CITY OF
PORTLAND, OREGON
OFFICE OF FINANCE AND ADMINISTRATION

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MEMORANDUM

December 8, 1992

TO: Mayor J.E. Bud Clark
Commissioner Earl Blumenauer
Commissioner Dick Bogle
Commissioner Gretchen Kafoury
Commissioner Mike Lindberg
City Auditor Barbara Clark

FROM: Tim Grewe
Director, Bureau of Financial Planning

RE: The Cost of Service Guidelines

Attached pleased find the Cost of Service Guidelines for the City of Portland. The purpose of these guidelines is to enable bureaus to comply with the City's Comprehensive Financial Management Policy (CFMP). The policy, in part, requires that every two years, bureaus complete a Cost of ServiceStudy to take a closer look at the full costs of service delivery and to recover 100% of "private" benefit service costs to ensure flexibility in the use of general tax dollars for "public" benefit service priorities. The guidelines provide a standardized cost model as well as fee setting policy considerations to assist bureaus in developing cost recovery proposals.

These guidelines have been under development by the Bureau of Financial Planning for the past three years and reflect the review and input of many bureaus during its development. Should you have any questions or comments, please contact me or Chrystella Byers at 823-6956.

cc: Bureau Managers
Executive Assistants
Steve Bauer
Bureau Budget Contacts
Budget Analysts

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INTRODUCTION

The City of Portland has long been nationally recognized for its excellence in financial management. Contributing to the financial health of City resources has been Council's strong commitment to long-range planning and the maintenance of financial stability. This commitment is exemplified through established policies aimed at providing guidance for the preparation, review and monitoring of the City's budget and overall financial condition.

In November of 1990 the passage of Measure 5, the property tax limitation, created many uncertainties which could significantly change the financial outlook of the City and its ability to address critical service needs. Specifically, approval of this Measure signaled a fundamental change in the property taxation system within the State of Oregon. For the City of Portland, property taxes make up the single largest source of discretionary revenue to the General Fund. This resource supports service priorities which provide a broad public benefit to the citizens of Portland.

To address forecasted financial pressures resulting from the passage of Measure 5, Council revisited financial policies to ensure that the City is able to meet its immediate and long-term service objectives. In June of 1992, Council adopted Resolution No. 35005, the City's Comprehensive Financial Management Policy (CFMP), a consolidation of many individual policies which had been developed over the years to enhance financial planning and internal financial management of the City.

The thrust of the CFMP is to ensure that available resources are fairly allocated and to make the City of Portland accountable to its citizens for the use of public dollars. The CFMP states in part that:

> ***"Municipal resources should be used wisely to ensure adequate funding for the services, public facilities and infrastructure necessary to meet the community's present and future needs".***

One of the policy's guidelines directs bureaus to take a closer look at the full costs of service delivery and to recover 100% of costs incurred when "private" benefit services are provided. This would ensure flexibility in the use of general tax dollars for "public" service priorities.

Because revenues are automatically re-dedicated to their respective services, both Enterprise and Operating Funds have an incentive to recover costs. For General Fund bureaus, however, the general practice has been to return revenues in excess of those budgeted (i.e., surplus revenues) back to the General Fund.

To create an incentive for General Fund bureaus to recover costs, Council adopted Revenue Policy #35006 in June of 1992. The policy allows for a portion of unbudgeted surplus revenues to be returned to bureaus to be reinvested in those programs that generated the surpluses. This incentive gives bureaus a means of supporting services which might otherwise be significantly reduced or eliminated.

The Revenue Policy requires all bureaus that charge fees for services complete fee studies based upon cost-of-service principles. Such studies are to be presented for review by the Office of Finance and Administration and subsequently for action by Council. These studies are to be updated at a minimum of every two years.

Purpose

The purpose of these guidelines is to assist bureaus in complying with the Revenue Policy. A standardized cost model as well as fee setting policy considerations are provided to help bureaus perform cost of service analysis and develop cost recovery proposals. The guidelines are not intended to be rigid and inflexible. Rather, they serve to ensure that bureaus: 1) use consistent and defensible methodologies to develop user fee rates and 2) are able to explain cost recovery policies and fee recommendations to Council. Most importantly, this process makes our City more accountable to the citizens of Portland not only for how property tax dollars are spent, but in answering why and how the City sets and charges fees.

A Cost of Service Study can also be used as a powerful management tool to evaluate program management and operations. Service efficiencies can be identified and costs saving steps can be implemented once cost information is gathered, analyzed and applied.

Overview

A successful cost of service study will require some level of cost accounting expertise. The Cost of Service Guidelines are laid out over the next four chapters. The process is illustrated by Table 1. Chapter One discusses how to identify services to determine if they provide a public benefit, a private benefit or a combination of both. In Chapter Two, the methodology determining the actual costs of services is addressed. Chapter Three addresses the impact of City and bureau policies on cost recovery decisions. And the final Chapter discusses the fee setting process which encompasses both technical and political considerations. An example of a Cost of Service Study is provided in Appendix 4. No chapter can be used in isolation. A cost of service study involves interrelated steps throughout a complex process. The guidelines that follow are basic and simple to provide bureaus with a standardized conceptual framework which can be tailored to meet each bureau's uniqueness.

