumption.[27] To raise the capital needed for water treatment improvements, many communities will have to increase water charges substantially. Full-cost charges make good economic sense for many communities, and fee structures can be used to manage water use. However, managers in small or older jurisdictions may find the necessary fee increases higher than property values will support. Districts that can raise fees enough to pay for investment capital may run up against State-imposed debt ceiling or Federal bond caps.

State-of-the-art engineering knowledge is needed to comply with Federal and State water quality regulations and to operate modern facilities, yet only the largest and wealthiest cities can attract the necessary engineering and technical talent. Small districts suffer most from a lack of technical and financial expertise, and while consolidation and regional solutions hold promise for such systems, communities resist giving up their independence. If aid is not available and Federal deadlines are not relaxed, noncompliance is a likely alternative for many jurisdictions.

Wastewater Treatment

Local governments have primary responsibility for wastewater treatment; they own and operate nearly 16,000 wastewater treatment plants, which treat more than 37,000 million gallons of sewage a day. Private industry treats only a small additional fraction of this amount and then discharges its effluent into local treatment facilities or waterways. Federal capital grants have helped finance about 25 percent of construction costs for local treatment plants, and State aid contributes an additional 5

[27]National Council on Public Works Improvement, op. cit., footnote 22, p. 54.

Photo credit: S.C. Delaney

To protect water quality, the Environmental Protection Agency requires State and local governments to develop programs for controlling indirect "non-point source" pollution, such as the agricultural runoff pictured here.

percent, with local monies supplying the balance.[28] Operating costs are covered by user fees, ad valorem taxes, hookup fees, and some State aid, with user fees covering between 40 and 70 percent of the operating costs, depending on the region.

Federal and State financial assistance and stricter treatment regulations have improved local wastewater treatment substantially over the past 20 years, yet the backlog of local needs for system renovation, expansion, and construction is massive. EPA estimated that a capital investment of $68 billion would be necessary to satisfy the needs of the 1988 population,[29] excluding costs of addressing combined overflow problems, stormwater management, nonpoint source control, and estuary protection. The end of EPA construction grants in 1990 will bring increased financial responsibilities for both State and local governments, and the latter will have to compete for limited State loan funds to finance system improvements.

Many jurisdictions lack the engineering expertise to resolve the technical problems related to assessing needs, evaluating innovative or alternative systems, siting facilities, and deciding on action plans to meet Federal and State regulations. Furthermore, local governments have few alternatives to raising user fees substantially-in most cases doubling them—to cover operating and maintenance costs and to pay debt service. Many facilities are currently so poorly operated and maintained that they are unlikely to last their design lives. Small, low-income communities **and** older cities may lack the economic base to raise rates or local subsidies sufficiently, and will need outside help or face noncompliance.

solid **Wrote**

Solid waste collection and disposal have been managed by local governments and the private sector. Local user fees have paid the operating costs, and bonds and commercial loans have financed new landfills and incinerators. **All** localities are contending with problems related to increasing per-capita generation of solid waste, limited permitted landfill capacity, and siting new solid waste facilities.[30] As the scope of such problems has increased, the Federal Government has enlarged its role, focusing on regulation of landfills, incinerators, and waste-to-energy facilities. States are also adopting stricter regulations for landfills and incinerators, and both State and local governments are developing programs to stimulate recycling and encourage waste reduction.

Eighty percent of the Nation's landfills currently operating will be full in two decades,[31] although many will close before then because they cannot meet regulations. Design features to ensure that landfills are environmentally sound, such as liners, leachate collection and treatment facilities, and methane gas collection systems, increase capital costs significantly. Local citizen and political oppo-

[28] Information derived from Research Ire., *Public Works: Report on Wastewater Management*, prepared for the National Council on Public Improvement (Washington, 19s7).

[29] U.S. Environmental Protection Agency, Office of Municipal Pollution Control, *1988* Needs *Survey—Report to Congress* (Springfield, VA: National Technical Information Service, February 1989), p. 1.

[30] U.S. Congress, Office of Technology Assessment, Facing Americans *Trash: Next for Municipal Waste?* OTA-O-424 (Washington, DC: U.S. Government Printing Office, October 1989), p. 303.

[31] Ibid., p. 271.

sition to siting landfills or incinerators is often extreme, extending the facility replacement process over many years. National efforts to increase demand for recycled materials have not been coordinated with policies encouraging waste separation and collection.[32]

LOCAL GOVERNMENT FISCAL PROGRAMS

Public works construction in cities and counties has historically been financed with revenues from broad-based local taxes and Federal and State grants. More recently, local jurisdictions have turned to user fees, developer impact charges, and revenues from special districts to help fund capital investments and operating and maintenance costs. Despite political risk and State limitations, most local governments have also had to raise property taxes, and some have introduced or raised income or sales taxes and service charges over the last several years to finance public works. Dedicated Federal and State funds have long supplemented local transportation programs. This has been much less true for environmental services, which are funded primarily through local revenues and service charges.

Property Tax

The property tax has always been the mainstay of local government revenue structure; in 1988, property taxes generated over 70 percent of the tax revenue collected by all local governments.[33] Cities, which usually have a more diversified tax base than counties and towns, rely on property taxes for approximately 50 percent of their revenue. Although the average effective tax rate on single-family homes valued at $100,000 decreased from $1,260 in 1981 to $1,150 in 1987,[34] 41 percent of cities increased property taxes in 1988 and in 1989—a significant number, since many States place legal limits on community property tax levies[35] (see box 4-A).

property tax limits have forced local governments to press State legislatures for authority to levy additional taxes. The retail sales tax is considered the most productive local, nonproperty tax and has proven most acceptable to voters. Since New York City adopted a general sales tax in 1934, local governments in 30 States have levied the tax; in 1986, these revenues made up approximately 16 percent of total local income.[36] Since all but five States set **a cap** on the local sales tax, attempts to increase it require substantial political effort (see box 4-B); and despite the need for additional revenue, only 8 percent of cities increased sales taxes in 1988 and 5 percent in 1989.[37]

Although most communities place sales tax revenue in the general fund, some dedicate a portion to special functions, usually regional transportation, including mass transit; currently, 11 States give local sales tax authority to 117 transit or transportation districts.[38] The Denver Regional Transportation District levies a 0.6-percent sales tax, and the Metropolitan **Atlanta** Rapid Transit Authority benefits from a l-percent sales tax dedication, of which 50 percent must be used for capital spending. In Ohio, counties may impose a transit tax of up to 1.5 percent;[39] in 1980, the Central Ohio Transit Authority in Columbus switched from a dedicated local property tax to a retail sales tax.[40] Since 1972, a portion of the sales tax paid in King County, Washington, has gone directly to Seattle METRO for operating and capital expenses. Currently, the 0.6 percent of the region's 8.1-percent tax dedicated to METRO produces $114 million annually and is a key source of agency revenue.[41]

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[32] Ibid., p. 317.

[33] U.S. Department of commerce, Bureau of the Census, (Washington, DC: November 1988), p. xv.

[34] Advisory Commission on Intergovernmental Relations, *Significant Features of Fiscal Federalism*, 1989 ed., vol. 1 (Washington, DC: January 1989), p. 72.

