DOCUMENT RESUME

ED 192 659 HE 013 129

AUTHOR Allen, Richard H.; Collier, Douglas J.
TITLE Higher Education Finance Manual: Volume 3. The Source/Use Concept.
INSTITUTION National Center for Higher Education Management Systems, Boulder, Colo.
SPONS AGENCY National Center for Education Statistics (DHEW), Washington, D.C.
PUB DATE 80
CONTRACT 300-76-0319
NOTE 36p.; For related documents see HE 013 132-133.
AVAILABLE FROM National Center for Higher Education Management Systems, P.O. Drawer P, Boulder, CO 80302

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Accounting; Data Analysis; Data Collection; *Educational Finance; *Expenditures; Guidelines; *Higher Education; Income; Matrices; Models; *Recordkeeping; School Funds; Specifications; Standards; Statistical Data

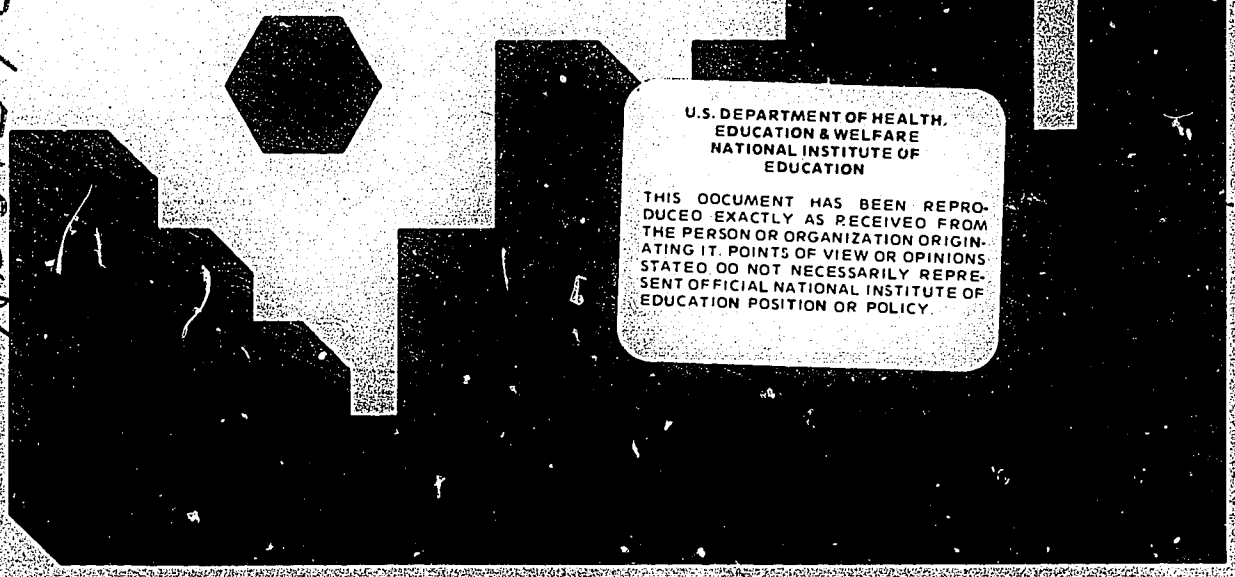
ABSTRACT

The third volume of the revised "Higher Education Finance Manual," this guide describes the principles included in presenting financial information in a format showing where money comes from (sources) and where it goes (uses). Potential analytical applications and limitations of the source/use concept are described, and the application of the standard source/use matrix as a supplementary financial statement and communication tool is examined in detail. Implementation of the source/use concept in terms of collection, compilation, and formatting of data for the standard source use matrix is also addressed. It is suggested that the source-use concept should be viewed as a way to format data and analyze institutional finances, rather than as a specific financial statement. It shows the relationship between the expenditure of institutional monies and the sources of funding for those expenditures. The standard source/use matrix describes current fund operations and expands the "statement of current funds revenues, expenditures, and other changes" by relating particular sources of funds to particular uses. It provides a one-page summary of current institutional financial affairs. (SW)

Volume 3:
Higher Education Finance Manual:

The Source/Use Concept

National Center for Higher Education Management Systems



National Center for Higher Education Management Systems
Post Office Drawer P, Boulder, Colorado 80302
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The mission of the National Center for Higher Education Management Systems (NCHEMS) is to carry out research, development, dissemination, and evaluation activities and to serve as a national resource to assist individuals, institutions, agencies and organizations of postsecondary education, and state and federal governments in bringing about improvements in planning and management in postsecondary education.

The Higher Education Finance Manual:

The Source/Use Concept

Richard H. Allen
Douglas J. Collier

1980

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P.O. Drawer P Boulder, Colorado 80302
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The work upon which this publication is based was performed by NCHEMS pursuant to Contract No. 300-76-0319—Pilot Project for the Installation of Finance Data Bases at State Levels—with the National Center for Education Statistics. It does not, however, necessarily reflect the views of that agency.

National Center for Higher Education Management Systems, Inc.
Boulder, Colorado 80302

Printed in the United States of America
Designed by Lynn E. Phillips

Contents

Preface

The *Higher Education Finance Manual: The Source/Use Concept* is the third volume in the revised *Higher Education Finance Manual (HEFM)* series. The three volumes in the series together revise and replace the original single-volume *Higher Education Finance Manual* (NCHEMS Technical Report 69). The series is designed to be a comprehensive guide for providers and users of financial information reported by institutions of postsecondary education. The material in the *HEFM* revision was developed at NCHEMS as part of the original *Higher Education Finance Manual* project (1972-74), supported by the National Center for Education Statistics (NCES). It was supplemented and refined in a follow-on project, the *Higher Education Finance Manual*/State-Level Technical Assistance (*HEFM*/SLTA) project, also supported by NCES, which in addition provided technical assistance to state agencies seeking to implement the *HEFM* guidelines.