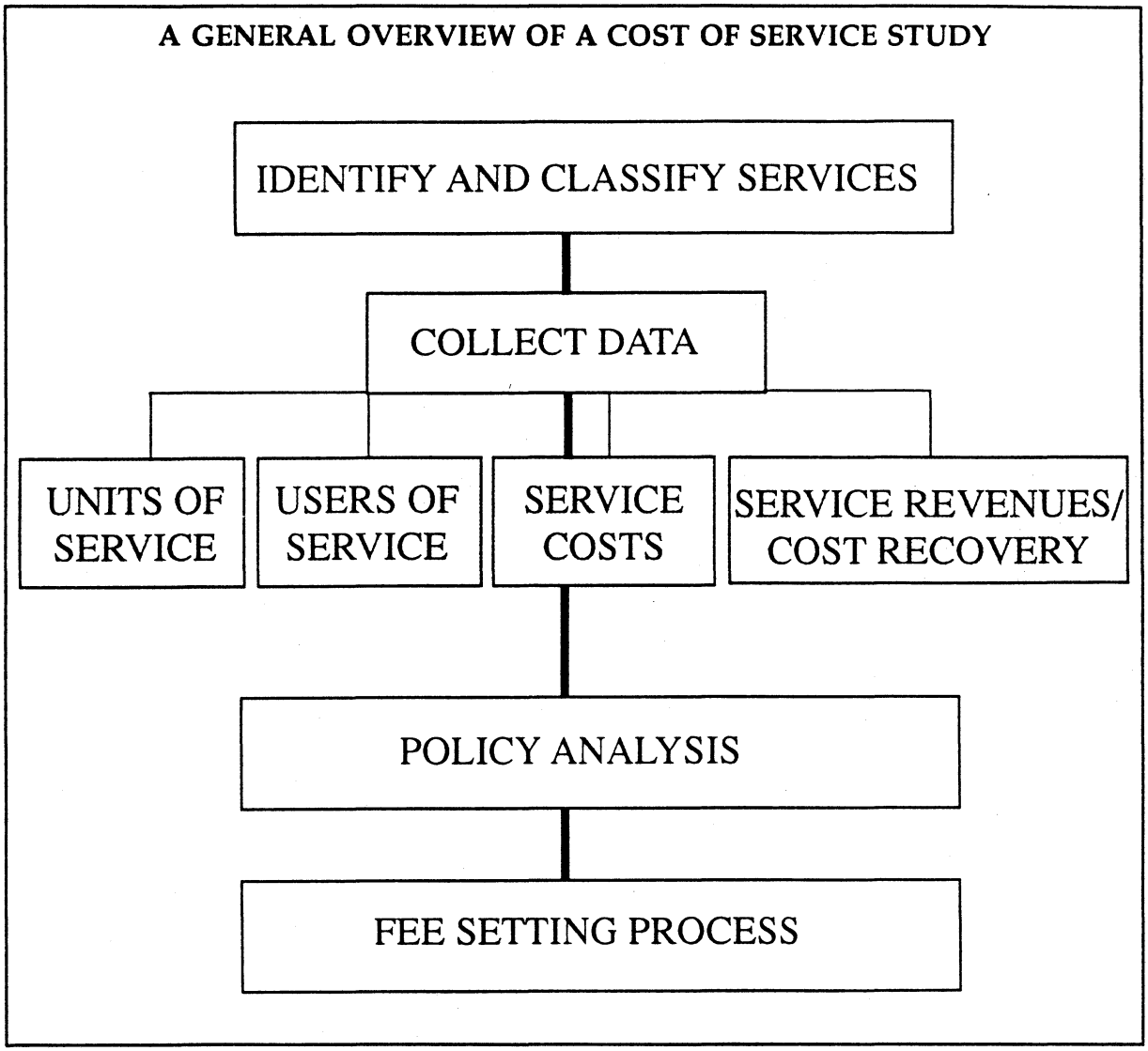

Table 1

Scope

These guidelines are for <u>all</u> bureaus that derive revenues in the following categories:

- Service Charges and Fees
- Permits
- Sales

- Contracts and interagency agreements. Note: interagency agreements are subject to 100% cost-recovery. Bureaus should therefore follow the cost of service methodology in this document. Rates set for these services however, are governed by the Interagency Policy (Resolution No. 34580).

Revenues which are exempt from these guidelines are:

- The major non-bureau specific General Fund revenue categories. These revenues will continue to be categorized as discretionary and be allocated to bureaus as part of the annual budget process:

  - Property Taxes
  - Utility License Fees
  - Franchise Fees
  - Business License Fees
  - Lodging Tax
  - Interest Earnings
  - Local Government Sources
  - State Sources

- Water, sewer, and drainage service fees. These rates are separately governed by generally accepted rate making formulas and principles.

- Services funded by donations.

- Dedicated revenue such as grants, State Gas Tax

- Fees exempted by Council; fees set elsewhere by Council; fees set by other agencies outside the City.

CHAPTER 1
IDENTIFY AND CATEGORIZE SERVICES

IDENTIFY SERVICES

Make a list of all the services provided by your bureau. A service is a unit of work that benefits another department within the bureau, other bureaus, other government agencies or some or all of the citizens of Portland. The intent of this exercise is to identify major service categories. This means grouping similar services under one major service heading. For example, the Bureau of Parks and Recreations provides permit services. Rather then list each type of permit (i.e., picnic, gym, athletic field, alcohol, wedding etc.), the service category would be simply "PERMITS". Bureaus should be able to document the types of permits which fall under each category.

Bureaus need to document a defensible process to identify services. A good place to start identifying services is the budget. The budget identifies each bureau's programs. Within each program, there are services. For example, the Office of Finance and Administration is composed of seven programs: Administrative Services, Financial Planning, Urban Services, Affirmative Action, Personnel, Debt Management and Strategic Planning. Within the Financial Planning Program, there are several major services which include the Quarterly Report, the Supplemental Budget, Economic Forecasting, the Preparation of the Budget Document, etc.

CATEGORIZE SERVICES

Once a list of services is prepared, determine who benefits from the service. This entails categorizing them into three areas: services which provide a **public benefit, a mixed benefit or a private benefit.** The categorization process is extremely important. How a service is labeled will impact decisions on whether it should be supported by general taxes, user fees or both. This process may not be an easy task as services may not fit neatly into these categories. Bureaus need to document the categorization of services process. This will insure that there is continuity and consistency in the categorization process.

Following are generally-accepted definitions of each of the three service categories provided to assist provide bureaus with a conceptual framework to categorize services:

Public Benefit services provide general benefits to the public at-large. Specifically:

- Such services support the majority of persons and property in the city of Portland equally
- Are not designed for a subset of the population.

Services such as access to parks, police and fire protection are common examples of public benefit services.

Private Benefit services are those services whose benefit accrues solely to those who use them. Typically, these are services:

- Desired by the certain citizens. Without these requests, the City would not provide these services.
- That benefit an individual, group or organization.
- That do not benefit the community at large.
- Where it is feasible to exclude those who **do not pay** for the receipt of the service.

The City's Golf program is a good example of a private benefit service. Another example would be where citizens requests that the City make improvements to their property's infrastructure. All services related to these activities exclusively benefit users of the service.

Mixed Benefit services are generally used by specific individuals but the benefits from the service extend to the community at large. These services:

- Have "spillover benefits" or elements of both public and private benefit. In most cases, spillover benefits are not clear cut. Here a primary beneficiary can be identified, however, some of the benefit frequently spills over to other citizens or to the community at large. For example, community centers offer youth-at-risk a place to engage in recreational activities. The spillover benefits is that these activities help them mature into responsible citizens.

- Are designed to **encourage acceptable behavior**. For example, after giving property owners ample notice, the City imposes nuisance abatement fees in cases where "eye sores" on public/private property are not removed. If the City did not regulate this activity, neighborhoods and the City at large would suffer.

- Are designed to **discourage socially unacceptable activities**. If the City did not provide these services, it would negatively impact the Citizens of Portland. It is likely that most of these services are either mandated by State Law or City Charter, however, some may not be. An example would be the City providing Building Inspection services. Not only does the City Charter require this service but without it, there would be inferior housing which could ultimately cause injury to the community at large.

CHAPTER 2
COLLECT DATA

The next step is to determine how much of the service is provided, to whom and what are the costs and revenues associated with each categorized service. Four pieces of data are required:

(1) Units of service delivered
(2) Users of services
(3) Service costs
(4) Service revenues/Cost recovery

This process involves the analysis of multiple years of data. One year of data does not provide reliable information. Ideally, bureaus need to collect at least five years of historical data in order to identify trends and to make informed projections. Further, data should be simple to collect as well as reliable, reproducible and verifiable.

Sources of data can either be **internal** or **external**. Internal data is information kept by the bureau on various aspects of its operations. These sources may include: Integrated Business Management Information System (IBIS) reports, budget documents, prior year Financial Management Systems (FMS) reports, Consolidated Annual Financial Reports (CAFRs), time sheets, other bureau activity records, registration logs, copies of service transactions, questionnaires, internal management studies or reports, staff interviews.

External data is not associated with the bureaus operations. This data may come from other bureaus, other government or private agencies or consulting firms. Economic and census data are common examples of external data. The Federal Government is the largest publisher of annual, monthly, weekly and daily statistics. For example, the Department of Commerce's annual publication of the **Statistical Abstract of the United States** which contains over 1,000 pages of population, price, education, production and other data.

In the event that the data needed is not available, estimates will have to be made. A review of what is available, reliable and accessible will need to be done to determine appropriate sources of information for estimates.

The core any cost of service study lies in the quality of cost and revenue data. Without it, all of the other data is useless. To this end, a discussion about IBIS is warranted as it is an example of how costs and revenues can be tracked by bureaus.

Overview of IBIS

In FY 1990-91, the City implemented a new financial accounting system, the Integrated Business Management Information System (IBIS). One of the system's many benefits, is that it can provide bureaus with an enhanced ability to collect cost and revenue data. The system is flexible so there are several alternative ways to use IBIS to obtain cost data.

