Appendix A
Statistical Overview of Local Governments

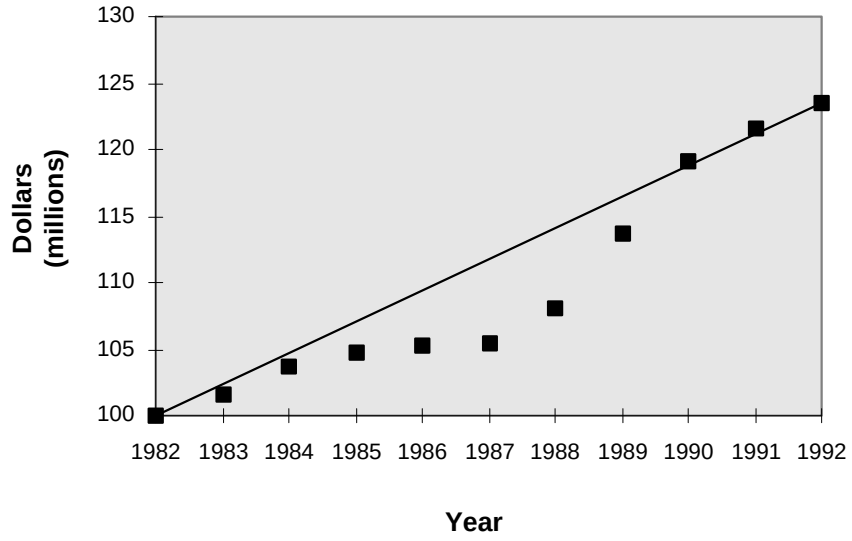
*[**Note**: Because direct education services constitute the overwhelming majority of a school district's budget (i.e. school districts do not usually perform services such as wastewater treatment, air quality monitoring) and have limited responsibility for managing environmental issues, the discussion of local governments in this appendix does not include school district-only data/ information. However, when data/information are provided for "total local governments," it does include school districts.]*

The majority of data used in this appendix were obtained from the U.S. Census Bureau. In all instances, the most recent data available were used; however, because different data are collected and published at different times, the dates may vary. That is, for one statistical category the most recent data may be from 1992. For other categories, the most recent data may be from 1993.

The historic data presented in this chapter are in actual dollars and do not consider inflation. During the 10-year period between 1982 and 1992, the consumer price index rose 25 percent (see Exhibit A-1). Most of the data presented indicate that revenues, expenses and other variables increased significantly more than this inflation rate.

While data in this document do not provide definitive cause for these increases, general increases may be due to increases in local government responsibility for environment-related activities that previously may have been managed by the state, increased regulatory requirements, or increases in population. For example, many local governments saw their responsibilities for landfill upgrades significantly increase in the late 1980s and early 1990s in preparation for the implementation of new federal landfill standards in 1991. Wastewater treatment budgets also increased significantly during this time in efforts to upgrade deteriorating systems and meet new CWA requirements. This section highlights some of the details of these increasing budgets.

Exhibit A-1. The Real Value of $100 Million: 1982-1992



A.1 TYPES OF LOCAL GOVERNMENTS

The three types of local governments discussed in this document are counties, subcounties, and special districts. The following sections define each of these types of local government and present information on the various structures and management systems that are typical of each. It should be noted that while examples are included in each of the sections, the specifics of each local government may vary. The organization, structure, and responsibilities of each local government are dependent on the specific characteristics of that local government, including size, location, and demographics.

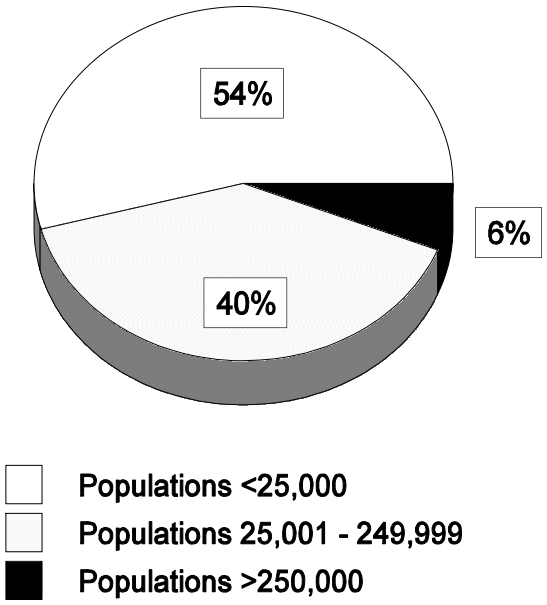
A.1.1 Counties

A county government is a unit of local government established to implement state and county policies, programs, and services. Counties can be distinguished from other local governments in that they are the only local government entity established as a formal arm of the state government. In most states[1], counties were originally established to implement state services so that citizens would not have to travel to the state capital. They may perform functions such as

[1] In New England states, counties have only a minor role, and towns (townships) are used to implement state government services. *(Managing local government: public administration in practice.* Richard Bingham et al. 1991.)

budgeting and tax collection, and provide services such as wastewater treatment, water supply, solid waste management, police and fire protection, and housing. Many counties provide services such as centralized recordkeeping (county clerk's office) and highway maintenance, and play an important role in education, transportation, and health services. Typically, larger counties provide a wider range of services.

Exhibit A-2. Populations of U.S. Counties in 1992

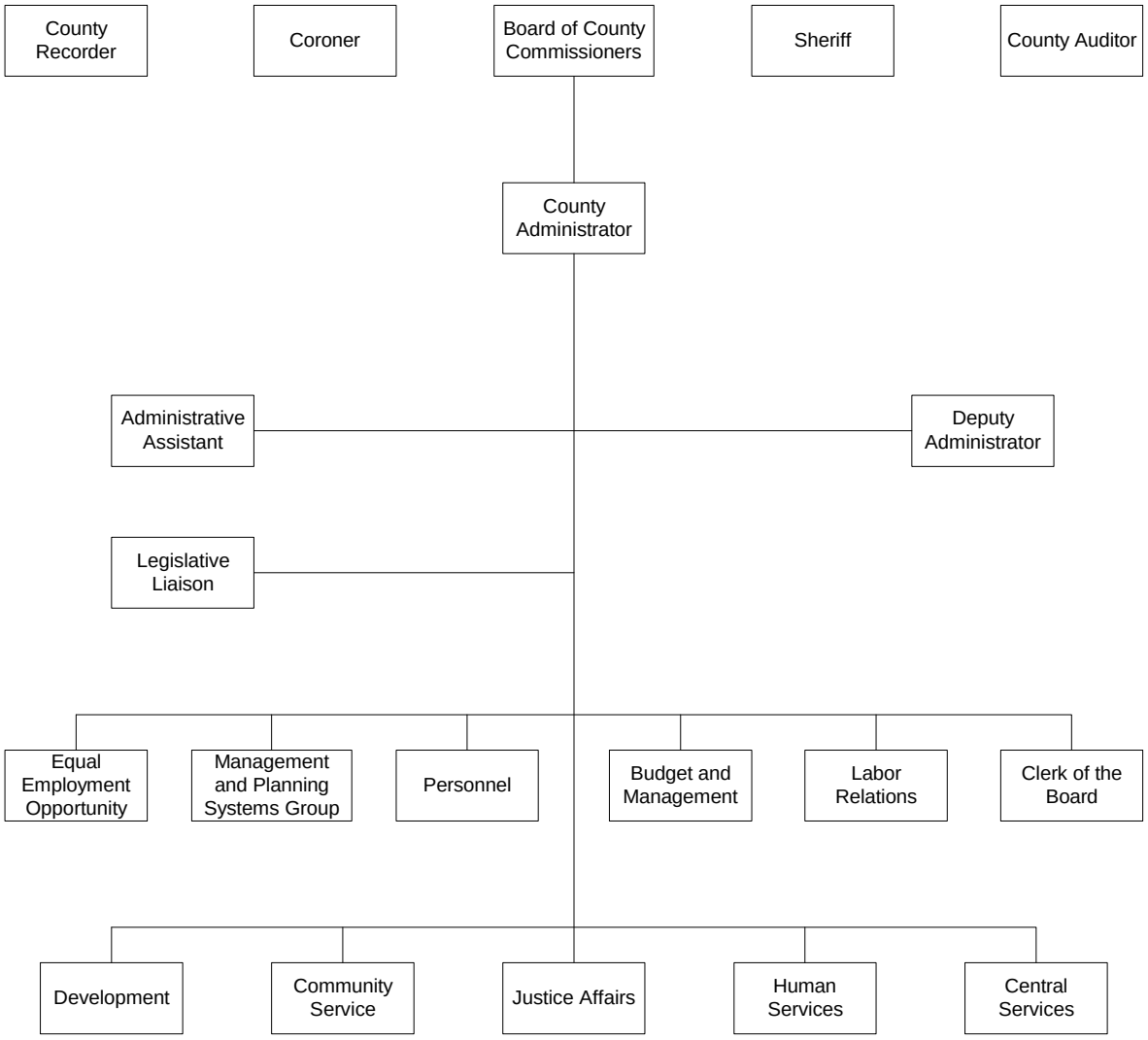


Counties generally have higher populations than subcounties or special districts. Nevertheless, most counties are small. As shown in Exhibit A-2, more than half (54 percent) of the 3,043 counties in the U.S. had a population of less than 25,000. Conversely, 6 percent had populations greater than 250,000.

While county government structures can vary, usually the principal governing body is the county board, also known as the board of county commissioners or county commission. County boards vary in size and method of election. Boards will often have members representing a specific portion of the county, as well as those elected at large. The chair of the board is appointed by the board members or elected by the voters. This board performs administrative functions, oversees general administration of county services and functions, and conducts legislative functions such as approving county budgets or local ordinances. While the county board may oversee many county operations, counties will often have some departments, such as the sheriff, treasurers, or school board, whose heads are elected directly by county residents.

The county board often appoints a county administrator, or manager, to implement board policies, and direct and supervise the administrative functions of county government. County manager responsibilities may include appointing county officials, supervising all county offices and departments, executing regulations, and submitting an annual budget to the board. Exhibit A-3 presents the structure of Johnson County, Kansas, which is typical of a county management structure.

Exhibit A-3. County Government Structure
(Johnson County, KS)



Bingham, Richard D. et al. *Managing Local Government: Public Administration in Practice.* SAGE Publications, Inc.: California, 1991, p. 42.

A.1.2 Subcounties

Subcounties include two specific types of governments: 1) municipalities and 2) townships. Municipalities and townships have the same definition, but are distinguished by the historical circumstances regarding their incorporation. Both are organized local governments authorized in state constitutions and statutes and established to provide direct general government for those living a defined area.

Perhaps the most distinguishing characteristic of municipalities is that they are generally defined by population. Municipalities can take several forms, but are most commonly organized as cities, boroughs (except in Alaska), villages, and towns (except in Massachusetts, Connecticut, Rhode Island, New Hampshire, Vermont, Maine, Minnesota, New York and Wisconsin).[2] In a typical state, those municipalities that have the largest populations and areas are classified as cities, while smaller municipalities are classified as towns or villages. The classifications are important because they often determine the nature of certain municipal boards or commissions. However, these classifications are not permanent and can change as a municipality's population increases or decreases.