The three volumes in the revision are the *Higher Education Finance Manual: Data Providers' Guide,* the *Higher Education Finance Manual: Data Users' Guide,* and the *Higher Education Finance Manual: The Source/Use Concept.* The *Data Providers' Guide* comprehensively describes national financial reporting standards, including those prescribed for the HEGIS reports, and includes the information needed to comply with those standards. It includes:

1. A complete set of definitions of expenditure categories and revenue categories endorsed by the National Center for Higher Education Management Systems (NCHEMS), the National Association of College and University Business Officers (NACUBO), the American Institute of Certified Public Accountants (AICPA), and NCES
2. An activity look-up table, with specific guidance for assigning activities to expenditure categories and subcategories, endorsed by NCHEMS and NACUBO
3. A glossary of financial accounting terms
4. A description of generally accepted accounting principles for postsecondary education
5. Exemplary formats for financial statements

Oriented to the nonaccountant, the *Data Users' Guide* describes the kinds of information about postsecondary education that can be derived from institutional financial data. Included are:

1. A description of fund accounting in higher education
2. A discussion of the relationship between accounting data and programmatic financial data
3. A guide to the implementation of the *HEFM* guidelines at the state level
4. A guide to the implementation of the *HEFM* guidelines at the institutional level

The *Source/Use Concept* describes the principles included in presenting financial information in a format showing where money comes from (sources) and where it goes (uses). Included are:

1. A general description of the source/use concept
2. Suggestions about ways to develop source/use formats for analysis and communication
3. A description of the standard source/use matrix and its uses as a supplementary financial statement
4. A guide to implementation

Portions of the *Higher Education Finance Manual* series have been reviewed by NCHEMS staff, the task force of the *HEFM*/SLTA project, individuals in its pilot-test states, a network representing the state-level postsecondary-education finance community, and a joint NCHEMS/NACUBO committee on the guidelines of the Joint Accounting Group. Since much of the material was drawn from the first edition of *HEFM,* the *HEFM* Task Force has reviewed those portions of the documents as well.

Acknowledgments

The authors are grateful to all those who assisted in the development of this book. We are particularly indebted to James Cofer of the Mississippi Board of Trustees of the Institutions of Higher Learning and James Elsass of the Illinois Board of Higher Education for coordinating developmental work on the source/use concept in their states.

For their assistance in structuring the project, we are grateful to the members of the *HEFM*/SLTA Task Force: William Arceneaux, State Higher Education Executive Officers (SHEEO); Carl Blackwell, National Association of State Budget Officers; John Folger, Education Commission of the States; John LaFaver, National Conference of State Legislatures; Reuben Lorenz, National Association of College and University Business Officers; and Jane Ryland, SHEEO/NCES. We would also like to thank Paul Mertins and George Wade, who were NCES project officers, for their efforts throughout the project, and Frank Schmidtlein, evaluator of the project, for his constructive feedback. We extend special thanks to NCHEMS Associate Directors Mel Orwig and Dennis Jones for their advice and support.

Mary Sue Waldkirch provided invaluable editorial assistance. Thanks are due also to Linda Smith, Paula Dressler, and Barbara Epp for their secretarial assistance.

1

Introduction

Institutions of postsecondary education regularly generate information to describe their financial activities and position. As a rule, an institutional accounting system forms the basis for the kinds of financial information generated, published in annual reports, and provided to funders, the institutional community, and the general public. Institutions commonly use three financial statements: the Balance Sheet, Statement of Changes in Fund Balances, and Statement of Current Funds Revenues, Expenditures, and Other Changes. In addition, many institutions prepare supplementary financial statements that focus on particular aspects of institutional finances, such as debt service or auxiliary enterprises.

Unfortunately, the fund-accounting principles that must be used in institutional accounting systems to ensure fiduciary accountability often produce financial statements that may easily confuse the administrator, legislator, or member of the public not acquainted with the technical aspects of accounting. At the same time, methods of formatting financial information that are not based on fund-accounting principles have been criticized on the grounds that they do not accurately portray institutional financial affairs. Thus many institutional business officers are reluctant to provide, and institutional and state-level data users are reluctant to accept, financial information not directly derived from an accounting system.

The source/use concept was developed to help resolve this dilemma. The concept is employed to present a summary picture of institutional operations and their financing that is derived from and linked to the institutional accounting system but nonetheless can be understood by nonaccountants. Formats based on

the source/use concept can be used in displaying the institution's financial operations as a whole or to analyze specific portions. The standard source/use matrix is a specific format designed to display institutional current operations. Formats deriving from the source/use concept relate types of revenues (sources) to types of expenditures (uses). These formats make the source/use concept distinctly valuable in analyzing and communicating about institutional finances. As figure 1 illustrates, the source/use concept shows where money comes from and where it goes in a matrix that displays the intersection of sources of revenue and uses of funds.

FIGURE 1

	SOURCE X	SOURCE Y	SOURCE Z
USE A			
USE B			
USE C			Z/B*

*Funds from Source Z were used to finance the expenditure for Use B.

The standard source/use matrix, discussed in section 3 and illustrated on p. 10, is one of many adaptations of the source/use concept. The matrix displays current-funds expenditures by source of funds, in terms of the categories and conventions used in institutional and state financial-reporting systems. The figures in the standard matrix are generally consistent with those in a Statement of Current Funds Revenues, Expenditures, and Other Changes.

The source/use concept was originally explicated in the *Higher Education Finance Manual.* As a result of interest expressed at the introductory workshop of the *Higher Education Finance Manual*/State-Level Technical Assistance *(HEFM/* SLTA) project at NCHEMS, implementation was then established as a priority for that project. To this end, two of the *HEFM*/SLTA pilot-test states, Illinois and Mississippi, were selected to collect financial data in a source/use format with assistance from NCHEMS. This document is based on the experiences of the institutions and agencies in those states.

Section 2 describes potential analytical applications and limitations of the source/use concept. Section 3 examines in detail the application of the standard source/use matrix as a supplementary financial statement and communication tool. Section 4 discusses the implementation of the source/use concept; in particular, the collection, compilation, and formatting of data for the standard source/use matrix.

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The Source/Use Concept

The source/use concept should be viewed as a way to format data and analyze institutional finances, rather than as a specific financial statement. The important characteristic of the source/use concept for data display is that, unlike traditional financial statements in higher education, it shows the relationship between the expenditure of institutional monies and the sources of funding for those expenditures. This section will describe some of the ways in which the source/use concept can be applied to institutional financial data. In fact, the standard *HEFM* source/use matrix, explained in section 3, should be viewed as one adaptation of the source/use concept rather than as *the* way to use it with postsecondary-education financial data. To describe some of the ways the concept can be applied, this section will discuss four topics:

1. How the source and use data categories can be varied
2. How the standard source/use matrix can be either dissected or expanded to meet particular information needs
3. How differences in the compilation of the format can result in different information
4. How the concept can be employed with fund groups other than the current fund

Data Categories

The source/use concept provides flexibility not found in financial statements of predetermined form. Therefore a wide variety of expenditure and revenue categories can be employed in a source/use format. The most common expenditure, or use, categories are (1) program, or function, categories (Instruction, Research, Public Service);[1] (2) organizational-unit categories (Business Office, Admissions Office, English Department, School of Engineering); and (3) object categories (salaries, travel, equipment). Any one of these three types of expenditure categories can be included in the use axis of a source/use format. Moreover, while the most common source categories are those like Tuition and Fees, Grants and Gifts, and State Appropriations,[2] other ways of viewing sources of funds will result in a different source dimension. For example, rather than naming the sources of revenues, one might specify either the nature of the sources (restricted, designated, unrestricted) or the mechanisms for providing the funds (budgeted, unallocated).