[35] Peterson, op. cit., footnote 5, p. 30.

[36] Advisory Commission on Intergovernmental Relations, *Significant Features Fiscal Federalism*, (Washington, DC: July 1988), p. 66.

[37] Peterson, op. cit., footnote 5, p. 23.

[38] Advisory Coremission on Intergovernmental Relations, op. cit., footnote 34, pp. 58-59.

[39] Ibid., p. 63.

[40] Public Technology, Inc., *Inflation Responsive Transit* prepared for the Urban Consorti"um for Technology Initiatives and the U.S. Department of Transportation (Washington, DC: 1982).

[41] Jean Baker, budget director, Seattle, communication, June 1989.

Box 4-B—What It Takes To Pass a Sales Tax Increase

In the fall of 1985, voters in Arizona's Maricopa County (Phoenix) overwhelmingly approved, by a 72- to 28-percent margin, a 1/2-cent sales tax to pay for a 20-year, $4.1 billion urban freeway system for the Phoenix metropolitan area. Congestion on city streets had brought travel delays and high accident and insurance rates, and made the voters willing to take action.

As part of the approved package, the Regional Public Transportation Authority (RPTA) was established to develop a plan to improve public transportation. In the spring of 1989, RPTA asked voters to approve another 1/2-cent sales tax increase for a 30-year, $5.6 billion program, which included extensive bus route expansion and surface and elevated, automated rail transit systems. This proposal was overwhelmingly defeated by a 61- to 39-percent margin.

The affected neighborhoods objected to the elevated rail system, and cost estimates were considered unrealistic. Many thought the transit proposal needed greater public input and a better review process; others, including an organized citizen group, Voters Against Senseless Transit, claimed that the sales tax, which everyone would pay, would finance a system that would benefit relatively few. The transit plan was seen as a boon to developers active in the transit corridors. Despite increasing air quality problems in Phoenix, the transit campaign did not make a strong, well-documented case for the regional benefits of the costs for transit over continuing to rely on private vehicles. Additionally, over the last several years, Arizona had raised its gas tax 4 cents (all dedicated to highway use), and many citizens believed this was sufficient to finance needed transportation improvements.

In contrast to Maricopa County, in 1988, San Diego voters approved a 1/2-cent local sales tax for multimodal transportation improvements, expected to cost $2.25 billion over the next 20 years. Previous transportation improvements in San Diego, such as the light rail project, had been financed largely by State sales and gas taxes. Traffic congestion and air pollution problems convinced San Diego voters that a combination of highway and transit improvements was the only viable solution for the region. The transportation package included $750 million in improvements each for highways, transit, and local streets, a combination that garnered widespread support for the proposal from all types of communities. The tax increase was specifically for funding projects that had been studied and adopted as key elements in the regional transportation improvement plan. Voters knew what they were voting for and believed they would be getting their money's worth from the sales tax increase.

Income Tax

Local governments in11 States may levy personal income taxes. and 3 States allow local payroll taxes. In 1988, more than 3,500 districts (over two-thirds of them in Pennsylvania) collected income taxes.[42] Large cities, such as New York, Detroit, St. Louis, Cleveland, and Philadelphia, are most likely to rely on income taxes, which generally account for about 15 percent of total city tax revenues.[43] Few cities earmark income tax for special uses, although Cincinnati, Ohio, and Newport, Kentucky, use income tax revenue to support transportation.[44] only 3 percent of cities initiated or increased income taxes in 1988, reflecting local resistance to any type of tax increase. For example, the 1989 Virginia General Assembly authorized several heavily urbanized northern Virginia counties to levy a l-percent income tax to finance needed transportation improvements, but the counties encountered heavy business and taxpayer opposition, and none expects to levy the tax.

Traditionally, local governments have levied fees or charges on users of certain types of public services to cover all or a portion of the costs and, to a lesser extent, to ration service. Typically, water, sewer, and solid waste disposal services, mass transit, bridges, and public parking garages are at least partially financed with user charges; fees often do not cover ail costs, especially for services with large capital expenses. Legal restrictions and public resistance to tax increases have driven many local governments to raise these fees and apply them to more services to replenish general funds and to pay for specific programs and improvements. Citizens seem to find "paying for what you get" more acceptable than paying higher general taxes.[45]

[42]Advisory Commission on Intergovernmental Relations, op. cit., footnote 34, p. 46.

[43]Peterson, op. cit., footnote 5, p. 30.

[44]Public Technology, Inc., op. cit., footnote 40.

[45]Hopkins, op. cit., ootnote 18, p. 1.

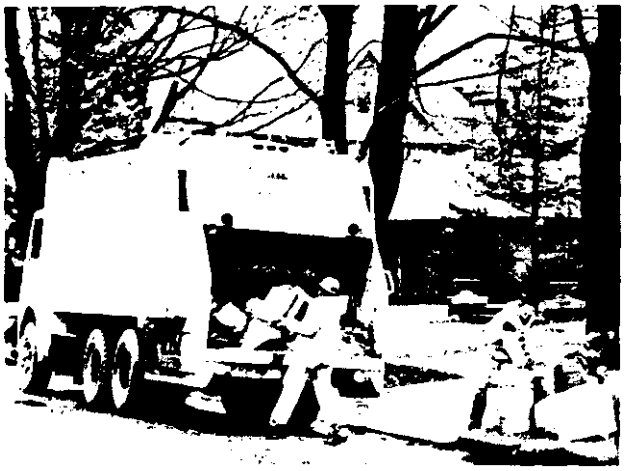

Photo credit: American Public Works Association

Taxpayers are often willing to pay full costs for direct services, such as garbage collection.

User charges grew at an annual rate of 11 percent between 1977 and 1984,[46] and currently, about 15 percent of State and local revenues come from such fees.[47] In 1988, 62 percent of cities raised garbage collection fees, 57 percent increased sewer service fees, and 55 percent boosted water charges.[48] Large cities are more likely to have increased fees than jurisdictions in the 10,000- to 50,000-population range, probably because they offer more services appropriate for fees. Moreover, implementing user charges that recover full costs of service requires a sophisticated capability that small jurisdictions usually lack. Regionally, user charges contribute most to local revenues in the South and the Plains areas, which have a tradition of low property taxes .49

User charges are best suited to finance those services for which users can easily be identified and charged, or for which it is easy to deny service to those who do not pay. Environmental services fall into this category. Less direct fees, such as the gas tax or vehicle registration fees, are used to capture some of the costs for facilities like local streets and highways, where users cannot be excluded from using the service. User fees provide local administrators with a useful management tool; service use can be manipulated through rate policy-charging higher rates for water used during dry months when demand is high and higher transit fares during peak hours when job-holding commuters must get to work, for example.

While user charges are attractive revenue options, local officials must build solid political support for increases or risk a public backlash (see table 4-3), and must resolve complex management and policy issues. First, they must decide what types of services they want to finance with user fees instead of general fund revenues and how to calculate true, full costs given available data and expertise. Charlotte, North Carolina, and Phoenix, Arizona (see box 4-C), are examples of communities that made substantial efforts and instituted M-cost accounting programs. Second, fee setting requires policy decisions on which services are to be self-supporting and which require subsidies for low-income groups. Finally, the extent to which user fees can be used to control service demand and still be equitable is a consideration.

