New Future for Federal Transit Administration Section 15 Program

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The results of an extensive evaluation conducted by the Federal Transit Administration (FTA) into the future of the Section 15 Uniform System of Accounts and Records and Reporting System are reported. On the basis of this evaluation, FTA will implement major structural and procedural changes to reduce the burden of reporting and improve the value of the data for analysis. The structural changes to the Section 15 program that are to be made through the rulemaking process are discussed. FTA published an Advanced Notice of Proposed Rulemaking that identified alternative changes and related issues and a Notice of Proposed Rulemaking (NPRM) that described FTA's proposed changes. From public comments, FTA will publish a rule to implement major changes. Because rulemaking is under way, the progress through the NPRM stage is the focus of the discussion. FTA applied a benefit-cost approach to consider trade-offs between the usefulness of the data base and the burden of reporting. FTA considered fundamental objectives of the program and its strengths and weaknesses from the perspective of 14 years of data base production. The major structural changes proposed to reduce the burden of reporting include replacing the current three voluntary and one required report levels with a simplified structure; reducing voluntary financial details by over half; replacing the balance sheet with sources and uses of capital; and raising the threshold for complete reports on contract service from 50 to 100 or more vehicles. To ease reporting and data access, FTA will improve program operations through computerized reporting, new reports on national trends and operators' performance, and more accessible computerized data.

The Federal Transit Administration (FTA) is nearing completion of a comprehensive formal evaluation into the future of the Section 15 Uniform System of Accounts and Records and Reporting System (the Section 15 program) that has been in operation for 14 years. On the basis of this evaluation, FTA will implement major structural and procedural changes to reduce the burden of reporting while improving the value of the data for a range of important local and national applications.

The Uniformed System of Accounts and Records and Reporting System were authorized in 1974 under Section 15 of the Urban Mass Transportation Act of 1964, as amended, and prescribed in January 1977, as called for in the law. Section 15 requires the Secretary of Transportation to establish a uniform system of accounts and records and a reporting system to collect and disseminate public mass transportation financial and operating data. More than 500 public transit operators use the Section 15 systems to record summary information in annual reports to FTA.

The Section 15 program provides the sole source of standardized and comprehensive data for use by all constituencies of the transit industry. Section 15 information is used for management and planning by transit systems and for policy analysis and investment decision-making at all levels of government. It provides a resource for consultants, researchers, and industry suppliers. In addition, the Section 9 formula apportions more than $1.5 billion in FTA grant funds annually based on a statutory formula that in part uses Section 15 data. No grant may be made under Section 9 unless the applicant and beneficiaries of the grant are subject to both the Reporting System and the Uniform System of Accounts and Records prescribed by Section 15.

At a national level, Section 15 data are the foundation for the annual summaries of the U.S. public transit industry by the U.S. Department of Transportation in its multimodal report, the White House Council on Environmental Quality, the United Nations, and the American Public Transit Association (APTA). The Section 15 structure and definitions have provided a valuable model for international data bases and analyses (1). For example, the Section 15 systems provided the structural model used by the European Conference of Ministers of Transport in multinational research projects on international public transport subsidies (2) and the economics of light-rail systems (3).

Throughout its review, FTA solicited and received a broad range of comments and recommendations from experts representing operators, public agencies, academia, consultants, and other constituencies of the public transit industry. Detailed recommendations and proposals were received from the FTA Section 15 Reporting System Advisory Committee (4), the APTA Section 15 Committee (5), TRB, and other representatives of the public and private sectors.

As part of the review, FTA initiated a rulemaking process to discuss, propose, and ultimately implement changes to the program. On August 13, 1990, FTA published an Advanced Notice of Proposed Rulemaking (ANPRM) that identified issues and invited comments on a broad range of changes proposed by industry constituencies (6). FTA then published a Notice of Proposed Rulemaking (NPRM) that summarized the 59 public comments on the ANPRM and identified and explained the changes FTA proposed to make to the program (7).