Center Codes, account codes and their relationships, (hereafter referred to as CARs for Center/Account/Relationships) are the building blocks of the IBIS coding structure. Center codes often identify bureaus and their services or activities. Account codes usually identify expenditures and revenues. Since the center code is partially bureau defined, the code is not used in a completely consistent manner throughout the City. Together, the center/account codes allow the City to record, report and track all expenditures and revenues.

Center Code -- The center code is an eight digit number composed of three sections. The first three digits identify the appropriation unit. An appropriation unit is the level at which City government legally appropriates funds. Often the appropriation unit also identifies a bureau. The fourth and fifth digits identify the organization unit. Some bureaus use it to identify a location or other work unit. The last three digits often identify an activity or service, performed by the organizational unit. An example of the center code follows:

Appropriation Unit	Organization Unit	Activity
Office of Finance and Administration	Bureau of Financial Planning	Economic Forecast
307	31	332

Account Code -- The account code consists of six digits. The first digit identifies the type of account: asset, liability, equity, revenue, expenditure, appropriation, encumbrance, commitment, or estimated revenue. For purposes of cost of service, the focus is on the expenditure and revenue accounts. The second and third digits identify categories within the expenditure and revenue accounts. Examples of revenue are service charges, fees and permits. Examples of expenditure accounts are the line items within the personal services, materials and services, and capital outlay categories. These last three digits identify more detailed information about both revenues and expenditures.

Center/Account/ Relationships (CARs) -- A relationship must be established between each center and account to record, track and report expenditures and revenues, associated with services and activities. Planning is necessary to obtain the most useful management information.

IBIS also has additional reporting capabilities through the use of the **Intermediate Level** (IML). IML allows bureaus to group and sort data in a variety of ways. For example, the intermediate level can tie CARs to a responsibility unit, a budget program, and indicate whether an expenditure is for a direct or indirect activity or service, or identify a capital improvement project.

In order to implement a cost of service analysis, it is recommended that bureaus conduct a review of their current CARs in IBIS to determine if the appropriate cost of service data is available. A task force, related to the IBIS Overlook Committee (IOC) Committee and IBIS project, has recently developed a list of recommendations that can guide bureaus in this process. One of the goals of the task force has been to assist bureaus in understanding how to best use the center codes, account codes, CARs, and intermediate level codes to meet information needs. Another goal has been to determine to effectively and efficiently use the IBIS system. Beginning in late October, 1992 the IOC will review the recommendations and make plans for implementation of the recommendations.

Currently, IBIS has a limitation. Because the system was implemented in FY 1990-91, only two full years of data are currently available. It should be emphasized that the system has extensive data storage capabilities, which in turn is useful for cost of service study purposes. Further, Bureaus may find that, in its present state, the system does not provide appropriate cost of service data. In this case, bureaus are strongly encouraged to improve their reporting capabilities in order to access cost of service data. However, it should be cautioned that the reorganization of the IBIS accounting structure may not be enough to give adequate results. A successful cost of service study will require some level of cost accounting expertise.

UNITS OF SERVICE DELIVERED

Quantifying service units is necessary for measuring the delivery of services. Simply put, one must count the number of instances of service delivery. But what is a unit of service? A unit of service is essentially a unit of work. Quantifying service units always answers the question: "How many?" For example, in measuring police service ask:

- how many assaults were investigated? and
- how many investigated assaults led to arrests?

For reasons of clarity, a distinction should always be drawn between a unit of service and its volume measurement. A unit of service is always a single instance of its delivery, while its volume is always the number of instances. Both concepts are important, but they are conceptually different and should be treated as such.

Kelly (1984) suggests that creativity is helpful when choosing a unit of service since a unit of service must provide information that addresses management concerns and many of the obvious units of service may only appear to do so. For example, having information about the number of burglaries investigated may give information about effectiveness. Since both efficiency and effectiveness are desired, it may be advisable to measure both for each of unit of service.

Clearly, there are more possible units of service than there is time to measure. Bureaus need to develop a selection process. Typically, units of service have one or more of the following five characteristics:

- Available data
- Result-oriented
- Simple, clear, and understandable
- Amenable to accurate measurement; and
- Acceptable to those who deliver the service

Of these five characteristics, the one most frequently ignored or overlooked is the fifth - acceptance by those who deliver the service. If the persons do not agree, the likelihood of accurate data collection is reduced greatly. Beyond the availability of reliable data, a good unit of service should focus on an element of service over which there is some control.

USERS OF SERVICE

Knowing the consumer of each service is useful in making policy and management decisions. Users provide a wealth of information to evaluate services and service needs. A more in-depth discussion will be addressed in Chapter Three.

SERVICE COSTS

Determine the full costs of each service provided. To determine costs, bureaus should gather as much information as feasible. At a minimum, this should include:

- Current year, and prior year costs and their relation to service levels

- Historical trends such as increasing demand for services
- Seasonal variations in costs and service levels
- Elasticity of demand for services

Each service should have one or a combination of four types of costs as illustrated by the Cost of Service Model in Table 2. As the Model illustrates costs can be either **direct or indirect**. Most services have elements of both types of costs. Refer to Appendix 1 for a full listing of costs.

Direct costs can be tied specifically to a particular service. Typically, Personal Services (excluding holiday, sick and vacation leave), Materials and Services and Equipment and Facilities are direct costs. In otherwords, a bureau can identify the labor hours, materials and capital associated with the provision of a service. For example, a Lifeguard's salary would be a direct cost in the provision of a recreational pool program.

Typically, Indirect costs are thought of as costs incurred for a common or joint purpose benefitting more than one service. These costs are generally defined as expenses not directly required to provide a particular service or product. Indirect and overhead are terms used synonymously to refer to administrative costs such as accounting, general management and clerical support necessary for the product or service to be produced. *However*, indirect costs also include Holiday, Sick and Vacation Leave Taken costs.

Indirect costs are easiest derived by developing a Cost Allocation System to them across direct services. This is done by developing what is called indirect "rates". Once these rates are derived, it is possible to compute the total cost of a service. Thus, total costs for a particular activity can be calculated with the following equation:

TOTAL COSTS =Direct costs + (AR * Total Indirect Costs),

where AR is a Cost Allocation Ratio

It is important to note that no single rule specifies what is a direct or indirect cost. Depending on the operating environment, a cost might be considered either direct or indirect. Organizations should be careful to develop a working definition of direct and indirect costs in order to insure consistent treatment within the Cost of Service Study. Following is an in-depth discussion of direct and indirect costs.

DIRECT COSTS

Personal Services

These costs reflect the salaries and wages for positions working to deliver a particular service. Also included are health benefits, retirement (PERS/FICA) overtime and premium pay. Generally, the majority of all costs lie here.