In large part, the appropriate type of categories for a source/use format is determined by the purpose(s) of the analysis. For example, if the source/use concept is to aid the planning process, program/function expenditure categories may be appropriate for the use dimension, since they label the objectives to be accomplished by a set of activities. On the other hand, if the concept is to be an aid for managing the institution, either object categories or organizational-unit use categories may yield more valuable information. While the source categories generally will identify the funder, other source dimensions may be useful. In an analysis of financial flexibility, for example, categories to distinguish the degree of restriction on particular funds may be helpful. For example, funds restricted to financial aid are more flexible than funds restricted to financial aid for foreign students.

A second factor influencing the choice of data categories is the unit of analysis. When the institution is the unit of analysis, the conventional revenue sources (Tuition and Fees, State Appropriations, Gifts and Grants) are probably the most appropriate type of source categories, because they identify funders. Similarly, at the institutional level, functional or organizational-unit expenditure categories may be the best type of use categories. If the unit of analysis is an academic department or administrative unit, source categories that describe the constraints on the use of monies (restricted vs. unrestricted, appropriated vs. nonappropriated, budgeted vs. nonbudgeted, contracted vs. noncontracted) will often be most valuable. Users can also develop source categories to describe both provider and constraints at once. (In particular, the standard *HEFM* source/use matrix employs source categories that combine restricted vs. unrestricted distinctions with provider distinctions.)

Figure 2 illustrates one design for a source/use format to aid management when the unit of analysis is a departmental or organizational unit. This format not only

1. This type of expenditure category is employed in the standard *HEFM* source/use matrix described in section 3.
2. The same revenue categories are used in the standard *HEFM* source/use matrix described in section 3.

FIGURE 2

SOURCE / USE	Institutionally Budgeted Funds	Government Grants and Contracts	Private Gifts, Grants, and Contracts	Departmental Sales	Other	Total
Faculty Compensation						
Other Compensations						
Supplies and Services						
Equipment						
Other						
Total						

helps department chairpersons to communicate financial matters to the faculty and administration but also allows them to analyze the impact of certain sources of funds on the department's ability to pay salaries, buy equipment, and so forth.

Dissecting or Expanding Elements

By focusing on the elements within a source/use format (such as the standard source/use matrix described in section 3), one can examine in detail the standard source or use categories or the relationship between them. These elements are the rows, displaying use categories; the columns, displaying source categories; and the cells, displaying the relationship between a particular source and a particular use. Focusing on a row allows one to view the full range of sources supporting a particular expenditure. For example, if federal grants and contracts are the major source of support for the research program, the administration may want to further investigate the sources of support listed in the source/use format to answer such questions as these:

- How stable and certain is that source of support in the future?
- If that support ceases, how will the institution be affected (for example, are tenured faculty supported by it)?
- Might other support for research increase in the future? Or decrease?

One might also want to examine a particular source column in a source/use format in more detail. For example, it may be useful to focus solely on a Federal Grants and Contracts column to determine the activities the contracts are supporting and the relative importance of these activities to the institution.

A source/use format can be dissected so that a single cell is the focal element. For example, by isolating and collecting detailed data for a cell showing the relationship between Endowment Income and Scholarships and Fellowships only, one can understand in depth how particular endowments support particular scholarships.

Such use of a source/use format is particularly valuable to the governing-board member or legislator, who, so often inundated with detailed data, has difficulty seeing the big picture. It provides an additional level of detail in areas of particular interest without requiring a great deal of detail in areas of lesser interest. Using this dissection method, the data provider can supply an aggregate point of view with a more general statement that provides necessary data without a great deal of effort but can also focus on a particular area.

Differences in Data Compilation

When considering methods of compilation, one can view a source/use format as a way of tracing Current Fund revenues to their uses or as a way of relating expenditures back to their sources of support. While this may appear to be a semantic distinction, it often reflects real differences in how one would compile the data. (That is, does one go to the expenditure accounting system to identify the sources that supported those expenditures, or does one look at the sources of revenues to identify the activities supported by each source?) Moreover, it often reflects differences in the purpose of the source/use concept. For example, for institutions concerned about managing their funds and cultivating new sources, the concept is useful for determining how the funds from each source are used. On the other hand, for institutions more concerned about "supporting their programs," the concept helps them determine the source of support for each program. Section 3 offers a more detailed discussion of how differences in compilation affect the development and application of the standard *HEFM* source/use matrix.

Use of the Concept with Other Fund Groups

To this point, discussion has centered on application of the source/use concept to the Current Funds group (those revenues and expenditures related to the institution's current operations). However, the concept can be equally valuable for analyzing and communicating about the source/use relationship for other fund groups. The Plant Fund exemplifies this particularly well. Like the Current Fund, the Plant Fund contains both restricted and unrestricted sources. Therefore one can develop a source/use format for the Plant Fund, tracing unrestricted funds to their uses or, conversely, tracing restricted uses to their source of support. Figure 3 shows one source/use format that can be used for the Plant Fund.

FIG

	UNRESTRICTED	RESTRICTED			
PLANT FUND	Designated Funds	Private Gifts, Grants, and Contracts	Endowment Income	Government Grants and Contracts	Other
Debt Retirement—Interest					
Debt Retirement—Principal					
Major Repairs and Renovations					
New Plant Expansion					
New Buildings					
Capital Equipment					

Summary

Whenever better knowledge of the relationship between expenditures and sources of funding would enhance a decision, some version of a source/use format will probably aid the decisionmaker. The discussion in this section was primarily intended to show how the source/use format can be adapted to particular uses. It should not be considered an exhaustive treatment of the applications of the source/use concept.

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The Current Funds Standard Source/Use Matrix

The standard source/use matrix, as defined in the Introduction, is intended to be used as a supplementary financial statement and general-purpose communication tool for describing current-fund operations. As a supplementary financial statement, it expands the Statement of Current Funds Revenues, Expenditures, and Other Changes by relating particular sources of funds to particular uses. In an accounting sense, it is a statement of current-funds expenditures by source of funds. (Section 4 discusses in detail the derivation of financial data of this type.) As a general-purpose communication tool, it provides a one-page summary of current institutional financial affairs that is intelligible to those without an accounting background.

The standard source/use matrix shows unrestricted expenditures (state appropriations, student fees) as a single revenue pool. The pool as a whole is allocated for use (*HEFM* expenditure categories). (Alternatively, two pools, Undesignated and Designated, may be used to separately show specific fund designations by the board of control.) Restricted funds are displayed by source (revenue type) and use (expenditure categories). Information about the relationship between the individual sources of funding and the uses of restricted funds is particularly important in planning and management, because funds whose uses have been determined by a donor are outside the control of institutional management. To allocate resources wisely, management should know as much as possible about such restrictions. The standard source/use matrix provides this type of information to both institutional administrators and state-level planners.