Table 4-3--Local Options for Addressing the Costs of Federal Environmental Standards

Option 1: Search for Funds From State and Federal Governments and Private Sector
Prognosis: Limited additional public funding except as loans; private investment attracted only in growth areas
Option 2: Raise Additional Funds Locally by Increasing:
• **User fees**
Prognosis: Potential for tax-payer acceptance where need is clear and fiscal capacity exists; regressive aspects and equity issues must be addressed; good potential for reducing service demand.
• **Developer charges**
Prognosis: Good potential as a source of capital, but limited to growth areas and where State laws permit
• **General taxes**
Prognosis: Tax-payer resistance, perhaps leading to State legal restrictions on increases.
• **Dedicated taxes (e.g., portions of sales, income, or "sin" taxes)**
Prognosis: Potential for tax-payer acceptance if need established and fiscal capacity exists.
• **Revenue-backed debt**
Prognosis: Potential for tax-payer acceptance unless debt service costs push taxes or fees too high.
Option 3: ***Reallocate Funds From Other Local Programs***
Prognosis: Political battles between conflicting goals; likelihood of smaller allocations all around.
Option Fail With Federal Standards
Prognosis: Federal enforcement action, fines and litigation; extensions or waivers; possibility of increased health risks.

SOURCE: Office of Technology Assessment, 1990.

[46] J. Richard Aronson and John L. Hilley, *Financing State and Local* Governments (Washington, DC: The Brookings Institution, 1986), p. 156.
[47] Hopkins, op. cit., footnote 18, p. 7.
[48] Peterson, op. cit., footnote 5, p. 25.
[49] Advisory Commission on Intergovernmental Relations, *1986 State Fiscal* (Washington, DC: 1989).

Box 4-C—Phoenix's User Fee Program

A Phoenix resident teeing off at a municipal golf course or obtaining a water hookup permit has paid a user fee that covers all or a substantial part of the cost of the service. In 1981, the combination of high inflation, limitations on revenue sources, and climbing expenditures for public services drove city officials to overhaul their user-fee systems to improve efficiency and increase revenues. Now, Phoenix has one of the Nation's strongest user fee programs, which recovers approximately $247 million annually, a $3 million increase over the previous fee revenues,[1] thanks to full cost accounting, strict political accountability, and a thorough annual review process.

Currently, the city recovers from users the full cost of services such as land fill and sewer and water service, which previously had been paid for out of the general fund. Cost accounting is centralized under the control of the city auditor, whose staff develop separate cost models for each of 209 services. The models start with the direct service costs—primarily personnel and materials—and add depreciation estimates and indirect costs, such as debt service, and a share of the city's overhead and central management expenses. The complex, systematic assessment of indirect costs distinguishes the Phoenix system from those of other cities that charge user fees. For some services, the indirect costs can be significant—running one-half the direct labor costs.[2]

The essential decisions about which public services are suitable for user fees and what the cost recovery rates shall be are made publicly by the city council. Cost recovery rates for public works range from 100 percent recovery for aviation, water, and sewer services, to 25 to 30 percent for public transit.[3]

Detailed review and consultation precedes the city council's action on these difficult political issues. Analysis by the city departments in cooperation with the Auditor's Office is followed by staff discussions with fee payers and citizen advisory committees. Through this process, the basis for fees is fully aired, and the public has the opportunity to comment on the fee proposals prior to council action. For instance, during discussion of an adjustment to the building safety permit fees, the Homebuilders Association agreed to a fee increase on the condition that the city staff speed up the plan review process.[4]

The user-fee process works well politically because fees are reviewed routinely every year, allowing minor adjustments at regular intervals rather than infrequent but major rate-hike proposals. Furthermore, city departments monitor closely the costs that go into their fee bases and look for more efficient ways to perform services because of the close scrutiny by users.

[1]James A. Flanagan and Susan J. Perkins, "Annual User Fee Review Program of the City of Phoenix, Arizona," *Government Finance Review*, June 1987, p. 13.

[2]Thomas D. Hopkins, "Benefit Charges for Financing Infrastructure," OTA contractor report, July 24, 1987, p. 68 (available from NTIS).

[3]Ibid., p. 67.

[4]Flanagan and Perkins, op. cit., footnote 1, p. 18.

Special Improvement Districts

The majority of special districts are formed to provide a specific public works function-water supply, sewage treatment, highways, airports, and deep-water port facilities-and have at least partial administrative and fiscal autonomy and are not constrained by State debt limits. Special district assessments account for approximately 10 percent of total local revenue, a relatively small share, but in some States, such as California , Illinois, Pennsylvania, Texas, Massachusetts, and Washington, special districts generate both capital and operating funds for local public works.[50] Like user fees, special districts, through their charges and assessments, shift most of the financing for their services from all taxpayers to those who benefit directly. One of the important *advantages* of special districts is that they can provide services in developing or rural areas or small towns where local governments are not willing or have limited financial or administrative capacity to expand. However, proliferation of fiscally autonomous special districts creates issues of public accountability and policy coordination with other types of infrastructure and other jurisdictions.

The Mount Laurel, New *Jersey, Township Municipal Utilities Authority serves* fast-growing suburban communities outside Philadelphia, and is typical of many special districts. Created in 1969 when it absorbed an existing private water and sewer system, the authority operates five wells, two water treatment plants, and three wastewater treatment

[50]U.S. Department of Commerce, op. cit., footnote 33, pp. 51,60, 68, S5, 90, 94.

plants, relieving the township of administrative and financial responsibilities.[51]

Although special district financing is best suited to growth areas, since 1965 *Missoula County, Montana,* a slow-growing rural area, has been raising capital through Rural Special Improvement Districts (RSIDs) for a variety of public works needs including roads, sewage treatment plants, and water projects.[52] Missoula has two categories of RSIDs. Neighborhood RSIDs are setup to improve facilities in already developed areas, and developer RSIDs are created when 51 percent of the land is owned by an entity intending to improve the land for development. As of 1987, almost 900 RSIDs had been established, many for small improvements and others for projects costing as much as $1.6 million. Missoula has also created perpetual maintenance RSIDs to pay for upkeep of existing facilities.

Capital improvement plans provide local governments with a structure to survey needs and establish priorities, coordinate intergovernmental projects, develop financing strategies and schedules, and sell the program to the public. Most cities and large counties operate under a 5- to 6-year capital improvement plan that is updated annually. Usually, the jurisdictions have a large backlog of capital projects, and this type of planning process is essential to maximize their limited funds.

In contrast, small communities are unlikely to use any type of capital budgeting plans, although the fiscal impact of necessary capital improvements may be greater for them than for large jurisdictions. Research on planning strategies in small towns under 10,000 in Wisconsin, Massachusetts, Montana and Maine indicates that less than 5 percent practice any form of capital improvement programming.[53] While small communities recognize that capital needs exist, responsibilities for public works are often divided between towns and independent districts, which are likely to deal with capital needs on an individual and ad hoc basis, because of the division of responsibility and because of their small staffs, limited fiscal capacity, and voter resistance to large expenditures.