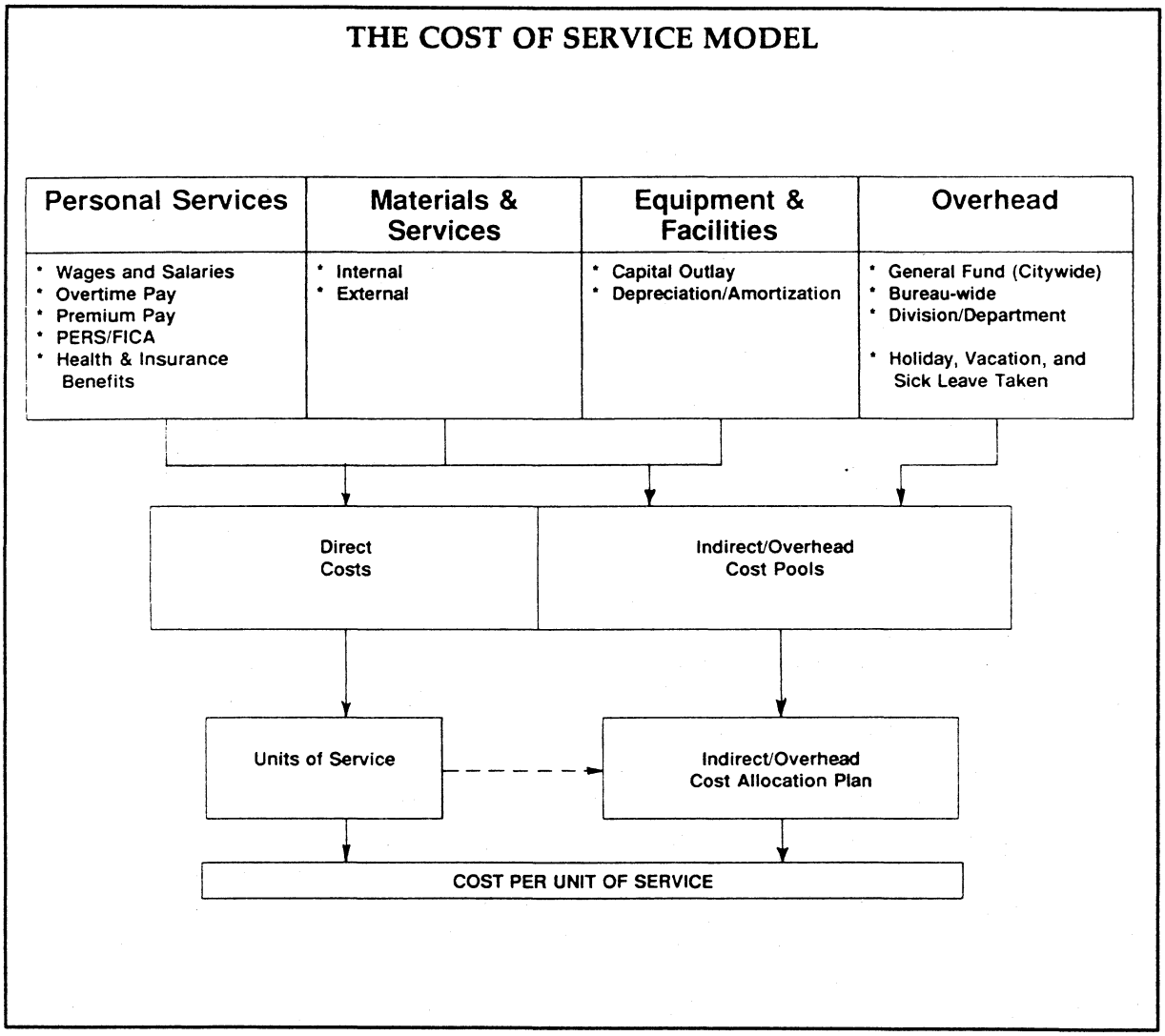

Table 2

Materials and Services

These costs reflect all of the materials and services including interagency costs and professional contracts required to deliver a service. All of the line items within the External and Internal Materials and Services Object Codes reflect these costs.

Facilities and Equipment

Depreciation/Replacement Costs

The cost of facilities and equipment (called "Fixed Assets") purchased to perform a particular activity, needs to be recognized as part of total costs. The total amount spent to purchase a fixed asset represents an expenditure of current budget resources; however, it does not represent a current expense for cost of service purposes. That's because fixed assets are typically paid for in one year but they are expected to provide service over many years. Therefore, to match cost to use, it must be spread over the years of estimated service. The method by which this is done is called depreciation. **The amount that is depreciated should be set aside in order to replace fixed assets in future years.**

There are many depreciation methods (straight line, sum-of-the-years digits, declining balance, etc.) and a detailed discussion of these methods are beyond the scope of this guide. The City uses the straight line method of depreciation and a discussion of this method can be found in Appendix 2.

Debt Service Costs

In the case where fixed assets have been financed with debt to provide services, bureaus need to include interest and principal payment costs associated with the debt service for the term of the loan *in addition to depreciation.*

When constructing rate structures, *however,* (Chapter 4) bureaus are to include only the depreciation and interest (not principal) *attributable to the portion of a fixed asset supported by user fees.* In this manner, the bureau recovers costs related to providing the service and some portion of replacement costs. For example, if it is estimated that 30% of a facility should be or is supported by user fees, 30% of the depreciation and interest costs (on the debt) should be included in the rates. In this manner, the portion of fixed assets purchased/lease purchased, improved or constructed for the public's benefit are excluded from the model as they are paid by taxpayers via property tax assessments or other general revenue sources. To include these costs would be to double count fixed asset expenses.

Types of Fixed Assets

The types of fixed assets are described below. They have also been classified between those assets which are generally included from cost of service analysis, and those which should be excluded.

Fixed Asset Costs Generally Included in Cost of Service Analysis

- Furniture, Equipment, & Software - Amounts paid to buy furniture, equipment, and computer software that exceed of $500, have an expected life of one year or more, and increase the City's investment in General Fixed Assets. This also includes vehicles and other rolling stock.

- Equipment Lease/Purchase - Furniture, equipment and software, as defined above, purchased through the City's Master Lease Program.

- Infrastructure - Amounts paid to construct and preserve roads, sidewalks, etc.

- Buildings - Amounts paid to buy or construct buildings owned by the City and managed by a bureau.

- Improvements - Amounts paid for additions or modifications to land or infrastructure, other than to a building, which requires expenditures exceeding $10,000, have an expected life of 10 years or more, and increase the City's investment in General Fixed Assets.

- Facilities Lease/Purchase - Buildings and/or improvements as defined under the above, bought under the City's Master Lease Program.

Fixed Asset Costs Generally **Excluded** from Cost of Service Analysis

- Land - Amounts paid to buy land. This is because land does not depreciate. However, any improvements made to the land that can be depreciated should be included in the model. Further if land is purchased through the issuance of debt, principal and interest costs are to be included in the total cost of service model.

- Donated Assets - Fair market value of donated assets or assets acquired with grant monies where title reverts to the City.

If unsure how to proceed with costing out fixed assets, please refer questions to the Office of Finance and Administration's Accounting Services Division.

INDIRECT COSTS

Overhead

These are costs relating to general administrative functions which support direct services There are many examples of indirect/overhead. Some of them include accounting and the general management and clerical support necessary for the product or service to be produced.

In the City of Portland, there are at least three possible levels of overhead: City-wide Overhead, Bureau Overhead, and Division Overhead. Some bureaus may have more levels within their respective organizations.

Aside from City-Wide/General Fund Overhead which is allocated to each bureau by the Office of Finance and Administration, Grants and Compliance Division, all other overhead costs will have to be allocated according to the methodology articulated in each bureau's Cost Allocation Plan. Following is a detailed discussion of each overhead type:

- City-wide Overhead

  These costs are more commonly referred to as General Fund Overhead. Costs relate to all of the administrative costs incurred by Central Service bureaus budgeted in the General Fund and allocated as General Fund Overhead. These Central Services bureaus are:

  The Office of Finance and Administration
  Bureau of Financial Planning
  Bureau of Personnel Services
  Bureau of Administrative Services excluding:
  Risk Management Division
  The Office of the City Attorney
  Bureau of Purchases and Stores
  Office of the City Auditor
  Mayor's Office
  Commissioner's Offices
  Bureau of General Services (General Fund)

Currently, General Fund overhead is charged only to enterprise and operating funds. Nevertheless, General Fund Overhead needs to be identified in the **all** costing models of all bureaus to determine the actual cost of the services provided. General Fund bureaus can obtain their share of overhead costs from the Grants and Contract

Compliance Division of the Office of Finance and Administration.