Township governments (which include "towns" in Connecticut, Maine (including organized plantations), Massachusetts, Minnesota, New Hampshire (including organized locations), New York, Rhode Island, Vermont, and Wisconsin) are also organized by their state constitutions. In contrast to municipal governments, townships are defined without regard to population. Townships typically include a central urban area and its surrounding rural area(s). Townships are typically subdivisions of a county covering a predetermined land area, as a result of the Congressional township system of identifying land, with the exception of New England towns, where township size varies considerably. Township functions are almost identical to those of municipalities. Some towns or townships permit voters to make policy through direct participation in local meetings. Other towns perform few formal functions, relying on county or state governments, or private organizations for public services.

Approximately 96 percent of all subcounty governments had populations of less than 25,000. Those same subcounty governments, however, accounted for 40 percent of the total population of all subcounties. As shown in Exhibit A-4 and Exhibit A-5, the 53 subcounties with more than 300,000 people represented more than 20 percent of the population, but less than 1 percent of total subcounty governments.

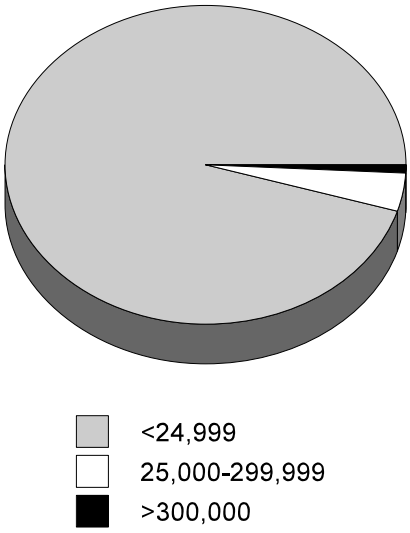
[2] For the purposes of U.S. Census Bureau data and this document, municipalities include certain cities that are completely or substantially consolidated with their county governments, operate outside the geographic limits of any county, or for other reasons have no organized county government operations within their boundaries. The following cities are included in this group: Anaconda (MT), Anchorage (AK), Athens (GA), Baltimore (MD), Baton Rouge (LA), Boston (MA), Butte (MT), Carson City (NV), Columbus (GA), Denver (CO), Honolulu (HI), Houma (LA), Indianapolis (IN), Jacksonville (FL), Juneau (AK), Lexington (KY), Lynchburg (TN), Nashville (TN), New Orleans (LA), New York (NY), Philadelphia (PA), St. Louis (MO), Sitka (AK), San Francisco (CA), and Washington, DC, as well as the "independent cities" in Virginia.

Exhibit A-4. Subcounty Governments by Population Size, 1992

Size (based on population)	Number of Subcounty Governments	Percent of Total Subcounty Governments	Population (in millions)	Percent of Total Population
<24,999	34505	96	82150	39.7
25,000 - 299,999	1977	3.8	81979	39.6
>300,000	53	0.0015	42,748	20.7
Totals	**35,935**	**100.0**	**206,877**	**100**

Source: 1992 Census of Governments. Government Organization, Volume 1, Number 4, Tables 7 and 8.

Exhibit A-5. Percent of Total Subcounty Governments by Population, 1992

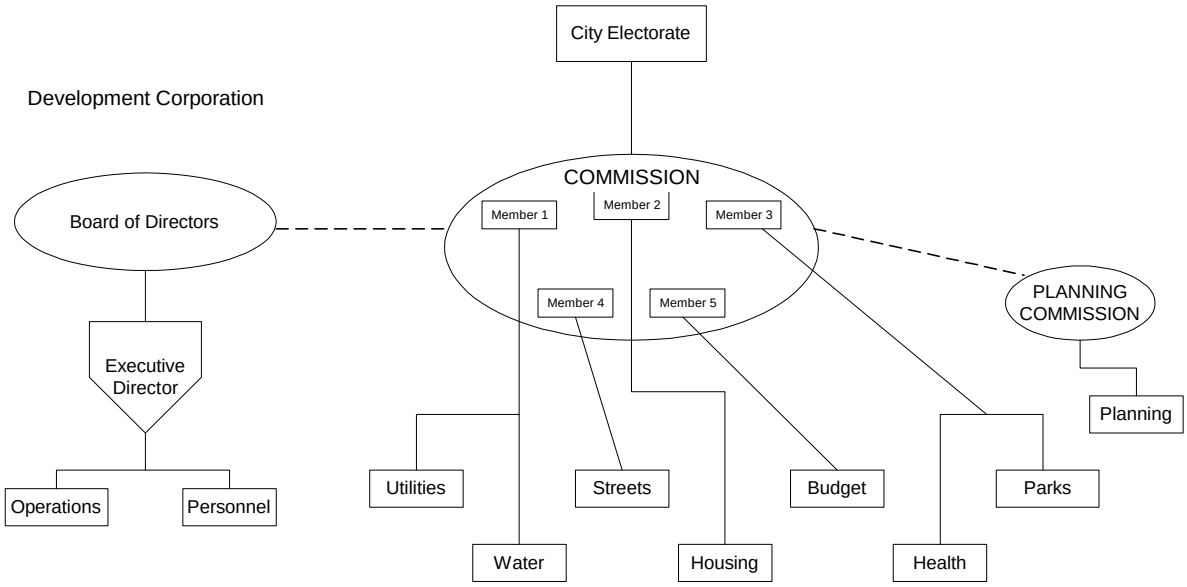


At the subcounty level, there can be a variety of potential government structures. The three most common are:

- Commission
- Council-mayor
- Council-manager.

In the ***commission*** structure (see Exhibit A-6), a group of elected commissioners oversee the city's executive departments, with each commissioner heading a different specific department. Though commission forms of government may vary widely, all share several characteristics, including small boards, at-large elections, and legislative and executive powers. The commission possesses the authority to enact ordinances and establish spending (budget) priorities; the commissioner is empowered to supervise administrative/executive departments (public works, for example); and the mayor is elected from the ranks of the city council but has few if any formal powers. The commission form of government gives both legislative and administrative (executive) powers to one body. One drawback of this form is that commissioners tend to become advocates of the departments they head, and that commissioners might not be interested in issues that are not directly related to their specific department.

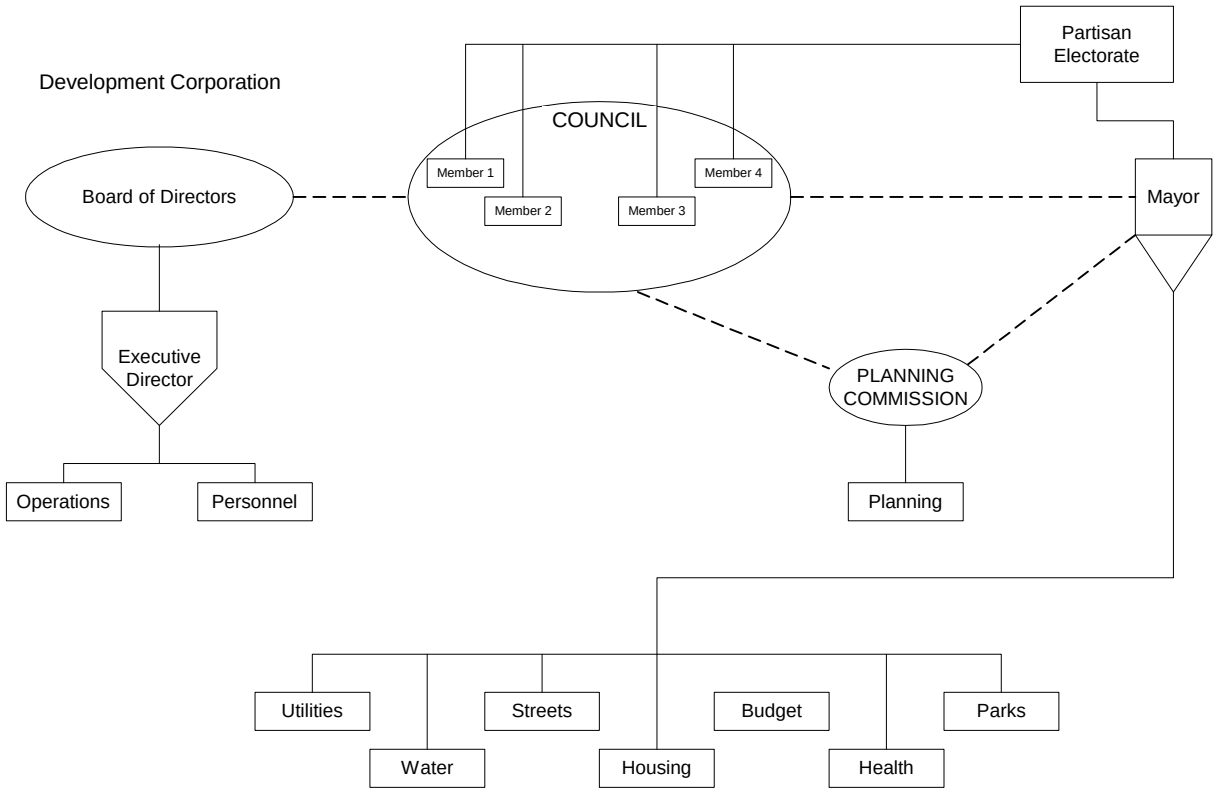
Exhibit A-6. Commission Form of Subcounty Government



As shown in Exhibit A-7, in the ***council-mayor*** form of subcounty government, the mayor is the chief executive or leader. Both the councilmen and the mayor typically are elected. The mayor -- as the administrative/executive chief of the city -- is directly responsible for overseeing the various city departments. The board of directors has the same responsibilities and links to the council as in the other forms of subcounty government. Most mayors serve two- or four-year terms and exercise a wide range of formal and informal powers. They have influence over city

council, oversee executive departments, enforce the law, resolve crises, and process citizen complaints. Mayors that are selected by a city council typically exercise less power than an elected mayor.

Exhibit A-7. Council-Mayor Form of Subcounty Government
(Madison, WI)



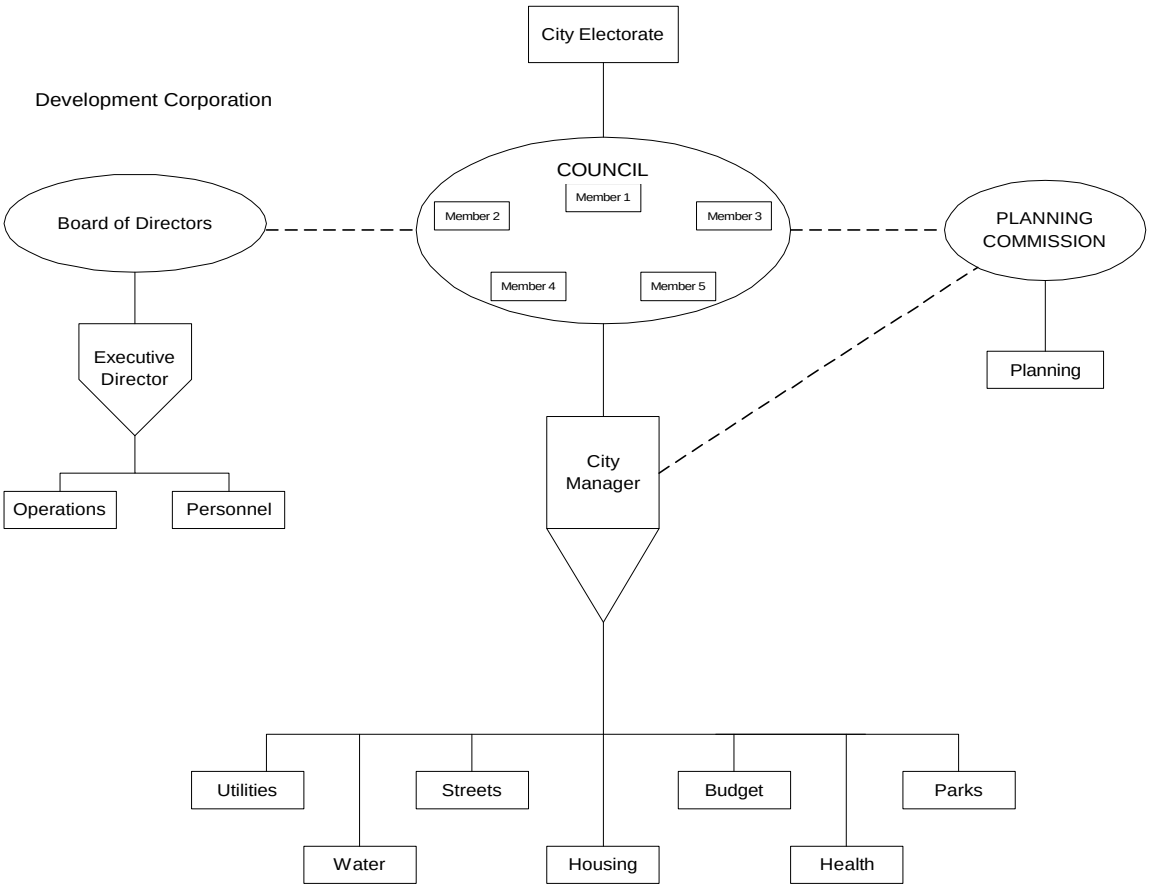
Bingham, Richard D. et al. *Managing Local Government: Public Administration in Practice.* SAGE Publications, Inc.: California, 1991, p. 41.