FIGURE 4

CURRENT FUNDS STANDARD SOURCE/USE MATRIX

Year Ended _____

Sample Educational Institution

Use of Funds (in thousands) \ Source of Funds		Unrestricted Funds (all revenue sources*)		Restricted Funds											
				Governmental Appropriations			Governmental Grants and Contracts			Private Gifts Grants, and Contracts	Endowment Income	Independent Operations	Other Sources	Transfers In	Total Funds Used (by function)
		Undesignated	Designated	Federal	State	Local	Federal	State	Local						
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Educational and General	Instruction	2,350	610							280	209				3,449
	Research		100				375	25							500
	Public Service	110	20						25						155
	Academic Support	250													250
	Student Services	140	60												200
	Institutional Support	450													450
	Operation and Maintenance of Plant	220													220
	Scholarships and Fellowships	5	85							100					190
	Mandatory Transfers	192	320												512
	Nonmandatory Transfers														
	Total—Educational and General	3,717	1,195				375	25	25	380	209				5,926
Auxiliary Enterprises			1,830												1,830
Hospitals															
Independent Operations															
Total funds used (by source)		3,717	3,025				375	25	25	380	209				7,756

*Unrestricted revenues may include student fees; federal, state, and local appropriations; federal, state, and local grants and contracts; private gifts, grants, and contracts; endowment income; sales and services of auxiliary enterprises and hospitals; independent operations; other sources; and transfers in.

Format

The standard source/use matrix follows the same approach as a more generalized source/use format. The approach is, however, a good deal more formal (see figure 4). The uses of funds in the format described here are expressed in terms of the standard *HEFM* major expenditure categories: Instruction, Research, Public Service, Academic Support, Student Services, Institutional Support, Operation and Maintenance of Plant, Scholarships and Fellowships, Mandatory Transfers, Nonmandatory Transfers, Auxiliary Enterprises, Hospitals, and Independent Operations. The sources of funds are defined, for restricted funds, in terms of the standard *HEFM* revenue categories: Federal, State, and Local Governmental Appropriations; Federal, State, and Local Grants and Contracts; Private Gifts, Grants, and Contracts; Endowment Income; Independent Operations; Other Sources; and Transfers In. The unrestricted funds of the institution are shown as a pool of income (or alternatively, two pools: one for designated funds and one for undesignated funds) and distributed to the various uses made of funds in this pool. While the conventions and categories described here and in the remainder of this section are those of *HEFM,* it is possible to develop a standard source/use matrix that employs adaptations of the *HEFM* guidelines. When an institution or state agency adapts the *HEFM* guidelines to meet particular local needs, the standard source/use matrix should also reflect these adaptations. For example, if a state or institution prefers to separate Libraries from the rest of Academic Support for reporting services, Libraries should be identified as a use of funds in the standard source/use matrix.

The distinction between unrestricted (both designated and undesignated) and restricted funds is a key point. Restricted funds are those funds legally restricted to a particular purpose by a funder external to the institution. Unrestricted funds are those that the institution has discretionary authority to spend for any purpose. Designated funds are those unrestricted funds that the governing board assigns to a particular purpose. Undesignated funds are those that the institutional management can assign to various purposes.

Since unrestricted, undesignated revenues (those whose use is not specified by an external funder or the institutional governing board), such as state appropriations and student fees, are not limited to a particular use, generally accepted accounting principles pool the resources to support the general operations of an institution. This practice makes it impossible to say which unrestricted, undesignated revenue source supports a given use, such as Instruction or Student Services. Such support can only be accounted for by an arbitrary allocation of funds. Accordingly, unrestricted, undesignated funds are shown as an undifferentiated pool of resources applied to various uses (fig. 4, col. 1).

For designated, unrestricted funds (those whose use is specified by the institutional governing board), institutional management must maintain information showing compliance with governing-board designations. In many cases, this

allows the sources and uses of designated funds to be shown. For example, if an institution received an unrestricted gift, the board might designate this revenue for scholarships. The source would then be Private Gifts, Grants, and Contracts, and the use would be Scholarships and Fellowships. Since management maintains records to show that the designation was complied with, the base data to create a source/use matrix for designated funds would be available. However, not all designated funds fit this description. For instance, a board could designate an unrestricted, undesignated ending-fund balance for building library collections. In this case, the source of revenue would be only the unrestricted, undesignated fund pool. It would be impossible to say whether the funds were student fees, state appropriations, or other. For this reason, designated, unrestricted funds are also shown as an undifferentiated pool of resources applied to various uses (fig. 4, col. 2).

Restricted funds (those whose use is specified by a funder external to the institution) require that each individual revenue (source of funds) be spent for the use to which it is restricted. The source and use categories in the standard source/use matrix represent aggregations of the types of sources and uses. For example, a Department of Energy grant to develop solar-heating technology would be included under the source Federal Grants and Contracts and under the use Research.

Columns 3 to 13 in figure 4 show the potential sources of restricted revenues applied to the various uses of funds. It is important to note that although the types of revenue sources identified in columns 3 to 13 may be unrestricted as well, the figures in those columns reflect *only* the restricted revenues of this type. For example, since most state-government appropriations are considered unrestricted, they would not appear in column 4 but rather in the unrestricted, undesignated funds pool (col. 1). Since this can cause confusion among users of the matrix, the three governmental-appropriations revenue categories in the restricted-fund area (columns 3 to 5) may be dropped if all appropriations are considered unrestricted. To further alleviate confusion, a footnote specifying the sources of funds for the unrestricted-fund pool is recommended as shown in figure 4. In addition, several of the *HEFM* revenue categories—Tuition and Fees, Sales and Services of Educational Departments, Sales and Services of Auxiliary Enterprises, and Sales and Services of Hospitals—are already excluded from the restricted-funds portion of the standard source/use matrix displayed in figure 4. It would be very unusual for any of those revenue sources to be restricted current funds. However, if there are restricted revenues of this type, they may be included in the Other Sources categories. If restricted revenues of this type are material, a column may be added to the matrix.