- Bureau-Wide Overhead

  These are the administrative costs related to the bureau as a whole. Each bureau must define and identify the total bureau Overhead. Typically, bureau managers and their respective staff and equipment attribute to bureau overhead.

- Division Overhead

  Division-wide Overhead can be defined as the administrative costs of the division(s) as they apply to the delivery of various user services. Again, the bureau must determine which costs can be attributed at the division level. Typically, division managers and their respective administrative staff and equipment qualify as division overhead costs.

Overhead Cost Allocation

Most direct service activity will have indirect costs at one or more of the three levels discussed above. Cost allocation involves the adding up of all of the bureau's indirect costs, thereby creating a "indirect cost pool". A percentage of the pool is then allocated to each service based on some rationale. The allocation methodology used by bureaus depends on the nature of the service provided as well as the bureau's organizational structure. Therefore, bureaus need to develop their own defensible methodologies to allocate these costs. Bureaus like BGS, Transportation, Planning and Buildings have existing formulas which can be reviewed to get ideas.

The key to the allocation of overhead costs is being able to isolate the indirect costs which impact services. For example, a bureau may allocate indirect cost on the basis of each service's personnel costs. The rationale for a bureau doing this would be if the majority of direct service costs are for personnel. Or, a bureau may allocate indirect costs on the basis of each direct service's total cost. The rationale here would be that the indirect costs increase proportionally with direct costs.

The allocation of overhead is a key factor in the cost of service analysis. The total cost of service is sensitive to the allocation method chosen by the bureau. Ultimately, the total cost of service will be used to determine the unit cost of service which will in turn be used to set rates.

Kyland Howard (1987) discusses two popular techniques of cost allocation: the Consolidated Allocation Method and the Stepdown Method. Of the two methods, the Consolidated Allocation Method is the simplest and easiest to apply but is more prone to inaccuracies. According to Holder & Kermer (1981) research has revealed that the

Stepdown Method generates results that are not materially different from those of more sophisticated techniques. A major intermediate result of both techniques is the formulation of an indirect cost allocation ratio. A discussion of the Consolidation method follows to provide an example of allocating indirect costs. Discussion regarding the Stepdown method, which is more complex, is provided in Appendix 3.

The Consolidated Allocation Method

This technique requires the summation of all indirect costs. This process is commonly referred as creating a pool of indirect costs. The pooled indirect costs are then distributed to various service areas based on some selected measure.

The "selected measure" is normally one of the following: (1) direct salary/wage costs, (2) direct salary and benefit costs or (3) total direct costs. The equation follows:

$$\text{ALLOCATION RATIO (AR)} = \frac{\text{Sum of all indirect Costs}}{\text{Selected Measure}}$$

The ratio (AR) is then applied to each service direct cost component of the chosen denominator (salaries, salaries + benefits, or total direct costs). If, for example, the Selected Measure chosen is salaries, then the bureau's indirect costs would be allocated by multiplying total direct salary costs for the service area by the AR.

Let's look at two different scenarios to show the impact the Consolidation Allocation Method of overhead on service costs:

Scenario 1: Bureau X incurs $350,000 in direct costs per year to provide three services. Indirect cost total $35,000. How should indirect costs be allocated to each service? In this scenario, the Selected Measure is total direct costs. The worksheet follows:

Direct Costs	Service 1	Service 2	Service 3	Total
Personal Services	$80,000	$51,000	$109,000	$240,000
Materials & Services	5,000	42,000	15,000	62,000
Facilities & Equipment	500	40,000	7,500	48,000
Total (Selected Measure)	**$85,500**	**$133,000**	**$131,500**	**$350,000**

Indirect Costs $35,000

AR = $35,000 Total Indirect Costs / $350,000 Total Direct Costs

AR =	10.00%	10.00%	10.00%	
Amount Allocated = AR*Total Direct	$8,550	$13,300	$13,150	$35,000
Total Cost Of Service (AR*Total Direct+Total Direct)	**$94,050**	**$146,300**	**$144,650**	**$385,000**

Under this scenario, service 2 will incur the larger portion of the overhead followed by service 3 and service 1. That is, more overhead costs are allocated to the service which has the most direct costs.

Scenario 2: Bureau X incurs $350,000 in direct costs per year to provide three services. Indirect cost total $35,000. How should indirect costs be allocated to each service? In this scenario, the Selected Measure is personal services costs. The worksheet follows:

Direct Costs	Service 1	Service 2	Service 3	Total
Personal Services *	**$80,000**	**$51,000**	**$109,000**	**$240,000**
Materials & Services	5,000	42,000	15,000	62,000
Facilities & Equipment	500	40,000	7,500	48,000
Total	$85,500	$133,000	$131,500	$350,000

***Selected Measure**

Indirect Costs $35,000

AR = $35,000 Total Indirect Costs / $240,000 Total Direct Personal Services Costs

AR =	14.58%	14.58%	14.58%	
Amount Allocated = (AR*Direct PS)	$11,667	$7,438	$15,896	$35,000
Total Cost Of Service (AR*PS Direct+Total Direct)	**$97,167**	**$140,438**	**$147,396**	**$385,000**

Under this scenario, service 3 will be allocated the most overhead followed by service 1 and service 2. This is because, the indirect costs are deemed to be driven more by direct personal services cost in this example.

It is important to note that the Consolidated Allocation Method ignores the relationship between the service provided and the type of support received. For example, if the Selected Measure is direct salaries and a service's direct costs include a large amount of capital expenses, there will be almost no overhead costs allocated to the service. Therefore, theoretically, consolidated allocation is inherently inaccurate on those occasions when the Selected Measure is heavily (or negligibly) employed for a particular service.

Holiday, Sick and Vacation Leave Taken

These are costs because an employee is compensated even when absent if he/she is eligible and has the available time. The easiest methodology is to allocate a "leave rate" to each service's direct labor costs. Some bureaus may have developed "direct labor rates" that include leave taken. In these cases, the rates developed should be used if the

methodology is defensible. For those bureaus that have not developed a direct labor rate that includes leave, the easiest and most acceptable method of allocating leave taken is to use an overhead cost pool. General ledger account 518000 titled "leave taken" can be considered an overhead cost pool. Allocate this pool to the various services based on direct labor costs.

For example, Bureau X has direct personnel (labor) costs (including benefits) totalling $200,000 and leave taken (account # 518000) totalling $40,000. The allocation ratio is therefore 20% or 20% of direct labor charges are to be added to direct labor charges to cover leave taken. The Bureau has determine that direct labor and benefit cost for Service 1 was $66,667, service 2 $42,500 and service 3 $90,833. The total personnel costs (including leave taken rate) would be $80,000 for service 1 or $66,667 X 120%, $51,000 for service 2 and $109,000 for service 3.