Finally, in the ***council-manager*** structure shown in Exhibit A-8, the elected city council has policymaking/legislative responsibilities, and the city manager—a professional administrator—is responsible for administrative (executive) functions. The city manager is appointed by the city council to act as chief executive. In this manner, legislative and executive functions are conducted by separate bodies. That is, the council develops policy, while the city manager implements council initiatives and supervises personnel.

In this form of government, the mayor may be elected, or selected from within the city council, but has few executive responsibilities. This form of government is one of the most popular,

particularly for small- and medium-sized cities and for suburban cities. However, few large cities implement this form. This form is useful because it offers functional simplicity, clear lines of authority, and utilizes professional experts.

Exhibit A-8. Council-Manager Form of Subcounty Government
(City of Rockville, MD)



Bingham, Richard D. et al. *Managing Local Government: Public Administration in Practice.* SAGE Publications, Inc.: California, 1991, p. 43.

A.1.3 Special Districts

Special district are local government units that perform one or more specific services that are not being supplied by other government units. Special districts are known by a variety of titles, including districts, authorities, boards, and commissions. A majority of special districts are established to perform a single function, but some have been given authority to provide several, usually related large-scale services such as water supply, wastewater treatment, or solid waste management. They may exist within the boundaries of a single city, across city and county

boundaries, or across state lines. Special districts have been formed for a wide variety of purposes, including:

- Sewer districts
- Water districts
- Irrigation districts
- Storm water management districts
- Regional solid waste authorities
- Water resource authorities
- Regional port authorities
- Regional air quality management districts
- Fire protection
- Vector control.

Examples of special districts include the Tennessee Valley Authority, which provides water, electricity, and flood control services in the southeast, the Port Authority of New York/New Jersey, which provides transportation services in New York and New Jersey, and the Sanitary District of Decatur, which manages the sanitary sewer system in parts of several local governments in Illinois. Exhibit A-9 presents the structure of the Sanitary District of Decator; Exhibit A-10 presents the structure of the South Coast Air Quality Management District of California, which is responsible for all aspects of air pollution control in four counties.

Special districts are the fastest growing local government unit in the United States, comprising more than 35 percent of all local government units in 1992, compared to 10 percent in 1952. This growth can be attributed to the benefits that other local governments see in developing special districts as an alternative to the local government providing public services. Special districts can often provide a service more efficiently, as their boundaries can be tailored to provide services where they are specifically required. In addition, they are independent financial entities, and thus are able to levy user fees or special assessments, rather than relying on taxes or municipal bonds to fund their services.

While the Census Bureau does not provide population data for special districts, it does provide data for the types of special districts. Special districts may be either a single-function or a multiple-function district. A single-function district has been established to provide only one service, such as sewerage or water supply, to the population it serves. More than 90 percent (29,036) of all special districts are single-function in nature. The

Exhibit A-9. Structure of the Sanitary District of Decatur, Illinois

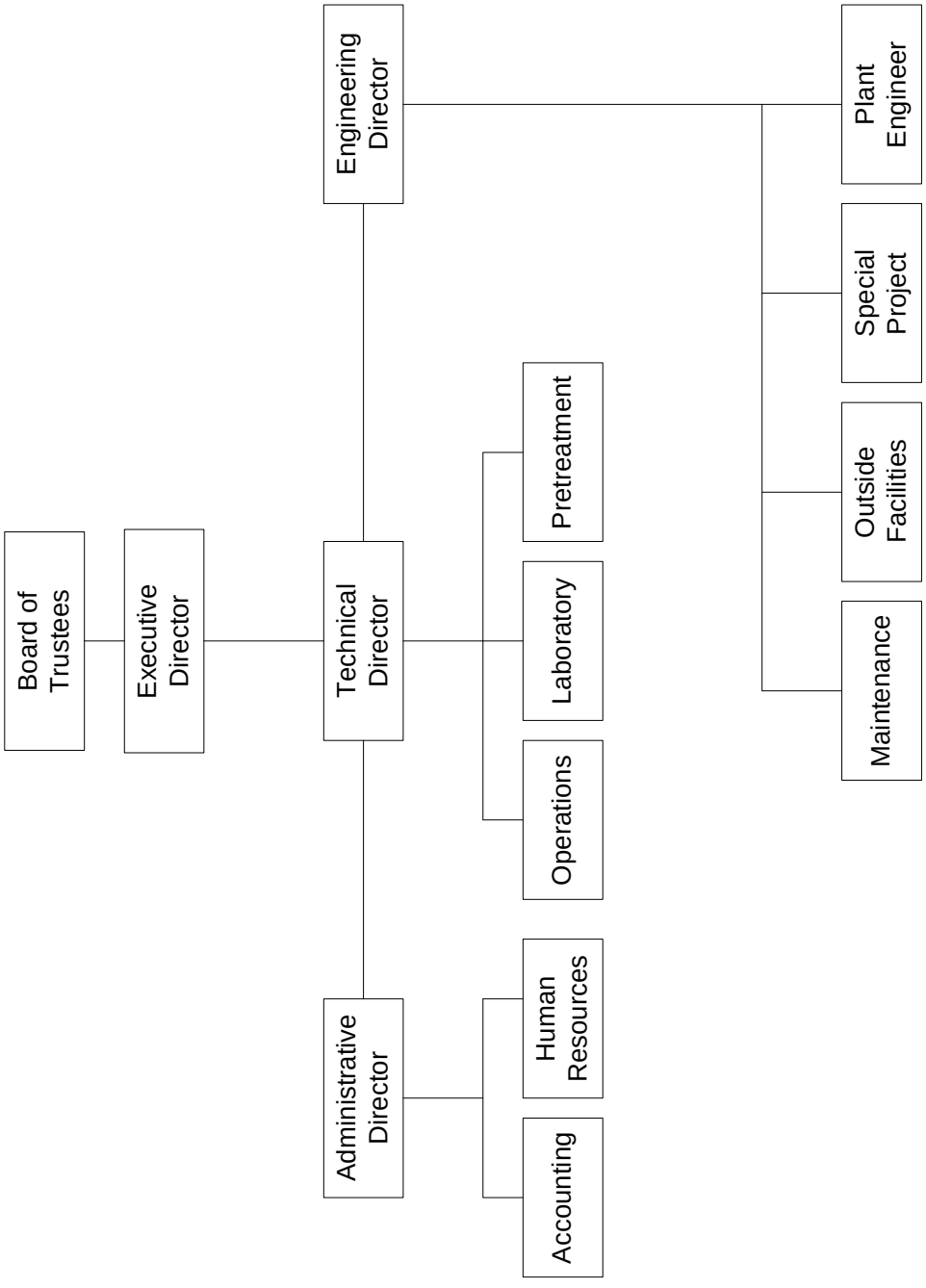
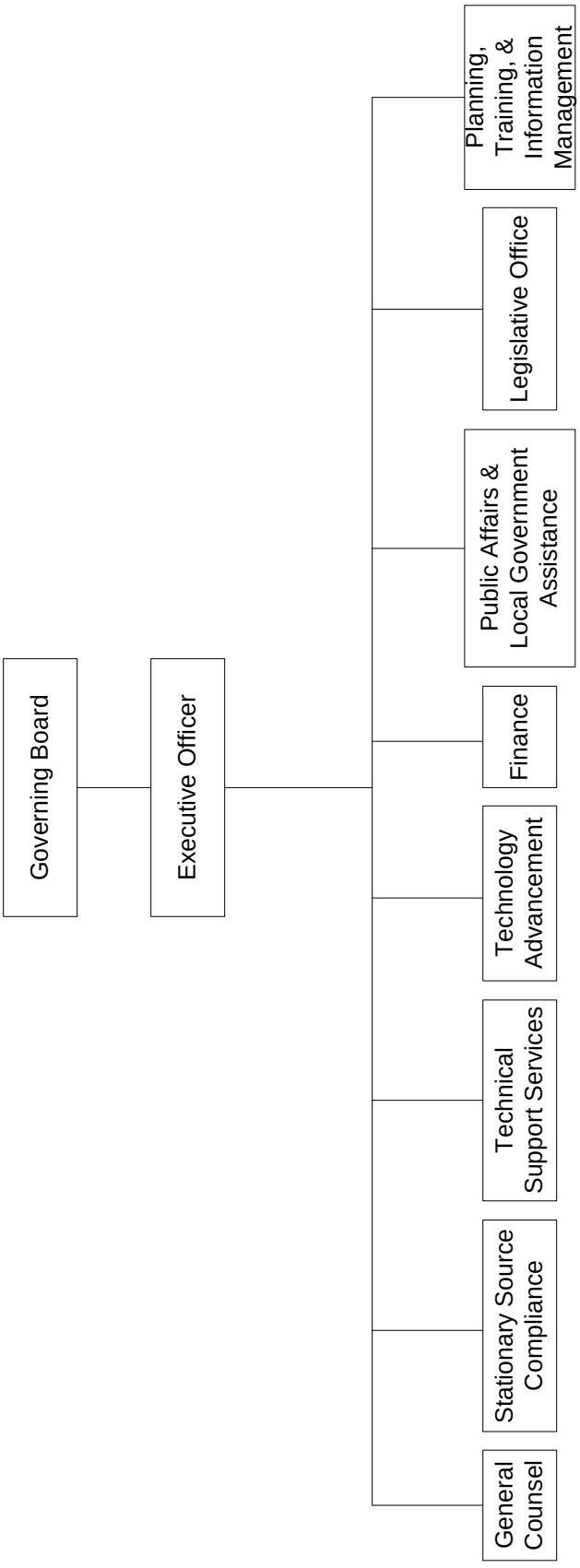
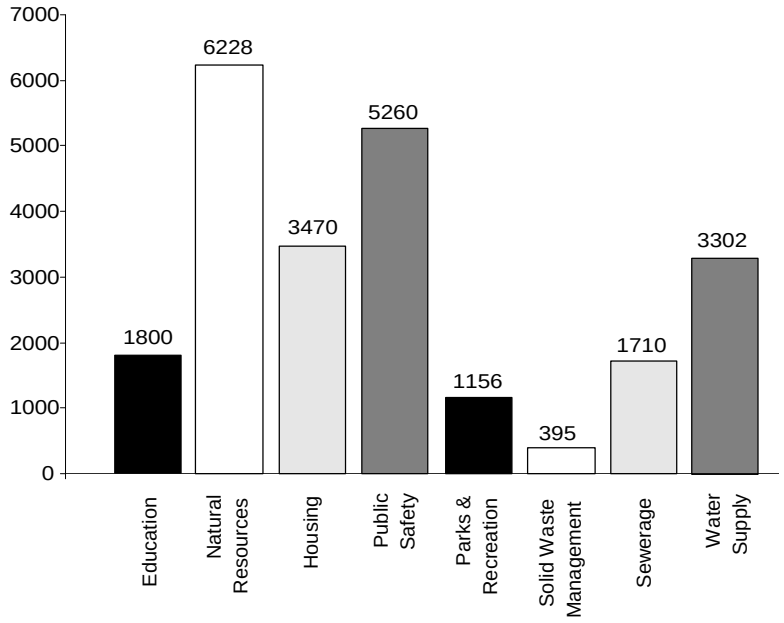


Exhibit A-10. Structure of Special District
(South Coast Air Quality Management District - California)



remaining special districts are multiple-function in that they provide a combination of services to their populations. Exhibit A-11 presents data regarding the type and number of single-function districts, as well as their percent of the total.

