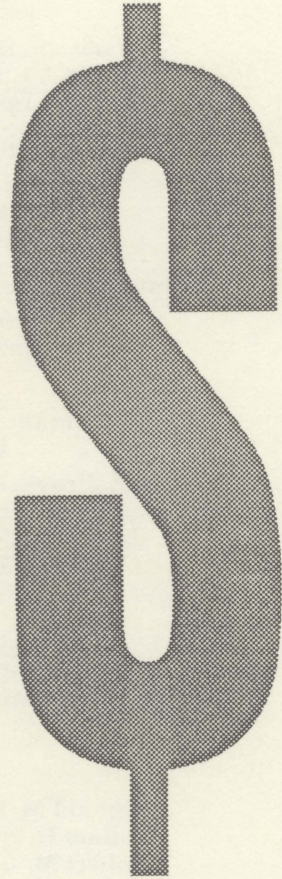


A STAFF REPORT

**Local Revenue
Diversification
User Charges**



**Advisory Commission on
Intergovernmental Relations**

SR-6
October 1987

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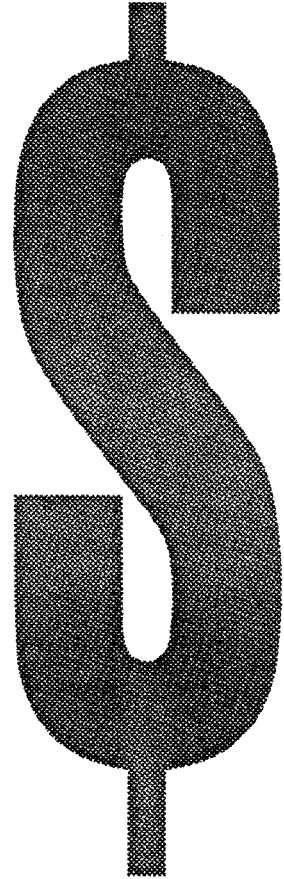
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Local Revenue Diversification

Introductory Notes

This study is one of a series done by staff and consultants of the Advisory Commission on Intergovernmental Relations on ways in which local governments can lessen their reliance on property taxes by diversifying their revenue bases.

For many years, the local property tax has been the fiscal mainstay of local governments, and it remains their major revenue source. Its dominant role has been due to its many virtues as a revenue raiser: for local governments it is easily enforced because a tax on land and buildings is virtually impossible to evade or avoid; it is capable of generating large amounts of revenue; rates are easily adjusted; its ad valorem character makes it the only tax presently employed in the United States that taxes unrealized capital gains. While this last characteristic is popular with tax administrators, it makes the levy unpopular with those who must pay the property tax, and it can create a serious burden for the elderly and low-income homeowners and farmers.

Given the acknowledged strengths of the property tax as a revenue raiser, why should local governments wish to resort to other types of taxes? One of the major reasons is that the inflation of the late 1970s emphasized one of the major shortcomings of the property tax—because it taps unrealized capital gains, it is capriciously related to the flow of cash into a taxpayer's pockets. As inflation sharply increased land values, property tax bills increased, and taxpayers became increasingly irate and fearful that steadily rising property taxes would force them to sell their homes. The passage of Proposition 13 in California in 1978 marked the most dramatic effort to shield homeowners by capping property taxes.

Another reason for diversifying revenue sources is added protection over the course of the economic cycle. At times when property tax revenues lag, they can usually be supplemented by revenues from the more elastic local income and sales taxes. When local income and sales tax receipts reflect drops in economic activity, the much more stable property tax provides a reliable stream of revenues.

The basic political and economic reasons for diversification of tax systems lie in the fact that there is no such thing as a perfect tax. Each major tax has unique strengths and weaknesses. The more intensively any tax is used, the more obvious its defects become and the less obvious its virtues. For example, the property tax scores high marks for the reasons cited above: ease of enforcement, fine tuning, and the ability to tax unrealized capital gains. However, when the tax on real property is raised too high, it is widely perceived as a threat to home ownership and a deterrent to certain types of capital intensive business development. In the same way, the local sales tax has the advantage of being convenient, levied in small increments, difficult to avoid, and levied on consumption rather than savings, but it also is widely perceived as being regressive, and creating an unfavorable business climate. Personal income taxes can be designed to make allowances for individual circumstances of the taxpayer, and they are not regressive, but the automatic response of the tax to inflation has created wide public resentment. A local income or wage tax also is difficult for local governments to administer because of their limited jurisdictional reach. User charges have the advantage of providing a direct way to link private benefits and demand to public costs incurred; however, too heavy a reliance on user charges can hurt low and moderate income families.

The lesson is clear: an effective local revenue system should rely on a well-balanced and diversified set of taxes. In addition to avoiding the problems created by excessive reliance on any single tax source, a balanced and diversified revenue system will create a more favorable business climate, soothe taxpayer discontent, and provide a desirable stability of revenue throughout the course of the business cycle.

This report on user charges was prepared by Robert Cline of Hope College, Holland, Michigan, while he was the Academic Resident in Public Finance at the Advisory Commission. Dr. Cline graciously offered to update his study and prepare it for publication after he returned to Hope College.

The author wishes to thank John Bowman, Dick Netzer and Frederick Stocker for their extensive and constructive comments on the earlier draft of this study.

John Shannon
Executive Director

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Introduction

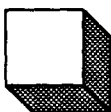
The fiscal pressures facing state and local governments—voter resistance to increased taxes, state-imposed spending and tax limits, reductions in federal and state aid, and slow real economic growth—have forced government officials to examine alternative revenue sources clearly. Increases in benefit-based taxes and user charges provide a logical way for policymakers to reconcile the need for more revenue with the realities of voter resistance to state and local taxes, particularly the property tax.

Dramatic changes in the fiscal federalism landscape in the last decade have contributed to a renewed interest in the old concept of charging “prices” for many publicly provided goods and services. Federal aid, which reached a peak of 26.5 percent of total state-local outlays in fiscal year 1978, dropped sharply to a 20.6 percent share in 1986, the lowest ratio since 1971. Coinciding with this fundamental realignment in federal responsibilities was the taxpayer revolt highlighted by the 1978 passage of Proposition 13 in California. Unfortunately for state and local governments, two national recessions—including the steepest recession in 50 years—occurred during the same period. The current era of “fend-for-yourself” fiscal federalism resulting from these combined forces has heightened interest in user charges and fees as an alternative state and local revenue source.

This paper examines both the theory and the practice of user-charge financing. The conditions under which user-charge financing is feasible are identified and recent trends in use are examined. The advantages and disadvantages associated with substituting user charges for general taxes are discussed in detail. A number of examples are also provided to illustrate the pricing principles involved in establishing an effective system of user charges. With the exception of water and sewer services, user-charge

financing for public utilities is not discussed in detail; however, the economic principles developed here are also applicable in the context of public utility pricing. Because the potential role of user charges is relatively greater at the local level, this paper focuses on local government trends and applications.

In addition to the obvious attractiveness of user charges as a source of additional revenues for state and local governments, increased reliance on fees and charges can also be justified on efficiency and equity grounds. The potential contribution of user charges to these two critical policymaking goals is discussed at length in this paper. In the long run, the efficiency and equity benefits from increased user-fee reliance may be far more important than the short-run revenue contributions.



Defining User Charges

It is not always clear in practice where benefit-based financing ends and general taxation begins. There are, however, important characteristics of user-based charges and fees which help to differentiate them from general taxes. *Figure 1* provides an overview of the wide range of local revenue sources and their distinguishing characteristics.¹

At one end of the revenue spectrum are utility charges and user fees, sources which are viewed as public sector counterparts to prices in the private sector. These charges have the distinguishing characteristic of being voluntary payments based on direct, measurable consumption of publicly provided goods and services. Because utility charges and user fees are usually levied per unit, the total cost to users varies with the quantity of goods and services consumed. Individuals who do not use the services or consume the outputs of government programs financed by charges and fees generally do not have to contribute to their funding. In effect, user charges establish a direct link between the expenditure and revenue sides of the budget for specific government services. Examples of utility charges and user fees include water, sewer and electricity charges; garbage collection fees; and fees for recreational facilities, such as municipal golf courses and parks.

Similar to prices in the private sector, user charges in the public sector contribute to an efficient allocation of resources by providing valuable information on consumer preferences and by constraining the demand for government goods and services. In addition to discouraging wasteful use of existing public services, user charges also provide invaluable information necessary to make long-run investment decisions in the public sector. With user-charge financing, local services will be expanded only if direct users are willing to pay the full costs of the expansion. As a result, user charges strengthen political accountability at the local level and lead to a more efficient mix and level of public spending.

Figure 1
Alternative Local Revenue Sources: User Fees to General Taxes

Revenue Source	Characteristics	Examples
Utility charges	Analogous to private market prices; benefits accrue to identifiable individuals; payment varies with consumption.	Charges for sewer, water and publicly-provided electricity.
User fees and charges	Similar to private market prices but may involve a subsidy to specific users; usually voluntary; payments normally based on an individual's consumption of goods and services.	Fees for public swimming pools, trash collection, health services, public museums.
Special assessments	Compulsory payments imposed on real property for specific benefits generated by public investments or services; in theory, costs are allocated in line with benefits received; includes exactments from developers and development fees.	Local assessments for sidewalks, street paving and lighting, and fire protection fees.
License fees and taxes	Payments required to cover the costs of government regulation of private activities; should be considered an excise tax if charges exceed reasonable costs of regulation.	Automobile inspection fees, building permit and inspection charges, professional licenses.
Narrow-based benefit taxes	Taxes on specific activities or purchases which are generally, but often indirectly, related to the use of public facilities, such as highways; revenues are usually earmarked for particular expenditure categories.	Motor vehicle and fuel taxes.
General taxes	Compulsory payments which are used to finance general government programs; tax payments are not linked, directly or indirectly, with an individual's consumption of specific goods and services.	Sales, income and property taxes.

There are, however, many user charge applications where consumers are able to adjust their level of consumption voluntarily, but are not charged a price that covers the "full" costs of their consumption. If the consumption of the good generates both direct, personal benefits to the consumer and indirect, general benefits to the public, general taxes may be used to subsidize a portion of the cost of the service. A subsidy may also be justified as a means of supplementing the incomes of low-income citizens. In this case, part of the costs of the public service is paid from general tax revenues. Even though consumers pay a subsidized price, the consumption of the good is still the basis for determining the level of payments by the direct beneficiaries and user fees still provide important demand information.

In contrast to user fees, general taxes are compulsory payments for public services which do not vary with the level of consumption of specific public goods and services. At this end of the revenue spectrum there is no direct link between the benefits individuals receive from specific services and their actual tax payments. For this reason, revenue flows provide no useful market information about the desired level of output for particular government goods and services. Although a portion of general taxes may be earmarked through the budgeting process for specific spending programs, the critical link between what consumers pay and the benefits they receive from specific services is still missing.

A narrow definition of user charges would include the utility charges and user-fees categories. A broader definition of benefit-related revenues would include the third revenue source in *Figure 1*, special assessments. Special assessments are compulsory payments, usually in the form of a specific levy against individual real properties in a limited geographic area. Although special assessments involve the compulsory aspect of taxes, the level of payment is closely related to the estimated benefits from public infrastructure investments accruing to identifiable owners of adjacent property. It is this nexus between charges and private benefits which distinguishes special assessments from property taxes.

Traditionally, special assessments have been levied for neighborhood improvements, including sidewalks, street paving and lighting, which provide special benefits to identifiable properties. In the post-Proposition 13 era, however, the special assessment approach is being rapidly expanded in the form of builder exactments to pay for public facilities needed to service new residential developments.² Exactments require private developers to pay for all or a portion of the capital costs of public infrastructure investment through land dedications, the actual construction of facilities or the payment of charges and taxes to local governments to cover public spending. Exactments are being imposed to finance both on-site and off-site investments, including roads, sewer and water distribution lines, public schools and recreational facilities. The general principle be-

hind developer exactments is that the developing areas which benefit from the public infrastructure investments should pay for their proportional share of capital costs.

Builder exactments, in the form of dedicated land or developer-built facilities, have evolved in many communities into development or impact fees which are dollar payments required under the regulatory or police powers of local governments. To the extent that development fees allocate capital costs with the identifiable benefits accruing to new developments, they can be viewed as a type of user fee. In theory, the lump-sum, up-front development fee is equivalent to the present value of a future stream of user charges imposed to pay for the same capital costs. License fees and taxes, the fourth revenue category in *Figure 1*, may arguably be included within a broader definition of user charges. License taxes (and fees closely related to licensing activities) are compulsory charges collected by governments as a condition for doing business or exercising a nonbusiness privilege—examples include marriage licenses and occupational and business licenses. They are used to cover the costs of regulating private-sector activities or to share in the revenues accruing to businesses or individuals as a result of government-granted privileges—taxicab licenses, for example. Some would argue that it is reasonable to identify the revenues collected to compensate government for the administrative costs of licensing and regulation activities as user charges.³ However, because the benefits of licensing and regulation accrue primarily to citizens in their roles as consumers, rather than to the regulated firms, it appears more useful analytically to view license fees as taxes, not user charges. In any case, license fees and taxes which are designed to raise revenues in excess of any reasonably justifiable public costs of licensing and regulation should be classified as general taxes.

Building permit fees provide an excellent example of the potential problems inherent in the classification of regulatory fees as user charges. Since the late 1970s, local governments in California and elsewhere have increased building permit and inspection fees substantially. In Fairfax County, Virginia, for example, building fees for a typical townhouse were recently increased by 32 percent to over \$600 per unit. The philosophy behind this increase, as expressed by the head of the Fairfax Department of Environmental Management, is that, "People who are here should not support with their taxes the people who are coming in. New development should pay for itself."⁴ In other words, an important equity objective is a fair allocation of the costs of the regulatory activities. This interpretation, however, assumes that the new residents, not existing residents, are the beneficiaries of the regulatory services.

In opposition to the recent trend of sharp increases in building permit and inspection fees, many builders argue that the level of charges is only remotely related to the actual costs of the inspection activities, including

incremental and overhead costs. To the extent that permit fees exceed these additional costs, the fees take on the characteristics of a tax on business activities rather than a user fee, even if new homeowners receive a portion of the benefits. As the head of one northern Virginia county inspection department noted: "We do a certain amount of work that doesn't relate to builders, and we don't think they should pay for it. To do so would be a subterfuge tax on the builders. Ethically, you're not supposed to do that."⁵ Because of the difficulty in separating the user fee and excise tax components of licenses and fees, they will not be considered as user fees in the following discussion.