Direct Costs		Service 1	Service 2	Service 3	Total
Personal Services		$66,667	$42,500	$90,833	$200,000
Leave Taken =	$40,000				
AR =	$40,000 / $200,000	Total Leave Taken Costs (Account #518000) / Total Direct Labor			
AR =	20%				
Amount Allocated = AR*Direct PS		$13,333	$8,500	$18,167	$40,000
Total Personal Services		**$80,000**	**$51,000**	**$109,000**	**$240,000**

COST PER UNIT OF SERVICE

Once the total cost of service has been determined, calculate the cost per unit of service. To do this, simply take the total cost of service and divide by the number of units of service. The cost per unit of service is the basis on which a rate structure is developed

SERVICE REVENUES/COST RECOVERY

Service Revenues

Next, bureaus need to match service revenues to service costs. In the case where there are no revenues, two things may be happening:

1. The service has been categorized as a public benefit, therefore no revenues from fees have ever been derived.

2. The service provides a mixed or private benefit, however, no fee has been charged and therefore no revenues derived. Here, bureaus need to project the amount of revenue that could be collected based on the guidelines (where applicable) described above.

Cost Recovery

This requirement is necessary in order to determine how much of a bureau's service costs have been recovered through fees. Dividing revenues for all user fee services into the total cost of user fee services gives you the bureau's cost recovery ratio as reflected in the following equation:

$$\text{Bureau Cost Recovery Ratio} = \frac{\text{Total Revenues}}{\text{Total Costs}}$$

Similarly, for each service, dividing the revenues for that service by the total cost of the service provides the cost recovery for each service:

$$\text{Service Cost Recovery Ratio} = \frac{\text{Total Service Revenues}}{\text{Total Service Costs}}$$

For General Fund bureaus, the Bureau Cost Recovery Ratio will determine the portion of unbudgeted surplus revenues to be returned to the bureau. These revenues can be used to reinvest in those programs that generated the "surplus" revenues.

CHAPTER 3
POLICY ANALYSIS

Once the data has been collected it needs to be reviewed to determine whether or not a fee should be charged and the level of cost recovery. Review the data collected for each service provided by the bureau. For each service, consider the following questions:

- Does the service fulfill a legal requirement?

- Does each fee based service pass the test below to ensure the City is within its legal rights to impose the fee?:

    - The fee must not be a tax. Fees and taxes have very different legal implications. The City may use tax revenue for general purposes. However, the City may only use fee revenue to compensate itself for the service provided for which the fee is charged. The earmarks of fees: (a) they are compensatory; (b) they are paid voluntarily by the user of the service who may to decline to accept the service and decline to pay the fee; and (c) the fee must be used to provide services which especially benefit the payer of the fees.

    - Fees are subject to the **Federal Equal Protect Clause**. This constitutional provision requires that the City must have the ability to justify that there is a clear difference between those who pay the fee and those who do not. Further, that the fee is fairly applied on all those who pay the fee. If unsure, the bureau should consult with the Office of the City Attorney.

- Is the service required by the Community? other bureaus? Other government agencies? by individual customers?

- Is the bureau meeting pre-defined service objectives for quality and quantity)

- Is the service being provided in the best way?

    - Is it being provided in the most economical way?
    - Is it being provided in the most efficient way?
    - Would it be cheaper to contract the service out?

- Should the service be subsidized? *Generally*:

    - **Public benefit services** are supported by discretionary resources such as property taxes. **Mixed benefit services,** can be supported by discretionary resources, user fees or both. **Private benefit services** are generally supported by user fees. These general funding concepts are illustrated in Table 3.

Review cost recovery ratios for each service and determine whether or not they comply with the City's CFMP Policy. Remember that this policy requires that **100%** of costs of services that provide a private benefit be recovered through fees. Only when approved by Council can bureaus subsidize of a portion of private benefit service costs. In general Council has authorized subsidy when it is consistent with legal requirements or City objectives such as:

- Economic Development
- Populations at-risk:
    - Low income/indigent
    - Youth at-risk
    - Elderly
    - Neighborhood Revitalization
    - Annexations
    - Residency

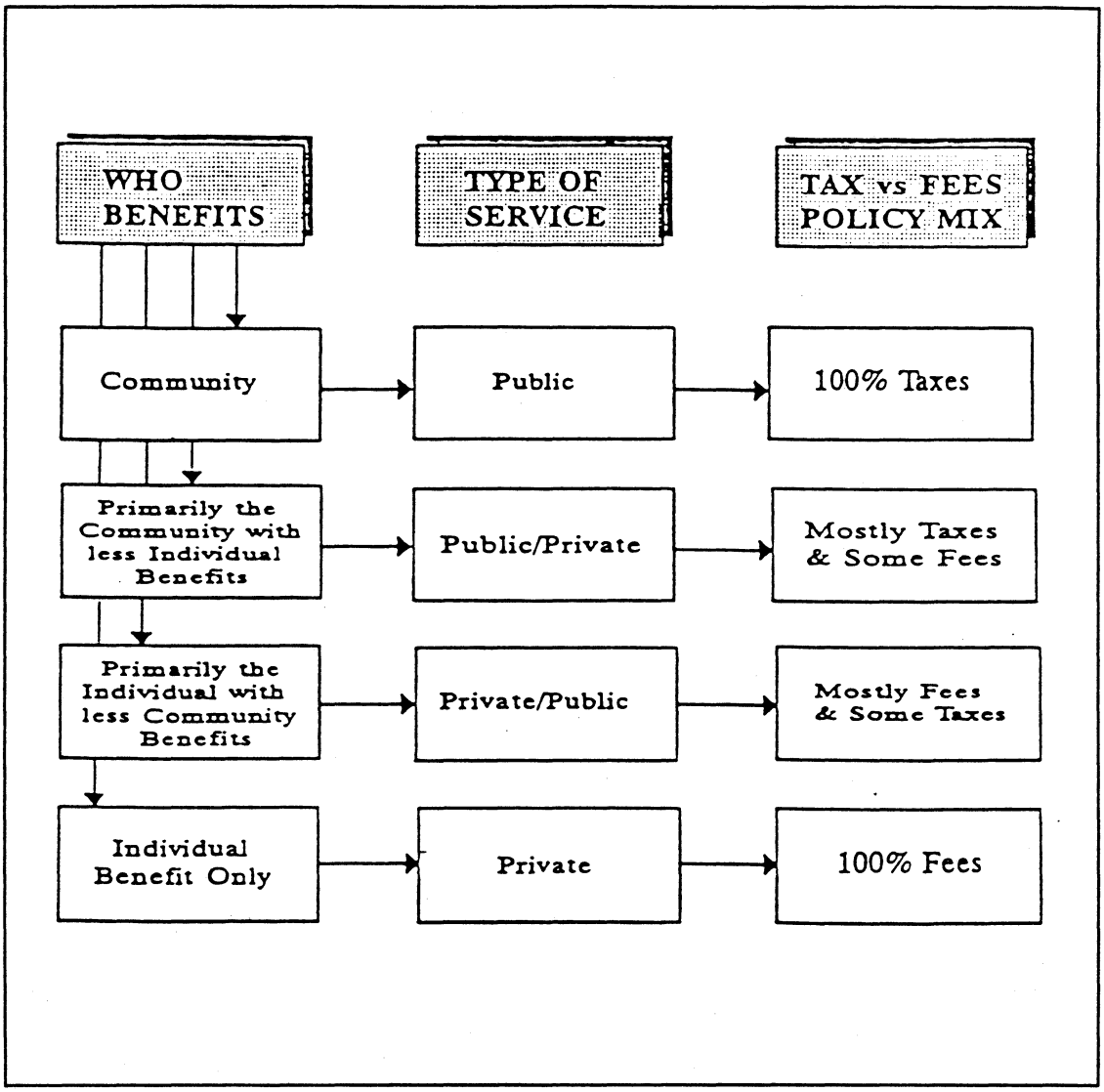
WHO BENEFITS
TYPE OF SERVICE
TAX vs FEES POLICY MIX
Community
Public
100% Taxes
Primarily the Community with less Individual Benefits
Public/Private
Mostly Taxes & Some Fees
Primarily the Individual with less Community Benefits
Private/Public
Mostly Fees & Some Taxes
Individual Benefit Only
Private
100% Fees

Table 3

CHAPTER 4
THE FEE SETTING PROCESS

This process involves estimating fee revenues and developing a rate structure that will generate those revenues.