Political Strategies

heal authorities are growing more conscious of the necessity for citizen outreach and basic public relations skills to raise awareness about infrastructure needs and gain funding approval. Commitment and persistence are key. As one example, the Chicago Regional Transportation Authority (RTA) had conducted studies from 1985 to 1987 to assess conditions of the RTA system, identify needs, and estimate the cost of needed capital equipment and reconstruction. The agency drafted a Strategic Plan, which it took to the State legislature with a request for a tax increase to support transportation improvements. Though supported by key legislators and the Governor, the bill failed. RTA redoubled its efforts the following year, drafting a concise but pointed summary of the Strategic Plan, engaging media consultants, and mounting an aggressive community outreach effort. Over a 3-month period RTA presented its program to civic, business, and government groups around the State. These techniques proved decisive in 1989; 1 day prior to adjournment and by a narrow margin, the legislature authorized $1 billion over 5 *years* for the RTA system.[54]

Officials in other jurisdictions that have succeeded in passing major capital improvement plans have planned equally carefully, allocating resources for public education so as to achieve the necessary political consensus. Box 4-D describes Cincinnati's recent efforts, and other examples include Phoenix and San Diego (box 4-B), and New York State (chapter 3, box 3-B).

REGIONAL PLANNING

Although the economic and operating efficiencies to be gained by regional planning for land use and public works are widely recognized, the political reality is that most of these decisions are made by local elected officials and are based on the salient local priorities. In many European countries, where governmental authority flows from the top down, local planning and infrastructure decisions are

[51] Porter et d., op. cit., footnote 2. p. 24.

[52] Apogee Research, Inc., *Financing Infrastructure: Innovations* at *the Local Level (Washington,* DC: National League of Cities, December 1987). p. 56.

[53] Sally A. Rood and Philip Rosenberg, ● 6CW1M Budgeting: Small Town Practices in Four Sates," prepared for the National Council on Public Works Improvement, unpublished manuscript, October 1986, p. 5.

[54] Theodore G. Weigle, executive director, Regional Transportation Authority, personal communication, Aug. 16, 1989.

Photo credit: Chicago Rapid Transit District

Chicago's rapid transit system faces a variety of needs. The ceiling in this administrative office collapsed a year before the picture was taken; and the deteriorating rail station is on Chicago's Northwestern line, the system's busiest route.

required to conform to district or regional plans. In the United States, planning and public works decisions are made by local governments, and regional planning organizations are usually advisory only. In most States, general-purpose planning agencies, such as Councils of Governments or Regional Planning Councils, have no specific governing or taxing authority, no veto power, and membership is voluntary. Because their products reflect the consensus of their local members, regional agency plans are often criticized as vague and overly general. "Regional planning only works when it's a win-win for all the districts; when everyone gets more or less what they want. When there are hard choices and winners and losers, regional planning--forget it."[55] As a result, regional planning operates in political limbo--acknowledged as an exemplary goal, but lacking the teeth to be effective.

Despite the institutional weaknesses of regional planning, policymakers have persisted in trying to make it work to improve the efficiency of public investment in infrastructure and other services. During the 1960s and 1970s, Federal and State governments encouraged comprehensive and functional regional planning. Provisions were added to many Federal programs requiring regional bodies to set priorities for, and review the use of, Federal funds. In 1973, DOT promulgated a requirement that Metropolitan Planning Organizations (MPOs) be established to review urban area transportation planning. DOT funded these regional activities; other Federal agencies, particularly those supporting housing and environmental programs, followed suit, including planning grants with program funds. During this period, most States passed legislation allowing the formation of regional planning organizations, and some provided modest appropriations. As a result of Federal and State support as well as local interest, the number of regional councils and planning associations jumped from 36 in 1%1 to 659 in 1978.[56]

[55]Mary Boergers, member, Maryland House of Delegates, personal communication, July 7, 19S9,

[56]Campbell Associates, "Regional Planning," OTA contractor report, June 19S9, app. B, p. 1.

Box 4-D—The Cincinnati Infrastructure Commission[1]

Throughout the early 1980s, city engineers in Cincinnati *warned* **of infrastructure decay** but failed to mobilize widespread support for action. In 1986, the mayor and city council turned to the business community to help draw **attention** to public works by establishing the Cincinnati Infrastructure Commission. Hoping to focus citizen concern **on the need** for repairs to roads, bridges, and sewers, and stimulate willingness to pay, the mayor and city council involved community leaders.

The effort paid off; within a year the commission had produced a comprehensive report on the city's public works, with recommendations for maintenance and repair and suggestions for financing, including a ballot referendum to raise the city income tax by 0.1 percent with proceeds earmarked for infrastructure repair, upkeep, and improvement. Six months later Cincinnati voters passed the tax increase, anticipated to yield $6.9 million per year for infrastructure maintenance. The tax may be used only **for projects that will take or less to** complete and will be rescinded if revenues are used for any other purpose. One commission member cited this emphasis on manageable, relatively short-term projects as a key factor in making the referendum attractive to voters.[2] Though the tax increase passed by a narrow margin, the approval was significant because the decade had otherwise been characterized by tax revolt.

The commission chairman, the chief executive officer of Procter& Gamble, selected as commissioners 10 business and community leaders from such corporations as Cincinnati Bell, General Electric, and Arthur Andersen, as well as the president of the University of Cincinnati. Five committees were formed to review streets and roads, parks and recreation, water and sewers, buildings, and financing. For each of these categories, volunteer project engineers assembled teams to draft portions of the report. Project engineers could staff their teams however they chose, though in most cases one member of the team was selected by the city Department of Public Works.

After completing their reports, the team leaders submitted them to the commissioners, who condensed the findings and presented a final report to the mayor and city council.[3] The commission's independent status gave its work an appeal that the municipal government could not muster. Passage of the tax increase highlights the importance of clearly defining needs and articulating priorities. As one Cincinnati Infrastructure Commission team leader noted:". . . people are willing to pay higher taxes if they know exactly what they will get for their money.'[4]

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[1]Material on the commission is based on Cincinnati Infrastructure Commission, "City of Cincinnati Infrastructure Commission Report," presented to Cincinnati City Council, unpublished document, Dec. 3, 1987; and Ronald w. Roberts, "Cincinnati's Dream Team," *Civil Engineering,* July 1989.

[2]William Victor, Cincinnati Infrastructure Commission, personal communication, Sept. 6,1989.

[3]Though the commission issued its complete report in late 1987, the group has remained intact to monitor progress and ensure proper program implementation.

[4]Roberts, op. cit., footnote 1*P"4"

However, during the 1980s, many Federal programs funded regional planning, such as the Housing and Urban Development's section 701 grants and EPA's section 205 grants, were eliminated or cut back. Financial support for regional planning has also waned in many States and generally is under 30 percent of agency budgets and as low as 10 percent.[57] The impact on regional planning organizations has been severe; professional staffs have been cut, services reduced, and essential databases have become out-of-date. Although regional agencies have been inventive in raising money by selling technical services, applying user fees, or charging special membership assessments, local revenues are not adequate to maintain even basic planning activities.