It is true, however, that certain user charges can be collected at the time a license is issued to cover subsequent public expenditures which will result from the exercise of the privilege or license. Charges for police services providing crowd control during a parade and builder exactments to cover public infrastructure costs are two examples. Another example is a fee on divorce actions recently adopted in Idaho to help fund programs for displaced homemakers. The public goods and services that are subsequently provided do create direct benefits to identifiable users and, therefore, the fees should be viewed as user charges.

The final revenue source identified in *Figure 1* is narrow-based benefit taxes, such as motor vehicle and fuel taxes. Many analysts view these excise taxes as benefit-related taxes which approximate user fees. Rather than charging the highway users directly for roads (by using tolls, for example), excise taxes indirectly tax road use by taxing goods which are complementary in use, such as gasoline. Because transportation taxes and fees are generally earmarked for highway spending, aggregate benefits, as measured by highway spending, are roughly equal to aggregate revenues collected from users. While this indirect approach might achieve an overall balance between highway expenditures and revenues, it fails to establish a direct link between an individual's highway use and the resulting public-sector costs. Without this link, auto-related excise tax collections cannot provide information necessary to evaluate individual highway investment alternatives, which would be the case for true user charges.

The distinction between excise taxes and user fees is also becoming important in the discussion of developer financing of public infrastructure. Local governments in several states, including California and Arizona, have been authorized to levy a development tax, rather than the development fee discussed earlier. Because it is a tax, local governments are not constrained to spend the development revenues for the benefit of specific taxpayers or geographic areas. For this reason, development taxes are more closely related to excise taxes than to user charges or fees.

The difficulty in distinguishing between a user charge and a tax on the basis of the voluntary characteristic surfaced in the public debate over the Reagan Administration's fiscal 1987-88 federal budget proposals,

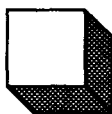
which included almost \$3.2 billion in new or expanded user fees. The following quote is from a newspaper report of a recent interview with James Miller, director of the Office of Management and Budget:

Pressed, Mr. Miller concedes that the line between taxes and user charges is a bit fuzzy. A tax, he asserts, is compulsory; a user charge isn't. For example, a person who pays a \$2 fee to enter a national park doesn't have to go there, but he does have to pay taxes.

"I must admit," Mr. Miller adds, "that it gets a little more difficult to separate out the two when you have something like an excise tax on telephone calls. You could avoid the tax by not using the telephone. But then, too, you could avoid the income tax by not earning income. So it (the distinction between user charges and taxes) is to some extent a matter of degree."⁶

This potential confusion can be avoided by asking whether or not the user charge or excise tax reflects the cost of specific government services which benefit the users. In the case of the telephone excise tax, it is difficult to establish the nexus between individual benefits and tax payments which would identify the excise tax as a benefit-related charge.

As the above discussion makes clear, the broadest definition of benefit-related charges would include user fees, utility charges, special assessments, license fees and taxes, and narrow-based benefit taxes.⁷ However, to avoid some of the inherent ambiguities in defining benefit-related charges, the definition of user charges used in this paper will be limited to the utility charges, user fees and special assessments categories. The common distinguishing characteristic of these revenue sources is the relatively close relationship between individual payments and direct benefits received from the provision of public services. The benefits of the government services financed by these benefit-related charges accrue primarily to identifiable individuals, rather than to the general public. In addition, these charges and fees are imposed on public goods and services that are usually consumed voluntarily, although special assessments and development fees provide an example of user charges which are, in fact, compulsory.



Recent Trends in User-Charge Financing

To examine recent trends in user-charge financing, it is necessary to develop an operational definition which is consistent with available U.S. Bureau of the Census data for state and local governments. The definition of user charges in this section includes the Census categories for current charges, special assessments and utility revenues, including public transit. The Bureau of the Census defines current charges as: "amounts received from the public for the performance of specific services benefiting the person charged and from sales of commodities and services except those by liquor store systems and local utilities." Included in the Census definition of current charges are fees, tolls, tuition and other reimbursements for current services, rents and gross income of commercial activities, e.g., parking lots and school lunch programs.

Special assessments are defined as "compulsory contributions collected from owners of property benefited by specific public improvements . . . to defray the costs of such improvements, and apportioned according to the assumed benefits to the property affected." This is the only category of narrow-based benefit taxes included in this study as user charges. License taxes, which the Bureau of the Census identifies as "taxes enacted . . . as a condition to the exercise of a business or non-business privilege," are excluded from the definition of user charges.

Public utility revenues represent the purest form of public sector user charges and include receipts from the sale of commodities and services by government-owned and operated water supply, electric power, gas and transit systems. Although electric, gas supply and transit system user charges are important for a number of local governments, the public pro-

vision of these services is less universal than water system operations and is more likely to be provided by special districts. For this reason, water system revenues and other public utility revenues are reported separately in the following table.

Although tax limitations, federal and state cutbacks in intergovernmental aid and overall economic conditions accelerated the shift to user fee financing in the late 1970s, local governments have been increasing their reliance on user charges for more than two decades. As shown in *Table 1*, in 1957 local governments raised \$.40 in user charges for each \$1 of local taxes; the ratio grew to \$.45 by 1977. Since 1977, growth in the relative importance of user fees has accelerated. User charges—defined as current charges, special assessments and utility revenues—rose sharply relative to local taxes between 1977 and 1983. User charges per \$1 of local taxes jumped to \$.64 in 1983, an increase of over 40 percent compared to the 1977 level. The user charge ratio in 1985 increased slightly to \$.65 per \$1 of local taxes.

The data in *Table 1* identify three distinct periods of growth in the relative importance of user fees over the last 28 years. From 1957 to 1977, user charges grew at a compound annual growth rate of 9.3 percent, slightly higher than the 8.6 percent average growth rate in local taxes. As a result, user charge reliance grew moderately over the 20-year period.

The second distinct phase of growth was the “fee fever” period from 1977 to 1983. While the average annual rate of growth in local taxes actually fell compared to the prior 20 years (from 8.6 to 7.1 percent), the average growth rate in user-based revenues accelerated by 45 percent (from 9.3 to 13.5 percent) over this period. As a result of this sharp divergence in growth rates, user charges jumped to 64.2 percent of local taxes by 1983, an increase of almost 19 percentage points over a six-year period. A comparison of the growth rates for individual components of total user charges shows that the categories experiencing the most significant acceleration in growth rates in the 1977-83 period were special assessments, other utility and transit charges, and educational fees. The forces which slowed the rate of growth of local taxes from 1977 to 1983—the 1980 and 1981-82 recessions and the taxpayer revolt beginning in 1978—were important factors explaining the higher growth rates for user charges. In addition, the double digit rate of inflation in energy prices from 1979 to 1981 certainly contributed to the 15.8 percent 1977-83 average annual growth rate in the other public utilities category.⁸

The significant shift in growth rates for local revenue sources between 1977 and 1983 suggests that increases in benefit-based user charges, which are not constrained by most state or voter-imposed restrictions on local revenues, have provided an important “escape hatch” for local governments in the post-Proposition 13 era. This partial coverage of limit

Table 1
Local Government User Charges, Fiscal Years 1957 to 1985

Revenue Source	Millions of Dollars Average				Annual Rate of Growth (percent)		
	1985	1983	1977	1957	1983-85	1977-83	1957-77
User Charges Total	87,566	72,655	34,030	5,764	9.8%	13.5%	9.3%
Current Charges	46,914	39,433	18,977	2,536	9.1	13.0	10.6
Education	6,272	5,703	3,429	665	4.9	8.9	5.7
Hospitals	15,654	13,935	5,722	459	2.8	16.0	13.4
Sewerage	7,427	5,809	2,488	219	13.1	15.2	12.9
Sanitation	2,143	1,644	662	76	14.2	16.4	11.4
Parks and Recreation*	1,869	1,572	756	131	9.0	13.0	9.2
Housing and Urban Renewal	1,854	1,496	916	280	11.3	8.5	6.1
Other	11,694	9,282	4,941	706	12.2	11.1	10.2
Special Assessments	2,022	1,569	862	284	13.5	10.5	5.7
Water Revenues	11,947	9,498	4,994	1,235	12.2	11.3	7.2
Other Utility and Transit	26,683	22,145	9,197	1,709	9.8	15.8	8.8
Local Taxes	134,473	113,145	74,852	14,286	9.0	7.1	8.6
User Charges as a Percentage of							
Local Taxes	65.1%	64.2%	45.5%	40.3%			

*Includes natural resources.

Source: ACIR staff computations based on U.S. Department of Commerce, Bureau of the Census, *Government Finances and City Government Finances*, various years.

Table 2
**Local Government Current Charges Per Dollar of
 Local Taxes, Fiscal Years 1972-85**

State and Region	1972	1977	1983	1985	Average Annual Rate of Growth in Intensity Ratio (%) 1972-85
U.S. Average	.22	.25	.35	.35	3.6
New England					
Connecticut	.07	.08	.11	.12	4.2
Maine	.08	.14	.16	.21	7.7
Massachusetts	.11	.13	.20	.24	6.2
New Hampshire	.09	.14	.11	.11	1.6
Rhode Island	.06	.06	.10	.08	2.2
Vermont	.06	.10	.09	.10	4.0
Mideast					
Delaware	.49	.57	.62	.70	2.8
Washington, DC	.17	.09	.09	.09	-4.8
Maryland	.17	.21	.26	.19	0.9
New Jersey	.12	.12	.17	.18	3.2
New York	.17	.18	.21	.21	1.6
Pennsylvania	.20	.20	.23	.23	1.1
Great Lakes					
Illinois	.15	.18	.21	.21	2.6
Indiana	.25	.33	.53	.47	5.0
Michigan	.27	.32	.35	.35	2.0
Ohio	.23	.26	.28	.32	2.6
Wisconsin	.15	.31	.38	.37	7.2
Plains					
Iowa	.24	.33	.41	.38	3.6
Kansas	.22	.27	.34	.31	2.7
Minnesota	.24	.36	.51	.51	6.0
Missouri	.25	.27	.34	.41	3.9
Nebraska	.22	.28	.42	.42	5.1
North Dakota	.18	.27	.25	.31	4.3
South Dakota	.13	.14	.19	.19	3.0
Southeast					
Alabama	.67	.79	.95	.86	1.9
Arkansas	.56	.60	.70	.65	1.2
Florida	.50	.58	.62	.70	2.6

Table 2 (cont.)
**Local Government Current Charges Per Dollar of
 Local Taxes, Fiscal Years 1972-85**

State and Region	1972	1977	1983	1985	Average Annual Rate of Growth in Intensity Ratio (%) 1972-85
Southeast (cont.)					
Georgia	.66	.59	.90	.80	1.5
Kentucky	.40	.35	.36	.42	0.4
Louisiana	.27	.44	.47	.48	4.5
Mississippi	.70	.83	1.30	1.15	3.9
North Carolina	.36	.38	.50	.44	1.6
South Carolina	.49	.54	.69	.70	2.8
Tennessee	.42	.45	.58	.58	2.5
Virginia	.21	.20	.24	.24	1.0
West Virginia	.37	.38	.57	.57	3.4
Southwest					
Arizona	.20	.23	.41	.38	5.1
New Mexico	.65	.49	.61	.49	-2.2
Oklahoma	.41	.41	.40	.48	1.2
Texas	.33	.32	.40	.37	0.9
Rocky Mountain					
Colorado	.22	.24	.28	.28	1.9
Idaho	.37	.44	.69	.68	4.8
Montana	.15	.20	.22	.24	3.7
Utah	.23	.24	.27	.27	1.2
Wyoming	.43	.32	.36	.41	-0.4
Far West					
California	.18	.20	.45	.43	6.9
Nevada	.44	.49	1.04	.87	5.4
Oregon	.21	.26	.31	.30	2.8
Washington	.41	.51	.63	.61	3.1
Alaska	.70	.46	.62	.53	-2.1
Hawaii	.10	.13	.13	.14	2.6

Source: ACIR staff computations based on U.S. General Accounting Office, "Including User Charges in the General Revenue Sharing Formulas Could Broaden the Measure of Revenue Effort," PAO-82-23, September 2, 1982, Table 12, pp. 50-51; and U.S. Department of Commerce, Bureau of the Census, *Governmental Finances, 1982-83 and 1984-85*.

laws has contributed to the diversification of local revenue structures away from property taxes and toward user-based revenue sources.⁹

The third distinct period of growth in user charges identified in *Table 1* is 1983-85. The annual growth rates for both user charges and local taxes returned to the levels observed in the two decades from 1957 to 1977. As a result, user charges per \$1 of local taxes rose only slightly, from \$.64 in 1983 to \$.65 in 1985. The overall rate of growth in user charges was held down by an unusually low growth rate in hospital charges (2.8 percent) and significantly lower growth rates in other utility charges and current charges for education.

It is interesting to note, however, that the rate of growth in water revenues and special assessments actually accelerated in the 1983-85 period. A look at individual state data shows that over 35 percent of the dollar increase in special assessment revenues for all local governments (\$452 million) occurred in California. This suggests a continuing adjustment in the mix of local revenue sources in the wake of Proposition 13. Over 60 percent of the increased special assessment revenue was accounted for by four states: Arizona, California, Colorado and Washington.¹⁰

Although the shift to a greater reliance on user charges is almost universal, both the degree of reliance and recent rates of growth in user charges vary substantially across states. *Table 2*, which provides information on the extent of user-charge financing by states, uses a more limited definition for interstate comparison. The degree of local government reliance on user charges is expressed as a ratio of current charges to local taxes. This user-charge intensity ratio provides a measure of the variation in the mix between local taxes and current user charges across states.

As shown in *Table 2*, significant regional differences exist in the ratio of local current charges to local taxes. States in the southeast region rely most heavily on current charges. In 1985, Alabama and Georgia had ratios of at least 0.80, while Mississippi led the nation with a ratio of 1.15. In other words, Mississippi local governments raised \$1.15 in current user charges for every \$1 in local taxes. For the entire region, the simple average ratio was 0.63, as compared to an average ratio of 0.41 for all states. The far west and southwest regions have, on average, the next highest user-charge intensity ratios. New England clearly relies less on current charges (and more on property taxes) than any other region, with Rhode Island having the lowest ratio (0.08) in the United States. The average ratio in New England was 0.14.