Exhibit A-11. Types of Single-Function Special Districts



A.2 THE LOCAL GOVERNMENT BUDGET PROCESS

Local governments, like the federal and state governments, operate on a 1-year budget cycle. During that one year, it is the absolute responsibility of the local government to manage its resources and, for the most part, determine how and when the budget is spent. The specific budget can be developed by several different parties, depending on the structure of the local government. Basically, there are two types of budget processes: 1) executive and 2) legislative. These processes are named for the party who develops the actual budget. Under the executive process, the local government executive proposes a budget, which is then sent to the legislative body for approval. This is the process used by the federal government. In the legislative process, the local legislative body is responsible for proposing and approving the budget. In the cases of local governments, the legislative body is usually the council or commission. This process is practiced primarily by small local governments with a city (or similar) council.

As with any entity that operates on a budget, the local government is tasked with balancing its incoming money (revenues) with its outgoing money (expenditures). To accomplish this task, a local government may use one of three types of budgeting:

- ***Incremental budgeting*** - This is a process of setting annual appropriations based on the previous year's budget, with small changes, usually reflecting the rate of inflation.

- ***Line-item budgeting*** - This process lists annual agency expenditures for items such as salaries, equipment, supplies, maintenance, and contractual services. This most resembles a traditional budget because it lists the item and cost of each item. This is the type of budget employed by most local governments.

- ***Planning-Programming-Budgeting System (PPBS)*** - PPBS is a tool that requires agencies to submit objectives and the most cost-effective manner to meet these objectives. It is predicated on concepts such as cost-benefit analysis, program budgeting, systems analysis, and cost effectiveness. Although not popular on the federal level, PPBS may be practiced in the local level because of its efficiency. It has generated more success in agencies that deal in material benefits rather than social benefits.

A.3 REVENUE GENERATION

Local government revenue includes all the money it receives for use in providing services to its population. These revenues are generated through several mechanisms, including:

- Taxes
- User fees
- Bond offerings
- Intergovernmental revenues
- Local government-owned utilities
- Employee retirement programs.

A.3.1 Taxes

Collecting taxes is the most common form of revenue generation associated with government at all levels. The primary source of revenue for local governments is the assessment and collection of property taxes. Property tax is a local levy on real or personal, tangible or intangible, property

(such as cars or real estate) collected once per year. Property taxes typically range from $.05 to $4.50 per $100 of assessed value of the property. Sales tax is another major producer of revenues for local governments. Sales tax is a levy on goods and services, derived as a percentage of the price at the point of sale. The sales tax usually ranges from less than one percent to five percent and can apply to most retail items and services. Local governments may also implement local use taxes on hotels, automobile rentals or other items that are not purchased. Use taxes are typically in the same percentage range as sales taxes. Local wage and income taxes are another important source of local tax revenue. Income tax includes levies on salaries, rents, interests, dividends, commissions, royalties, business profits, and other income. A severance tax is sometimes levied on natural resources (e.g., minerals) extracted from the land. Severance taxes are mostly used in the West, Southwest, and South for revenue and conservation.

A.3.2 User Fees

User fees are levied on individuals and businesses who use various public services and are frequently used to fund the specific service for which the fee was collected. The implementation of user fees has increased in recent years as local governments have been forced to reduce their reliance on property taxes as a major revenue source. User fees have also increased because they help local governments track the fiscal efficiency of each operation or service. Examples of user fees include the following:

- Sewage - Sewer system fees, including local hookup, maintenance, and use fees
- Drinking water - Fees based on water use, connection fees, and system development changes
- Other sanitation - Trash collection fees and industrial waste charges
- Education - School lunches, adult education tuition, municipal college tuition, charges for books, gymnasium uniforms or equipment
- Transportation - Road and bridge tolls, airport fees, water transportation fees, and parking
- Health and hospitals - Hospital charges (including per diem rates and service charges), ambulance charges, and inoculation charges

- Parks and recreation - Parking charges, concession rental, golf course greens fees, softball league enrollment fees, tennis class charges, day camp charges, admission charges to municipal swimming pools, zoos, and museums

- Housing/community development - Rent from public housing, street light installation charges, and convention center charges

- Electricity and natural gas usage.

A.3.3 Bond Offerings

A local government may also raise revenue through bond offerings. Bonds are basically an "IOU" issued by the local government for a specific amount. Holders or "buyers" of the bonds are promised full repayment of the IOU plus interest. Local government can offer both 1) general obligation bonds, and 2) revenue bonds. General obligation bonds, often referred to as guaranteed bonds, are backed by the local government, and as such, are deemed to involve less risk to the bond holder. The lower risk to the bond holder allows the local government to pay lower interest rates. Issuing general obligation bonds are the least costly method of borrowing for the local government, but are usually subject to a voter referendum to approve a tax increase to pay the interest on and fulfill the obligations of the bond.

A revenue bond is backed by the specific project it was issued to support. For example, if a local government issued bonds to build a wastewater treatment plant, revenue generated from operating the wastewater treatment plant (i.e., sewer use fees) would be used to pay the interest on and fulfill the obligations of the bond. Similarly, revenue bonds may be issued for construction of a landfill with the intention that tipping fees will generate revenue to repay the bondholders. Because these bonds are not guaranteed by the local government, they involve a higher risk, but pay higher interest rates. A voter referendum is usually not required to issue revenue bonds. Such bonds may be either short or long term.

User Fees and Privatization

Contracting solid waste management services to private entities is becoming increasingly popular with local governments. Approximately 30% of the solid waste management operations are contracted out by local governments. Depending on the contract or privatization agreement, user fees may be collected by the local government, or directly by the privatized entity.

It should be noted that many state constitutions and laws impose, or have the ability to impose, restrictions on a local government's debt limit. These limits are usually calculated as a percentage of the total assessed

value of real estate within the local government's boundaries. The debt limit generally ranges from 5 to 10 percent.

A.3.4 Intergovernmental Revenue

For sewer and wastewater projects, most local governments depend on local revenue bonds or State Revolving Fund (SRF) loans as their major sources of capital funding, while relying on user fees to fund annual operating expenses.

Three forms of intergovernmental revenue can be provided to local governments by government entities at the state and federal level: 1) categorical grants, 2) block grants, and 3) revenue sharing.

Categorical grants are tied to a specific program that the federal government initiated. They allow little flexibility or discretion on the part of the recipient (i.e., local government). The state revolving fund for wastewater treatment plant upgrades is an example of a categorical grant. A block grant, or discretionary grant is under direction of a national administrator. Block grants are available to local governments for a number of projects within broad guidelines. An example of a block grant is the federal Community Development Block Grant program, which can be used for almost any infrastructure improvement program.

In revenue sharing programs, local governments may receive a percentage of fees collected by another government entity, such as state liquor revenues. Revenue sharing may also include formula grants, where the recipient is allowed to receive and budget expenditures for assistance based on an established formula. Often, these formula grants are awarded on the basis that the funds must be matched (i.e., if the local government puts up $1,000 for a project, the state government will provide an additional $1,000) by the recipient government. Federal and state agencies will often provide formula grants for road construction or environmental projects that benefit more than one local government.

Local Government-Owned Utilities

Many local government operations pay for environment-related services such as water supply and solid waste disposal as a utility, funding them through user fees set to cover to the costs of the operation. Rather than operating out of general funds, solid waste disposal facilities may be operated with the goal of paying its own way or making a profit. Fees may be collected for residential pickup, with surcharges for non-citizens, commercial entities, and industrial disposers. In some local landfills, citizens are allowed to dispose of any nonhazardous or hazardous waste without charge, while commercial entities are required to pay a fee.

With each of these intergovernmental revenue sources, the funding can be front-end funded or funded through reimbursement. In front-end funding, the donor gives assistance as soon as the spending plan is approved. Funding through reimbursement allows for more control by the donor government because funds are not given by the donor until the project is nearly complete.

A.3.5 Utilities and Liquor

Utility and liquor revenue includes revenue generated through user fees or other revenues generated by a government-owned water supply, electric light and power, gas supply, transit system, or liquor store. It does not include other revenues, such as those generated by utilities owned by the local government, but leased to other governments or persons, or other commercial-type activities such a sport facilities, airports, housing projects, radio stations, steam plants, ferries, or similar activities that are considered "general government activities." Its also excludes any revenue from taxes (including excise or liquor taxes), special assessments, and intergovernmental revenue**.**

A.3.6 Employee Retirement Revenue

Employee retirement revenue includes contributions required of employees for financing government administered employee-retirement systems (e.g., social security), earnings on investments held for such systems, and the receipts of state payments for employees covered by government systems.

A.3.7 Use of Various Funding Sources

Few projects will use only a single revenue source. Capital or construction projects such as building wastewater treatment plants or adding capacity to a water supply system are often funded by debt or grants, while operating, maintenance, and employee costs are generally funded through taxes or user fees. It should be noted that although bond offerings are a major revenue generator, they are not included in the data presented in this appendix. They are included as debt and discussed later in the appendix.

Revenue generation varies not only by type of government, but also by government size. Smaller local governments may depend heavily on one or two revenue sources, while larger local governments may have more diverse sources. Funding also varies among environment-related projects. Based on a

Throughout this appendix, the term ***environment-related*** is used to describe categories of both revenues and expenditures. While nearly all operations conducted by local governments have environmental aspects and impacts, the ones identified below are considered environment-related for the purposes of this statistical overview:

C Natural resources
C Parks and recreation
C Sewerage
C Solid waste management
C Water supply (*Note: The Census Bureau does not break out data for water supply for counties and subcounties; it does, however, provide data for special districts*.)

survey of small local governments conducted by EPA, it appears taxes are the most commonly used method for funding storm water management, UST and AST programs, while water supply, wastewater treatment systems, and solid waste handling and disposal are most often funded by user fees. For more detail on local government financing of various environment-related activities, see *Results of the 1994 EPA Survey of Small Local Governments*, EPA Publication 270-R-97-001, 1997.