On the positive side, many agencies have highly skilled and knowledgeable staffs, who contribute essential technical expertise and provide valuable services to their constituents. Indeed, one reason many regions have coped as well as they have with the transportation impacts of rapid growth is the transportation planning process DOT has fostered through the work of regional MPOs. In a few places, regional agencies have achieved enough influence to overcome political differences. For example, in 1988, the major urban county in Arizona adopted a new air pollution control plan; since then the State legislature had adopted four of the five priority recommendations of the Maricopa Association of

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[57]Ibid., p. 3.

Box 4-E—SANDAG: Financing Means Planning Power

Although State and local districts are often reluctant to share authority with a regional organization, San Diego's Association of Governments (SANDAG) is an exception. Designated as the State Metropolitan Planning Organization (MPO), SANDAG plays a key role in both transportation planning and financing. In 1987, San Diego voters approved a general sales tax increase for capital projects identified in the Regional Transportation Improvement Plan (TIP), and the State designated SANDAG as the chief administering agency in charge of allocating the $100 million annual tax revenue. By virtue of its role as San Diego's MPO, SANDAG prepares the TIP, and thus it can develop and finance the implementation of its own plan—an unusually strong role for a regional agency. SANDAG's financial independence has greatly increased its power within the region and may well alter its other roles. Making financing options part of the planning process ensures that SANDAG gives careful attention to setting priorities among TIP projects, with the result that plans are realistic and likely to have public support. In addition to transportation planning, SANDAG has initiated an effort to identify all regional public works needs and to develop a regional financing plan.

Governments' plan.[58] Box 4-E provides another example. Regional planning is greatly strengthened if the regional agency has the capability to finance its recommendations and to tie infrastructure decisions to land-use development policies. Unless State governments provide them with more power, regional planning agencies will remain peripheral to most infrastructure decisions, as one Governor recently recognized publicly:

> **The critical challenges facing** Virginia cannot be addressed **without formal, regional cooperation by our localities.** We must use State resources in a manner **that cuts waste and improves efficiency.** Such cooperation will not **happen** by accident.[59]

The diversity of regional planning can be seen in case studies of six regional planning organizations and two State planning programs in appendix C.

BENEFIT-BASED FINANCING STRATEGIES

Local governments have traditionally paid for infrastructure with funds raised largely from broad-based taxes plus some user fees levied on groups that benefit directly from specific services. Pressed for funds but constrained by voter opposition to tax increases, local governments have turned to developer charges and special districts-all ways to focus the costs of constructing infrastructure on the beneficiaries.

Developer charges are money, land, or construction services required of a developer seeking governmental approval of a project.. The charges compensate local governments for the costs of providing public facilities needed by the development and are used to achieve some of the same goals as growth limitation by regulation. Traditional forms of developer participation have included land dedications for highway rights-of-way, schools, and parks. In recent years, developers in fast-growing locations have been required to build or provide funds for school buildings, fire stations, and sewage treatment facilities. Generally, developers pass these charges on to buyers by raising prices.

Despite the advantages to local governments of developer charges, their use is not widespread because to have an effective program, State enabling legislation, local ordinances, and most important, a strong real estate market are necessary. Communities in California, Florida, and Colorado are the principal users, although examples exist in other States. There is no standard program; every community has a different process, including the following:

In *Broward County, Florida, the* county undertakes an "adequacy review" to assess the impact of any proposed development on the comprehensive land-use plan and a wide range of public facilities, including the regional transportation network, local roads, water management and water supply, wastewater treatment and waste disposal, air quality,

[58] Ibid., app. A-4, p. 4.

[59] Gerald Baliles, former Governor of Virginia, quoted in Arlington, Virginia Journal, July 24, 1989, p. A9.

schools, and parks.[60] The developer must show that existing facilities are adequate to support the proposed development or provide for them through fees or exactions paid to the county.

Initially opposed by developers, the Broward County system is now accepted because it applies a systematic procedure to all developers and reduces costly administrative delays. Impact fees are levied prior to development for roads, parks, and schools. Road impact fees are set, based on a computer model that contains information about existing volume and capacity for all major roads and calculates the amount of traffic generated by the proposed development. The developer must pay a proportionate share of the costs of increasing the capacity or constructing any necessary road improvements; fees are deposited in a dedicated fund earmarked for that service area. Park and school construction fees are set by a similar process of impact assessment. Water supply and wastewater treatment facilities must be constructed by the developer.

Orlando, Florida, has refined its system of developer fees, using them as partial security for revenue bonds for improvements to the wastewater treatment system.[61] Funds paid by developers and deposited in an Impact Fee Account, plus user charges, provide debt service payments on the bonds. The city has established a reserve account to cover shortfalls if revenues are insufficient or a growth slowdown occurs.

In Fresno, California, developer fees pay for all public works improvements needed in designated growth zones of the city.[62] The initial developer Of a growth zone must pay an accelerated fee (approximately established base fee) for improvements. Once the total improvement cost is collected, the fee is reduced to the base rate, and the developers who paid at a higher rate are reimbursed.

Upper Merion Township, Pennsylvania, a suburb of Philadelphia, has established itself as a Transportation Improvement District with authority to charge developers impact fees based on the number of tips generated by the new development.[63] The fees are deposited in a highway/traffic capital improvement fund and dedicated to making the necessary improvements. Developed by a local traffic task force, the system enables the community to raise revenue for road improvements without affecting the township's bond credit rating, thus reserving the township's bonding capacity for other capital projects.

While special districts are not a new concept in public finance, local governments, particularly in growth areas, have recently modified and expanded their use. Between 1982 and March 1987, *Pleasanton, California,* raised approximately $145 million for infrastructure construction through general obligation bonds backed by special district assets.[64] After a special improvement district has been approved by the property owners or the city, the full costs of all improvements, including interest costs and engineering fees, are calculated, and the amount is apportioned among the property owners. Benefit zones are designated within some improvement districts according to the proximity to the improvement. Assessments are made in proportion to acreage rather than assessed value to prevent confusion with property taxes, and property owners may choose either to pay the assessment in a lump sum or in annual installments. In one district that had three zones for allocating highway improvement costs, assessments ranged from $13,700 to $50,000 per acre. If a parcel falls into a multiple-improvement district, the owners can be assessed charges of $200,000 per acre.[65]

Tax Increment Financing

Based on the special district concept, tax increment financing is practiced in many States, most frequently in California. The procedure involves freezing, as of a base date, the real estate tax base in a designated benefit area. Tax revenues at the pre-investment level continue to flow to the general fund, but any increased revenues resulting from

[60] Douglas R. Porter and Richard B. Peiser, *Infrastructure Community* Development Component Series Urban Land Institute, 1984), pp. 15-17.

[61] U.S. Environmental Protection Agency, Administration and Resources Management, *Case Studies* (Washington, DC: September 1989), p. 68,

[62] Porter and Peiser, op. cit., footnote 60, p. 18,

[63] Apogee Research Inc, op. cit., footnote p. 80.