FTA is now developing a final rule that will discuss ANPRM and NPRM comments and implement major changes to the program. When completed, the rulemaking will result in major improvements to the Uniform System of Accounts and

Records and Reporting System and will represent a major stage in the 14-year evolution of the Section 15 program. If FTA is able to publish the final rule early in 1992, many of the structural changes described in the rule could be effective for the 1992 report year.

This report focuses on the broad range of structural changes proposed through the rulemaking process. In evaluating the proposed changes, FTA applied a benefit-cost approach to consider trade-offs between the usefulness of the data base and the burden of reporting. The objective was to present a clear picture of who would gain or lose under each proposal and the extent of these gains or losses. FTA considered the potential effects of proposed change from three separate perspectives.

From a reporter’s perspective, changes in reporting requirements and procedures can

- Require a one-time cost for revising a reporter’s chart of accounts and associated accounting software,
- Increase or decrease the annual cost of data collection, and
- Increase or decrease the annual cost of data validation and annual report preparation.

From FTA’s perspective, changes in reporting requirements and procedures can

- Require a one-time cost for revising reporting forms and instruction manuals, retraining the data validation contractor, revising data base formats, redesigning data validation checks, redesigning the annual report, revising data validation and report preparation software, producing documentation to advise data users of structural changes, particularly those that affect time-series analyses, and providing training to reporters and data users; and
- Increase or decrease the annual cost of data validation and annual report preparation.

From a user’s perspective (users include operators, consultants, FTA, other federal agencies and state and local governments), changes in reporting requirements and procedures can

- Increase or decrease the number of data items available (i.e., reflecting changes in the types of information and levels of detail provided);
- Increase or decrease the number of observations for a particular data item (i.e., the number of agencies reporting that data item);
- Increase or decrease the accuracy with which a particular data item is reported;
- Increase or decrease the consistency of data among reporters in terms of how definitions are interpreted; and
- Increase or decrease the comparability of data with those of prior years (i.e., for time series analyses).

The fundamental issue is what data items provide valuable enough information to justify the burden of reporting and not the number of pages or forms required. When possible, FTA estimated the numbers of reporters who would have increased or decreased requirements.

In general, the proposals ease the burden of reporting by simplifying or eliminating requirements and clarifying ambiguities. The proposals also increase the value to analysts of the data base for the following reasons:

- Simplified details and procedures will result in improved data quality;
- All data will be easily accessible through reports and computer media; and
- Capital cost data, which have long been a weakness in the systems, will be improved by replacing the balance sheet with annual sources and uses of capital.

To ease reporting and data access, FTA will undertake a broad range of operational improvements to the program, including streamlined forms and instructions, automated reporting, new reports, and more accessible computerized data.

**PROPOSED MAJOR CHANGES**

The proposed major changes are as follows:

- The basic reporting structure will be simplified. The current structure of the three voluntary and one required report levels will be replaced with a simplified structure and fewer details.
- Voluntary-level financial details, the most complex component of the systems, will be reduced by over half.
- The threshold for complete reports on purchased transportation service will be increased from the current 50 or more vehicles to 100 or more vehicles. This change will decrease the reporting burden by allowing more contract services to be reported using a basic subset of forms.
- Security and ticketing costs will be moved from the administration to the operations grouping. This change responds to industry concern that the systems exaggerate administrative costs. The cost of this more logical alignment could be a reduction in the historical continuity of summary expenses for most reporters.
- Capital reporting will be revised by adding sources and uses of capital in place of the balance sheet. This proposal overcomes a major weakness in the application of Section 15 data. The absence of capital costs has encouraged an overemphasis on operating, rather than capital, costs, which can distort comparisons between modes or operators with varying degrees of labor or capital.
- Accounts will be redefined and employee contributions will be eliminated on the fringe benefits schedule. This revision simplifies reporting with only a minor loss in data.
- Labor equivalents will be redefined. Measuring labor in terms of hours rather than in the form of an arbitrary national standard for a labor year will increase data consistency without increasing burden.
- Fleet inventory information from three different forms will be consolidated onto a single form.
- Reports of operators’ work time will be restructured. This proposal greatly simplifies reporting with only a minor loss in data.
- The option of indicating the percentage of paid hours by part-time operators will be added. These data will be valuable in assessing the effect of part-time labor on performance.
• The following required reports will be eliminated because their reporting burden outweighs the value of the data to analysts.
  — Pension plans: these data are inappropriate to many operators, difficult to compile, and seldom used in analysis.
  — Balance sheet: these object classes are inconsistently reported and of minimal value to analysts.