In 1992 alone, local governments generated $679.4 billion in revenues. Of that amount, only 4 percent was generated through environment-related operations (Exhibits A-12). When examining the environment-related revenues, approximately 60 percent was generated by solid waste management.

Exhibit A-12. Environment-Related Revenues for Local Governments: 1992-1993

Category of Revenue	Revenues (thousands of dollars)
Natural resources	$495,014
Parks and recreation	$3,193,308
Sewerage	$6,913,062
Solid waste management	$15,829,079
Total environment-related	**$26,430,463**
Non-environment-related	$652,998,192
Total local government revenues	**$679,428,655**

Source: United States Total State and Local Government Finances by Level of Governments: 1992-1993.

Local governments will use a combination of funding sources for most of their operations and services. Exhibits A-13, A-14, and A-15 provide examples of revenue generation for solid waste management operations, special projects, and wastewater treatment operations. Note that within each operation, individual activities may be funded by different sources. In particular, capital projects are often funded through general obligation bonds, revenue bonds, or grants, while day-to-day operations are often funded through taxes and user fees.

Exhibit A-13. Funding Municipal Solid Waste Operations

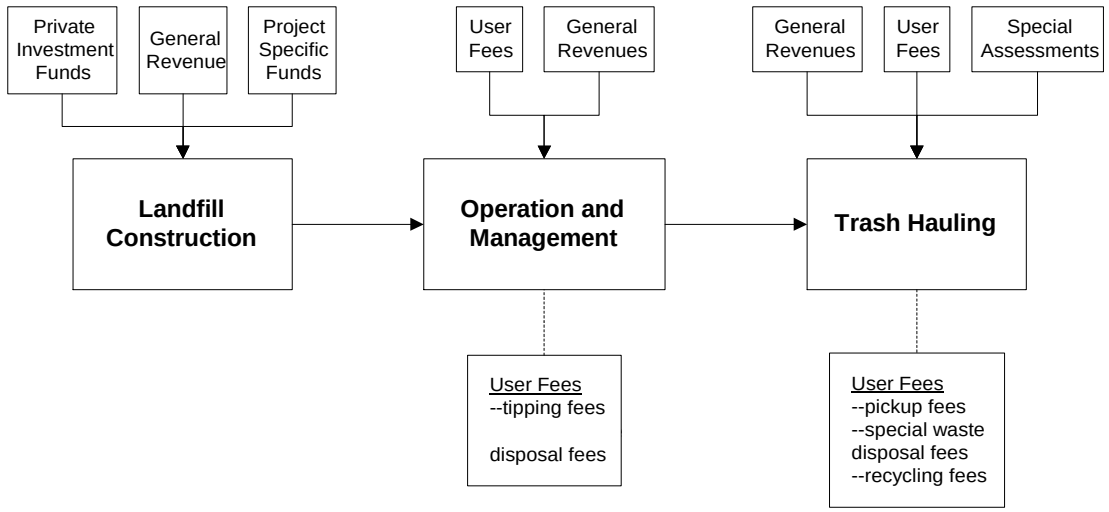


Exhibit A-14. Funding Special Projects

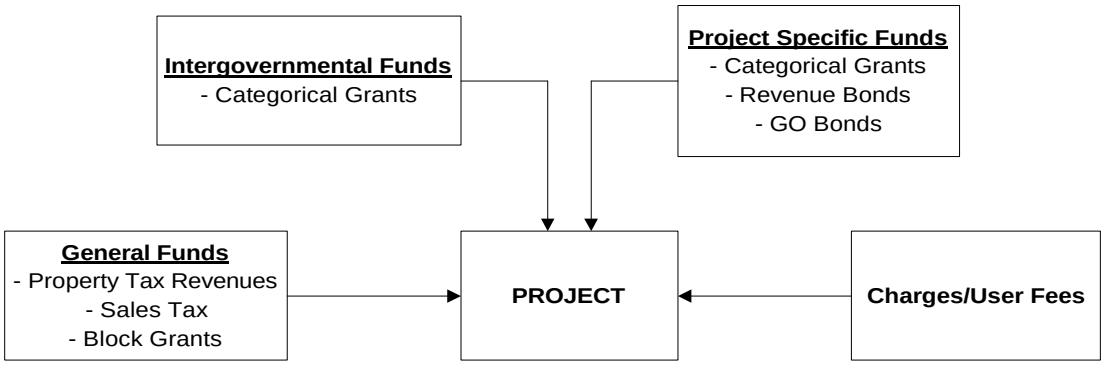
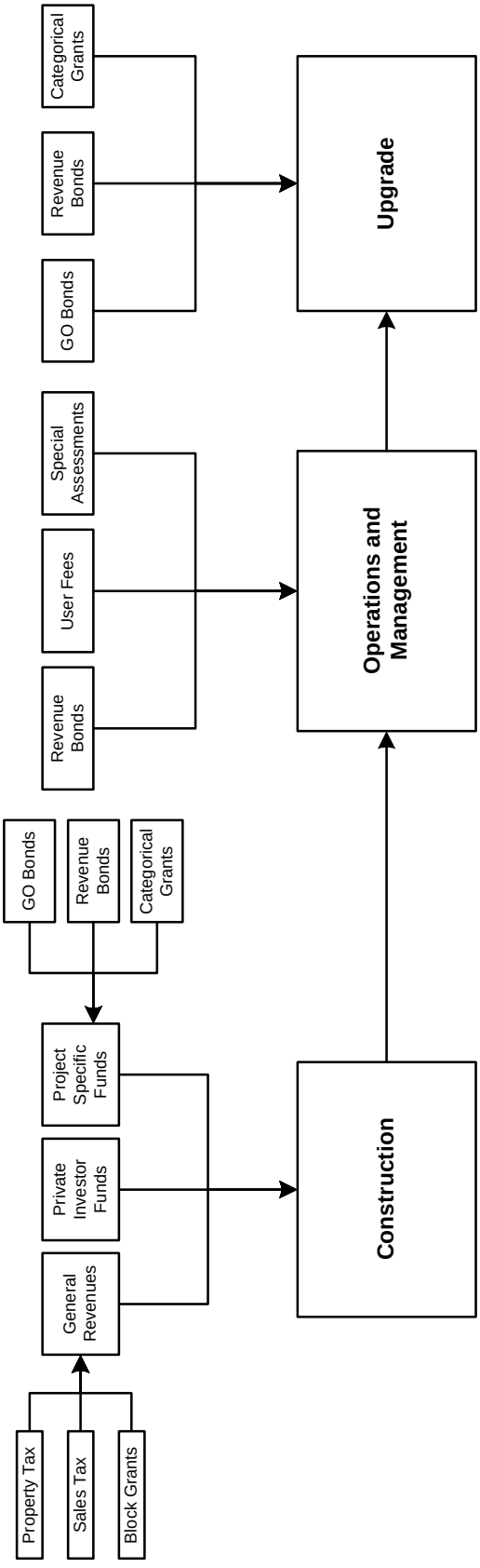


Exhibit A-15. Funding Wastewater Treatment Plant Operations



A.3.7.1 County Government Revenue Generation

County government revenues increased by more than 130 percent from 1982 to 1992, or over five times the rate of inflation. The most common methods of generating revenue are taxes and intergovernmental revenue. These two financing methods provided more than 70 percent of the $155 billion in total county government revenues in 1992. As indicated in Exhibits A-16 and A-17, county governments have used each of the revenue sources in nearly the same proportions for each of the periods shown.

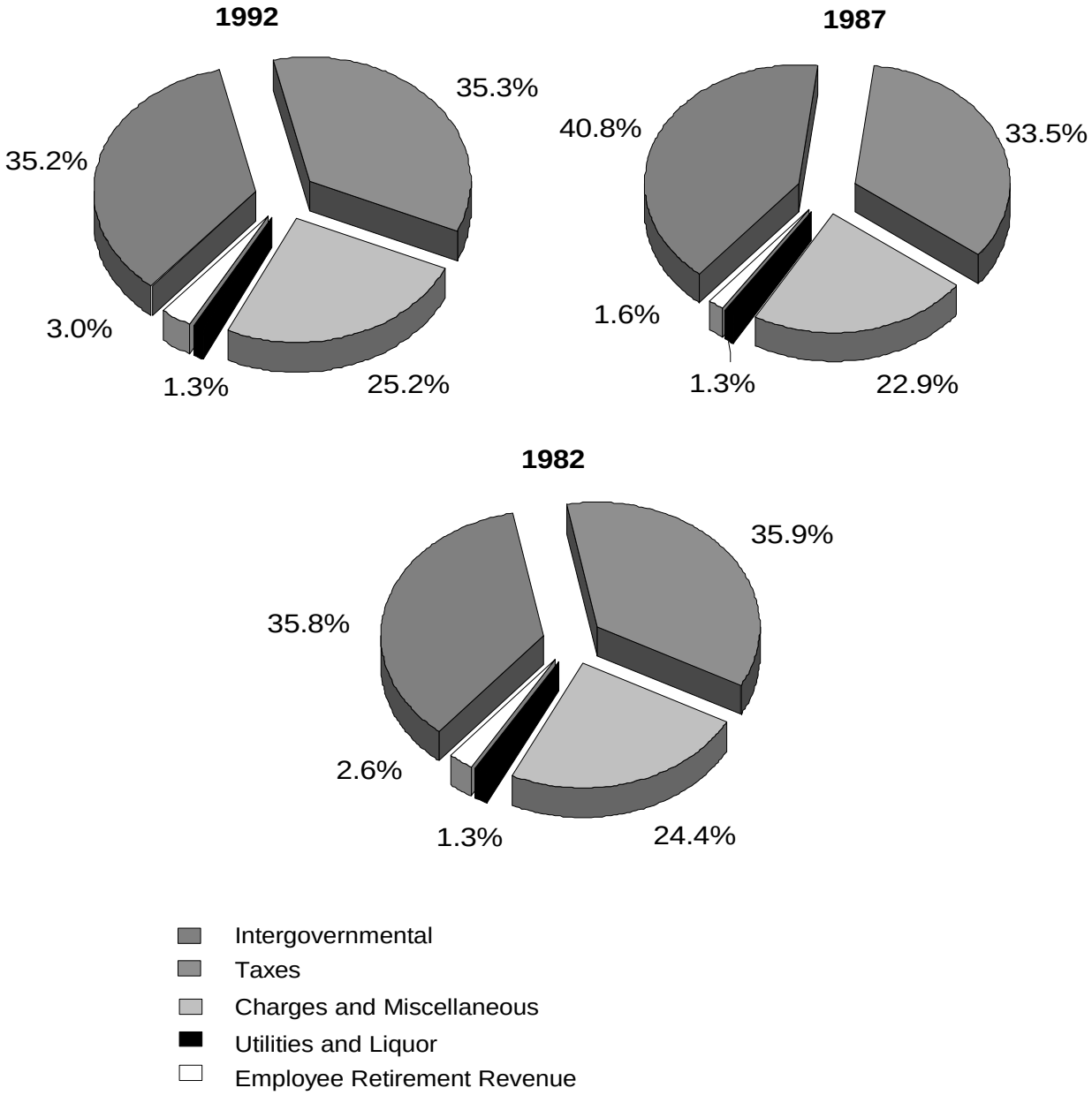
Exhibit A-16. Revenues of County Governments (in millions of $)

Category of Expenditure	1991-1992	1986-1987	1981-1982
Intergovernmental	55,292	37,268	28,002
Taxes	55,463	37,341	22,970
Charges and miscellaneous	37,612	26,681	15,682
Utilities and liquor	2,025	1,426	874
Employee retirement revenue	4,027	3,159	1,092
Total county revenues	**154,419**	**105,875**	**68,620**

Source: 1992 Census of Governments, Volume 4, Number 2, Table 1

Exhibit A-17. Revenue Sources for County Governments

1992, 1987, 1982



A.3.7.2 Subcounty Revenue Generation

Subcounty revenue generation increased slightly less than 100 percent between 1982 and 1992, or nearly four times the rate of inflation. Subcounty revenue generation was spread more broadly among the available methods than was county revenue generation. The three most commonly used methods--intergovernmental revenues, taxes and user fees--accounted for 80 percent of all revenues. As shown in Exhibits A-18 and A-19, taxes were the most common revenue source, followed by intergovernmental revenues and user fees.