[64] Ibid., p. 35,

[65] Ibid., p. 37.

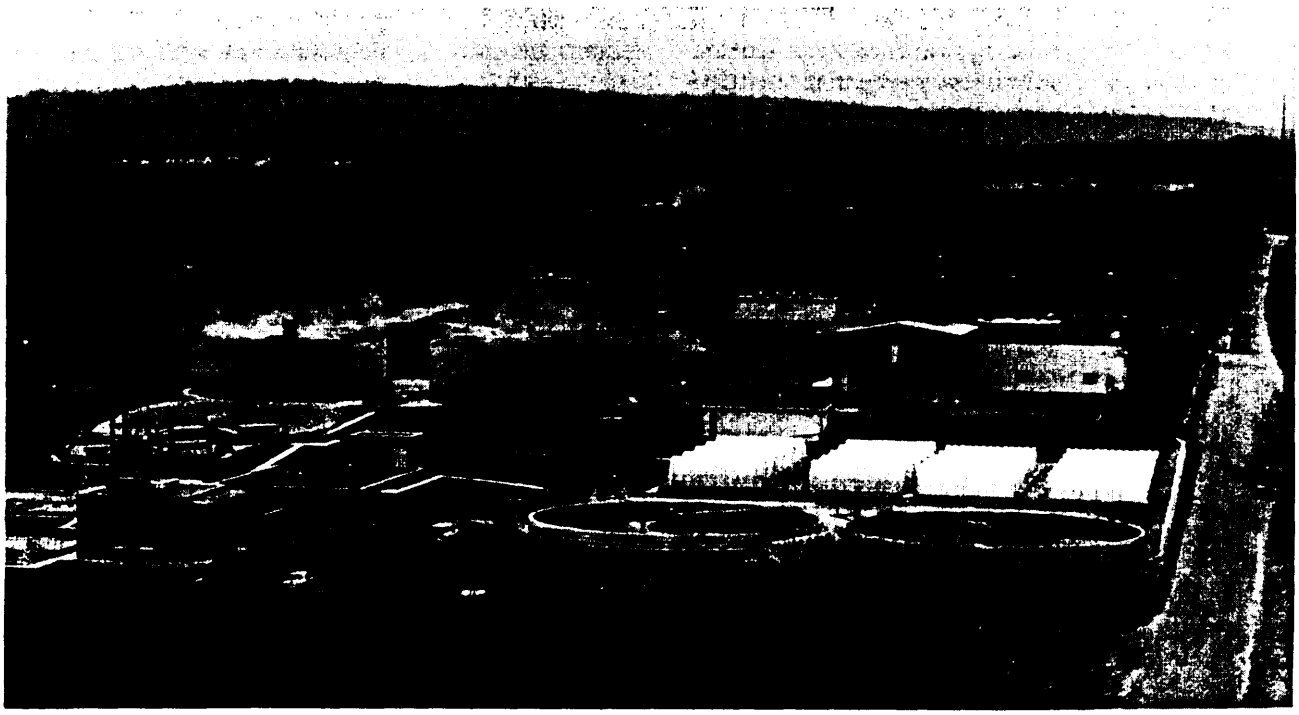

Photo credit: Upper Merion Township

The Matsunk Sewer Expansion Project in Upper Merion, Pennsylvania, was financed through the Township's sewer access rights program.

property values rising above the base are earmarked for debt service on the improvements. Since the mid-1970s, California jurisdictions have had authority to finance redevelopment with the additional tax revenues generated by the projects. Los Angeles has used tax increments to finance numerous redevelopment projects, both in the central business district and in residential neighborhoods.

Orlando, Florida, has based its $19 million financial plan for the redevelopment of its downtown area on tax increment financing.[66] Revenue bonds to finance the needed capital investments are backed by an irrevocable lien on the increment in the property tax revenue. In 1986, the tax increment revenue, which is paid into a redevelopment trust fund, was $2.3 million.

Davenport, Iowa, is financing a portion of $13.2 million in improvements in an economic development project with tax increment revenue.[67] Improvements include four new Interstate highway ramps, two bridges over the highway, and improvements to local roads. One-half of the income from the tax increment district is earmarked for repayment of a $2.5 million loan from the RISE Fund (a State transportation funding program described in chapter 3, box **3-A).**

While local governments are eager to tap private resources for public works capital, the private sector is reluctant to participate because such projects are not usually profitable; thus, involuntary developer charges are more typical means of acquiring private capital. However, occasionally, private investors are willing to participate in financing public works that they determine can lead to profits. For example, in the tiny town of *Belen, New Mexico,* a developer agreed to subsidize a new water supply plant until the customer base grew and the system was operating at capacity and covering full costs.[68]

[66] Ibid., p. 68.

[67] Ibid., p. 46.

[68] U.S. Environmental Protection Agency, op. cit., footnote 61, p.%.

Purchasing Access Rights

As a way to avoid bond issues and to accumulate capital in advance for a water or wastewater facility, some local governments sell access rights in prospective plants. For example, the township of *Upper Merion, Pennsylvania,* initiated a Sewer Access Rights Program to build up capital to finance expansion of a sewage treatment plant. Developers were allowed to purchase credits for an equivalent dwelling unit (200 gallons per day) for $3,200. The price of the credits increased as construction costs rose, creating an incentive to invest early. Moreover, nonparticipants had no guarantee of sewage treatment capacity for their developments. So far, the township has collected $23 million from the program, $5 million in paid credits, $6.5 million in signed contracts for additional rights, $5 million contributed by the township to purchase reserve capacity for its own uses, and $6.5 million from neighboring communities that plan to use the facility.

In 1983, officials in *Houston,* Texas, established a similar pre-purchased wastewater treatment plant program. In exchange for the payment of a capital recovery charge, private developers are guaranteed access to a contracted amount of future system capacity. Between 1983 and 1987, the city collected nearly $70 million, which it leveraged into $180 million in improvements to treatment plants.[70] Private developers have never liked the program, and the downturn in the local economy has made the pre-payment plan burdensome. However, the capacity credit system signals clearly where additional capacity is needed and prevents overinvestment in facilities where demand is limited. Moreover, new capacity has been provided efficiently; the city expanded several small treatment plants rather than building a new, larger, regional plant.

In the early 1980s, *Escondido, California, was* not in compliance with State wastewater regulations and was the subject of a lawsuit filed by the neighboring city of San Diego for nonperformance on a wastewater service contract. The city was also experiencing intense developer pressure. Although Escondido was in technical default on its municipal debt, voters had vetoed bond financing, higher user fees, and conventional public-private partnerships.[71] To finance the needed upgrading of the sewer plant, the city opted to sell future capacity, raising $16 million in 3 months by selling rights at $1,650 per unit, for either cash payments or letters of credit payable in 2 years. The city assures a sell-back price based on a guaranteed 33-percent increase for the first year and an 18-percent return for rights held for 5 years. In April 1989, access rights sold for $3,300 per unit. The program has the support of both citizens and developers, although there is some opposition from anti-growth groups.