MAJOR ISSUES

FTA considered the fundamental purpose of the Section 15 systems and whether the systems should continue or be significantly modified in the future.

As stated in the Urban Mass Transportation Act, the Section 15 systems were designed to provide information on which to base planning for public transportation services and public sector investment decisions at all levels of government. FTA asked how successfully Section 15 provides information required by the transit industry, including federal, state, and regional policy-makers, local transit operators, consultants, suppliers, and academic researchers, while limiting the costs and burden of reporting. Does the current structure, format, and content represent a successful compromise among competing interests, or are changes necessary?

Industry respondents found Section 15 to have a broad range of applications, e.g., as a source of standardized definitions, as a resource for academic research, and for local management use. Some respondents expressed the opinion that Section 15 is most useful for national policy analysis. Although some respondents found it unsuitable for local management and planning, particularly for small systems, others found Section 15 useful for local applications. In general, the program was found to satisfy legislative intent, although many respondents advocated improvements in reporting or streamlining of content to improve the balance between the burden of reporting and the value of data.

Comments from the transit industry and the public universally supported continuing the Section 15 program. Numerous comments requested a reduction in the level of required details, particularly for smaller operators. These and other proposed operational improvements to the program are discussed later in this study.

STRUCTURAL ISSUES

This section focuses on proposed changes to fundamental aspects of the structure of the Section 15 Systems. These proposals and related issues discuss several components of the systems or address areas identified by respondents as major weaknesses. Proposals to modify specific components of the systems are described later.

Number and Type of Reporting Levels

A major characteristic of the current structure is the use of various reporting formats. The required (R) level applies to all operators and specifies the minimum data that must be reported by all beneficiaries of FTA Section 9 funds. Operators currently have the option of reporting additional details at any of three voluntary levels (A, B, or C). In order of detail, the A-level requires the most information, followed by levels B, C and R.

The only difference between the required and voluntary levels of reporting is the amount of detail provided for operating expenses and revenues. All other information is required of all reporters and is filed on the same forms. Voluntary levels of expense and revenues have the same basic structure as the required level, but they expand into greater detail. There is no difference in the underlying Uniform System of Accounts and Records.

Although FTA suggests that operators with certain fleet sizes report at specific voluntary levels, this is not a requirement. Several of the largest operators report at the required level, whereas some small operators report at voluntary levels. Operators that received FTA grants for management information systems (MIS) have been obligated to report at voluntary levels. Beginning with the 1991 report year, reporters who received MIS grants will have been able to report at either the voluntary or required level.

Considering the usefulness of a data base that provides various levels of financial details for operators, FTA asked whether voluntary reporting should continue. Is a subset of the national data base that contains more detailed information valuable to analysis or does it encourage biased results? Is the current system unnecessarily burdensome or excessively detailed? And how many levels should there be, whether required or voluntary?

The evaluation showed a great range of views on voluntary reporting and the number of reporting levels. In response to the ANPRM, six respondents supported voluntary reporting, with three in favor of the current approach. Of the 22 comments advocating required reporting only, 10 supported one level, 10 supported two levels, and 1 each supported three and four levels. In addition, two comments supported establishing a new, less-detailed level for small operators.