Estimating Revenues

Bureaus should gather as much information as feasible to make informed projections. At a minimum, this should include:

- Budgeted, current year, and prior year revenues and their relation to service levels
- Historical trends such as increasing demand for services, or worsening collection rates
- Seasonal variations in revenues and service levels
- Elasticity of demand for services

Constructing a Rate Structure

To develop a rate structure, start with the unit cost of service. Construct a rate structure that will recover 100% of costs. Then adjust the rate up or down to meet service and policy objectives. This will allow bureaus to review a range of options prior to selecting the best one for a particular fee. Bureaus may also want to document the anticipated consequence resulting from each option. One thing to consider here is the political feasibility of the fees. In preparing the rate structure be sure to consider:

1) The fee amount set by the bureau

2) The volume of services provided. This is based on the bureau's capacity to supply and the client's demand for services. For example, a bureau may have a limited staff to provide the service. Clients may choose to use an alternative service, may purchase the service from another provider, or may try to forego the service.

3) The percentage of fees that are paid. This is based on payment methods and client unwillingness or inability to pay. For example, fees may be paid in advance or broken into installment payments. Clients may write bad checks for services or appeal fees.

There are various types of fee structures. The most common include:

1. **Flat Rate Pricing**: This method is based on the average cost of serving each user. Flat fees provide no incentive to reduce wasteful consumption so they should be used only where it is administratively infeasible to measure use.

2. **Variable Rate Pricing**: This fee generally has two parts - a flat rate for access to the service, plus a variable rate based on the quantity of service used. Utilities are usually priced this way.

3. **Block Rate Pricing**: This is a variation of variable rate pricing. The variable rate declines as the consumption increases within blocks. It reflects the fact that per uses costs for overhead, capital and operations decline as consumption increases.

4. **Peak Period Pricing**: Here prices are set to encourage or discourage use within certain periods of hours, days, months, or seasons.

5. **Classification Pricing**: Rates are set according to **type of user** (elderly, children, handicapped, low income), **location of user** (resident, non-resident), or **location of service**. Where costs vary by class of user, prices should be stratified so low-cost users do not subsidize higher cost users.

In General

A fee increase is likely to result in an increase in revenues. Bureaus may want to phase in major rate increases over a number of years. If the fee increase is small, revenues are likely to follow historical trends unless there are substantial changes in service levels or client demand. However, some fee increases may reduce demand causing revenues to decrease or level off. In all cases, changes in one or more of the following external or internal variables could have a major impact on fee revenue:

- <u>External Variables</u>

  Economic conditions:
  - Economic development
  - Housing starts
  - Consumer confidence
  - Interest rates

- Unemployment levels

Availability and price of alternative services
Availability and price of other service providers
Population growth
Weather

- Internal Variables

  - Quality of service
  - Staffing levels
  - Availability of materials
  - Planned fixed asset purchase/lease
  - Public outreach and education

Bureaus are encouraged to include some level of citizen involvement at some point during the fee setting process particularly if a new fee is being imposed or the fee will be substantially greater than in prior years. Further, bureaus should also consider the following:

- Experience of other jurisdictions with similar fees
- User surveys
- Industry standards
- Other studies

In fiscal years between cost of service studies bureaus may want to *index* rates by applying an automatic inflator (to cover cost of living increases and rising labor costs, for example). The indexes should be explicitly stated, reasonable and verifiable.

Final Report

A final report of the findings and recommendations of the bureau is to be presented in written form as part of the bureau's ordinance to Council. This report is to include:

- Documentation of the cost of service process as described in this guide
- Current fee schedule
- The impacts of proposed changes
- Conclusions and recommendations, including the proposed fee schedule(s) and percentage of cost recovery and projected revenues following implementation.

- Policies underlying the bureau's recommended level of cost recovery.

The adoption of the ordinance will implement the proposed fees. As part of the Council Calendar Review Process, the Bureau of Financial Planning will review the bureau's cost of service report prior to it being presented to Council. At least two weeks notice needs to be given to your Budget Analyst prior to the filing of a fee proposal for Council review and adoption.

The Budget Process

Fee revenue projections submitted as part of the bureau's Annual Budget should include user fees as adopted by Council for the following fiscal year. These projections should tie to the bureau's Cost of Service Study.

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8. City of Long Beach, California, Report on Costs, Fees, and Revenue, 1992

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14. City of Portland, *Interagency Manual,* Bureau of General Services, 1991-92

15. City of Portland, *Indirect Cost Rate Proposal and Consolidated City-Wide Cost Allocation Plan with Carry-Forward Computation,* Office of Finance and Administration, Grants Compliance Division, Year ended June 30, 1989

16. Kyland, Howard, ICMA. *Determining Appropriate User Fees.* Vol. 19, No. 9, September, 1987.

17. Willian W. Holder and Rick Kermer, *Cost Accounting for California Cities* (Sacremento, California: 1981) p.11

APPENDIX 1

TYPES OF COSTS

511000 Full-Time Employees					
512000 Part-Time/Limited Term					
514000 Overtime					
515000 Premium Pay					
517000 Benefits					
Total Personal Services					
521000 Professional Services					
522000 Utilities					
523000 Equipment Rental					
524000 Repair & Maintenance					
528000 Local Match Payment					
529000 Miscellaneous Services					
531000 Office Supplies					
532000 Operating Supplies					
533000 Repair & Maint Supplies					
534000 Minor Equipment					
535000 Clothing					
539000 Other Commodities					
541000 Education					
542000 Local Travel					
543000 Out-of-Town Travel					
544000 External Rent					
545000 Interest					
546000 Refunds					
547000 Retirement					
549000 Miscellaneous					
Total External Materials & Svcs					
551000 Fleet Services					
552000 Printing/Distribution					
553000 Facilities Services					
554000 Communications					
555000 Data Processing					
556000 Insurance					
557000 Equipment Lease					
558000 Same Fund Services					
559000 Other Fund Services					
Total Internal Materials & Svcs					
Total Materials & Services					
561000 Land					
562000 Buildings					
563000 Improvements					
564000 Equipment					
566000 Equipment Lease Purchase					
Total Capital Outlay					
573000 Equipment Cash Transfer					

APPENDIX 2

THE STRAIGHT LINE DEPRECIATION METHOD

Generally, the following five pieces of information must be gathered before depreciation can be calculated:

1. **Date Acquired** - This sets the starting point from which the remaining service life is calculated. It is generally the date purchased; however, it could also be the date that asset was made ready for use, or the date when it was first used. Remember, the idea of depreciation is to spread cost over several periods of use.

2. **Useful Life** - This requires estimating how long the asset will be useful in providing service. Factors that affect useful life are the amount of physical wear, technical obsolescence, etc. Useful life is typically stated in months or years, but may also be stated in miles, machine hours, or some other measurable standard.

3. **Historical Cost** - This is the amount paid to buy and place an asset into a serviceable condition. Historical cost typically includes purchase price, freight in, and set-up or installation costs. For cost of service calculations, historical cost may also include the cost of extended warranties or maintenance contracts even though these costs are not typically considered part of asset cost. Accounting Services (OF&A) can provide guidance in determining the historical cost of fixed assets.