Exhibit A-18. Revenues of Subcounty Governments (in millions of $)

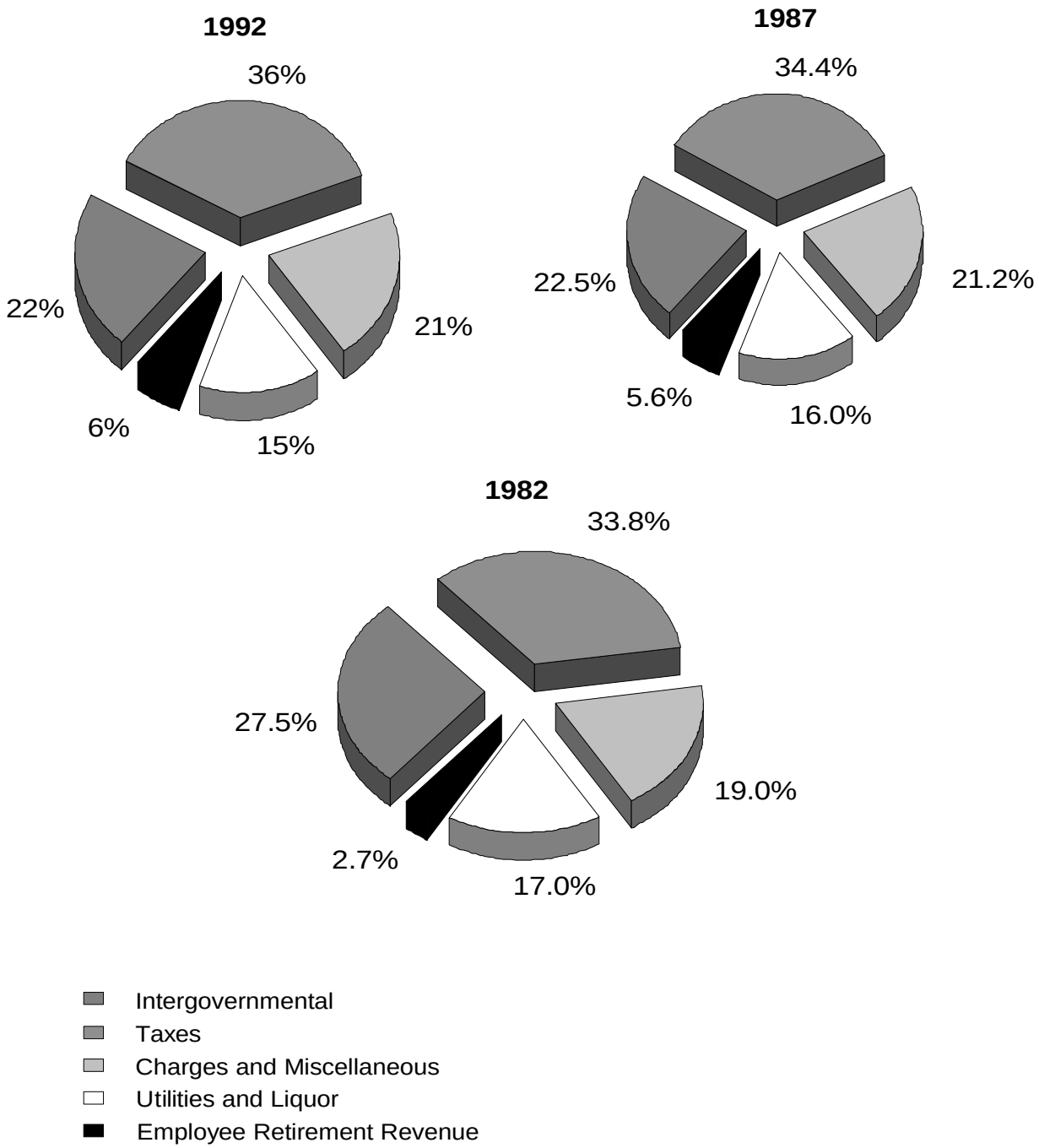
Category of Expenditure	1991-1992	1986-1987	1981-1982
Intergovernmental	54,476	41,735	34,519
Taxes	88,801	63,675	42,427
Charges and miscellaneous	52,462	39,267	23,933
Utilities and liquor	37,021	29,839	21,286
Employee retirement revenue	14,121	10,529	3,483
Total subcounty revenues	**246,881**	**185,045**	**125,648**

Source: 1992 Census of Governments, Volume 4, Number 4, Tables 1 and 14

.

Exhibit A-19. Revenue Sources for Subcounty Governments

1992, 1987, 1982



A.3.7.3 Special District Revenue Generation

As with other local governments, a special district may generate revenue through any of the mechanisms described above, as legislated in the special district's charter.[3] As shown in Exhibits A-20 and A-21, charges and miscellaneous revenues (i.e., user fees) accounted for the largest percentage of revenues for special districts in all three years shown.

Exhibit A-20. Revenues of Special Districts (in millions of $)

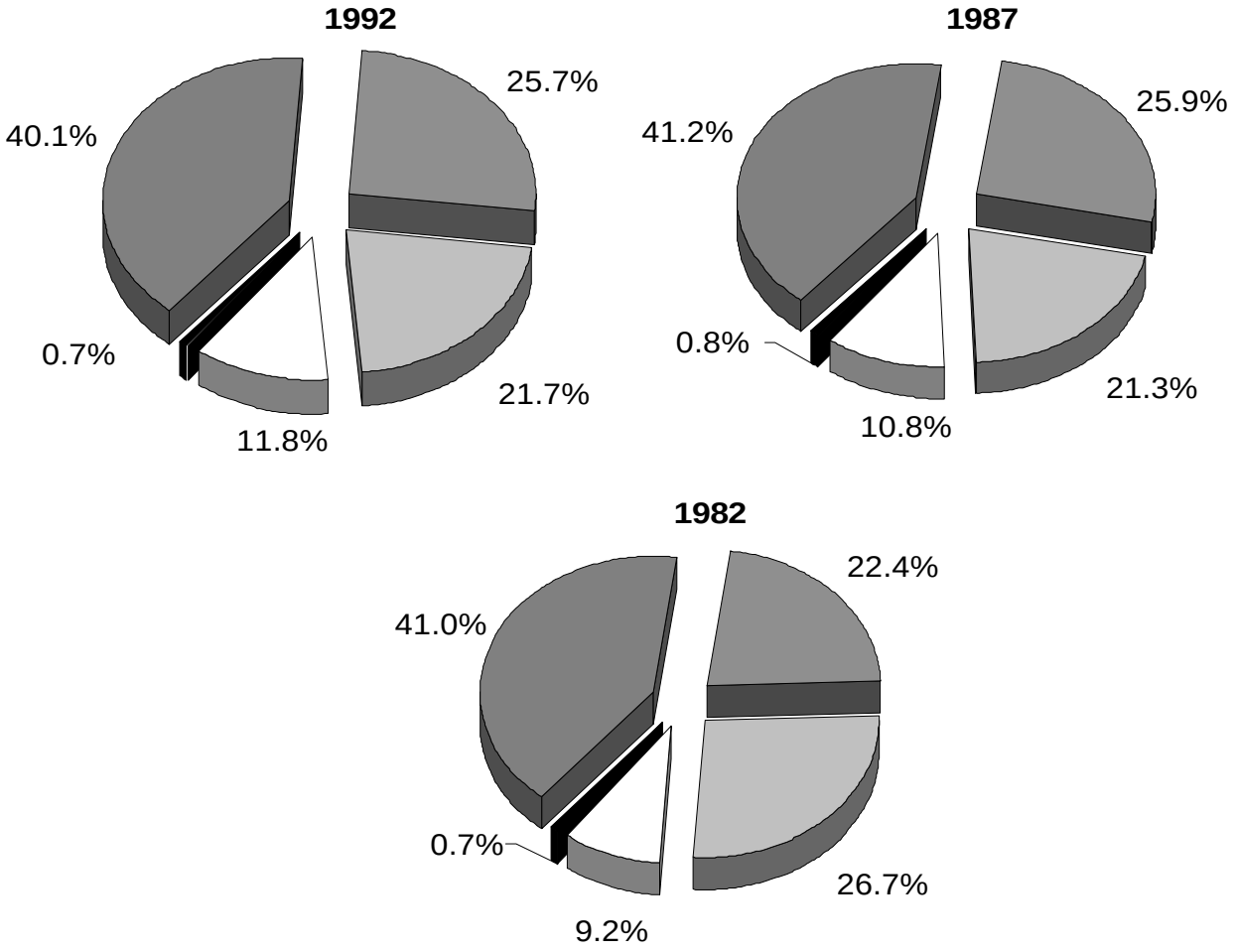
Category of Revenue	1991-1992	1986-1987	1981-1982
Intergovernmental	14,843	10,783	8,271
Taxes	8,087	5,491	2,846
Charges and miscellaneous	27,502	20,847	12,687
Utilities and liquor	17,626	13,115	6,940
Employee retirement revenue	490	416	217
Total special district revenues	**68,548**	**50,652**	**30,961**

Source: 1992 Census of Governments, Volume 4, Number 2, Table 1

[1] Note that the "Utilities" category, while separate from "Charges and Miscellaneous," also includes user fees, such as water fees that are based on water use. If these fees were included, the total for user fees/charges would be closer to 50 percent.

Exhibit A-21. Revenue Sources for Special Districts

1992, 1987, 1982



Special districts often collect user fees to generate revenue from the operation of water supply or solid waste management systems. For example, 86 percent of the revenues to operate and maintain publicly owned water systems are generated directly from the sale of water to customers. Water systems also generate revenue through other types of water-related user fees such as connection fees, inspection fees, and interest earnings. Exhibit A-22 illustrates the significance of user fees in providing drinking water. Note that approximately two thirds of all water supply districts generate revenue through user fees.[4]

Exhibit A-22 . Revenue Sources for Water Utility Special Districts*

Revenue Source	No. of Special Districts
Total number of water utility special districts	3302
Charges/User fees	
Service charges and sales	2260
Special assessments	644
Taxes	
District-wide property taxes	1475
Other taxes (sales, payroll, etc.) imposed by the district	99
Intergovernmental revenues	
Grants, shared taxes, rentals, and reimbursements from other governments	861

* The number of special districts in each revenue category will not add up to the total since reporting districts may have more than one revenue source.

Source: 1992 Census of Governments, Volume 1, Number 1, Table 19

The 395 solid waste management special districts obtain nearly half of their revenues through special assessments and service charges and sales. The remaining revenues for these special districts come from district-wide property taxes, other taxes (sales, payroll, etc.) imposed by the district, and grants, shared taxes, rentals, and reimbursements from other governments.

[4] As presented in EPA's *Community Water System Survey Volume 1: Overview* (from all sources, total annual revenues for publicly owned water supply are $22.2 billion).