In its evaluation of proposals to change the current approach to reporting expenses and revenues, FTA concluded the following in the NPRM:

1. The current structure is unnecessarily complex; the value to analysts of many voluntary expense and revenue details is insufficient to justify their continued reporting.

2. The current required level alone does not provide enough details on costs and revenues to meet Section 15 program objectives of providing data to support management, policy, and investment analysis.

3. FTA will strive to limit net increases in financial reporting requirements for the large number of operators reporting at the minimum level who have increased requirements under any proposals for two or more required levels.

4. Most large operators have internal accounting systems, based on the Section 15 Accounting System, that have a greater level of detail than is currently required.

5. Forms or data cells that are inapplicable to most operators do not create a reporting burden for those operators. For example, the existence of expense details on maintenance of roadway and track or communications systems do not cre-
ate a burden to the majority of operators who can ignore these cost items.

6. Data reported for some, but not all, operators have valid and important applications. Valuable and undistorted analysis can be performed by using an incomplete data set if sources are identified and no universal conclusions are attempted without statistically valid methods. For example, voluntary costs such as fare collection, maintenance of roadway and track and passenger stations, and security could be useful in deriving unit costs for analysis for investments in alternative modes.

On the basis of these conclusions, FTA made the following proposals in the NPRM:

- The current structure of three voluntary levels and one required report level will be simplified. The structure proposed in the NPRM reduces the number of voluntary functions (A-level), expense object classes, and revenue object classes by over half.
- Beginning in the 1991 report year, reporters who received FTA MIS grants will be able to report at either the voluntary or required level. FTA will continue to encourage voluntary reporting for large operators and will make these additional details easily accessible as an incentive for operators to contribute to the national data base.

Few of the 26 NPRM comments directly addressed reporting levels in general or in detail. Of the three respondents opposed to the NPRM proposal, two supported a single required level, and a third supported either one or two required levels. Fifteen respondents either explicitly supported the proposed approach to reporting level or supported the overall NPRM structure but did not directly refer to reporting levels—probably the major proposed structural change.

Frequency of Reports

Far more respondents supported continuation of annual reporting than the proposed less frequent reporting. A few respondents suggested less frequent reports from operators with small fleets. In response to this clear consensus, FTA will continue annual reporting while casing the burden of reporting by reducing the number of required forms.

Method of Preparing Reports

In the case of multimode operators, operating expenses, operators’ wages, labor years, ridership, and type of service are reported separately by mode. Operating expenses reported separately by function (operations, vehicle and nonvehicle maintenance, and administrations) are reported by mode. However, operating expenses that are reported by object class (e.g., wages, contracts, and fuel) are not reported separately by mode.

Comments overwhelmingly supported continuing the current structure of modal separation. At least as many respondents favored adding to modal data as reducing them.

Demographic Data: Revision or Expansion?

Each reporting agency has been required to submit a statement from the local metropolitan planning organization (MPO) stating the agency’s service area and population and describing the methods used to determine the service area. FTA assigns a single census-defined urbanized area code (UZA), with population and surface area, to each reporter. This code, which is used to apportion Section 9 funds, can be an inaccurate measure of service area and population.

Respondents generally supported continuing to report or expanding demographic data. FTA proposes to eliminate the MPO statement but to continue collecting data on service area population and density. Because census data provide an inaccurate measure of service area and population, these data are not a good substitute.

PROPOSALS TO CHANGE DETAILED STRUCTURE

This section presents the proposals made in the NPRM to modify specific components of the systems and related issues.

Reducing Voluntary-Level Details

In restructuring and simplifying the number of voluntarily reported expense and revenue details, FTA’s intent is to carefully balance the burdens of reporting against any losses of valuable data for analysis and historical continuity. FTA developed the following criteria to consolidate the number of current voluntary details into a simplified new structure.