4. **Current Replacement Value** - Replacement value should be determined each year. Replacement value can be estimated by applying a cost-of-living index to historical cost. However, this method would not take into account technological advances that could significantly change an asset's productivity or price. A better source would be current industry publications or advertisements. If replacement value is greater than historical cost, replacement value should be used as the basis for calculating depreciation expense. If it is less, use historical cost. This is consistent with the City's policy to recover full costs each year.

5. **Salvage Value** - This is an estimate of the amount of money or credit to be received from disposal or trade-in of the asset when it reaches the end of its useful life and is replaced. It may be estimated by reviewing industry publications, want ads, etc. to determine what similar pieces of used assets are selling for. Salvage value is typically set as a percent of historical cost/replacement value, but may also be a stated dollar amount.

An example might be where a bureau purchased a micro fiche reader/printer on January 1, 1992 for $1,675.00. In addition to the purchase price, the bureau also paid $75.00 for shipping and installation and $450.00 for an extended warranty. The reader/printer has an estimated useful life of 20 years and 200,000 copies. On June 30, 1992, new readers and printers were selling for $1,795.00, used plain paper rather than wet-process paper for copying, and were expected to last 25 years and 250,000 copies. However, extended warranties had dropped to $435. Industry publications indicated that old micro fiche reader/printers generally sell for around $500.00.

Question: How much depreciation should be used in a cost of service analysis of micro fiche copying?

Step 1: Assemble the data

1. Date Aquired	January 1, 1992
2. Estimated life (current machine)	20 years/200,000 copies
Estimated life (replacement)	25 years/250,000 copies
3. Hisorical costs ($,1675+$75+$450)	$2,200
4. Replacement value ($1,795+$75+$435)	$2,305
5. Salvage Value	$500

Step 2: Compute depreciation (using the straight-line method):

Note: The replacement machine's longer service life does not enter into the calculation even though the machine that the bureau bought has a shorter service life. This is because the bureau will not reap the benefits of the newer machine's extended life until such time as the current machine is replaced. Therefore, depreciation calculations should be made for both machines using the current machine's estimated life and pick the larger of the two as follows:

	Current	Replacement
Historical cost	2,200	2,305
Less: salvage value	500	500
Depreciable basis	$1,700	$1,805
Depreciation per year over 20 years	$85.00	$90.25
Depreciation per copy for 200,000 copies	$0.0085	$0.0090

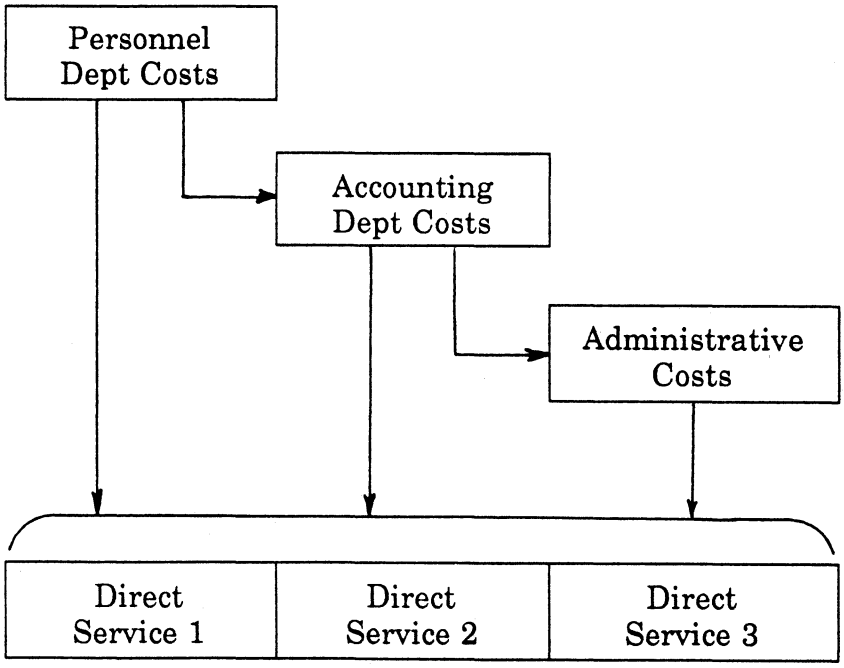
Answer: Depreciation to be used for a cost of service analysis would be $90 per year or $.0090 per copy. Once a depreciation schedule is chosen, it should not be changed for the life of the asset.

APPENDIX 3

THE STEPDOWN ALLOCATION METHOD

The Stepdown Allocation Method strives to acknowledge the interrelationships between services provided to departments within the bureau, to services provided to customers outside the bureau. This method answers the following question: How much of the bureau's indirect costs should be allocated to other indirect services as well as to each of the direct services provided?

This method requires an anlysis of the relationships between support services and direct services and assumes a one-way flow of costs as shown below:



Like direct services, support services costs must be allocated on the basis of some measurable statistic (unit of service). For example, Personnel Department costs could be allocated on the basis of the number of personnel actions processed. Accounting Department costs could be allocated based on the number of accounting transactions processed. Administrative costs could be allocated on the basis of direct labor hours.

Following is an example of the Stepdown Allocation Method to allocate Personnel Department, Accounting Department, and Administrative costs to three services using the facts from the examples presented in Chapter 2.

The major limitation of the Stepdown Allocation Method is that it assumes a one-way flow of costs and ignores the reciprocal relationships between indirect/overhead departmental services.

For example, the accounting department not only receives services from the personnel department, it also provides services to it. However, the Stepdown Allocation Method does not provide for this interrelationship. Because these interrelationships are not recognized, the amount of indirect departmental service costs allocated to direct service costs are somewhat higher than they would otherwise be.

Bureau X identified indirect costs totaling $37,000. Of this amount, $5,000 was attributable to the Personnel Department, $12,500 to the Accounting Department, and $19,500 to Administration. The worksheet below illustrates how these costs would be allocated to the three direct services using the Stepdown Allocation Method.

	Personnel Department			Accounting Department			Administration			Cost of Services		
	Personnel Actions Processed	% of Total	Total Costs Allocated	Accnting Trnsactns Processed	% of Total	Total Costs Allocated	Direct Labor Hours	% of Total	Total Costs Allocated	Allocated Indirect	Direct	Total Services 1, 2, & 3
	(1)			(1)			(1)					
Indirect Costs												
Personnel Dept	10	N/A	N/A	140	N/A	N/A	93	N/A	N/A	N/A		
Accounting Dept	4	3.28%	164	125	N/A	N/A	83	N/A	N/A	N/A		
Administration	17	13.93%	697	175	25.00%	3,166	25	N/A	N/A	N/A		
Direct Service Costs												
Service 1	25	20.49%	1,025	189	27.00%	3,419	200	25.00%	5,841	10,285	85,500	95,785
Service 2	32	26.23%	1,311	292	41.71%	5,283	150	18.75%	4,381	10,975	133,000	143,975
Service 3	44	36.07%	1,803	44	6.29%	796	450	56.25%	13,141	15,740	131,500	147,240
Totals	122	100.00%	$5,000	700	100.00%	$12,664	800	100.00%	$23,363	$37,000	$350,000	
Indirect Costs + Stepdown Allocation Costs:												
Personnel Department			5,000			164			697			
Accounting Department						12,500			3,166			
Administration									19,500			
Total Costs			$5,000			$12,664			$23,363			$387,000

NOTES:

(1) Units of service provided within an Indirect Department or to another Indirect Department on the "prior step", are ignored for cost allocation purposes.

APPENDIX 4

EXAMPLE OF A
COST OF SERVICE STUDY