Table 2 also provides state-by-state figures for the average annual percentage rate of growth of the user-charge intensity ratio between 1972 and 1985. The highest growth rate, 7.7 percent, occurred in Maine. California, responding to the "tilt" toward nontax local revenue sources encouraged by the partial coverage of Proposition 13, had the third highest

growth rate at 6.9 percent. It should be noted, however, that in 1985 California's reliance on user charges relative to local taxes was still only slightly higher than the unweighted U.S. average.

The lowest rates of growth in the relative importance of current charges tended to occur in energy-producing states where energy taxes provide an alternative source of local revenues. In fact, the user-charge intensity ratio actually fell in New Mexico, Wyoming and Alaska. The increase was a modest 0.9 and 1.2 percent in Oklahoma and Texas, respectively. For these states, user-charge revenues grew only slightly faster than local taxes.

The interstate comparisons in *Table 2* clearly illustrate the large variance in the reliance of local governments on current user charges relative to local taxes. The variation partly reflects different patterns of state aid to local governments, the presence or absence of state-imposed revenue limits, and availability of alternative local revenue sources. If the U.S. average fee-intensity ratio is used as a benchmark, the analysis suggests that there is substantial room for increasing user charges relative to local taxes, especially among states in New England and the midwest.

The data in *Table 3* provide more detailed information on the state-by-state distribution of current charges by major charge categories. The variation in the mix of user charges is quite extreme. Hospital charges, for example, vary from zero in several states to over 70 percent in Mississippi and Georgia. Mississippi's heavy reliance on user charges is partially explained by the fact that over 75 percent of the state's current charges are from hospitals, as contrasted with a U.S. average of 33 percent. On a per capita basis, hospital charges in Mississippi were almost three times higher than the U.S. average.¹¹ In contrast, hospital charges in the midwest accounted for only 14 percent of total current charges.

As mentioned above, the significant increase in user-fee reliance since 1977 is perhaps most evident in California, a state with the most restrictive tax and spending limits. *Table 4* illustrates the increasing importance of user-fee financing in large California cities, as well as the substantial variation in the ratios within this group of cities. The upward trend in the fee-intensity ratios immediately after Proposition 13 are readily apparent. The large increases in 1979 were due to both a sharp increase in user charges and an absolute reduction in property tax revenues. In San Francisco, for example, current charges increased by more than 27 percent in 1979. Renewed growth in property tax collections and the distribution of a large state surplus to local governments reduced the pressures to raise user charges in the 1981-83 period. No discernible pattern is evident in the changes in user-charge reliance from 1983 to 1985, although the ratios of user charges to local taxes in 1985 were approximately at the same level as in 1981 for four out of the six cities.

For all U.S. cities, the ratio of revenue from current charges to total

Table 3
Percentage Distribution of Local Government Current Charges,
Fiscal Year 1985
(in percent)

State and Region	Educa- tion	Hos- pitals	Sewerage and Sanita- tion	Housing	Air and Water Transpor- tation	Other
U.S. Average	13.37	33.37	20.40	3.95	7.73	21.18
New England	13.18	26.20	19.48	15.14	1.30	24.70
Connecticut	17.01	11.62	21.30	14.78	0.53	34.75
Maine	13.84	25.88	26.10	5.36	6.57	22.24
Massachusetts	11.02	36.09	15.95	16.71	0.76	19.47
New Hampshire	23.41	0.00	24.07	9.23	0.64	42.64
Rhode Island	3.58	0.00	42.64	26.95	0.00	26.83
Vermont	24.26	0.00	24.21	8.82	6.62	36.10
Mideast	15.25	14.34	21.29	9.31	9.26	30.55
Delaware	7.78	0.00	41.30	3.18	11.39	36.35
Washington DC	6.45	16.39	41.65	8.95	0.00	26.56
Maryland	28.39	0.04	45.66	6.29	0.20	19.42
New Jersey	18.17	14.30	32.84	6.75	0.47	27.47
New York	10.80	20.81	9.78	11.39	13.48	33.75
Pennsylvania	23.13	1.06	35.34	6.44	6.82	27.21
Great Lakes	17.63	29.30	22.30	2.64	3.99	24.14
Illinois	21.56	21.72	17.95	4.85	7.49	26.43
Indiana	10.49	55.47	19.89	1.72	1.98	10.46
Michigan	18.06	35.67	18.74	0.99	0.05	23.49
Ohio	19.47	22.00	30.69	3.04	3.95	20.85
Wisconsin	14.07	14.48	24.50	2.65	2.22	42.09
Plains	18.79	37.05	15.52	2.56	6.45	19.63
Iowa	19.40	41.35	21.51	0.33	1.84	15.57
Kansas	22.12	36.81	13.43	2.24	6.57	18.83
Minnesota	15.01	31.12	15.95	3.67	7.15	27.10
Missouri	18.11	42.30	13.20	2.33	10.13	13.92
Nebraska	23.16	45.97	10.50	2.72	3.18	14.47
North Dakota	35.95	0.00	22.22	5.82	9.10	26.91
South Dakota	18.10	19.37	22.02	3.90	3.53	33.06
Southeast						
Alabama	8.22	57.64	10.78	4.46	2.41	16.50
Arkansas	16.67	50.04	17.28	3.78	2.79	9.43
Florida	12.06	39.03	18.27	1.31	9.42	19.91

Table 3 (cont.)
Percentage Distribution of Local Government Current Charges,
Fiscal Year 1985
(in percent)

State and Region	Educa- tion	Hos- pitals	Sewerage and Sanita- tion	Housing	Air and Water Transpor- tation	Other
Southeast (cont.)						
Georgia	4.39	70.82	12.01	2.73	5.27	4.78
Kentucky	12.32	31.09	32.26	3.74	7.25	13.34
Louisiana	5.81	59.81	12.03	3.16	4.89	14.30
Mississippi	10.94	74.59	6.94	1.85	1.71	3.96
North Carolina	16.87	43.46	16.02	5.68	4.65	13.32
South Carolina	14.61	55.47	17.15	2.03	1.04	9.70
Tennessee	6.78	53.27	17.99	4.29	3.53	14.15
Virginia	14.41	13.75	43.57	4.30	3.03	20.94
West Virginia	7.14	48.17	21.62	2.92	2.36	17.79
Southwest						
Arizona	15.26	31.87	24.91	2.01	11.32	14.62
New Mexico	19.12	19.53	28.62	1.22	13.53	17.98
Oklahoma	9.24	29.41	35.53	1.66	6.16	18.00
Texas	6.54	51.82	22.06	2.38	4.16	13.04
	16.56	30.36	24.26	2.09	12.55	14.18
Rocky Mountain						
Colorado	13.74	32.03	22.65	1.50	8.23	21.86
Idaho	14.59	27.28	22.96	2.16	10.83	22.18
Montana	9.04	51.26	18.77	0.50	2.94	17.49
Utah	9.28	14.92	24.76	2.46	6.20	42.38
Wyoming	15.10	7.76	36.55	0.88	13.38	26.33
	16.79	62.34	10.70	0.36	1.15	8.66
Far West						
California	9.42	31.21	21.62	2.13	12.76	22.86
Nevada	8.25	32.48	20.65	1.96	11.53	25.13
Oregon	3.33	48.65	16.56	1.84	14.15	15.47
Washington	22.10	15.91	24.33	1.61	16.94	19.10
	11.75	25.80	27.61	3.54	17.32	13.97
Alaska	4.88	6.90	17.66	1.68	4.60	64.29
Hawaii	0.00	0.00	71.31	0.30	0.00	28.39

Source: Computations based on Government Finance Diskettes supplied by the U.S. Advisory Commission on Intergovernmental Relations, Washington, DC, 1987.

Table 4
**Relative Importance of User Charges,
 Large California Cities,
 Selected Fiscal Years¹**

City	Relative Importance ²				
	1985	1983	1977	1979	1981
Long Beach	.96	.93	.97	1.12	.65
Los Angeles	.42	.41	.41	.40	.29
Oakland	.67	.59	.72	.75	.46
San Diego	.57	.46	.52	.48	.32
San Francisco	.57	.54	.57	.52	.24
San Jose	.45	.62	.53	.44	.39

¹Cities with population greater than 300,000.

²Current charges and special assessments per dollar of local taxes.

Source: ACIR staff calculations derived from the U.S. Department of Commerce, Bureau of the Census, *City Government Finances*, various fiscal years.

Table 5
**Fee-Intensity Ratios by City Size,
 Fiscal Years 1981 and 1985**

City Population in 1980	Current Charges as a Percentage of City Taxes	
	1981	1985
All cities	32.8%	34.7%
1,000,000 and over	21.6	20.5
500,000—999,999	31.0	31.4
300,000—499,999	38.4	41.3
200,000—299,999	35.3	46.8
100,000—199,999	38.0	39.0
50,000— 99,999	33.8	37.5
less than 50,000	43.0	47.7

Source: ACIR staff computations based on U.S. Department of Commerce, Bureau of the Census, *City Government Finances*, various years.

city taxes has risen from 23.2 percent in 1971-72 to 34.7 percent. (The ratio was 26.2 percent in 1976-77 and 34.6 percent in 1982-83).¹² *Table 5* shows the relative importance of current charges for cities ranked by population-size. In general, fee-intensity ratios drop as city size increases. Medium and smaller-size cities rely most heavily on user charges because larger cities tend to have more diversified tax structures and provide different mixes of city services. Larger cities, for example, tend to spend a greater proportion of their budgets on social services and income maintenance programs which are not subject to user-charge financing. Fee-intensity ratios are also lower in larger cities because they are more likely to have special districts providing public utility services which rely most heavily on user charge financing.

Table 6 provides relevant information on "fee sufficiency"—the percentage of expenditures covered by current charges—by function for the largest U.S. cities. For enterprise activities, including parking facilities and water supply, that have close private-sector counterparts, this ratio was over 88 percent in 1985. In contrast, only 19.3 percent of parks and recreation expenditures are covered by user charges. The lower ratios for recreation and education functions reflect the public-good aspects of these activities and the relative importance of income redistribution objectives.

Table 6
**Current Charges as a Percentage of Expenditures
 for Selected Functions,
 Cities with Population of 300,000 or more,
 Fiscal Years: 1977, 1981 and 1985**

Functional Category	1977	1981	1985
Education	5.7%	3.7%	2.4%
Hospitals	40.0	40.5	38.2
Sewerage	37.7	43.2	63.5
Sanitation	10.3	13.7	18.3
Parks and Recreation	15.6	16.7	19.3
Housing and Urban Renewal	29.3	15.9	18.8
Airports and Water			
Transportation	102.5	87.0	93.3
Parking Facilities	128.9	101.8	100.9
Water Supply ¹	85.8	81.8	88.6

¹All cities in the United States.

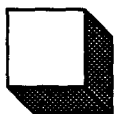
Source: ACIR staff computations based on U.S. Department of commerce, Bureau of the Census, *City Government Finances*, various years.

Table 7
**State Government User Charges,
 Fiscal Year 1985**

Functional Category	User Charges (millions of dollars)	Percentage Distribution	Charges as a Percent of Direct Expenditures
Education	15,664	56.8%	29.2%
Hospitals	5,956	21.6	37.4
Natural Resources, Parks and Recreation	1,268	4.6	15.9
Housing and Community Development	218	0.8	21.1
Highways	1,835	6.7	6.8
Air and Water Transportation	634	2.3	63.0
Other	2,015	7.3	—
Total	27,590	100.0 %	—
User Charges as a Percent of State Taxes	12.8%		

Source: ACIR staff computations based on U.S. Department of Commerce, Bureau of the Census, *Governmental Finances in 1984-85*.

Similar data for state government user charges for fiscal 1985 are presented in *Table 7*. Charges for education and hospitals, which account for over 78 percent of state current charges, cover 29 and 37 percent, respectively, of direct state expenditures in these areas.



Continuing Support for User Charges

The data in the previous section document the widespread and growing reliance on benefit-related user charges at the local level. Recent survey evidence suggests that this shift in the composition of local revenues away from property taxes to nontax revenues accurately reflects the preferences of citizens. The Advisory Commission on Intergovernmental Relations in its annual survey of public attitudes on government and taxes has included questions concerning user charges as a source of local revenue in 1981, 1986 and 1987. The 1981 ACIR public opinion poll found that taxpayers prefer user-charge financing by overwhelming margins compared to other local taxes if local revenues have to be increased.¹³ Fifty-five percent of the respondents identified user-fee increases as the best way to raise additional revenue. This support was more than two and one-half times as large as the percentage selecting local sales taxes, the next favorite choice.

The support for increasing specific user charges was greatest for residents of the northeastern states, which include most of the states in the New England and midwest regions. As shown in *Table 2*, these states, on the average, have the lowest ratios of user charges to local taxes. In contrast, residents of southern states, states with the highest user-charge intensity ratios in *Table 2*, expressed the lowest level of support for increasing user charges. Nevertheless, 50 percent of residents in the south still selected user charges as the best way to increase local revenues.

The 1986 ACIR poll found continuing strong public support for user charges for services if local governments must raise more revenue.¹⁴ Charges for specific services were chosen as the preferred revenue option by 49 percent of the respondents. Support for increasing the local sales tax was a distant second (26 percent), followed by increasing the local income tax (9 percent). A comparison of the responses in 1986 and 1981

does show a decline in overall support for charges for services—a drop of 6 percentage points. The largest decline in support occurred in the northeast, where 54 percent chose charges for services in 1986 as compared to 68 percent in 1981. Public support for user-fee financing actually rose slightly in the west. This shift in preferences appears to coincide with the relatively strong increase in reliance on user fees in the northeast region over the same period (see *Table 2*).

In 1987, the ACIR poll again asked a question relating to user charges: for the federal government, state government and local government, respondents were asked to choose from a series of alternative ways to raise a small amount of additional revenue. User charges were clearly the first choice as a way to raise revenue for local government, with 33 percent of the respondents choosing "an increase in user fees or charges for things like the use of local parks and swimming pools, parking, library use, garbage pick-up or ambulance service." Twenty percent chose a local sales tax or increase in the existing local sales tax. An increase in the local property tax rate and a local income tax (or increase in the existing income tax rates) were each chosen by 9 percent. Seventeen percent of the respondents volunteered the answer that there should be no tax increase or new taxes.