- Consolidate minor cost items (in terms of dollars and reporters providing that item);
- Disaggregate large items;
- Retain easy-to-collect items;
- Avoid irrelevant or analytically meaningless items;
- Retain items that are key decision variables; and
- Avoid realignments from one category to another in the interests of preserving the continuity of 12 years of historical data.

Purchased Transportation Services

Transportation service provided under contract is described on several reporting forms. Form 002 describes contractual relationships. Costs of contracts are reported as expenses on the 300-series forms. Complete reports must be filed by or for contractors that provide over 50 revenue vehicles. A public agency contracting for under 50 revenue vehicles also describes contract service on separate Forms 004 (Maximum Service Vehicles) and 408 (Revenue Vehicle Inventory) for vehicles operated, 403 (Transit Way Mileage), and 406/407 (Transit System Service) for service supplied and ridership.

The threshold for submission of a separate Section 15 report by a purchased transportation provider is being increased from 50 to 100 vehicles in maximum service. This change is con-
sistent with FTA's objective of easing the reporting burden for small transit agencies and operators.

Capital Expenses

The reporting system collects a limited amount of information on capital expenses in relation to the detail provided on operating expenses. Capital expense information includes a balance sheet (Form 101) with basic financial information on assets, liabilities, and capital at the end of the financial year. Rolling stock, facilities, and equipment are combined into a single category. Unlike operating expenses, which are structured to allow modal separation of costs, capital accounts are not separated by mode.

In addition, a single depreciation figure for all modes combined is reported on the expense forms (300 series) without separations identifying depreciation of vehicles or other assets by mode. The accounting system does not provide or recommend standardized approaches to depreciation or require reporters to identify the approaches they use. The amount and source of public assistance funds dedicated to capital are also identified for all modes.

It is possible that the lack of capital cost data encourages overemphasis on operating costs in analyses of performance and alternative investments and may also limit thorough evaluation of all expenses, revenues, and outputs. Capital expense data can include purchases and depreciation of capital assets, including rolling stock, plant, or other equipment.

Comments generally recognized the importance of capital information in the national reporting system and of adding annual sources and uses of capital to improve the usefulness of the data base. Of the 15 respondents requesting an expansion of capital information, 9 supported the addition of sources and uses of capital. Of the seven respondents requesting that the balance sheet be eliminated as inconsistent, four proposed adding sources and uses of capital.

FTA proposes to revise capital data reporting to add sources and uses of capital, as proposed by APTA. A new form will combine current information on private and public sources of revenues for capital with new information on uses of capital. Uses of capital will identify purchases of rolling stock; transit way, structures, and equipment; passenger facilities; land; and other assets. This new information, which was supported by industry and respondents, should provide valuable information for analysis without significantly adding to the reporting burden. All major categories for use of capital will be identified by mode.

To compensate for any additional effort in reporting uses of capital, FTA will eliminate the balance sheet. Although there is some support in the industry to retain it, because it is often reported inconsistently, the balance sheet of reduced value for analysis. Only one NPRM comment supported retaining the balance sheet.

Revenues

Information on revenues is reported in several categories. The required level Form 201 (Operating Revenue) contains information on fares, other earnings, and federal, state, and local grants, and identifies total subsidies for handicapped, senior, and student passengers combined. Form 202, used by all voluntary-level reporters, expands the Form 201 structure into greater detail. For example, Form 202 expands the single-fare total on Form 201 into seven categories. Forms 201 and 202 identify revenues for publicly operated, but not contracted, service. Multimode operators provide only system-wide totals, even though all reporters have the option of separating fares by mode.

Forms 103 (Capital Funding) and 203 (Sources of Operating Funding) describe revenues for operating and capital assistance by governmental source (federal, state, and local) and by the means used to collect revenues (e.g., sales, income, and gasoline taxes and tolls).

FTA proposes to replace the current single voluntary and required revenue reporting forms with a simplified structure and reduced details. The new structure will be the result of applying the criteria previously described.