Privatization

Enthusiasm for ownership of environmental facilities has waned since the passage of the 1984, 1986, and 1988 Tax Reform Acts (see chapter 2 for details), and solid waste management is one of the few areas in which private ownership is still considered profitable. In *Hempstead, New York,* a private firm is scheduled to install a recycling facility in a building provided by the town. The firm will make a capital investment for equipment of between $500,000 and $750,000. The town has agreed to sell its recyclable to the company for a guaranteed price for 3 years,[72] at which time the town will buy the equipment from the company, unless the contract is renewed. Other nearby communities are permitted to use the recycling plant.

In transportation, suburban traffic congestion and the lucrative prospect of the combination of toll revenues and increased land values have made the construction of private, for-profit toll roads more attractive. However, prospective investors must overcome a multitude of time-consuming financing and institutional hurdles. In 1988, the Virginia Legislature passed a bill enabling the construction of private toll roads, and the *Toil Road Corporation of Virginia* received approval in 1989 from the State Transportation Commission to construct a 14-mile toll road from Dunes Airport to Leesburg, Virginia. In addition to completing the acquisition of capital and purchasing the right-of-way, the corporation must get approval of toll rates and financing plans from the State Corporation Commission. Private

[69] Apogee Research, Inc., op. cit., footnote 52, p. 135,

[70] Apogee Research, Inc., "Public-Private Partnerships for Environmental services: Anatomy, Incentives, and Impediments," prepared for the U.S. Environmental Protection Agency, Office of the Comptroller, Resource Management Division, unpublished manuscript, Oct. 17, 1988, p. 17.

[71] U.S. Environmental Protection Agency, op. cit., footnote 61, P. 65.

[72] Apogee Research, Inc., op. cit., footnote 70, p. 23.

entrepreneurs are also attempting to develop a commuter rail service on abandoned railroad track in northern Virginia.

Highway E-470, a 50-mile circumferential on the eastern side of *Denver, Colorado,* exemplifies a successful public-private venture, but it also illustrates the complexity of financing a major urban highway. Private participation is limited to right-of-way contribution, the payment of impact fees, and membership on advisory panels. Nonetheless, the collaboration has been a major factor in public acceptance of the financing package (see box 4-F).

Issues Related to Benefit Financing

Despite the advantages to local governments of shifting public works costs onto individual developers, users, and property owners, such benefit-based strategies pose a number of complex practical and policy issues.

- Equity: The issue of equity has several dimensions. First, developer charges and special district assessments frequently require advance payment for improvements. These can be a heavy burden for small developers and even exclude them from the market. Second, new residents pay housing prices inflated to cover required developer improvements. Benefits of a highway or other community improvement often come to both old and new residents, making equitable cost allocation a challenge. Finally, user fees are basically regressive. Raising such charges to cover more fully the costs of essential services, such as drinking water or transit can create serious policy dilemmas for local officials. Low-income citizens may be disproportionately hurt by new or increased fees, unless the fees include provisions for low-income and other special groups and encourage efficiency. However, if carefully structured, benefit charges may be no more regressive and can be less so, than subsidy by broad-based taxes.[73]
- Cost *Allocation:Determining* the full costs of public works and developing-a rational system for allocating costs among all direct and indirect beneficiaries are complex and difficult tasks. For example, the more extensive the use of developer fees and benefit charges, the cloudier the lines become between who are direct or indirect beneficiaries, and who are not.
- *Administrative:* Establishing a cost accounting and budgeting system that measures and allocates user and developer impact costs requires expertise usually found only in major metropolitan areas. Setting equitable fee schedules and making choices between charging average and marginal costs can be very complex. **Administrative** systems that must accommodate both public and private funds in special district accounts involve equally complicated problems.
- *Uncertain Revenues:* Uncertain revenues and accumulation of debt without adequate budget control and financial planning can be serious problems for public works authorities and special districts. Unforeseen rises in interest rates and economic downturns can create shortfalls in user-charge revenues and devastate financing plans that assume stable interest rates and economic growth.
- *Political Decisionmaking:* Public works programs financed by developer charges, access rights, and special district assessments can remove important budget and development decisions from the political process. Since these funds are earmarked, they do not necessarily reflect changes in community priorities or development goals. Strong regional or State planning programs can balance this independence.
- *Regional Planning and Budgeting:* If developer charges and special district assessments are used to finance infrastructure, developing and following comprehensive land-use and capital improvement plans become very important. High fees can encourage development to leapfrog over regulated areas into other less restrictive districts, exacerbating the problem of providing infrastructure in the long term. Especially in jurisdictions near State boundaries, this is a difficult and politically sensitive issue.
- *Strategy Selection:* Local financing strategies must conform to State laws, economic conditions, and the willingness of the community to **accept anew** scheme. Most of the strategies that shift costs from general purpose government to individuals or special districts work best in growth regions, where the real estate market is

[73] Hopkins, op. cit., footnote 18, pp. *22-23.*

Box 4-F— Denver's E-470 Highway

In 1988, after years of planning and negotiations, the State of Colorado authorized the E-470 Public Highway **Authority to** design, finance, and oversee the construction of E-470 as a limited-access tollway. The authority, composed of an elected official from the three counties and the city (Denver) along the route, was empowered to set tolls, levy *development* fees, **and** establish local improvement districts. From the outset of the planning stage, no Federal or State support was available to cover the estimated $1 billion cost, and crafting a workable local financing package required regional cooperation and private sector support.

scheduled to open its first segment in 1991, Highway E-470 is financed by a $722 million bond issue approved in 1986,[1] and toll revenues are expected to cover the bulk of the debt service once the highway is completed. **Developers who own property along the route are contributing approximately two-thirds of the-right-of-way as well as paying impact** fees to the authority. The authority has designated a 3-mile wide corridor along the E-470 route as **a value capture area because of its strong economic potential, and** planned to collect 25 percent of the increased property and sales taxes resulting from the corridor development, However, a slump in the regional real estate market has delayed implementing the value capture program. The authority considered imposing a $2 per employee head tax on local employers as another form of beneficiary charge, but the idea was abandoned after strong local opposition developed.

Funds for the first 5.5 miles, a $68 **million segment, will come from bond funds, the revenue from a** $10 increase **in vehicle registration fees charged within the three-county region, and developer impact** fees.[2] The Union Bank of Switzerland is providing a guarantee that bond holders will be repaid from tolls, once the first segment is opened in 1991. The provisions of the Public Highway Authority stipulate that any fees or taxes imposed are short term and must be removed when toll revenues reach **a** sufficient level to pay the debt and cover ongoing operations. Once a separate fired is established to handle maintenance and improvements, the tolls will be eliminated.

Promoted as **a public-private partnership, the authority** has formed an Executive Advisory Committee including four authority members and four developers. Two other groups are also advising the authority--a task force, which brings together private citizens, developers, and the planning directors of the four jurisdictions, and a landowners committee representing property owners along the southern portion of the route, the first section to be **built.**

Photo credit: Colorado Department of Transportation

Construction **of Happy Canyon Bridge, part of Denver's E-470 Highway project, is under way.**

[1] E-470 Authority, *E-470 Report* February 1-9.