The bottom row and column 14 of the standard source/use matrix shown in figure 4 show the total revenues of the institution by source and the total expenditures of the institution by use. These figures should generally correspond to the Statement of Current Funds, Revenues, Expenditures, and Other Changes. In figure 4, revenues and expenditures in the illustrated year are equal. But this is not always the case. Since the standard source/use matrix is a statement of expenditures

by source of funds (rather than a statement of revenues by use), only revenues expended in the current year should be shown. (That is, revenues used to increase fund balances should not be shown except as a footnote.) In the opposite case, where unrestricted expenditures are made possible only by drawing down unrestricted current-fund balances, such drawdowns should be included in the revenue totals for unrestricted funds and footnoted as such. The suggested footnote format is: "This source of funds includes $_____ of reductions in fund balances." In those cases, of course, the standard source/use matrix will differ from the Statement of Current Funds Revenues, Expenditures, and Other Changes. This question will not arise in the restricted current funds, since under the principles of accrual accounting a revenue will be recorded only when an expenditure is made The use of reductions in fund balances in other fund groups, such as the Endowment and Similar Funds, to support current-fund unrestricted expenditures should be reported as a Transfer In (col. 13), according to the definitions of the *HEFM* revenue category.

Attributes

The standard source/use matrix can be used as a tool for communicating with state agencies (postsecondary-education agencies, budget bureaus, special study commissions), legislators and their staffs, governing and coordinating boards, donors and potential donors, members of the academic community, and other interested parties. The standard source/use matrix is valuable for this purpose because of its *summary nature, intuitive format,* and *links to auditable financial data.*

The *summary nature* of the standard source/use matrix is valuable for holding down the volume of information while still focusing on key financial variables. Rather than displaying the great detail of fund accounting necessary to fulfill fiduciary responsibilities, the standard source/use matrix uses aggregations of fund sources and functional uses consistent with the principles of fund accounting. This allows for a single-page summary of institutional current-fund operations, which is more likely to be read and understood by those not versed in accounting principles than is a multipage financial report.

The *intuitive format* of the standard source/use matrix is very important for communicating with those unfamiliar with accounting practices. While few except accountants have the background, inclination, or time to obtain an overall picture of institutional current-fund operations from a traditional financial statement based on fund-accounting principles, nonaccountants will find information presented in a standard source/use matrix much easier to understand and use. The standardized source and use categories (the revenue and expenditure categories) are widely used and are defined in numerous documents, such as *The Higher Education Finance Manual: Data Providers' Guide,* the NACUBO *College and University Business Administration—1974,* the AICPA *Audit Guide,* the Higher Education General

Information Survey (HEGIS) reports, and many state and institutional data-collection systems. The functional expenditure categories are the familiar classifications of higher-education programs, such as Instruction, Research, and Public Service. The ability to look at the uses of individual sources of revenue or at the sources of funding for particular programs is evident from the format. As a rule, some explanation is required to impress upon nonaccountants why unrestricted revenues must be put in a pool before expenditures can be reported. Although any allocation of a particular unrestricted revenue to a particular use is essentially arbitrary, administrators commonly hear questions like "what did you spend the student fees on?" In addition, the focus of the standard source/use matrix on restricted funds will need explanation.

The *linking of financial data in the standard source/use format to auditable financial statements* is another important attribute of the standard source/use matrix. The matrix uses the same categories of revenue and expenditures and the same definitions of restrictions that are incorporated into the conventional auditable financial statements. While the matrix is not necessarily an auditable statement itself (although it can be) and is not a substitute for the generally accepted auditable statements, it can be linked to an audit trail by the use of common definitions. This gives the source/use matrix a generally higher level of credibility than accrues to ad hoc financial information.

Communication with the Standard Source/Use Matrix

These three attributes of the standard source/use matrix—summary nature, intuitive format, and links to auditable financial data—allow institutions and state postsecondary-education agencies to use it for communicating with several audiences.

A public institution often provides financial information to various state agencies and legislators as an integral part of the state appropriations process. During the appropriations process, the state generally deals with a subset of the total institutional revenues. One typical pattern of states is to appropriate the unrestricted educational and general revenues of an institution (appropriations, student fees). Another is to appropriate only funds originating in the state treasury. It is unusual for a state appropriations process to address auxiliary enterprises and even more unusual for restricted funds to be appropriated. Since the state only appropriates part of the institutional funds, it often collects financial data for only part of institutional operations. Awareness that large segments of institutional finances are outside their purview, coupled with lack of understanding of institutional financial statements, can lead some to suspect that all nonappropriated funds constitute a large pool of discretionary funds. Although this is demonstrably untrue, it has in fact not been demonstrated to some state legislators and state-agency staff (particularly in those agencies not dealing specifically with higher education).

The standard source/use matrix, used as a communication tool, can address this problem. By providing a summary overview of institutional current operations, with budgeted funds as a clearly identified subset of all revenues, a state postsecondary-education agency or institution can identify the allocations to program areas of various appropriated and nonappropriated revenue sources, demonstrate that the funds are used for important purposes related to the missions of the institution, and explain the relationships among the different sources of funds.

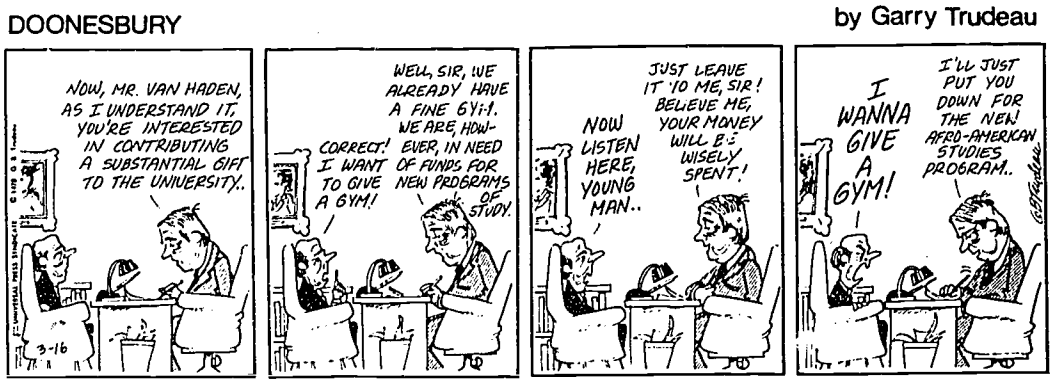
The summary nature and intuitive format of the matrix allow state-agency staffs (especially those outside the postsecondary-education sector) and legislators to absorb the information in the limited time available to them. At the same time, the linking of data in the standard source/use matrix to auditable financial data makes this format more creditable with state-level officials and agency staff than other summary statements of institutional finances. A related benefit is that top management of institutions and state postsecondary-education agencies will feel more comfortable explaining data to legislators or other state agencies with the standard source/use matrix than with the more complicated auditable financial statements. Moreover, they can better demonstrate the interrelationships between sources of revenue and uses of funds without resorting to accounting concepts likely to be poorly understood by both the speaker and the audience.