Seven ANPRM and NPRM respondents proposed adding modal separation of fare revenues, whereas three opposed this separation. Although the voluntary- or required-level reporters have had the option of allocating fares by mode since the 1984 report, few have done so despite the fact that most operators collect this information for their own use. Few analysts have used modal fares, primarily because these fares are available only on tapes.

FTA recognizes the high level of interest by analysts in modal splits of fares, that would allow Section 15 data to be used to analyze a broad range of valuable modal performance measures, including farebox recovery rates, average fares, and subsidies per rider. FTA will not require modal fares because of the difficulty this type of system would present for operators with large numbers of transfers and monthly or other passes. However, FTA proposes to encourage a greater degree of reporting of modal fares and improving access to modal fares through published reports and microcomputer files.

Operating Expenses

Transit systems use the 300-series forms to report operating expenses in function (operations, vehicle and nonvehicle maintenance, and general administration) and object class (wages, fringe benefits, and other) categories. A reporter at the minimum or required (R) level uses the basic 4 functions and 14 object classes. This detail expands, for operators at any of the 3 voluntary levels, up to 44 functions and 47 object classes at the most detailed A-level. Voluntary expense details are consolidated to the required level in the annual report and on the Section 15 diskettes. Complete expense information is available on computer tape only.

Functions and object classes can be cross-classified, allowing, for example, identification of fringe benefits paid to vehicle operators. There is, however, limited ability to separate modal costs for multimode operators. Modal costs can be separated by function (e.g., light-rail vehicle maintenance) but usually not by object class (e.g., light-rail wages) or by function and object class (e.g., light-rail operators' wages).
There was a large range of views on voluntary reporting, the number of reporting levels, and the number of details in each level. Of the six ANPRM respondents who supported voluntary reporting, three supported retaining the current system and two proposed a reduced level of voluntary details. Of the 22 respondents supporting all required reporting, 9 supported use of the current required level alone, 1 recommended that the current B-level be used for all reporters, 10 proposed two required levels, and 1 each supported three and four required levels.

FTA proposes to replace the current expense reporting structure of three voluntary and one required level with a simplified structure and reduced details. This new structure will be the result of applying the criteria previously described.

FTA proposes to realign the Uniform System of Accounts and to move Ticketing and Fare Collection (151) and System Security (161) from the General Administration to the Operations category. These functions are major cost items for current A-level reporters and represent the fourth and fifth largest cost items of the 44 reported. Realigning these costs could disrupt the continuity of 12 years of historical costs, because the definitions and values of Operations and General Administration will change. However, there is a logic to moving these items into operations.

As previously discussed in structural issues, few of the 26 NPRM comments dealt directly with expense reporting levels or the number of details. Of the three respondents opposing the proposed approach to reporting levels, two supported a single required level, and a third supported either one or two required levels. Fifteen respondents either explicitly supported the approach to reporting levels proposed in the NPRM or supported the overall NPRM structure but made no direct reference to reporting levels—probably the major feature of the proposed structure. There were only two comments addressing the proposed realignments—both in support.

**Other Financial Data**

**Operators' Wages and Hours Schedule**

The current Form 321 (Operators' Wages) provides a detailed breakdown of the hours and wages paid to revenue vehicle operators, including major categories of dollars and hours for both operating and nonoperating paid wages. Seven respondents requested either eliminating the Operators' Wages and Hours Schedule or consolidating the detailed categories. FTA proposes to simplify the Operators' Wages and Hours Schedule by consolidating detail and providing improved definitions.

**Fringe Benefit Contributors**

Fringe benefit contributors of both employers and employees are reported on Form 331. Of five respondents proposing a revision to fringe benefit reporting, four suggested eliminating employee contributions. FTA will eliminate reports of employee contributions to fringe benefits. This change is consistent with the specific comments received on fringe benefits and with the general support for simplifying reporting.

**Pension Plans**

Information on the cost components of the various pension plans that reporters provide for their employees has been reported on Form 332 but has not been published. Respondents universally supported elimination of the pension plan data. Although 20 supported elimination of Form 332, 1 respondent supported consolidation, and no other respondents defended the data for analysis.