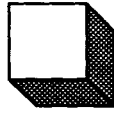
There were no substantial variations in support among the regions. Although support for user charges does not appear to be as strong in 1987 as in the previous years, the wording of the 1987 question varies too much from the previous questions to make direct comparisons possible. User charges are still clearly the first choice of most of the respondents when it comes to choosing ways to raise local revenues.¹⁵

A national survey of municipal finance officers in 1982 also found strong support for increasing the relative importance of user charges at the local level.¹⁶ Almost 54 percent of the respondents indicated no strong community opposition to user charge financing. Among those who did indicate opposition, the regressivity of user charges was cited by 17 percent as an "important" reason for opposition; regressivity was deemed "fairly important" by another 17 percent. Regionally, respondents in New England, the midwest and the southeast showed the greatest opposition to user charges on equity grounds. In the midwest, 32 percent listed regressivity as an important reason for opposition. In contrast, only 7 percent of those in the Plains region identified regressivity as an important obstacle.

A more recent survey of county government officials shows that increases in the scope and level of user fees continue to be an important tool in diversifying the local revenue base.¹⁷ Over 47 percent of the respondents indicated that user fees were either increased or applied to new services in the last five years. The survey results also show that the percentage of counties reporting increases in fees was significantly higher in larger counties. Significant increases in user fees were reported in the

areas of parks and recreation, health, vehicle registration, business licenses and utilities. Regionally, fee increases were most pronounced among the states in the far west region.

More attention to the potential role of user fees is also surfacing at the federal level. The Reagan Administration's proposed budget for fiscal year 1988 included over \$22 billion in new revenue sources to help meet the 1988 deficit targets under the *Balanced Budget and Emergency Deficit Control Act of 1985*. Reflecting the Administration's long-standing opposition to general tax increases, the budget proposal included almost \$3.2 billion in new or increased user fees and charges to identifiable beneficiaries of federal programs. Proposed charges included increased fees for FHA insurance and VA home loan programs; significantly expanded charges for Coast Guard inspection, navigation, and search and rescue services; a more than doubling of recreation fees at national parks; increased charges for government publications; expanded fees for food safety and inspection services; new fees for marine fishing activities; and up-front fees to cover student loan defaults.¹⁸ The intensifying public discussions of expanded federal user-charge financing may prove an additional stimulus to state and local user-fee increases.



User Charges in Theory

Publicly provided goods and services must have two important characteristics before user charges are feasible. First, the benefits of the public expenditures must accrue primarily to particular individuals rather than to the general public. Second, it must be feasible to exclude non-payers from receiving the individual benefits of the program. If a specific good or service provided by government has these two characteristics, then user-charge financing may be technically feasible. However, economic feasibility must be determined by comparing the necessary costs of administering the user-charge system to the efficiency and equity gains expected from substituting user charges for general taxes. The distinction between technical and economic feasibility is a critical one. Highway tolls, for example, are currently economically feasible for limited-access highways, but not for city streets.

Municipal tennis courts, golf courses and public utility outputs are clearly government services which can be financed through user charges rather than general taxes. The benefits accrue primarily to individuals who can be easily identified, and charges can be imposed in proportion to direct personal use of the good or service. Nonpayers can be prevented from consuming the service, and fees can be collected at relatively low administrative costs.

John Due and Ann Friedlaender provide useful guidelines for determining when it is appropriate (or inappropriate) to consider expanding the role of user charges in financing public goods and services.

In summary: Use of the pricing mechanism where possible instead of free distribution with financing by taxation is regarded as most justifiable when:

1. Benefits are primarily direct, so that charges will not cause significant loss of external benefits.

2. Demand has some elasticity, so that the use of prices aids resource allocation and eliminates excessive utilization.
3. Charges do not result in inequities to lower-income groups, on the basis of accepted standards.
4. Costs of collection of charges are relatively low, or alternate taxes measured by use can be employed.

Use of charges is more questionable when:

1. External benefits are significant and will be lost in part if charges are made.
2. Demand is perfectly inelastic, so that resource allocation is insensitive to the pricing system. Even so, charges may be regarded as warranted on equity grounds.
3. Equity standards require that the lower income groups be assured of obtaining the services.
4. Collection costs are relatively high and alternative tax measures related to usage cannot be devised.¹⁹



The Case for User Charges

In the private sector, prices serve the dual roles of rationing available goods and services among potential consumers and of determining the quantity of goods and services actually produced. User-charge financing has the potential to generate similar short-run and long-run efficiency related benefits in the public sector. Proponents of user charges also consider them to be a fair and equitable method of paying for public services which accrue primarily to individual beneficiaries. A third, and very important, argument in favor of user charges is their revenue potential as an alternative to local taxes, particularly the property tax. The efficiency, equity and revenue productivity dimensions of user charges are discussed in this section.

Efficiency Benefits

The most frequently stated argument in favor of user-charge financing relates to the potential efficiency gains of charging users directly for services received. The efficiency gains take the form of an improved allocation of scarce resources between the public and private sectors, a more efficient allocation of resources within the public sector and possible cost savings from more efficient production of a specific good or service.

In the "fend-for-yourself" fiscal era of the 1980s, local governments are facing increased citizen-taxpayer pressure to provide the level and mix of public expenditures preferred by most of their citizens. A greater reliance on benefit-based taxes and user charges can contribute to this objective by providing invaluable information about actual preferences for specific public services.

By requiring identifiable beneficiaries to pay for services on the basis of benefits received, user charges simultaneously constrain demand and

reveal the value that beneficiaries place on the last unit of the good consumed. The role of user fees in providing demand information is, perhaps, the most important role. Richard Bird has succinctly summarized the value of this information as follows:

At present there is no mechanism by which demand, or the lack of it, for even those public sector activities which consist of providing essentially private goods can be recorded or can directly influence the allocation of resources in the public sector. When consumers pay for public services through the price system their individual actions can signal shifts in demand more quickly and flexibly than can the inherently cumbersome political mechanism. Through prices, consumers can also be offered differentiations in the quality of public services—whether trash collection, off-street parking, or foreign language instruction—which otherwise can only be offered on an all-or-nothing basis.²⁰

The information provided by user charges is critical in deciding whether or not to expand government services. If services are provided free of direct charge, the political process will be subjected to continuing pressure to relieve “shortages” by investing additional resources in the provision of the services. User charges can reduce this pressure by requiring beneficiaries to pay prices which more accurately reflect the full costs of their actions. Faced with higher prices in the form of user charges, consumers can be expected to reduce their actual level of output relative to the level preferred at a zero price. As a result, wasteful consumption of public goods and services can be reduced significantly, and economically unjustifiable capital investments can be avoided. There will be cases, of course, where user fee revenue will cover the full costs (operating and capital) of expanding output. In this situation, it would be efficient to provide consumers with an expanded level of services financed from user-charge revenues. The important point is that long-run investment decisions require the type of demand-related information which can be generated by user charges.

If users are charged “prices” reflecting the marginal costs of consumption of government services, output will be provided only if the additional value of the service to the consumer is at least as great as the cost of the resources used by government in providing the service. If the service is provided free (at a zero price), many consumers of the service may place a very low value on the output, although the real resource costs of providing the service may be substantial. In the extreme case, free goods become wasted goods. The substitution of user charges for free provision of specific services will reduce the demand by those who value the service least and insure that the service is used by those who value it the most—as indicated by their willingness to pay for it. Those who continue to con-

sume the service can also be expected to demand a higher quality of service than if they received the service free of direct charge.

In terms of establishing a proper balance between the public and private sectors, correct user-charge financing can automatically limit the rate of growth in expenditures to the rate of growth in demand for a specific service. In other words, user charges contribute to increased political accountability in the local budgeting process, an important characteristic in the fiscal environment of the 1980s.²¹ However, unlike statutory or constitutional constraints on overall taxes and expenditures, user charges can also improve the allocation of resources across expenditure categories while simultaneously contributing to a better balance between the public and private sectors. On the other hand, because user charges are applicable only to those public expenditures without significant spillover benefits or income redistribution dimensions, charges cannot serve as a check on the growth of total public spending. They can, however, make a significant contribution in determining the desired level of output of a great number of public activities.

User charges may also foster efficiency in the production of publicly provided goods and services by increasing the awareness of citizens and producers concerning the true costs of public programs. Being more aware of costs and prices, consumers and producers have an incentive to reduce costs where possible. If public goods and services have close substitutes in the private sector, potential competition should put further pressure on government providers to hold down cost increases or to find more efficient ways to provide public services.

There is some empirical evidence to suggest that the production efficiency gains which accompany the adoption of user-charge financing are primarily in the area of labor cost reductions. After reviewing the evidence presented in several recent studies of public-sector production efficiencies in areas such as hospitals and refuse collection, George Peterson concluded that:

Both comparisons between public and private service suppliers, and tracking of changes resulting from the conversion of public service suppliers to cost-based user charges confirm that the major differences in service costs lie in excess labor costs in that part of the public sector that is funded by general taxes.²²

Labor cost savings often result from reductions in compensation levels and the number of hours used per unit of output provided.

A final efficiency benefit from user-charge financing is the possible reduction in the economic distortions caused by high marginal tax rates on incomes, sales or property values at the local level. If user-charge financing is substituted for general taxes, the marginal tax rates could be lowered to reduce distortions. High tax rates on personal and business in-

comes may discourage both work effort and savings. High tax rates, relative to those in nearby jurisdictions, on sales and property values, may also cause individuals and firms to change locations to reduce tax burdens. This change results from tax rate differentials, not underlying differences in real economic benefits and costs. For this reason, the distortions caused by high marginal tax rates are a "deadweight loss" to society. Looked at in a different light, these distortions result in consumers and firms giving up more in benefits than local governments collect in taxes. If user charges are set properly, they will not create these inefficient distortions and deadweight losses.

There is an additional efficiency dimension to user-charge financing that has not, perhaps, been sufficiently emphasized in the literature on charges. As public prices are substituted for general taxes, where appropriate, individuals will be faced with greater opportunities to adjust both the quality and quantity of public goods and services which are consumed. Faced with a given price per unit of a specific good or service—such as curbside or backyard garbage pickups—individuals have greater flexibility in adjusting actual consumption to more closely match their preferences. This ability to fine-tune consumption patterns is often absent in the public sector, where general taxation is most often coupled with the provision of a standard level of services for all citizens.

In a recent evaluation of the potential role of user charges, Harvey Brazer clearly pointed out the potential of charges in expanding the public-sector options available to citizens:

I find most appeal in the employment of user charges to finance differentially higher levels of service being afforded to neighborhoods, blocks, or, if feasible, even individual households within local jurisdictions. It would seem to me self-evident that preferences for public services will vary more across a city than within a neighborhood of that city. Once a week curbside pick-up of garbage may be as much as some neighborhoods wish to pay for, while others may prefer twice a week pick-up at the rear of the dwelling. Standard tax finance can only offer the entire city one or the other. An obvious alternative is to offer the basic service through general tax finance while supplying the deluxe service to those neighborhoods or households that are willing to pay the incremental costs. There would then be a clear gain in efficiency with no obvious equity loss, especially if the charges levied covered the full incremental costs.²³

Brazer's possible candidates for differential service levels included supplementary police patrols, fire and police alarm station connections, street lighting, neighborhood recreational facilities, and garbage and trash removal.

In summary, user fees can improve public sector allocation decisions by reducing the possibility of local governments providing the wrong level of output at too high a cost to the wrong people. Prices in the public sector, where feasible, can provide important information to consumers about changes in cost conditions, as well as information to public officials on changes in the demand for services. Positive user charges, even if below the "optimal" level, are superior to a zero price in terms of providing information to consumers and producers. User charges which accurately reflect the additional costs of providing services will yield the maximum in efficiency benefits.

Equity Benefits

In addition to being viewed as an efficient method of financing government services, user charge proponents argue that they represent a "fair" method of paying for public-sector goods and services that are similar in nature to private sector products. One possible reason for increased taxpayer support for user charges is the perception that, as local governments provide an increasingly wider range of goods and services to a more heterogeneous population, general-tax financing makes it easier for direct beneficiaries of basically private goods and services to shift the costs to nonbeneficiaries. The resulting redistribution of tax burdens relative to direct benefits is almost impossible to detect. User charges provide a more direct and visible link between consumption benefits and payments and reduce the extent of unintentional subsidies provided to specific, identifiable groups of citizens.

Viewed from the perspective of the benefit theory of taxation, user-charge financing is a fair method of financing government services because those who benefit pay the costs. This concept of fairness focuses squarely on the criterion of horizontal equity: people in equal situations should be treated equally. Those who consider user-charge financing as fair implicitly or explicitly define "equal situations" to be equal consumption of publicly provided goods and services. Equal treatment requires that they pay equal amounts in user charges. All nonusers are treated equally by not having to pay for the good or service.

As interstate and intrastate tax competition has intensified in the 1980s, state and local policy makers are being increasingly sensitive to the potential negative effects created by horizontal inequities in the financing of public expenditures. In addition, the central thrust of the federal *Tax Reform Act of 1986* was to broaden the income tax base to create a fairer tax structure in the sense of increased horizontal equity. As horizontal equity receives greater public attention, benefit-based user charges and taxes should receive increasing support on equity grounds.

User charges also have the virtue of providing a method for charging nonresidents and those who occupy tax-exempt property for public serv-

ices received. Larger central cities may be particularly interested in user-charge financing as a means of charging nonresidents, including commuters, for the use of specific cultural and recreational facilities and public services. Tax-exempt institutions—such as colleges and universities, churches and nonprofit organizations—would also be subject to user charges. Although tax-exempt entities may already be making “voluntary” payments to cover a portion of the costs, user-fee financing would be a more direct, efficient and fair way to collect for services provided.

User charges may also contribute to horizontal equity in terms of the treatment of existing residents relative to new residents. New residential developments create the need for extensive expenditures on new public facilities and infrastructure. If these expenditures are financed through general revenues or utility charges based on average costs charged to all residents, existing residents could well end up subsidizing new residents. This would occur if the costs of service expansion are above the per unit costs of serving existing residents as could happen if development occurs in lower-density areas at a greater distance from the existing public facilities. User charges which reflect the incremental costs of serving the new residents could reduce this cross-subsidization and contribute to greater horizontal equity.

A final dimension of horizontal equity concerns possible “unfair competition” between the public and private sectors. This could occur when the public sector produces substitutes for private goods and services which benefit specific individuals rather than the general public and user fees do not cover the full costs of production. Golf courses and other recreational facilities are examples of government activities where unfair competition is a possibility. With user-charge financing, publicly provided goods would not be subsidized through general revenues, and prices would more accurately reflect the economic costs of both public and private provision.