Governing and coordinating boards are another potential audience for financial information in the standard source/use matrix. These boards are typically composed of members with substantial obligations outside the postsecondary-education community and limited time for their board responsibilities. Much of this time is taken up with important nonfinancial matters. A summary of institutional finances can help both institutional and state-level boards put financial information in an overall institutional context. For instance, if an institution had received an unrestricted gift for which the board must determine a use, it would be helpful to know the program areas to which other gifts had been applied, in order to avoid concentrating one-time revenue in a single program area. State-level board members typically have the same information needs as legislators. Thus a summary of those areas of institutional finance outside the general scope of the state budgetary process will prove helpful to them as well.

Due to its intuitive format, the standard source/use matrix is an effective way of resolving a common complaint of governing and coordinating boards: they do not really understand the financial statements. At the same time, the matrix will not mask the fiduciary responsibilities of fund accounting.

Another potential use for the standard source/use matrix is in relationships of institutions with donors or potential donors. As figure 5 shows, donors often want to designate their gifts for a particular purpose. The ideas that donors have about uses for their gifts tend to duplicate each other. For instance, intercollegiate athletics and financial aid are common uses of gift funds, in spite of the fact that an institution may have higher priorities for the use of additional funds. A standard

FIGURE 5



source/use matrix can help persuade donors to designate their gifts for purposes considered by the institution to have a high priority. For instance, institutional representatives can demonstrate to a donor that while the financial-aid function has significant resources and multiple sources of funding, research has limited resources and few available sources of discretionary funding. On this basis, the donor may be persuaded to allocate a gift to fund released time for faculty research. Few donors want to be involved in a detailed discussion of institutional finances. But if they are to be convinced to assign their gifts to a particular area, they will need to understand the reasons why the area is an institutional priority. The standard source/use matrix offers substantial advantages in this context by providing a one-page, easily understood summary of institutional finances.

Members of the academic community (students, faculty, and staff) and the general public often have an extremely limited understanding of institutional financial affairs. This lack of understanding may be partially responsible for some of the controversy regarding such items as pay and benefit packages, tuition rates, local tax levies (for community colleges), and so on. While a fuller understanding of institutional finances will not eliminate such issues, it will assist institutional representatives, state-agency staff, and state and local elected officials in focusing on the issues instead of spending their time clearing up confusion. Conventional financial statements have not accomplished this function very well. The standard source/use matrix can aid the communication efforts of institutions or state agencies with audiences having limited time and inclination to study financial statements. Again, the summary nature, intuitive format, and links to auditable financial data of the matrix may prove to be assets in addressing these audiences.

Analysis with the Standard Source/Use Matrix

While most of the applications of the standard source/use matrix involve communicating with various audiences, analytic uses should not be overlooked. It can be used by an institution as an early-warning system. By identifying the program

areas funded on soft money, the matrix points toward program areas in which the institution should be developing contingency plans for the loss of funding. For example, a number of institutions were left with unfunded, but highly paid and tenured, health-sciences faculty when the federal subsidies for some instruction programs were ended, thereby precipitating a crisis. Top institutional management reviewing a standard source/use matrix would have had their attention focused on the fact that a great deal of soft money was being used for instruction and may have encouraged development of contingency plans. Traditional financial statements did not fill this role, because the information was included within a mass of detail about restricted funds.

The application of the standard source/use matrix as an early-warning system is important at the state level as well. States are often called upon to absorb the costs of soft-money programs (especially in the instruction area) when outside funding runs out. Cooperative contingency planning between the institution involved and the state is likely to ease the transition and encourage more considered decisions about program continuation or phase-out.

Another major analytical application of the standard source/use matrix at the state level is for summary financial and program planning and budgeting. This includes consideration of issues such as the role of the state relative to other funders in financing postsecondary education; long-range budget projections; the mission, role, and scope of various institutions within a state system; and general consideration of program-area budgets for the current year. It does *not* include the kind of detailed budget development undertaken in some states, review of specific programs by state agencies, or day-to-day management of institutions by states with statewide governing boards. The standard source/use matrix provides summary data only and is not sufficiently discriminating to deal with those issues.

Limitations

Although the standard source/use matrix is a valuable tool for communication and analysis, it has several limitations, summarized below:

- The matrix is not a substitute for the conventional financial statements—it is a supplemental financial statement. In order to comply with generally accepted accounting principles, an institution must continue to generate the Balance Sheet, the Statement of Changes in Fund Balances, and the Statement of Current Funds Expenditures, Revenues, and Other Changes. This is true even if an institution follows accounting procedures designed to make the matrix itself auditable.
- The matrix tends to focus attention on the Current Fund of the institution and to divert attention from other fund groups. This is particularly true if it is used, as suggested, as a summary of institutional operations. It must be

made clear to interested parties that noncurrent funds form a vital part of institutional finances. Those wishing to see the standard source/use matrix as a tool for understanding higher-education finance will have to learn to use the Statement of Changes in Fund Balances for the noncurrent funds in conjunction with the source/use matrix to get an overview of all institutional finances.

- The matrix is best suited for the collection of summary data, as displayed in figure 4. An attempt to collect source/use data in greater detail, for example, at the subcategory or discipline level, will greatly multiply the workload. However, this does not preclude the generation of detailed source/use data on an ad hoc basis to support a particular analysis.
- The matrix is not capable of distinguishing uses among different kinds of unrestricted revenues unless there is a very detailed budgetary control system for each source of funds, as in a few state-level accounting systems. The existence of such a system would raise questions about how unrestricted the revenue really is. In this respect, the standard source/use matrix has the same limitations as any commonly used postsecondary-education financial statement.

4

Implementing the Source/Use Concept

Background

Although presenting financial information in a source/use format can benefit the data users, it will involve some effort by data providers. While the definitions and accounting procedures necessary to develop a standard source/use matrix are consistent with those used in developing the conventional Statement of Current Funds Revenues, Expenditures, and Other Changes, the final format looks considerably different. Moreover, the format requires additional information to show the relationship between sources and uses. Thus an agency or institution that collects or compiles financial information in a source/use format should give careful attention to the implementation process. Before the data are collected, both users and providers must clearly understand what information is wanted and in what format, and how it should be provided.

This chapter is based mainly on the pilot-test experiences in Illinois and Mississippi, pilot-test states of the *Higher Education Finance Manual*/State-Level Technical Assistance (*HEFM*/SLTA) project. As a part of their project activities, the cooperating state agencies in these two very different states tried using a standard source/use matrix in their regular collection of financial information. Agencies in several other states, including Kentucky, South Carolina, New Jersey, and Pennsylvania, have used a standard *HEFM* source/use matrix as part of their reporting formats, and Maryland (also a *HEFM*/SLTA pilot state) is developing a

nonstandardized source/use format. The degree of institutional implementation, beyond the states mentioned above, is unknown.