[2] John E. Arnold, executive director, E-470 Authority, personal communication, Aug. 9, 1989.

strong. Without a healthy demand for growth, the governing body has little leverage.

CONCLUSIONS

Local governments are in the unenviable position of having primary responsibility for providing and maintaining public works services and coping with numerous Federal and State regulations on how projects must be built and severe restrictions on their ability to raise and manage funds. In most cases, traditional broad-based taxes, principally on property, no longer produce sufficient revenue to finance essential public services, which range from education to maintaining streets and sewer systems. As a result, many communities have cut back expenditures to balance budgets, frequently deferring both maintenance and capital improvements for public works, and creating large backlogs of projects in the process. In States where such actions are legal, local jurisdictions have diversified and expanded their revenue sources, raising nonproperty taxes and user fees, and tapping private capital to finance new growth.

Costs have risen across the board and a variety of Federal and State actions have spumed the search for additional local revenue. First, higher costs dictate that a larger portion of local general tax revenue is needed for education, law enforcement, housing, and social welfare programs, all of which have no other revenue source and are not suitable for benefit charges. Second, cutbacks during the 1980s in Federal construction grants, revenue sharing, and support for social programs, coupled with higher standards for environmental services, have added significantly to local costs for public works. Finally, property tax increases, particularly to support growth or expanded facilities, have met with stiff resistance from local voters, often leading to State constitutional or legal limits on taxes.

Local Revenue Sources

Property tax increases seem to have neared the upper limits of acceptability in many jurisdictions, at least for the near term. **However, dedicated local income and sales taxes have proven to be successful revenue raisers for some communities, and increments added to these taxes have become important sources of revenue for local public services.** Earmarking portions of tax increases for specific improvements, such as public transportation, is often key to winning public acceptance. On the other hand, once a source of funds is earmarked, it cannot be used for other needs even if surplus funds accumulate. Nonetheless, these sources, too, generate citizen resistance, and few communities raised their rates during 1988.

In many growth regions, governments are shifting costs for infrastructure expansion needed for new development directly to the private sector, through developer charges, sales of access rights, and special district assessments. The private sector is initiating for-profit ventures in a few districts, primarily solid waste projects, although transportation services that have potential for operating revenues and land development profits may successfully attract direct private investment **Based on current political and economic trends, OTA concludes that new infrastructure, particularly in growth areas, will be financed increasingly from various benefit charges, including direct user fees and taxes, such as the fuel tax, that target beneficiaries.**

Increasing benefit charges for public works services has some compelling advantages over raising broad-based taxes. **First, citizens seem willing to accept the principle of paying for services, making it politically easier to charge higher fees for public services and require developers to pay for facilities needed by their projects.** Many developers find" these strategies systematic, predictable approaches that save time and money. **Second, charging fees for services and programs that are closer to full costs may cut demand and hold steady or even reduce capital requirements. Third, the community** often can collect capital funds up front, avoiding the necessity for bond issues, and eliminating interest costs and reserving debt for other public facilities. Finally, benefit-based strategies allow local governments to design projects that are relatively self-supporting, making them less dependent on State and Federal programs, with their attendant strings.

Despite their advantages, strategies that shift infrastructure costs to beneficiaries pose some complex and difficult public policy issues. If recovery of the full cost of services is necessary to a jurisdiction, how should fees be structured and administered so they are not an excessive burden on the poor? Determining service costs accurately and allocating them equitably among direct and indirect beneficiaries are also difficult and complex problems, especially when service benefits are diffused

(as in public transit for example) among users and non-users. The equity of a new resident paying up front for services, through higher land prices, when long-time residents are also likely to benefit from growth is a further issue. Finally, while establishing independent special financing districts is a politically attractive option, doing so removes many fiscal and land-use decisions from the political process and may make it difficult to address new issues as they arise. Each of these issues embodies important political and policy concerns that must be weighed and resolved before governments embrace these new types of public works financing.

Small Districts and Low-Growth Areas

In many small, rural communities and low-growth jurisdictions, such as older, central cities, private capital and credit are unavailable, and residents have limited ability to pay higher user fees. **OTA concludes that benefit-based and private sector strategies are not appropriate or workable for most small, rural communities and low-growth areas. This is an especially severe problem for funding environmental public works, since these lack any substantial Federal or State support. Policymakers need to consider alternatives for such districts, which cannot depend for revenue on a strong real estate market or the profitability of private venture. Many** such communities need additional technical and management expertise as well. Considerably more State involvement and assistance is likely to be needed to address these problems, since Federal programs and resources are spread very thin already.

The task of complying with new Federal environmental standards hits hardest at small, poor communities lacking resources and expertise, and large, older cities with public works facilities needing major upgrades. Small jurisdictions are frustrated by their lack of resources and **Federal** standards that they fear may be more strict than their local public health needs justify. **A** requirement to build a new wastewater treatment system or replace a solid waste facility that still has extra capacity may raise local costs beyond the value of the homeowners' land in a small, rural town. For an older city with a backlog of deferred maintenance and rehabilitation needs, even full-cost accounting may not generate sufficient funds. Furthermore, higher service charges could be a decisive factor for a local business considering a move to a lower-cost jurisdiction.

The Federal challenge is to permit local choices within a framework that implements national public health and safety goals, maintains accountability, and sustains economic vigor. **Most local jurisdictions have no dedicated, reliable, outside funding source for environmental projects, as they have for transportation in the form of Federal and State allocations of fuel taxes and other benefit charges (see chapter 1, table 1-9). Developing public support for new taxes or significantly higher user charges to fill this gap requires substantial time and effort and may fail, even when the local economy can support them.** Furthermore, local options for funding environmental services have more limiting trade-offs associated with them than the options for funding transportation. OTA concludes that without stepped-up State or Federal assistance, noncompliance with EPA standards is a likely outcome for districts that cannot generate adequate funds.

Debates in State legislatures from Maine to California emphasize that infrastructure-related problems, such as traffic congestion, water supply, and air quality, long ago transcended local boundaries, to become regional issues.[74] However, despite requirements for comprehensive regional planning, enacted as part of Federal grant programs over the last couple of decades, **OTA finds that regional planning organizations currently have such basic shortcomings that most are ineffective.** Generally, these organizations are underfunded, lack authority to prepare and implement plans, and are highly dependent on the expertise and personalities of individual personnel.

If regional planning groups are to become constructive, effective forces, their basic weaknesses need to be addressed. First, regional agencies need reliable funding, in addition to the limited revenue they can generate, to maintain core staff and technical and service capabilities. Cutbacks in Federal funds for housing and environmental programs have left DOT funding as the primary support for regional planning. **The lack of funding for comprehensive environmental planning is of**

[74]Campbell Associates, Inc., op. cit., footnote 56, p. 5.

particular concern as States assume responsibility for revolving funds to support local environmental infrastructure. Second, the regional impacts of infrastructure issues create the need for coordinated capital improvement planning and budgeting. **OTA concludes that because of local government ambivalence about cooperating with neighboring jurisdictions, State leadership and funding will be necessary for regional planning activities to be effective. Federal program requirements or incentives could spur the States to take action.**