While user charges score well on the horizontal equity test, fairness must also be examined in terms of the test of vertical equity which examines the distribution of user charges relative to household income. The vertical equity issues are addressed below in the section discussing potential problems with expanding user-charge financing.

Revenue Potential

The recent upsurge in the relative importance of user charges has been motivated by specific tax-expenditure limits, including Proposition 13 in California and Proposition 2½ in Massachusetts, and the more general taxpayer revolt environment of the late 1970s and early 1980s. Given this setting, the revenue potential of user charges is an important concern of fiscally constrained local budget officials. Although the efficiency and horizontal equity merits of user charges are widely acknowl-

edged, the revenue potential from expanded user-charge financing is still subject to debate.

The strong supporters of user charges argue that current voter opposition to increasing tax rates may make user charges the most acceptable, if not the only, source of significant additional revenues in the near future. Popular support for user-charge financing makes it possible to expand existing services or provide new ones through user charges, where it would be politically difficult to do so through general tax increases. User charges may also provide a legal loophole for increasing revenues where state-imposed tax limitations have restricted the growth of local property taxes.

Others view the current interest and activity in user-charge financing as more of a limited, short-run phenomenon with little long-run revenue potential. One reason for this more pessimistic view is the belief that user charges may be primarily a substitute for local property taxes, rather than a new source of additional revenues.²⁴

As the data in *Table 1* indicate, user charges have been growing relative to local taxes since 1957, and the difference in growth rates widened in the 1977-83 period compared to 1957-77. However, in the 1983-85 period, the rate of growth in user fees relative to local taxes appears to have returned to the long-run trend of the 1957-77 period. This suggests that the shift to user-charge financing is continuing, although at a rate lower than that experienced in the late 1970s.

The wide variation in user-fee intensity ratios shown in *Table 2* also suggests that low-ratio states could increase substantially the relative importance of user charges in their local revenue structures. The extent of this substitution will be limited, of course, by the range of goods and services which are considered politically acceptable candidates for user-charge financing.

While it is not clear whether more extensive use of user charges will mean a smaller or larger public sector over time, an examination of political realities suggests slower growth with user charges than with general taxes. If user charges effectively link changes in revenues to changes in the demand for specific services, the rate of growth of revenues will reflect changes in population, income, relative prices and preferences. General taxes, which tend to have more elastic or responsive bases, may generate revenue growth in excess of desired expenditures because of "automatic" tax base growth not offset by discretionary reductions in tax rates. This concern over a possible disequilibrium between tax collections and desired expenditures lies behind the current efforts to index federal and state income taxes. In this context, increased reliance on user charges may strengthen the political accountability safeguards designed to balance the rate of growth of the private and public sectors.

At the same time, many analysts and policymakers have argued that the current political process has resulted in too little spending on certain

public goods and services, such as capital investments in roads, bridges and public buildings. User-fee financing may serve to protect expenditures on new capital and maintenance of existing capital from bearing the brunt of budget reductions when tax revenues fail to grow as rapidly as anticipated.²⁵ Therefore, increased reliance on user charges may lead to higher (and more efficient) levels of expenditures for these functions over time. This is an important example of how user fees lead to a more efficient mix of government spending.

The fact that current user charges are often lower than justified on the basis of incremental costs, or are not used at all even if economically feasible, means that the potential growth in user charges is difficult to predict. If the actual demand for certain services—such as tennis courts or water consumption—is inelastic, increases in user fees may generate substantial new revenues. If demand is very sensitive to increases in charges, little revenue may be collected. But the demand for information necessary to make such predictions will not be available until user charges are more widely used by local governments. As long as consumers are charged zero prices for their consumption, there is simply no effective way of knowing how much they are willing to pay.

It should also be noted that focusing on the revenue potential of user charges tends to give too narrow a view of their potential net impact on local government budgets. One of the primary efficiency arguments favoring user charges over general tax financing is that wasteful consumption will be eliminated and the costs of production reduced to more efficient levels. These adjustments will lead to lower expenditures at the same time that revenues increase. Both adjustments work in the same direction to reduce the need for local tax revenues. In fact, the reduction in current and future expenditures may be more important from a budgetary viewpoint than the increase in revenues from more extensive user-charge financing.²⁶



The Case against User Charges

As outlined above, user charges are applicable if public goods and services are similar in nature to private sector outputs. Important characteristics of these goods include significant private benefits accruing to identifiable individuals or firms, the possibility of excluding non-beneficiaries and a reasonable cost of imposing and collecting user charges. Public goods and services with these characteristics are strong candidates for user-charge financing or for private provision in certain cases, such as garbage collection. However, there are a number of concerns which are often raised by those who question the desirability of expanding user-charge financing.

Vertical Equity Issue: Special Hardships on the Poor

The most frequent argument against imposing new or higher user charges, even if economically feasible, is that they impose unfair burdens on low-income individuals. This concern over vertical equity is usually discussed in terms of the relationship between user-charge payments and consumer incomes for households at different levels of income. Under the ability-to-pay principle of tax equity, a fair distribution of tax burdens is widely held to be one in which higher-income individuals pay a larger percentage of their income in taxes than do low-income taxpayers. This prescription for vertical equity will be violated by user-charge financing if low-income individuals spend a larger proportion of their incomes on goods financed by user charges than do higher-income individuals. According to the 1982 municipal finance officers survey discussed earlier, 17 percent of the respondents who indicated opposition to user charges cited this regressivity potential as an important concern and another 17 percent deemed it fairly important.

It was argued above that user charges could improve horizontal equity by charging users according to benefits they receive. The use of the good, not the level of their income, determines the fair distribution of charges under the benefit principle. In effect, this view does not consider the redistribution of income as an important objective in the public provision of goods and services amenable to charge financing. Those who oppose user charges on vertical equity grounds view the free or subsidized provision of government goods and services as an indirect, but important, method of redistributing income in the form of goods and services. They fear that the cumulative effect of increased and expanded fees will be a substantial reduction in low-income assistance. For this reason, they may actively oppose any increased reliance on user charges at the local level.

The first step in examining the potential tradeoff between the efficiency and equity objectives is to ask if, in fact, user-charge financing is more regressive in impact than the alternatives of either general tax financing with free access to public goods and services or a reduced level of service. This is obviously a complex question to answer. In many cases, user charges may finance public sector services which are not consumed in significant amounts by the poor, and charges would, therefore, not be regressive. In fact, if user charges for these activities are substituted for local taxes paid by low-income individuals, the poor may actually be better off. In other cases, if the alternative to charging for specific services is significantly reduced levels of outputs, low-income consumers may be relatively better off under the charge alternative than if goods which they consume are severely restricted.

The potential danger in extending this justification for free access or substantial subsidization too far is highlighted in the following statement:

“Free” services involve redistribution in kind, but it is extremely unlikely that the poor are the principal beneficiaries. And to the extent that they do benefit, the distribution in kind that is involved is inefficient in the extreme. That is, the poor who have a high preference for swimming pools or tennis or library use benefit while their equally needy and deserving fellows do not gain a thing. It is difficult to imagine that anyone would in fact propose a program of income maintenance specifically designed to benefit people in proportion to their preferences for the consumption of publicly supplied goods and services of a kind that lends itself well to pricing. This pro-poor argument strikes me, by and large, as one that redounds to the benefit of the non-poor and is supported by public officials and bureaucrats who prefer not to be confronted by a market test of the value of the services they offer.²⁷

The comparison of alternatives is further complicated by the fact that the net impact on the poor is sensitive to the actual structure of both user charges and alternative revenue sources. User charges which reflect the incremental costs of providing services to low-density, newer and more suburban residents are probably less regressive than uniform user charges which charge all residents the same prices regardless of location and actual costs of services. In the case of taxes, local sales taxes which tax public utilities and food purchases may be as regressive as user charges on individual goods and services. Broad-based local personal income taxes are likely to be constrained by interjurisdictional competition to a proportional distribution of tax burdens over a wide range of incomes and pay-roll-type local income taxes may actually be regressive.

When compared to the most important local tax—the general property tax—user charges may or may not be more regressive. The outcome depends critically on the structure of user charges. Unfortunately, there is little empirical evidence on the distribution of specific user charges by income classes. One reviewer of the evidence on the distribution of trash collection fees suggests that “a well-designed user charge for refuse is not likely to be much different in its distributional effects than the property tax it replaces.”²⁸ If this conclusion is accurate, the efficiency gains may be achieved with little change in the vertical distribution of financing burdens.

If user fees do in fact impose unacceptable burdens on low-income citizens, or if income redistribution is an important policy objective in providing goods and services, the economically more efficient response is to find methods of insulating the poor from this impact, not to provide the service free of charge to all consumers regardless of their income levels. Free provision of services is simply too imprecise a mechanism to achieve a specific redistribution of income. The compromise solution is to institute user charges to achieve the efficiency benefits and to simultaneously insure access to a minimal level of these services for those with inadequate incomes. Rather than being concerned about the vertical distribution of user fees over the entire range of incomes, local policymakers should focus attention on providing an acceptable minimum standard of living for those at the low end of the income distribution.

Because user charges are collected from identifiable individuals, it is usually possible to vary the charge depending on recognizable differences in consumers, such as age or income levels. If low-income individuals can be identified directly or indirectly, without undue stigma, subsidies can be targeted on this group of individuals. However, local governments would still face the important limits on their ability to redistribute income imposed by the mobility of individuals and firms.

The first step in implementing low-income subsidies is deciding who is eligible. Existing welfare program thresholds could be used as a basis for

identifying the cutoff level of income. The next step is to specify which user-charge financed goods and services should be considered an essential part of the consumption opportunities of the poor. This minimal bundle should be defined realistically in terms of its potential impact on low-income people.

The actual subsidy could be provided in the form of coupon books, multipurpose vouchers, special passes, lower prices for certain groups such as the elderly or the young, and lower charges in geographic areas with relatively high concentrations of low-income residents. An alternative approach would be to provide a basic level of services (refuse collection, for example) free of charge to all consumers and then impose charges for additional services beyond the minimum. There are any number of alternative fee structures which can alleviate the special hardships imposed on the poor. The point to be stressed, however, is that provisions to reduce this burden are more costly to administer than would be a uniform fee structure which charges all consumers the same per unit price. This may be a particular problem for specific services with low revenue potential which could not economically justify a complex fee structure. Free provision to all consumers may be the reasonable alternative in these situations.

In practice, communities which have developed systematic programs for reviewing and evaluating user fees appear to handle the vertical equity issue by varying the fee recovery rate depending on the relative importance of the income redistribution objective in providing a specific good or service. For example, if low-income individuals are important users of community pools, fees may be set to recover only a small percentage of attributable costs. In contrast, golf fees may be targeted for 100 percent recovery rates.²⁹

Nondeductibility of User Charges

The fact that user charges cannot be deducted from income when determining federal and state personal income tax liabilities means that \$1 of user charges is more expensive to residents (in after-tax terms) than \$1 of local property or income taxes which are deductible. In theory, this creates a bias against levying user charges and special assessments at the local level. However, the bias does not affect all taxpayers equally. For businesses, both charges and taxes are deductible as an income-related expense. For more than 70 percent of federal income tax filers who are nonitemizers, and thus cannot deduct either taxes or user charges, there is also no bias. In addition, for those who itemize deductions, the net cost of \$1 of local taxes varies inversely with the taxpayer's federal marginal income tax rate.

For the same reasons, most state income taxes also create a bias against user charges. Whereas states have the freedom to permit or deny

whatever deductions they choose, for the convenience of both taxpayers and state tax collectors, states tend to copy federal tax policy. Furthermore, the state income tax deduction is of considerably less significance since the state rates are much lower than the federal rates.

Although there is a possibility that this bias could inhibit the substitution of user charges for general local taxes, there is no empirical evidence that this bias has been a significant factor in limiting the growth in user fee financing. As *Table 1* indicated, the rate of growth in user charges has consistently exceeded the local tax growth rate for decades. Non-deductibility will certainly be less of an argument against user fees in the future because of the federal phaseout of the sales tax deduction contained in the *Tax Reform Act of 1986*.

State Revenue Sharing

A number of states have programs of financial assistance to units of local government in which the amount of aid received from the state depends on the amount of tax revenue raised by the local government. By excluding user charges from the local revenue effort calculations, these programs create a bias in favor of using general taxes rather than charges to finance government activities. If this bias is considered to be potentially important, state revenue sharing formulas should be altered to include user charges in the measure of local effort. Because of the expiration of the General Revenue Sharing Program at the end of fiscal 1986, this formula issue is no longer relevant at the federal level.

State Legal Constraints

Sometimes user charges cannot be levied because state law prohibits their use or at least does not specifically authorize it. The prohibition against tuition at public schools is the strongest example of such a constraint. In addition, some states forbid supplementary charges for specific items such as books, laboratory and gymnasium equipment, and lockers.³⁰

Licenses and fees are generally restricted in amount to what is needed to cover the costs of regulation, except where broader powers have been granted to the local government imposing the charge. For example, Proposition 2½ adopted in Massachusetts in 1981, contained the following broad restrictions:

No city, town, county, district, public authority, or other government entity shall make any charge or impose any fee for goods provided or services rendered in excess of the costs of furnishing such goods or providing such services. (M.G.L. C.59, S.20A new)

Statutory changes in 1981 removed this restriction for cities and towns, and, therefore, increased the degree of local discretion in setting fees for these units of government.

Charging for enterprise or proprietary activities, such as water, sewage and garbage collection, would appear to present little legal difficulty. In contrast, charges for road use and police and fire protection are more likely to be challenged as illegal taxes unless authorized by the state. This is particularly true when the charges are designed to substitute for general property taxes which are constrained by state-imposed tax limits.