In large part, the standard source/use matrix will form the basis for this discussion, since it provides a concrete implementation objective. As presented here, the matrix conforms to the conventions of *HEFM*. However, institutions and agencies may need to adapt the matrix to follow their own financial-reporting systems in order to put all financial reports on a comparable basis and to avoid a dual reporting structure. The section first describes a state-level process for implementing the standard source/use matrix, with emphasis on the relationship between state agencies and institutions. It then examines the methods used in the institutional compilation of the standard source/use matrix, and finally, considers the compilation of ad hoc source/use information.

The Implementation Process at the State Level

Although the data used in the standard source/use matrix will normally be generated by institutions, a state-level process will usually be required to coordinate institutional efforts, consistently interpret guidelines, and define the needs of state-level data users. One approach to the state-level implementation process is outlined below. Though not the only approach, it does emphasize important issues that should be considered during implementation.

In general, the most successful state-level implementation processes have emphasized the importance of establishing a *cooperative framework* among the state agency and institutions. There is a firm basis for institutional cooperation with the state, since the standard source/use matrix has perhaps as many uses within the institution as it does at the state level. It is valuable to formalize this cooperative effort by establishing an implementation group composed of representatives from each institution (or from each institutional sector) and from the various interested state agencies. If a standing group of institutional representatives oriented toward financial matters does not exist, it is recommended that the chief executive officer of each institution be asked to designate a representative. In this way, the chief executive will ensure the selection of an appropriate person and will have the opportunity to be apprised of the purpose of the effort.

It is often desirable for the implementation group to devote their first meeting to discussing the *concepts and uses* of the standard source/use matrix at both the state and institutional levels. Since institutional representatives will probably be business officers or chief accountants, it is worthwhile to emphasize the value of the matrix in communicating with nonaccountants and to encourage its use for that purpose. At the same time, it is particularly important for the state agency to outline exactly what uses it intends to make of the data collected for the matrix and to explain why these needs cannot be easily met by more conventional forms of financial reports. For example, a state agency may wish to use an all-current-funds

summary of institutional operations in a standard source/use matrix to support an existing reporting system focused only on state appropriations.

At this first meeting, participants will also wish to consider the design of the *basic format.* Although the standard *HEFM* source/use matrix displayed in figure 4 can be used as a prototype, it will often need to be modified. For example, a state may use revenue and expenditure categories different from those illustrated in figure 4 or consider different types of revenues to be restricted (and therefore to be displayed in the restricted segment of the matrix). This discussion of the basic format is also useful for resolving any problems or concerns. Many times, more fundamental concerns will arise when the participants are confronted with a concrete example of what is to be done with the source/use format.

In some instances, basic concepts and formats can be determined in the context of regular contacts between agencies and institutions. If institutions and agencies have cooperated extensively in providing and using data, the agency itself may prefer to design the basic format, consulting with the institutions informally. Even in this case, however, it is recommended that the agency provide written material to institutional representatives, especially on the subject of intra-institutional use of financial information in a standard source/use matrix.

After the standard source/use matrix has been discussed with the institutions and background information has been provided, financial data can be compiled for the matrix. It is often useful to develop a standard source/use matrix on a *trial basis,* with the understanding that the information will not be used in decision-making in the first year. This approach has the advantage of training institutional agency personnel and uncovering any shortcomings in the format, implementation procedures, or data. It also can reassure institutions that information in an unfamiliar format will not be used at the state level until the institutions themselves become familiar with it.

Once trial reports have been produced, institutions and agencies often will find a *formal review process* helpful to discuss uses, formats, and compilation procedures. Although direct contact between an agency and a single institution may be useful in this context, it is generally more valuable to have several institutions simultaneously deal with these issues. A meeting involving several institutions will bring out different perspectives on source/use information and will provide the opportunity for each institution to explain its point of view. Such a review also guards against polarization of the agency and institution. After the review, both the format and the compilation procedures can be appropriately revised.

Institutional Data Compilation

Although a state agency could compile institutional data in a source/use matrix, the greater familiarity of institutional personnel with their own charts of accounts generally makes institutional compilation easier and more accurate.

Thus institutional efforts and processes are described here. In compiling data for a standard source/use matrix itself, an agency would follow the same general guidelines, although it would probably require a very detailed financial statement and would have to communicate extensively with institutions.

Two basic aspects of institutional compilation of financial data in a standard source/use matrix will be discussed. First, general guidelines for extracting the standard source/use matrix for institutional accounting records will be described. Then two separate methods for compiling the information necessary for the matrix—*the transactional method* and the *estimated method*—will be explained.

GENERAL GUIDELINES

The standard source/use matrix is a display of current-funds expenditures by source of funds. While other configurations of a source/use format are possible (for example, a display of the sources of funds by their use, as noted in section 2), the standard source/use matrix focuses on expenditures. Numbers are generated in the matrix by assigning expenditure accounts to source and use categories. Most of the guidelines for extracting source/use information from institutional accounting records are derived from this method.

1. Unrestricted and restricted expenditure accounts are handled separately. Within the unrestricted accounts, designated and undesignated expenditures are identified separately (if the institution desires such a breakdown). Since fund-accounting practice in higher education normally requires fiduciary controls on restricted and designated funds, an institution usually establishes at least one expenditure account (cost center) for each restriction or designation category. For example, one such restricted expenditure account might be entitled "Hypertension Research (NIH Grant #_____)" and identified within the Department of Internal Medicine for management purposes. In addition, institutions establish a variety of accounts (cost centers) for expenditures of unrestricted funds. These accounts can be used to construct the standard source/use matrix.
2. Each unrestricted, undesignated expenditure account can be assigned to a function, such as Instruction, Research, Public Service, and placed in the appropriate cell of column 1 in figure 4. For those institutions that have organized their financial reports to conform to *HEFM* guidelines, this column can be taken directly from the Statement of Current Funds, Revenues, Expenditures, and Other Changes. Institutions that organize their reports in some other way will have to "crosswalk" data in the institutional expenditure categories to the *HEFM* categories used in the standard source/use matrix. If the two methods of organization are similar, one may use figures from the Statement of Current Funds, Revenues, Expenditures, and Other Changes with minor adjustments. If they are radically different (for example, an

institutional reporting structure based on major organization units, such as a College of Arts and Sciences), one may have to consider separately each unrestricted, undesignated expenditure account and assign it to a category to conform with *HEFM* guidelines. Information sufficient to perform this function may be found in *The Higher Education Finance Manual: Data Providers' Guide.*

3. The procedure for unrestricted Undesignated Funds should be followed for Unrestricted, Designated Funds (see column 2 in figure 4) as well. Again, each expenditure account should be assigned to a source and a use category. And again, the Statement of Current Funds, Revenues, Expenditures, and Other Changes can be used as the basic resource document. Of course, Designated Funds should be dealt with separately from Undesignated Funds.
4. For restricted funds, the standard source/use matrix requires information on the relationships among revenue sources and expenditures often not explicit in an institution's accounting records. Institutions can compile this information using worksheets like those illustrated in figure 6. *Essentially, each worksheet is a column in the standard source/use matrix, with room for multiple entries for each cell.* One worksheet will be required for each restricted-funds column of the matrix (see columns 3 to 13 in figure 4).