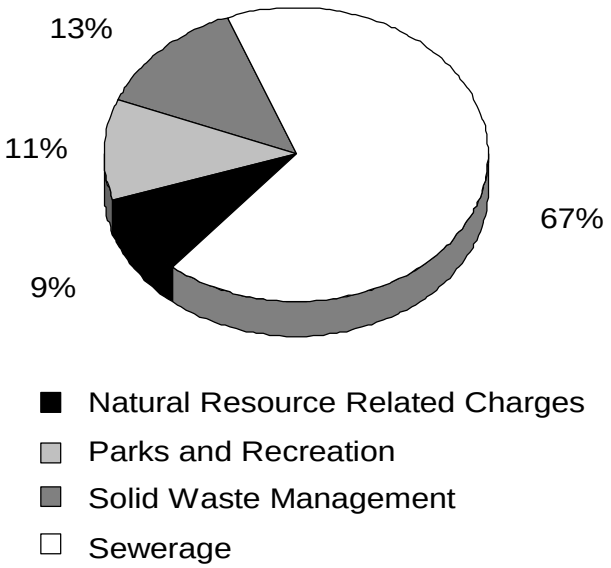
In addition to being a significant revenue source for environmental projects, user fees from environmental projects represent a significant source of revenue for the special district as a whole. In 1992, as shown in Exhibit A-23, environment related user fees (not including utilities) accounted for nearly $4.7 billion, or approximately 17 percent of the $27.5 billion total revenues collected through charges and user fees, and 7 percent of $68.5 billion total revenues collected. Wastewater or sewerage fees accounted for the largest percentage of this revenue (see Exhibit A-24).

Exhibit A-23. Environment-Related User Fee Collected by Special Districts, 1992

Type of User Fee	Revenue (in thousands of dollars)
Natural resource related charges	417,000
Parks and recreation	516,000
Solid waste management	599,000
Sewerage	3,147,000
Total user fees collected	**4,679,000**

Source: 1992 Census of Governments, Volume 1, Number 1, Table 19

Exhibit A-24. Revenues Collected Through Environment-Related User Fees Collected By Special Districts, 1992



A.4 EXPENDITURES

The expenditures incurred by a local government are those dollars it spends to provide services to its population. Such expenditures can includes salaries for local government employees, operation of facilities (e.g., wastewater treatment plants, libraries, schools), maintenance of roads and sewer systems, social service programs, or debt on outstanding loans. Except in the case of categorical grants or block grants that limit a local government's discretion, it is the decision of the local government how and when it expends its budget to the extent it is authorized under state law.

In 1992 alone, local governments expended approximately $685.3 billion. Of those expenditures, approximately seven percent was spent on environment-related operations (see Exhibit A-25). Within the environment-related expenditures, approximately 44 percent was spent on sewerage.

Exhibit A-25. Environment-Related Expenditures of Local Governments: 1992-1993

Category of Expenditure	Amount (thousands of dollars)
Natural Resources	2,653,440
Parks and Recreation	13,321,667
Sewerage	21,594,594
Solid Waste Management	11,412,627
Total environment-related	**48,982,328**
Non-environment-related	636,332,492
Total expenditures	**685,314,820**

Source: United States Total State and Local Government Finances by Level of Governments: 1992-1993.

A.4.1 County Government Expenditures

Counties expended more than $155 billion in 1991-1992. Of this, slightly more than 6 percent, or $9.5 billion, was directed toward environment-related operations (see Exhibits A-26 and A-27). This percentage was only a slight increase from 1981-82, when environment-related operations accounted for just less than 6 percent of all expenditures. The largest increase in expenses was for solid waste management, which increased nearly 400 percent between 1982 and 1992, or sixteen times the rate of inflation (note that the consumer price index increased 25 percent during this time period). Expenditures for natural resources and parks and recreation increased by more than 100 percent, while expenditures for sewerage/wastewater treatment increased by 80 percent.

Per capita data enable comparisons of expenditures across counties of different sizes. Exhibit A-28 presents per capita data for environment-related expenditures, based on population size.

Exhibit A-26. Environment-Related Expenditures of County Governments (in millions of $)

Category of Expenditure	1991-1992	1986-1987	1981-1982
Natural Resources	1,562	1,203	666
Parks and Recreation	2,810	1,770	1,242
Sewerage	2,406	1,951	1,333
Solid Waste Management	2,711	1,356	680
Total Environment-related	**9,489**	**6,280**	**3,921**
Non-environment-related	145,825	96,959	63,186
Total County Expenditures	**155,314**	**103,239**	**67,107**

Source: 1992 Census of Governments, Volume 4, Number 3, Table 1

Exhibit A-27. Environment-Related Expenditures by Counties

1992, 1987, 1982

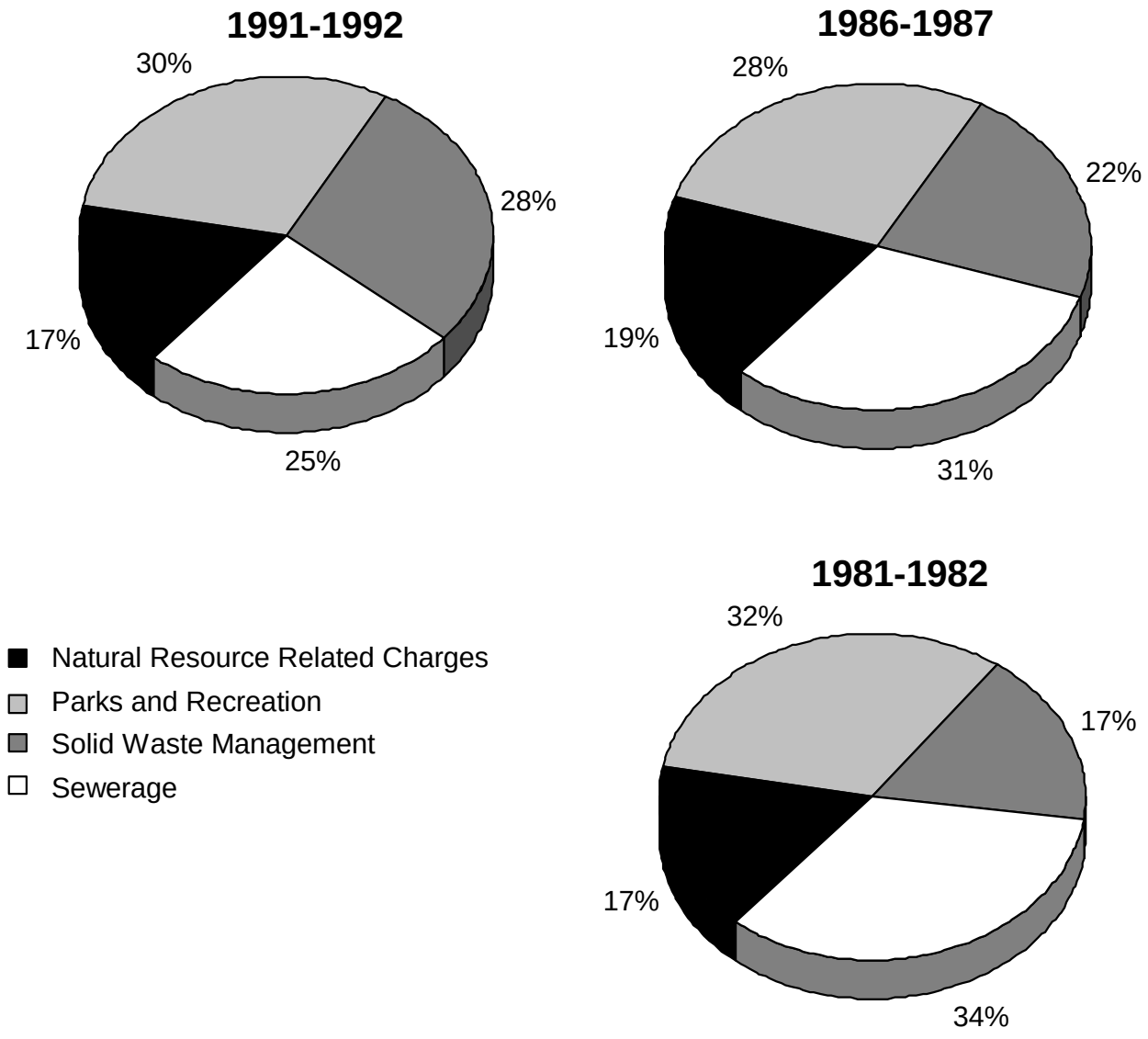


Exhibit A-28. Per Capita Environment-Related Expenditures of Counties (in dollars) for 1991-1992, by Population

Population	Expenditures			
	Natural Resources	Parks and Recreation	Sewerage	Solid Waste Management
Average for all counties	6.95	12.49	10.70	12.05
<10,000	13.32	7.49	3.55	11.38
10,000 - 24,999	6.41	5.17	1.81	9.73
25,000 - 49,999	6.16	4.69	2.57	10.77
50,000 - 99,999	4.43	5.92	4.95	11.36
100,000 -149,999	3.60	7.88	9.81	11.86
150,000 -249,999	3.82	10.31	9.74	9.97
250,000 -499,999	4.20	13.65	12.13	12.27
>500,000	10.08	18.83	16.12	13.44

Source: 1992 Census of Government, Government Finances, Finances of County Governments, Volume 4, Number 3, Table 12

A.4.2 Subcounty Expenditures

In 1992, subcounty governments (which include both municipalities and townships, unless otherwise noted) expended more than $246 billion. Of this, 13 percent was spent on environment-related expenditures. Exhibit A-29 provides historic environment-related expenditures for subcounties. It should be noted that by percent, environment-related expenditures did not change significantly in comparison to total expenditures over the 10-year period examined. As for the percentages of specific environment-related expenditures, they did not change over the 10-year period either. It should also be noted that data for natural resources were not available for subcounties. It was, however, available for municipalities only, and is presented on the following page.

Exhibit A-29. Environment-Related Expenditures of Subcounty Governments 1992, 1987, and 1982 (in millions of dollars)

Category of Expenditure	1991-1992	1986-1987	1981-1982
Parks and Recreation	9,032	6,343	4,342
Sewerage	15,439	9,803	6,906
Solid Waste Management	7,808	4,970	3,424
Environment-related	**32,279**	**21,116**	**14,672**
Non-environment-related	214,396	157,643	108,298
Total Subcounty Expenditures	**246,675**	**178,759**	**122,970**

Source: 1992 Census of Governments. Government Organization, Volume 1, Number 4, Tables 1 and 14

A.4.3 Municipal Government Expenditures

In 1992, municipalities expended $224.3 billion. Environment-related expenditures, which are broken out below, accounted for 12 percent ($27.6 billion) of those expenditures. Specifically:

- Sewerage expenditures totaled $12.4 billion, which is 45 percent of the environment-related expenditures, and 5.5 percent of total municipality expenditures

- Expenditures for parks and recreation totaled $8.4 billion, or 30 percent of environment-related expenditures, and 3.7 percent of total municipality expenditures

- Solid waste management expenditures accounted for $6.6 billion or 24 percent of environment-related expenditures, and 2.9 percent of total municipality expenditures

- Natural resources expenditures totaled $196 million, or just 0.1 percent of all environment-related expenditures and .01 percent of total municipality expenditures for 1992.

Water supply expenditures, which are not included in the above numbers, totaled $15 billion. This amount represents 7 percent of the total municipality expenditures for the year.