For example, the West Virginia Supreme Court recently ruled that a fire protection fee levied by the City of Fairmont and based on property values was, in fact, a property tax. Because the city property tax rate was already at the state constitutional ceiling, the additional fire-service fee was unconstitutional. The city attorney argued unsuccessfully that state law permits ad valorem user charges as long as charges are reasonably related to benefits received.³¹

In determining the legal distinction between taxes and user charges, state courts are examining closely the relationship between the basis for determining fees and the costs of services provided or benefits accruing to recipients. Recently, a Massachusetts Superior Court ruled that a fire service charge adopted in Boston after Proposition 2½ was unconstitutional. The court noted that the formulas used to determine fire-service fees did not accurately reflect the costs of services rendered to specific properties.³²

Parking meters fees provide a final example of the potentially complex legal nature of particular user charges. Parking meter ordinances have sometimes been adjudged invalid because they were instituted as revenue producing rather than regulatory measures. The fee collected is subject to limitations of reasonableness and equality, but may be set sufficiently high to defray the costs of installation, maintenance and supervision of the meters. However, it cannot be, in effect, a tax for general revenue, except when the city is specifically authorized by state statute to levy such a tax.

Recognizing the potential negative effects of state legal constraints, ACIR recommended in its 1974 Local Revenue Diversification report that states take actions to authorize local governments to impose and adjust user charges to cover costs of specific services and to provide state assistance by publishing and disseminating data on the extent of local charges and by assisting in the development of new user charge applications.

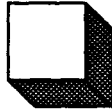
Unbundling Effect

Another possible disadvantage associated with a more extensive use of benefit-based charges and taxes is the potential adverse competition

which may be created between tax-financed and user-charge financed budget functions. The finance director of Concord, Massachusetts, has expressed this concern as follows:

Injudicious use of fees and charges can undermine basic public support for the full range of local government activities while permitting the maintenance of services susceptible to pricing. It would be ironic if the move toward user charges resulted ultimately in the withering of services that remained to be financed from taxes.³³

George Peterson also identified this potential problem in a recent analysis of the fiscal effects of tax limitations.³⁴ According to Peterson, local governments are “unbundling” municipal budgets by earmarking specific revenue sources to finance more narrowly defined public services and activities. Peterson notes that the increased use of dedicated revenue sources could potentially lead to a more fragmented budget process and reduce budget flexibility in local governments. As a result of this change, activities financed by dedicated revenues or user fees may be freed from expenditure and tax limits, while general public services, including education, public safety, general administration and income redistribution programs, become more tightly constrained.



User Charges in Practice

The remainder of this chapter is devoted to a discussion of specific user charges and fees, particularly those which highlight basic issues in determining appropriate charges and which are promising areas for innovation or provide opportunities for expanding the scope of current user charges. Special assessments will also be discussed as an important area for innovation.³⁵

The economic principles which follow from the efficiency discussion require that prices, whether in public or private markets, normally be set equal to the additional or marginal costs of providing another unit of a good or service. In practice, prices or user fees set equal to short-run marginal costs may or may not cover the full costs—capital plus operating costs—of providing the output. In the case where marginal cost is below average cost, policymakers are faced with two basic alternatives. Prices can be set equal to short-run marginal costs and any resulting deficit can be financed from general taxes. Alternatively, prices can be set above short-run marginal costs to insure that the overall budget constraint (i.e., total fee revenue should equal total costs) is satisfied. Although not as efficient as the marginal cost pricing scheme, this second alternative does satisfy the benefit equity principle which requires beneficiaries to pay for the benefits they enjoy from public expenditures. These pricing principles will be addressed in the discussion of specific charges.

Water Services

There are two aspects of water systems to be considered in determining user charges for water: the supply of the total quantity of water to be consumed and the distribution (transmission) of the water to the place where it is used. Supply includes activities for the collection, treatment

and storage of water. Distribution includes the network of pipes to transport the water to individual residences.³⁶

Distribution. Because the capital cost of producing and laying pipe increases only slightly with the cross sectional area (corresponding to the volume of water used) and because a minimum size is required to provide water for fighting fires, the distribution costs for water are not directly dependent on the quantity of water used. Because the cost of pipe is generally proportional to the length of pipe, the distance from the treatment plant and the density of customers are the critical determinants of per customer distribution costs. An efficient distribution charge would reflect both the density and location of the general service area, as well as a specific charge based on the number of frontage feet of the property served. This capital charge can be made when the service is connected or it can be collected annually.

Supply. The cost of the total quantity of water supplied does depend on the quantity used. Economies of scale in some facilities may indicate decreasing costs as volume increases, but increasing costs are also present since storage costs rise as the best natural sites for reservoirs are used first and as water must be gathered from greater distances. This suggests that a fixed quantity or consumption charge per gallon of water, designed to reflect constant marginal costs of supply, is a fairly reasonable way to cover the incremental costs of water for most consumers. Higher quantity charges could be levied during peak demand periods, such as periods of heavy lawn sprinkling during the summer, if the peak consumption can be monitored at a reasonable administrative cost. This could lead to a more efficient level of investment in the long run by discouraging the peak-load demand and reducing water shortages that serve as the rationale for expansion.

In addition to a quantity charge which varies proportionately with water consumption, a comprehensive pricing system would charge each consumer a fixed capacity charge to cover the fixed capital and overhead costs associated with the treatment and distribution of water. This charge is necessary to cover full costs because fixed costs are large relative to variable costs of treatment and distribution. Although this capacity charge may discourage some marginal water consumption which would otherwise be efficient, it would insure that the users of water pay the full costs without being subsidized through general taxes.

The combination of quantity and capacity charges will discourage inefficient consumption and impose the true long-run marginal costs of water on users. It would also reduce cross-subsidies from low-cost to high-cost users which would occur if the total costs of the water system were spread equally over all consumers. This uniform or average cost pricing system—independent of distance or time—is not uncommon

among private and municipal water companies. As this point suggests, each possible system of charging for water has a different set of effects with respect to the efficient allocation of resources and the distribution of income.

Metering of water use is the superior approach to charging for water from both an efficiency and an equity standpoint. It extracts the most from those who use the most water (including water for swimming pools, grass and gardens), potentially shifting more of the cost to the affluent and, at the same time, encourages all users to avoid wasting water. These advantages are partially offset by the significant administrative costs involved: meters must be purchased and installed in every residence, meter readers must be dispatched regularly to the residences, bills must be mailed, checks examined and deposited.³⁷ On balance, however, metering is considered to be efficient when compared to fixed monthly charges which do not reflect actual consumption.

In summary, public water systems fulfill the basic requirements of user charge financing: the benefits are primarily individual, nonpayers can be excluded from consuming the benefits at a reasonable cost and metering can be used to identify the beneficiaries of the service. Even though most water utilities are self-supporting, realizing the potential efficiency and equity benefits from pricing requires more than simply covering total costs from total user charges. It also requires charging individual consumers prices which reflect the actual incremental costs associated with their consumption at a particular location and, if feasible, at a particular time. This system of prices can also reduce the subsidies paid for by off-peak users and residents closer to the treatment facilities to peak users and those who locate further from the facilities.

Sewers

Much of the analysis pertaining to water systems also applies to sewer systems. Just as water systems can be divided into supply and distribution, sewer systems can be divided into collection and disposal, and much of the cost discussion and pricing prescriptions of one system relate to the other as well. The principal difference is that, unlike water, the marginal cost of treating sewage is related to both sewage strength and volume. Unfortunately, sewage strength cannot be readily metered, and charging on this basis depends on periodic sampling, a costly and sometimes arbitrary process, except for certain industrial customers.

Interestingly, water and sewer systems tend to differ substantially in the extent to which users pay the costs of services. As shown in *Table 6*, 1985 current charges for sewerage covered over 63 percent of annual expenditures; in contrast, user charges for water supply equaled almost 89 percent of annual expenditures. In general, local governments have failed

to cover total costs, including capital costs from sewer charges, and the shortfalls must be financed from other local revenues.

In general, the amount of water distributed to a structure corresponds roughly to the amount of sewage collected from it. Thus, if metering is employed for water consumption, the metered use of water is often a sufficient proxy for household use of the sewer system. Unless it is desired to measure sewage strength, the sewerage charge can be combined with or piggybacked on the water charge for most residential customers. Separate sewage meters may be justified for large industrial users.

The principal exception to the correspondence between water and sewer system use occurs when water is used to water lawns and gardens. For this reason, some municipalities base the sewerage charge on winter water usage. However, the difference between summer and winter usage is also due to swimming pools and to greater human use of water, both of which would properly be reflected in the charge. Furthermore, because the use of water is higher in summer, proper pricing requires a higher summer water charge to reflect peak-load demands for water. To place a double surcharge for sewerage on winter use and no surcharge on summer water use results in inefficient pricing with respect to time of year.

As in the case of water pricing, sewerage charges should be based on the incremental costs of serving different locations or types of consumers. User charges which reflect average costs per customer or fixed percentages of water charges would not provide the proper incentives for efficient levels of use (assuming that quantity demanded varies with changes in the level of charges). The sewerage charges must be directly related to the level and strength of sewage treated to achieve the full efficiency benefits.

Fire Protection

There are several interesting alternatives for charging individual beneficiaries for the private benefits provided by public fire protection services. One is simply to charge the cost of the suppression of a fire to the person owning the property where the fire originated (known as actual cost pricing). Insurance companies would presumably include a provision in their fire policies to pay such fire service bills and charge an appropriate increase in their insurance rates. The property owner would then be paying for fire protection in proportion to the likelihood and likely seriousness (as perceived by the insurance company) of a fire originating on the property. Furthermore, the insurance company would have an incentive to provide the property owner with assistance in eliminating any hazards having a clear potential of creating a fire.

The other means of placing fire protection on a user-charge basis is to have the government adopt the method of the fire insurance company and charge the owner according to the likelihood and likely seriousness

of a fire originating on the property (known as expected cost or actuarial pricing). The charge would be directly related to the incremental costs of providing a given level of fire protection to the property. Charging on the basis of expected use does entail some administrative difficulties, since all property subject to the charge would have to be visited by an inspector to gather data on age of building, type of construction, presence of fire extinguishers and sprinklers, distance from nearby structures, and presence of flammable or explosive materials. Many buildings are already subject to such inspections under the present system.

Either approach would create strong incentives to improve fire safety and thus reduce the amount of fire protection service which the city must actually provide. People who believe that a fire would not arise on their property would still have an incentive to take preventive actions simply to avoid the extra charges. The costs of equipment necessary for fighting fires on special types of property (e.g., tall buildings) could be charged to that class of property.

Determining the relevant marginal costs of providing fire services to a specific property is not easy. Costs vary with a number of factors: the distance from a fire station, the speed of response, the height of the building, the density of development and the potential for damages.³⁸ The charges would also have to be flexible enough to vary with any private actions building owners undertake to reduce risk or extent of fire damage.

The case for collecting user fees to supplement local property taxes in financing fire protection services is based on the assumption that the potential external costs of a fire will still be minimized by requiring all residents to share in the costs of protection. Because it is possible to identify potential beneficiaries, user charges can play an important role in allocating the costs to different types of property more efficiently and equitably than would property taxes. However, as pointed out earlier, fire-service fees may be legally rejected as disguised property taxes unless an appropriate basis is chosen for allocating fire protection costs. In any case, individual property values are poorly correlated with the expected annual costs of fire protection.

Inglewood, California, adopted a fire assessment fee in 1978 in response to Proposition 13. The fee was based on the expected costs of fire protection for each property after allowing for differences in the risk of a fire. If property owners took steps to reduce the risk of fire, the fee would be reduced. The city council repealed the fee within a year in the face of a court challenge.³⁹

Short of establishing fees for fire protection, user charges can be instituted for more limited services provided to individual beneficiaries. For example, Cambridge, Massachusetts, has instituted a special false alarm fee for private security systems. In addition to raising revenue, the ordinance was also designed to reduce the number of false alarms turned in

through the private systems. New Bedford, Massachusetts, has instituted a \$5 fee for private smoke detector inspections and a \$100 annual service fee for central fire alarm boxes in hospitals and commercial buildings.

Refuse Collection

The application of user charges to trash removal is very similar to the water and sewerage applications. Like sewerage, trash removal can be divided into collection and disposal activities. The principal and critical difference is that trash removal is not a natural monopoly. This implies that one large firm will not be able to serve a wide geographic area at lower costs per household than several smaller firms, as long as service areas are large enough to avoid inefficient route overlapping. For publicly provided refuse collection, techniques are being developed that would make possible a more exact measurement of the amount of trash, thus achieving the beneficial effects similar to those achieved through water metering but with lower administrative costs. One technique is to require the use of specially marked plastic bags sold by the governmental unit. The price of the bag includes the cost of removing garbage. This system results in user charges which vary with the amount of trash collected.

Unfortunately, policymakers face a potential dilemma in charging for trash removal as opposed to general tax financing. If the charge reflects the amount of trash picked up, people will have an incentive to take into account the effects of their consumption decisions, such as the choice between returnable and disposable bottles, on the quantity of trash created. Unfortunately, charging in this way will also encourage disposing of trash in potentially undesirable ways. People may choose to abandon their trash in vacant fields, public parks, or other places. People may also burn the trash or dispose of it in some other manner which is environmentally inferior to the public agency's method of disposal. User charges that reflect actual disposal costs would encourage less of this behavior than fees set significantly above costs.

If the charge does not vary with the amount of trash, the incentive to litter disappears, but the merit of a user charge also vanishes. The choice is then simply whether the cost of trash removal should be financed with a flat \$3 per month tax or an ad valorem property tax that raises the same revenue from each home. This dilemma is avoided by requiring that all households and firms subscribe to a collection service and by implementing appropriate enforcement procedures and fines to prevent the free use of the environment as a lower-cost private alternative.⁴⁰

User fees contribute to efficiency in trash collection by charging users the real costs of the scarce resources employed in collecting and disposing of trash. Given these fees, consumers may find it cheaper to reduce waste than to pay to have it collected. An additional benefit to consumers would be flexibility in the level and quality of services. Rather than having

the same service for all households or firms, residents could be given options such as more frequent pickups and backyard collection.

There appears to be a great deal of room for the expanded use of trash collection fees at the local level. As seen in *Table 6*, current charges account for 18.3 percent of municipal expenditures for sanitation other than sewerage among the largest cities. This aggregate ratio includes a number of municipal systems with no direct price for trash collection. For example, a 1978 survey of Illinois cities found that 17 cities financed trash collection from tax revenues, while 25 cities imposed fees on users averaging \$5.58 per month for residential services.⁴¹

Parking Fees

Parking fees in publicly owned facilities and on public streets are capable of producing substantial amounts of revenue. Increases in fees can be made with only slight increases in administrative costs since the costs of meters and of collecting from meters remains the same regardless of the rate being charged. Use of on-street meters should not drop off dramatically, as shown by the willingness of drivers to pay much higher rates at commercial parking establishments. However, increased enforcement efforts might be necessary to realize the potential revenue gains.