   Using a set of these worksheets, one can assign each restricted-fund expenditure account to a particular cell, entering either its account number or a dollar amount.

   The source of funds for each restricted expenditure account can often be determined by looking at the fund. If an institution is complying with and accounting for its restriction categories in the standard fund-accounting way, most restricted funds will be separately identified in the accounting system. One difficulty might arise if an institution combines two different sources of revenue with the same restriction in the same expenditure account. For example, an institution could have both gifts and endowment income restricted to providing undergraduate scholarships. In such a case, expenditures should be allocated between the two sources. Often the revenue accounting system can provide a useful supplementary source of information for this purpose. From the revenue accounting system, one can estimate the proportion of restricted funds received from each source and allocate expenditures from this estimate. This kind of estimation is not necessary if source/use information is compiled on a transactional basis.

   Like the source of funds, the use of funds can usually be determined by examining the fund structure. However, such a determination may be complicated by funds restricted to purposes that do not conform to the use categories of the standard source/use matrix (the *HEFM* functional expenditure categories). For example, an institution may have endowment income restricted to the law school. Within the law school, however, the funds may

FIGURE 6

STANDARD SOURCE/USE MATRIX WORKSHEET

Source of Funds/Revenue Category
(Endowment Income)

Use/Expenditure Category	Dollars or Expenditure Account Codes
Instruction	
Research	
Public Service	
Academic Support	
Student Services	
Institutional Support	
Operation and Maintenance of Plant	
Scholarships and Fellowships	
Mandatory Transfers	
Auxiliary Enterprises	
Hospitals	
Independent Operations	

be spent on instruction, public service, libraries, or other functions. If the restricted expenditure accounts are only identified as Law School—Restricted Endowment Income, one must determine the appropriate functional expenditure categories (uses) to which this expenditure account should be assigned.

Once each restricted-funds expenditure account has been assigned to a source/use category on the worksheets, the totals for each cell can be entered in the standard source/use matrix. Alternatively, the account numbers can be used to form the basis of an automated, transactional derivation of a standard source/use matrix.

5. When the cells of the standard source/use matrix have been completed, the totals can be computed by adding across and down. The last column (see column 14 in figure 4) should be identical to the expenditures reported by function in the Statement of Current Funds Revenues, Expenditures, and Other Changes. However, the bottom line of the standard source/use matrix will not necessarily be identical to the summary of revenues by source included in the Statement of Current Funds Revenues, Expenditures, and Other Changes, since only those revenues spent and thereby reported in an expenditure account will be recorded in the process outlined above. This will not affect restricted funds since, according to the principles of accrual accounting, restricted revenues must be earned (expended in accord with the restrictions) before they are reported. An identity between restricted revenues and expenditures is thereby ensured. However, unrestricted revenues may be used to build up unrestricted current-fund balances. Since these revenues would not be expended, they would never appear in a standard source/use matrix except in the recommended footnote (see section 3). On

the other hand, some funds applied to uses identified in the unrestricted expenditure accounts will not have a readily identifiable source (the institution will not draw down unrestricted fund balances to allow expenditures to exceed revenues). This financial operation should also be footnoted (see section 3).

TRANSACTIONAL COMPILATION OF THE SOURCE/USE FORMAT

Source/use information can be derived directly from the institutional accounting system to permit a direct audit trail back to the accounting system. Such auditability can be insured by using a transaction-based compilation in the matrix, employing the same guidelines described above. Transactional compilation of the standard source/use matrix requires a source-of-funds identifier for each expenditure account. This is usually done as a part of a structured fund code; that is, ---xxx-- ----, where the xxx code identifies a particular source of funds and the rest of the code identifies expenditures by function, organization unit, object, or other. The transactional method eliminates the crossover assignments to source and use categories. In the scholarship example described above, the institution would be required to maintain separate expenditure accounts for the two revenue sources. However, these could be aggregated in an automated fashion, since the only point of difference would be the revenue code. In the law-school example, the institution would establish separate expenditure accounts for each function to which the restricted endowment income would apply. Since the separate accounts would have the same revenue identifier, they could easily be reaggregated if the user wanted to emphasize the uses of the endowment fund itself.

The major advantage of transactional source/use information is that it permits timely use of a flexible and highly credible standard source/use matrix without continuing expenses. The major drawback of this approach is that the start-up costs are substantial. The redesign of an entire accounting system to meet the conditions outlined above requires substantial resources at the institutional and/or state levels. This approach is recommended only if a state or institution is already redesigning its accounting system or if it has a system that already meets the criteria. In these cases, the only requirements are the minimal systems work to produce the report and the choice of an account-code structure to provide the necessary information.

ESTIMATED SOURCE/USE INFORMATION

The standard source/use matrix can also be developed without using transactional expenditure and revenue data. Essentially, the general guidelines described above are followed, but the analysis uses regular expenditure reports (a detailed financial statement or internal institutional accounting records). Each account is assigned to a source and use category. While this operation can always be done manually, a more complex institution may find it worthwhile to develop a simple

computer program for compiling the expenditure accounts into appropriate source and use categories.

The major advantage of the estimating approach is its relatively low effort requirements. Experience in institutions that have compiled a standard source/use matrix indicates that smaller, less complex institutions with limited restricted-fund expenditures can accomplish the task in 2 to 4 work hours (more for a one-time learning experience on the first attempt). More complex institutions with a substantial volume of restricted-fund expenditures may require 20 to 40 work hours to complete the matrix (more for a one-time learning experience). The major disadvantages of this approach are the expenditure of effort each time a standard source/use matrix is required, the lack of flexibility, the delay in receiving expenditure reports, and the inability to track the reported source/use information back to audited, transactional expenditure data.

Ad Hoc Source/Use Information

Although it is rather difficult to talk about implementation of ad hoc source/use information (since it can take so many forms) the same general procedures are applicable. Ad hoc source/use information, like the standard source/use matrix, is compatible with higher-education fund accounting, even though a particular source/use analysis may have a different focus. In general, the more detail and flexibility in an institutional accounting system, the greater capacity that system will have to produce ad hoc source/use information. Finally, experience in producing a standard source/use matrix will prove to be a valuable learning tool for developing ad hoc source/use information.

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