Exhibit A-30 presents per capita data for environment-related expenditures, based on population size. It is generally noted that as population increased, so did the cost of environment-related

services per person. For a comparison of expenditures of some geographically and demographically diverse municipalities, Exhibit A-31 presents the total environment-related expenditures, as well as per capita data, for five municipalities in various locations around the United States.

Exhibit A-30. Per Capita Environment-Related Expenditures of Municipalities (in dollars) for 1991-1992, by Population

Population	Expenditures			
	Natural Resources	Parks and Recreation	Sewerage	Solid Waste Management
Average for all municipalities	1.28	54.67	80.69	42.89
<10,000	0.64	29.35	68.28	32.94
10,000 - 24,999	0.53	42.28	73.46	38.96
25,000 - 49,999	1.17	51.36	74.66	36.99
50,000 - 99,999	1.54	57.71	63.16	34.26
100,000 -199,999	1.35	60.93	69.10	41.42
200,000 -299,999	1.83	82.67	78.99	51.95
>300,000	1.94	70.99	108.46	57.76

Source: 1992 Census of Government, Government Finances, Finances of Municipal and Township Governments, Volume 4, Number 4, Table 13

Exhibit A-31. Environment-Related Expenditures of Selected Municipalities, 1991-1992

Municipality	Population (1990)	Parks and Recreation			
		Expenditures (in thousand $)	Per Capita	Expenditures (in thousands $)	
City of El Paso, TX	515,342	21,427	41.57	55,890	108.45
Santa Barbara, CA	85,571	8,019	93.71	6,242	72.95
Seattle, WA	516,259	112,370	217.66	162,440	314.65
Homestead, FL	26,866	8,241	306.74	2,180	81.14
New York City, NY	7,322,564	360,889	49.28	1,608,624	219.68

Sources: United States City Governments Having 500,000 Population or more: 1993-1994; and 1992 Census of Governments, Government Finances, Finances of Municipal and Township Governments, Volume 4, Number 4, Table 18.

A.4.4 Special District Expenditures

Exhibit A-32 presents special district environment-related expenditures. Since 1982, environment-related expenditures have accounted for approximately 20 percent of the total expenditures for special districts, compared to 13 percent for subcounties and 7 percent for counties. Exhibit A-33 provides additional detail on the environment-related expenditures for 1992, while Exhibit A-34 provides data on the purpose of the special district expenditures.

It should be noted that environment-related expenditures are considered differently for special districts than they are for counties and subcounties. Since most special districts are single function, their budget goes to providing for that one function only (e.g., sewerage). As such, the comparison of environment-related expenditures to total expenditures basically provides a comparison of environment-related special districts to total special districts.

Exhibit A-32. Expenditures of Special Districts 1992, 1987, and 1982 (in millions of $)

Category of Expenditure	*Number of Single-function Special Districts*	1991-1992	1986-1987	1981-1982
Natural Resources	*6,288*	1,169	1,291	707
Parks and Recreation	*1,156*	1,624	1,138	670
Sewerage	*1,710*	5,375	3,695	2,634
Solid Waste Management	*395*	724	221	63
Water Supply	*3,302*	6,852	4,821	2,523
Environment-related	***12,851***	**15,744**	**11,166**	**6,597**
Non-environment-related	*16,185*	55,187	41,273	28,224
Total Special District Expenditures	***29,036***	**70,931**	**52,439**	**34,821**

Source: 1992 Census of Governments, Volume 4, Number 2, Table 1

Exhibit A-33. Environment-Related Expenditures of Special District

1992, 1987, 1982

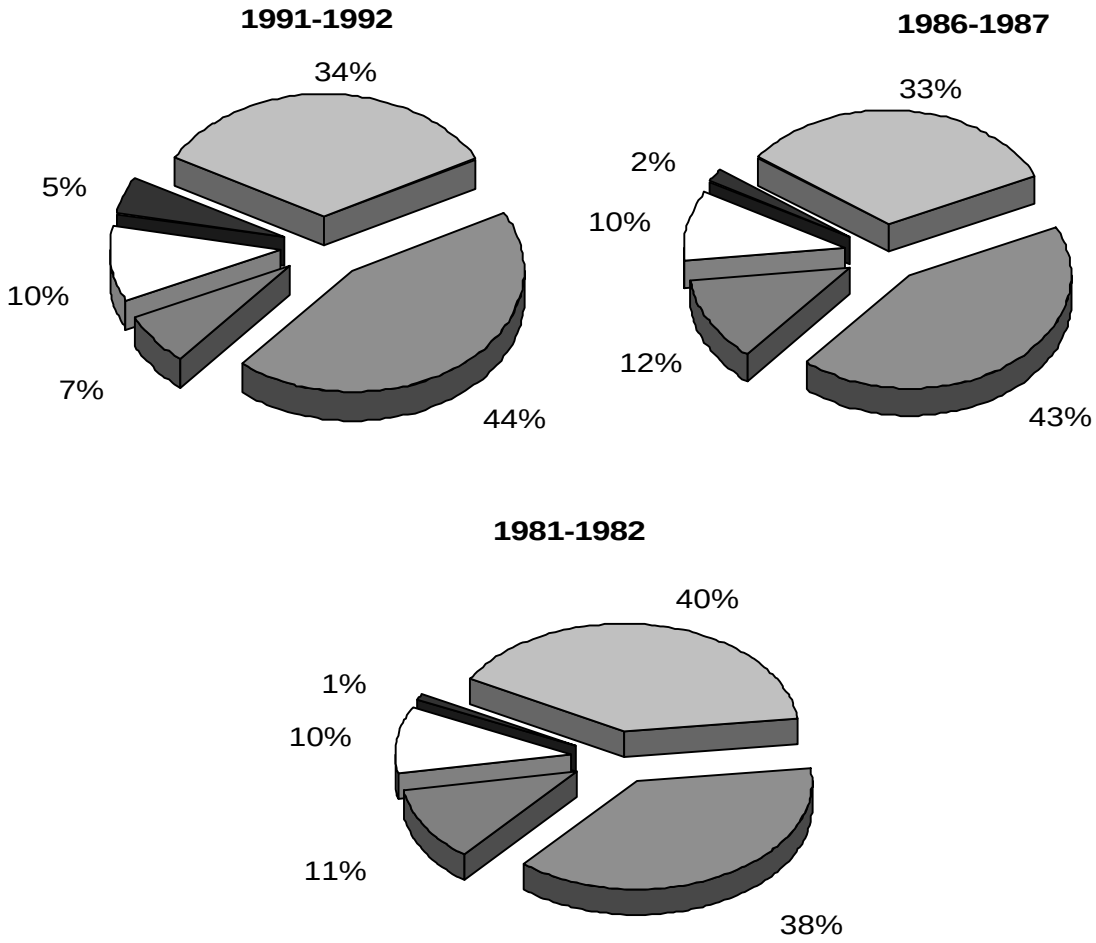


Exhibit A-34. Purpose of Special District Expenditures, 1992

Expenditure	Percent of Expenditures			
	Operation	Construction	Other Capital Outlays	Interest on Debt
Natural Resources	80%	16%	4%	-
Parks and Recreation	77%	18%	5%	-
Sewerage	53%	45%	2%	-
Solid Waste Management	77%	17%	6%	-
Water Supply	50%	34%	2%	14%

Source: 1992 Census of Governments, Volume 4, Number 2, Table 6

B.5 CASH AND DEBT TRANSACTIONS

To meet the daily financial demands of operation and, when necessary, replace or expand infrastructure, it is necessary for local governments to have immediate access to cash or securities that can easily be converted to cash. Cash is defined as funds that can be used for immediate cash disbursements, such as a checking account or actual currency. It is held by local governments for a variety of reasons, including:

- Daily transactions, such as paying suppliers or creditors
- Maintaining credit ratings
- Meeting unexpected cash needs.

Securities are defined as governmental or private stocks, bonds, notes, or mortgages that can be sold on short notice without loss of principal or original investment. Investing in securities is generally thought of "as temporarily putting cash balances to work," since the securities provide a higher rate of return than do checking or savings accounts. Local governments may hold securities to:

- Pay for employee benefit programs, such as unemployment compensation, employee retirement, and worker's compensation

- Finance seasonal or cyclical operations
- Meet known financial requirements.

Debt represents the amount of money a local government owes another entity, such as a bank, individual, corporation, or other government unit. It is defined by the Census Bureau as all long-term credit obligations and all interest-bearing short-term credit obligations. Short-term debt is defined as any liability originally scheduled for repayment within one year; it is generally incurred in the course of normal operations. Types of short-term debt include:

- Accruals, which are defined as recurring costs of operations, such as wages and taxes
- Accounts payable (i.e., money owed for materials, resources, etc.)
- Bank loans, such as a line of credit or loan.

Long-term debt, defined as any liability with a repayment period greater than one year, can generally be divided into two distinct groups--guaranteed and non-guaranteed. Guaranteed debt has the "full faith and credit" of the local government, which means it is virtually risk free to the entity who holds the debt paper. Types of guaranteed debt include mortgages, notes, and general obligation bonds. Non-guaranteed debt does not have the "full faith and credit" of the local government unit and is usually issued in the form of revenue bonds that have been offered for capital improvements or construction. These types of bonds are paid back based on the ultimate financial success of the specific project for which the bonds were issued.

Data on both local government cash and security holdings and debt are presented in Exhibits A-35 and A-36.

Exhibit A-35 Cash and Security Holdings of Local Governments

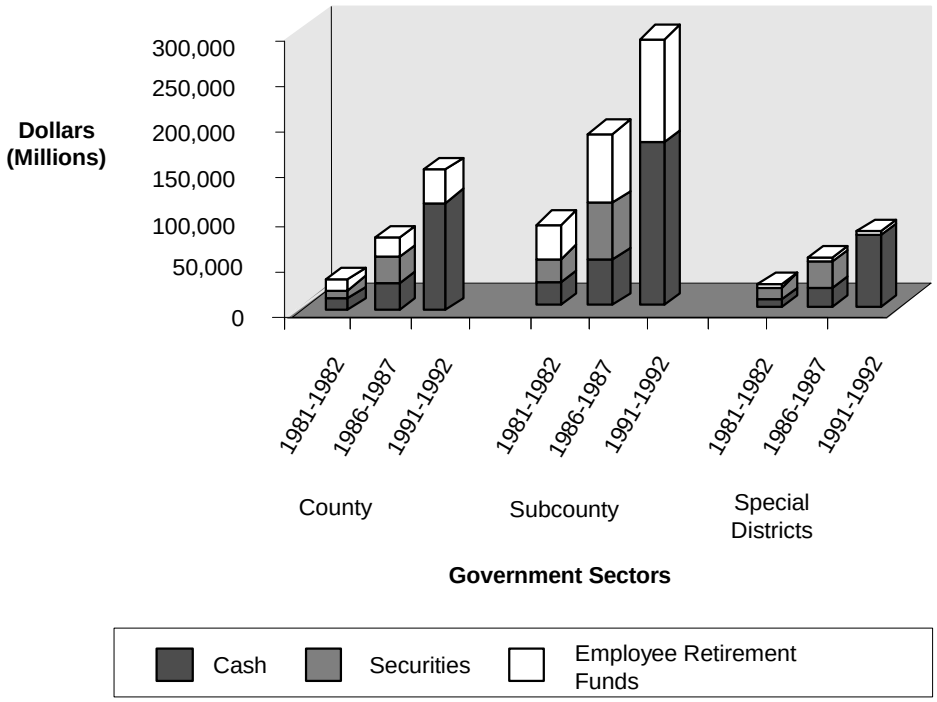


Exhibit A-36. Debt of Local Governments