Because of the relatively low level of current rates, public parking spaces are generally rationed on a first-come basis, with a resulting waste of time as people arrive earlier to obtain one of the limited number of spaces. Higher prices would allocate the available spaces to people who value them most. Revenue from parking meters would also supply valuable information indicating whether additional parking facilities should be provided.

Some cities hesitate to charge much for parking for fear that to do so will drive shoppers from downtown stores. Conceivably, the availability of parking would be of first importance in a shopper's decision of whether or not to attempt to park downtown, and such availability would be enhanced by charges sufficient to discourage workers from occupying all available spaces.

Parking fees provide an excellent example of the rationing function of any pricing system. Given the existing number of parking spaces in a downtown area, current demand for spaces may far exceed the available supply. Higher parking fees would provide a more efficient alternative to a first-come, first-served method of allocating the spaces to those who value them the most in terms of willingness to pay. In the case of a shortage, the parking fees could well exceed the costs of installing and maintaining the meters or collection systems. The fees should be allowed to rise above this level in order to serve the rationing function. If the demand remains strong, the revenues generated could be used to finance the desired expansion in facilities. In the long run, after expansion, the

parking fees would come closer to equating demand and supply at the incremental costs of building and operating parking facilities.

Police Protection

Certain police department activities may meet the necessary requirements for user charge financing. However, in imposing user fees in this area careful attention must be given to identifying which services are basically private in nature and which services provide substantial, general benefits to the community. Fees can be charged for a number of police services which have identifiable beneficiaries. These include special patrol service fees, traffic and crowd control services for recreational or cultural events and police responses to private alarm systems.

The potential revenue from "unbundling" the private-type police services suitable for charging from other police services financed through general taxes may be significant. A study of police services in Bridgeport, Connecticut, found that 16 percent of police costs were attributable to private services, while an additional 27 percent of the costs were related to traffic control and other automobile services.⁴² The private service expenditures could be financed by direct user charges. More complicated methods of imposing parking charges, tolls or narrow-based benefit taxes would have to be utilized to cover the automobile-related costs.

Other Charges

Local governments are experimenting with user charge applications in almost all public expenditure areas. Recreation facilities, including golf courses, tennis courts and swimming pools, are good candidates for fee financing. Many of these charges to finance these activities are set to vary with the level of demand by the hour or by the day of the week. Some communities are also installing coin-operated metered light systems on tennis courts which charge night-time users directly for their use of energy. After Proposition 2½, a number of cities in Massachusetts moved to increase recreational fees; in particular, fees for adult recreational activities. For example, team registration fees for athletic leagues were increased to as much as \$300 for softball in Framingham.⁴³

A number of special library services are often fee financed, although general access, considered to be a public good, is provided without charge. Charges are being collected for interlibrary loans, video and film rentals, and specific reference services. In addition, non-residents are being charged a fee for access to the library.

Licenses and Permits

Permits and licenses are frequently issued to businesses as a part of the general regulatory process. Usually they involve an inspection or ex-

amination prior to obtaining or keeping the permit or license. In many cases, the ultimate beneficiary is the customer of the business obtaining the permit, and user charges should be reflected in higher prices for the product. In other cases, the charge is viewed as a means of recouping regulatory costs created by the private activity where benefits accrue primarily to the general public. It is arguable that such fees should not be considered as user charges. Charges for permits and licenses are also a means of sharing in the windfall profits which government helped create by restricting entry. However, this revenue is properly viewed as a tax on the business activity and not a user charge or fee to cover regulatory costs.

Because of the large number of different permits and the relatively modest size of individual fees, local jurisdictions often fail to maintain a realistic fee structure. Because of the continuous increase in the general price level and in employee wage rates (both the paperwork and the inspections are very labor-intensive activities), the failure to update fees frequently leads to underpricing of these activities.⁴⁴ One straightforward solution to this problem is to have all such fees listed with the finance director, who will in turn issue a new fee schedule with an across-the-board increase in all fees immediately following any across-the-board increase in city employee wage levels.

The City of Forest Grove, Oregon, has actually adopted a city ordinance which establishes procedures to adjust fees and charges annually. Specific charges are indexed to changes in the Portland Area Consumer Price Index. Detailed cost of service studies are to be undertaken every five years to establish a new benchmark for the automatic annual adjustments. Phoenix, Arizona, has also implemented a cost accounting system and budgetary process to systematically monitor and update user fees.⁴⁵

Special Assessments and Development Charges

A significant development in the post-Proposition 13 era has been the increased use of special assessments and development-related levies to finance new public infrastructure investments. One estimate of the magnitude of the fiscal impact of the Proposition 13 rollback is that property taxes in California were reduced by as much as \$20,000 on a \$100,000 house over a ten-year period.⁴⁶ Alternative sources of revenue from new developments were adopted to replace this lost property tax revenue. The property tax revolt in other states created similar, but less severe, pressure to find local substitutes for general property taxes.

Subdivision or builder exactments provide one means of paying for much of the infrastructure investment by requiring developers to actually provide roads, street lighting, pipelines, public land, and even school buildings (temporary or permanent) as part of the development process. In California these exactments are levied under the state *Subdivision*

Map Act and *Environmental Quality Act*. One example of development fees in California is the local park fee on new construction, which may be as high as \$700 or \$800 per unit.

The objective in using these exactments is to charge land developers with a substantial portion of the marginal public capital costs of development. It is assumed that over time these charges will be capitalized in the price of residential property in the development. As a result, residents will be paying for a portion of public infrastructure investments through initial development fees, rather than as future user charges or general property taxes. If the value of exactments approximately covers the true incremental public costs of development, exactments can reduce the subsidy to residents in new, higher-cost developments resulting from user charges based on communitywide average service costs. If exactments and development fees exceed actual costs of development, the excess represents a tax or entry fee on new residents.

Special assessments, as defined earlier, are narrow-based benefit taxes levied according to the assumed benefits accruing to real property from specific public investments. The assessments are designed to cover only the direct benefits accruing to identifiable property owners, not the community-wide benefits accompanying the investment. For this reason, property owners are charged only a portion of the costs of the investment. Indirect measures of private benefits used to allocate costs include lot area, front footage or property values. Costs may also be apportioned equally to each property in a geographic area within the benefit area for a specific investment, such as a neighborhood park.

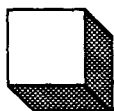
In general, local taxpayers appear to support the concept of special assessments as a fair method of paying for the costs of specific investments. Although the assessments are, at best, only tenuously related to actual increases in property values, it is difficult to argue that the individual benefits are not significant. For this reason, vertical equity concerns are raised less often in opposition to special assessments than in the case of user charges. But just as in general property taxation, a cash flow problem may arise from taxing unrealized capital gains in the value of property. One suggestion to deal with this problem is to defer the payment (with interest) until the property is sold. Taxpayers may also object to the less than perfect—perhaps even arbitrary—allocation of total costs between individual property owners and the entire community.

Special assessments and the newer versions of development fees and taxes may offer a significant source of future growth in benefit-related charges. This potential has been described as follows:

By legal tradition, assessments have been thought suitable only for projects which create "special benefits." Narrow and unimaginative legal minds have thought that special benefits can only occur when a project virtually physically touches the prop-

erty being assessed. In fact, it would be perfectly reasonable to find that the school, police station, fire station kind of project created at least some differential benefit for parcels located near (but not touching) them, and hence were suitable candidates for assessment use.⁴⁷

If the broader view of special assessments as neighborhood or geographically limited benefit taxes is adopted, it could prove to be an important substitute for communitywide property taxes. Special assessments and development fees could also be expanded to cover operating expenditures in addition to capital costs for particular categories of public expenditures.⁴⁸



Conclusion

This paper has examined in detail the economic case for an increased role for user charges in local government revenue structures. A greater reliance on user-charge financing would result in a more efficient level and mix of local public expenditures and would contribute to improved horizontal equity in local revenue structures. However, the applicability of user charges is limited by the nature and characteristics of public-sector activities. User charges are not appropriate in cases where income redistribution is an integral component of a publicly provided good or service or where substantial communitywide benefits are associated with an individual's consumption of the good or service.

The potential for expanding the relative importance of user charges in financing local expenditures will be determined by the ability of local governments to distinguish between those services that are comparable to private-sector activities and those services that can only be effectively provided through general taxation. To extend user-charge financing into the traditional areas of government expenditures (e.g., education, fire and police protection, health care), local officials will have to identify specific programs within these large, aggregate expenditure categories which can be "unbundled" from general tax financing.

This paper has suggested several additional mechanisms for increasing the relative importance of local user charges. One promising area for further innovation is a more creative combination of general taxation and user charges to finance specific services. General revenues can be used to provide a subsidy to certain individuals or groups of consumers with other consumers paying the full user charge. Another possibility is to provide a basic level of public service to all citizens at a zero price with additional services available for a specific charge. The optional services could take the form of more frequently provided services (garbage collection and

snow removal, for example) or a different quality of service (street and recreational facility lighting and backyard garbage collection, for example.) An expanded role for special assessments and developer charges, which recognize the neighborhood-specific benefits of many public services is also an important potential source of benefit-related charges for local governments.

The areas for innovation in the application of benefit-related charges identified in this paper share the common characteristic of providing a closer match between direct, individual benefits and payments for public goods and services. This link between benefits and charges creates a greater degree of political accountability at the local level and contributes to a more efficient allocation of resources in the public sector. As suggested here, a greater reliance on user-charge financing may also lead to a more diverse mixture of public services which recognizes variations in the desired level and quality of public services across individuals and neighborhoods.

Notes

- ¹The classification in *Figure 1* closely follows that presented in Richard M. Bird, *Charging for Public Services: A New Look at an Old Idea*, Canadian Tax Foundation, 1976, Chapter 2.
- ²For a detailed discussion of the new directions being taken in developer financing of public infrastructure, see Thomas P. Snyder and Michael A. Stegman, "Financing the Public Costs of Growth," *Government Finance Review*, August 1986, pp. 23-27; and Paul B. Downing and James E. Frank, "Recreational Impact Fees: Characteristics and Current Usage," *National Tax Journal*, Vol. XXXVI (1983), pp.477-90.
- ³In the case of license taxes and fees, the costs being charged to "users" are the costs of government control, not the public costs of providing specific goods or services. Regulatory costs are viewed as an external cost imposed on the community by the exercise of a privilege. If the recipients of the privilege are not charged these costs, they would be receiving a subsidy from general taxpayers and would fail to consider the full costs of their economic decisions.
- ⁴"Virginia Builders Face Higher Fees," *Washington Post*, July 7, 1983.
- ⁵*Ibid.*
- ⁶"OMB Chief Wages Campaign of Semantics to Ban 'T-Word,' " *Wall Street Journal*, February 17, 1987.
- ⁷Some students of public finance would extend the spectrum of user charges to include that portion of the general property tax which falls on the value of the land. For a discussion of the potential for using land-value taxes as one means of charging citizens for the locational benefits generated by the public sector, see Walter Rybeck, "The Property Tax as a Super User Charge," in C. Lowell Harriss, ed., *The Property Tax and Local Finance, Proceedings of the Academy of Political Science*, Vol. 35, No. 1, 1983, pp. 133-147.
- ⁸For a more detailed discussion of user charge changes in the post-Proposition 13 period, see Robert J. Cline and John Shannon, "Municipal Revenue Behavior After Proposition 13," *Intergovernmental Perspective*, Vol. 8, No.3, Summer 1982, pp. 22-28. See also Maurice Criz, "The Role of User Charges and Fees in City Finance," *Urban Data Services Reports*, Vol. 14, No. 6, Washington, DC, International City Management Association, June 1982, for survey data on the types and amounts of user charges by city size and geographic region in 1981.
- ⁹As Dick Netzer has pointed out, a portion of the increased reliance on user charges reflects higher rates of growth of expenditures on functions traditionally financed by user charges, rather than the adoption of new user charges or increases in the portion of the costs of specific services financed by charges. User charge revenues from electric power and gas utilities and public hospitals illustrate this type of accelerated growth. In contrast, the portion of total public transit costs covered by user charges has actually declined in the last decade. See Dick Netzer, "Local Alternatives to the Property Tax: User Charges and Nonproperty Taxes," paper prepared for the Academy for State and Local Government, June 1983.
- ¹⁰Computations based on Government Finance Diskettes supplied by the U.S. Advisory Commission on Intergovernmental Relations, Washington, DC, 1987.
- ¹¹*Ibid.*
- ¹²U.S. Department of Commerce, Bureau of the Census, *City Government Finances*, Summary Table 1, various years.
- ¹³See ACIR, *Changing Public Attitudes on Governments and Taxes*, S-10, Washington, DC, 1981, p. 38.

- ¹⁴Survey results are reported in ACIR, *Changing Public Attitudes on Government and Taxes*, Washington, DC, S-15, 1986.
- ¹⁵ACIR, *Changing Public Attitudes on Government and Taxes*, Washington, DC, S-16, 1987. Somewhat similar questions relating to federal and state revenues did not show the same degree of support for user charges. For the federal government, 15 percent chose user charges—second to the 47 percent choosing a national lottery. For states, 13 percent chose user charges—second to the 54 percent who chose an increase in cigarette and liquor taxes.
- ¹⁶See Robert J. Cline and John Shannon, "Municipal Revenue Behavior after Proposition 13," pp. 22-28. Respondents were not asked to identify support or opposition for specific types of user charges.
- ¹⁷Barbara P. Greene, "Counties and the Fiscal Challenges of the 1980s," *Intergovernmental Perspectives*, Winter 1987, pp. 14-19.
- ¹⁸U.S. Executive Office of the President, Office of Management and Budget, *Budget of the United States Government, Fiscal Year 1988, Supplement*, pp. 2-41-2-49.
- ¹⁹John F. Due and Ann T. Friedlaender, *Government Finance*, 6th Edition, Richard D. Irwin, Inc., 1977, p. 80.
- ²⁰Richard Bird, *Charging for Public Services*, p. 34.
- ²¹For a more detailed discussion of user charges in a high-quality state-local revenue system, see Robert J. Cline and John Shannon, "The Property Tax in a Model State-Local Revenue System." in C. Lowell Harriss, ed., *The Property Tax and Local Finance, Proceedings of the Academy of Political Science*, Vol. 35, No. 1, 1983, pp. 42-56.
- ²²George E. Peterson, "The Allocative, Efficiency and Equity Effects of a Shift to User Charges and Benefit-Based Taxes," unpublished paper, The Urban Institute, January 1982, p. 24.
- ²³Harvey E. Brazer, "User Charges in an Environment of Fiscal Limitation," *Proceedings of the National Tax Association—Tax Institute of America*, LX XVI (1983), pp. 200-05.
- ²⁴This view is forcefully presented in Dean J. Misczynski, "California's Nonplunge into Benefit Levydom," unpublished paper prepared for the UCLA School of Law Conference on Born Again Special Assessments and Other Creative Development and Public Finance Techniques, January 1982.
- ²⁵See George E. Peterson, "The Allocative, Efficiency and Equity Effects of a Shift to User Charges." The 5-cent increase in the federal gasoline excise tax contained in the *Highway Revenue Act of 1982* is a good example of an increase in a narrow-based tax intended to stimulate state and local expenditures for highways.
- ²⁶Support for this hypothesis can be found in Richard M. Bird, *Charging for Public Services*, Chapter 21.
- ²⁷Harvey E. Brazer, "User Charges in an Environment of Fiscal Limitation," p. 203.
- ²⁸Paul B. Downing, "User Charges and Service Fees," An Information Bulletin of the Management, Finance, and Personnel Task Force of the Urban Consortium, Public Technology, Inc., Washington, DC, 1980, p. 22.
- ²⁹For examples of different fee recovery rates, see James A. Flanagan and Susan J. Perkins, "Annual User Fee Review Program of the City of Phoenix, Arizona," *Government Finance Review*, June 1987, pp. 13-18.
- ³⁰For an interesting discussion of state legal constraints in the area of developer financing, see Thomas P. Snyder and Michael A. Stegman, "Financing the Public Costs of Growth."

- ³¹As reported in the *Charleston Daily Mail*, August 17, 1983.
- ³²See "Fire Service Charge Held Unconstitutional," *Impact*: 2 1/2, No. 49, May 1, 1983. California's experience with user charges in the wake of Proposition 13 is discussed in Donald G. Hagman, "Statutory and Judicial 'Loopholing' of the California TELS through Benefit-Based 'Taxes,' User Charges, and Exactions," unpublished paper prepared for the UCLA School of Law Conference on Born Again Special Assessments and Other Creative Development and Public Finance Techniques, January 1982.
- ³³Anthony T. Logalbo, "Responding to Tax Limitation: Finding Alternative Revenues," *Governmental Finance*, March 1982.
- ³⁴George E. Peterson, "The Allocative, Efficiency and Equity Effects of a Shift to User Charges."
- ³⁵Paul B. Downing, "User Charges and Services" provides an excellent discussion of the theory and practice of setting specific user charges. For an example of a detailed manual written as a guide for public officials in determining costs and setting user charges, see Commonwealth of Massachusetts, "Costing and Pricing Municipal Services." A number of studies are also available which provide numerous examples of fee schedules adopted by local governments in different states. Studies include: Bureau of Governmental Research and Service, "The Use of Service Charges and Fees to Finance Local Government in Oregon"; Texas Advisory Commission on Intergovernmental Relations, "Municipal Current Charges and Alternative Revenue Sources"; and Catherine L. Flynn, et al., "Using User Fees: A Guide for Massachusetts Cities and Towns." Also see Ross C. Kory and Phillip Rosenberg, "Costing Municipal Services," *Governmental Finance*, March 1982, pp. 21-27 for a discussion of developing effective cost accounting programs.
- ³⁶The economics of water pricing is discussed in more detail in Steve H. Hanke, "Pricing Urban Water," in Selma J. Mushkin, *Public Prices for Public Products*, Urban Institute, 1972.
- ³⁷Utility companies in Japan are now experimenting with the use of a computerized "reading" system that meters through the telephone system. This system is described in Council for International Liaison, *Urban Innovation Abroad*, Vol. 6, No. 11, November 1982. In the U.S., designated channels of residential cable TV lines are being considered as a possible means of continually monitoring the consumption of utility services such as electricity.
- ³⁸The various dimensions of costs are discussed in more detail in Paul E. Downing, "User Charges and Services Fees." See William Pollak, "Pricing Fire Protection Services," in Selma J. Mushkin, ed., *Public Prices for Public Products* for an extensive discussion of how to implement fire protection fees.
- ³⁹John L. Mikesell, *Fiscal Administration: Analysis and Applications for the Public Sector*, Dorsey Press, 1982, p. 278.
- ⁴⁰The advantages and disadvantages of trash collection fees are discussed in Richard M. Bird, *Charging for Public Services*, Chapter 12.
- ⁴¹Norman Walzer and Vickie Winters, "License Fees and User Charges in Illinois Cities," *Illinois Municipal Review*, June 1979, pp. 12-15.
- ⁴²P. Kemper and R. Schmenner, "Police Services—Their Costs and Financing" in J. Meyer and J. Quigley, eds., *Local Public Finance Squeeze: A Case Study*, Ballinger, 1977.
- ⁴³For further details see John M. Grainer and Harry P. Hatry, "Coping with Cutbacks: Responses in 17 Local Governments," in Lawrence E. Susskind, ed., *Proposition 2 1/2: Its Impact on Massachusetts*, Oelgeschlager, Gunn & Hain, 1983, Chapter 17.

⁴⁴A recent study of user charges in California suggests that local governments could have gained up to 20% more revenue if charges were increased to cover estimated costs. See Lloyd Mercer and W. Morgan, "The Relative Efficiency of Local User Charges: The California Case," *National Tax Journal*, Vol. XXXVI, No. 2, June 1983, pp. 203-12.

⁴⁵The Forest Grove ordinance is reproduced in the Appendix to Bureau of Governmental Research and Service, Finance Bulletin No. 10, "The Use of Service Charges and Fees to Finance Local Government in Oregon," University of Oregon, January 1980. The Phoenix program is discussed in James A. Flanagan and Susan J. Perkins, "Annual User Fee Review Program of the City of Phoenix, Arizona." For an excellent discussion of state indexation of gasoline taxes, see John H. Bowman and John L. Mikesell, "Recent Changes in State Gasoline Taxation: An Analysis of Structure and Rates," *National Tax Journal*, Vol. XXXVI, No. 2, June 1983, pp. 163-82.

⁴⁶Dean J. Misczynski, "California's Nonplunge into Benefit Levydom," p. 7.

⁴⁷*Ibid.*, p. 13.

⁴⁸Anthony H. Pascal, "The Post-Municipal City," paper prepared for the Conference on Urban Development and Public Finance: The Decade Ahead, Washington, DC, April 1982, predicts an expanded role for special assessments in financing neighborhood-specific programs.

Bibliography

- Advisory Commission on Intergovernmental Relations, *Changing Public Attitudes on Governments and Taxes*, S-15. Washington, DC, ACIR, 1986.
- Advisory Commission on Intergovernmental Relations, *Local Revenue Diversification: Income, Sales and User Charges*, A-47. Washington, DC, ACIR, 1974.
- Berney, Robert E. and Nancy Wallace, "Pricing Policy for the Washington State Ferry System," *Final Report to the Washington State Department of Transportation*. February 1987.
- Bird, Richard M., *Charging for Public Services: A New Look at an Old Idea*, Toronto, Canadian Tax Foundation, 1976.
- Bird, Richard M., and Enid Slack, "Urban Finances and User Charges," in George F. Break, ed., *State and Local Finances: The Pressures of the 1980s*. Madison, University of Wisconsin Press, 1983, pp. 211-37.
- Bowman, John H. and John L. Mikesell, "Recent Changes in State Gasoline Taxation: An Analysis of Structure and Rates," *National Tax Journal*, Vol. XXXVI, No. 2. June 1983, pp. 163-82.
- Brazer, Harvey E., "User Charges in an Environment of Fiscal Limitation," *Proceedings of the National Tax Association—Tax Institute of America*, LXXVI (1983), pp. 200-05.
- Bureau of Governmental Research and Service, University of Oregon, "The Use of Service Charges and Fees to Finance Local Government in Oregon," *Finance Bulletin*, No. 10. January 1980.
- Cline, Robert J. and John Shannon, "Municipal Revenue Behavior after Proposition 13," *Intergovernmental Perspective*. Vol. 8, No. 3, Summer 1982, pp. 22-28.
- Cline, Robert J. and John Shannon, "The Property Tax in a Model State-Local Revenue System," in C. Lowell Harris, ed., *The Property Tax and Local Finance*, *Proceedings of the Academy of Political Science*. Vol. 35, No. 1, 1983, pp. 42-56.
- Commonwealth of Massachusetts, Executive Office of Communities and Development, "Costing and Pricing Municipal Service," August 1982.
- Criz, Maurice, "The Role of User Charges and Fees in City Finance," *Urban Data Service Reports*. Washington, DC, International City Management Association, Vol. 14, No. 6, June 1982.
- Downing, Paul B., "User Charges and Service Fees," an Information Bulletin of the Task Force of the Urban Consortium. Washington, DC, Public Technology, Inc., 1980.
- Downing, Paul B. and Thomas DiLorenzo, "User Charges and Special Districts," in J. Richard Aronson and Eli Schwartz, eds., *Management Policies in Local Government Finance*. Washington, DC, International City Management Association, 1981.
- Downing, Paul B. and James E. Frank, "Recreational Impact Fees: Characteristics and Current Usage," *National Tax Journal*, Vol: XXXVI (1983), pp. 477-90.
- Due, John F. and Ann T. Friedlaender, *Government Finance*, 6th Edition, Homewood, Illinois, Richard D. Irwin, Inc., 1977.
- Flanagan, James A. and Susan J. Perkins, "Annual User Fee Review Program of the City of Phoenix, Arizona," *Government Finance Review*, June 1987, pp. 13-18.
- Flynn, Catherine L., et al., "Using User Fees: A Guide for Massachusetts Cities and Towns." University of Massachusetts, Massachusetts Cooperative Extension Service, December 1981.
- Goddeeris, John, "User Charges as Revenue Sources," in Harvey E. Brazer, ed., *Michigan's Fiscal and Economic Structure*. Ann Arbor, University of Michigan Press, 1982, pp. 765-87.

- Grainer, John M. and Harry P. Hatry, "Coping with Cutbacks: Responses in 17 Local Governments," in Lawrence E. Susskind, ed., *Proposition 2 1/2: The Impact on Massachusetts*. Boston, Oelgeschlager, Gunn and Hain, 1983.
- Greene, Barbara P., "Counties and the Fiscal Challenges of the 1980s," *Intergovernmental Perspective*. Vol. 13, No. 1, Winter 1987, pp. 14-19.
- Hagman, Donald G., "Statutory and Judicial 'Loopholing' of the California TELS through Benefit-Based 'Taxes,' User Charges and Exactions," unpublished paper prepared for the UCLA School of Law Conference on Born Again Special Assessments and Other Creative Development and Public Finance Techniques, January 1982.
- Hanke, Steve H., "Pricing Urban Water," in Selma J. Mushkin, *Public Prices for Public Products*. Washington, DC, Urban Institute, 1972.
- Kemper, P. and R. Schmenner, "Police Services—Their Costs and Financing," in J. Meyer and J. Quigley, eds., *Local Public Finance Squeeze: A Case Study*. Cambridge, Massachusetts, Ballinger, 1977.
- Kleine, Robert J. and John Shannon, "Characteristics of a Balanced and Moderate State-Local Revenue System," in Steven D. Gold, ed., *Reforming State Tax Systems*. Denver, National Conference of State Legislatures, 1986, pp. 31-54.
- Logalbo, Anthony T., "Responding to Tax Limitations: Finding Alternative Revenues," *Governmental Finance*, March 1982, pp. 13-19.
- Mercer, Lloyd, and W. Morgan, "The Relative Efficiency of Local User Charges: The California Case," *National Tax Journal*, Vol. XXXVI, No. 2, June 1983, pp. 203-12.
- Mikesell, John L., *Fiscal Administration: Analysis and Applications for the Public Sector*. Homewood, Illinois, Dorsey Press, 1982.
- Mushkin, Selma J., *Public Prices for Public Products*. Washington, DC, The Urban Institute, 1972.
- Misczynski, Dean J., "California's Nonplunge into Benefit Levydom," unpublished paper prepared for the UCLA School of Law Conference on Born Again Special Assessments and Other Creative Development and Public Finance Techniques, January 1982.
- Netzer, Dick, "Local Alternatives to the Property Tax: User Charges and Non-property Taxes," paper prepared for the Academy for State and Local Government, June 1983.
- Pascal, Anthony H., "The Post-Municipal City," paper prepared for the Conference on Urban Development and Public Finance: The Decade Ahead. Washington, DC, January 1982.
- Peterson, George E., "The Allocative, Efficiency and Equity Effects of a Shift to User Charges and Benefit-Based Taxes," unpublished paper, the Urban Institute, Washington, DC, January 1982.
- Pollak, William, "Pricing Fire Protection Services," in Selma J. Mushkin, ed., *Public Price for Public Products*. Washington, DC, The Urban Institute, 1972.
- Rybeck, Walter, "The Property Tax as a Super User Charge," in C. Lowell Harriss, ed., *The Property Tax and Local Finance, Proceedings of the Academy of Political Science*. Vol. 35, No. 1, 1983, 133-47.
- Snyder, Thomas P., and Michael A. Stegman, "Financing the Public Costs of Growth," *Government Finance Review*, August 1986, pp. 23-27.
- Taft, Graham S., "User Fees: Trends and Prospects for Indiana," in James A. Papke, ed., *Indiana's Revenue Structure: Major Components and Issues*. West Lafayette, Indiana, Purdue University, 1982.
- Texas Advisory Commission on Intergovernmental Relations, *Municipal Current Charges and Alternative Revenue Sources*. Austin, Texas, August 1981.

- U.S. Department of Commerce, Bureau of the Census, *City Government Finances*. Washington, DC, the Bureau, various years.
- U.S. Executive Office of the President, Office of Management and Budget, *Budget of the United States Government, Fiscal Year 1988, Supplement*. Washington, DC, OMB, 1987.
- U.S. General Accounting Office, *Including User Charges in the General Revenue Sharing Formulas Could Broaden the Measure of Revenue Effort*. PAO-82-83, September 1982.
- Walzer, Norman and Vickie Winters, "License Fees and User Charges in Illinois Cities," *Illinois Municipal Review*, June 1979, pp. 12-15.

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