FTA proposes to eliminate the pension plan questionnaire. This change is consistent with the comments on the minimal value of pension data and the general support for simplifying reporting and reducing the number of forms. The total cost of the pension plan will continue to be a part of, and included with, the fringe benefit cost.

**Nonfinancial Operating Data**

The reporting system uses several forms to collect information on a broad range of nonfinancial characteristics of transit service, including maintenance of vehicles, fleet inventories, infrastructure, labor resources, safety, service supplied, and ridership.

**Fleet Inventory**

The reporting system records several types of fleet information on several forms. Forms 003 and 004 (Maximum Service Vehicles) contain the number and type of vehicles required and available, measured at the time of year when maximum service occurs, to meet peak or maximum service requirements. Forms 406 and 407 (Transit System Service) record the number of vehicles in operation during average daily time periods. Form 408 (Revenue Vehicle Inventory) measures all vehicles in the total fleet, including those that are active, stored, and awaiting sale.

Consistent with numerous ANPRM responses requesting simplification of reporting and reduction in the number of forms, FTA is eliminating Forms 003 and 004 (Maximum Service Vehicles) by incorporating the information from those forms onto Forms 406 and 407 (Transit System Service).

**Service Periods**

Periods of transit service for each mode, including a.m. and p.m. peaks, midday, and hours of service for weekdays, Saturdays, and Sundays are reported on Form 401. These data are not published in the Annual Report.

The great majority of respondents recommended eliminating Form 401. Consistent with numerous ANPRM requests to simplify reporting and reduce the number of forms, FTA is eliminating Form 401. Information on service period sched-
ules will be incorporated onto Forms 406 and 407 (Transit System Service).

**Service Reliability (Roadcalls)**

Data on roadcalls for mechanical failure and other reasons are reported on Form 402. The ANPRM asked whether reports of roadcalls are of value, whether definitions should be revised to make the data more useful, or whether alternative data items could be substituted to measure reliability.

Taken as a group, the ANPRM and NPRM comments expressed a high level of dissatisfaction with the current approach to reporting roadcalls. Because roadcalls are a crucial aspect of performance, the current definition of roadcalls will be retained until FTA and the industry are able to develop a superior standardized measure of reliability.

**Transit System Employee Counts**

Systemwide hours worked are categorized by various functions on Form 404. These hours are divided by 2,080 and reported as full-time equivalents (FTEs). There are no distinctions between labor of full- and part-time employees.

Some respondents supported reporting work hours instead of annual FTEs, arguing that the use of 2,080 h/labor-year is arbitrary and confusing. A few respondents supported the use of percentage of hours worked by part-time employees as a useful indicator of the extent to which part-time employees are used.

To avoid the arbitrarity of the current definition of FTE employees, FTA proposes the use of work hours instead of equivalent work years as the standard measure of labor equivalents. A check-off box will be added to Form 404 to indicate the use of part-time operators. In addition, on a triennial basis, all reporters will have the option of indicating the percentage of paid hours for revenue vehicle operations provided by part-time operators on Form 404. The local definition of part-time will be summarized on Form 005 (Supplemental Information). FTA believes that these data will be valuable in assessing the effect of part-time labor on performance, including costs, service, safety, and other factors.

**Service Supplied and Consumed**

Information on service supplied and consumed is reported on Form 406 for nonrail modes and on Form 407 for rail modes. Information includes measures of the quantity of service supplied, including vehicle miles and hours, actual and scheduled vehicle revenue miles, and capacity miles; and unlinked passenger trips and passenger miles. Most items on these forms are reported by time of day.

Two comments opposed and no comments supported development of new measures of service quality. Although it will not add measures of service quality, FTA will improve the access to reports of actual and scheduled vehicle revenue miles that are currently being reported. Scheduled vehicle revenue miles are currently available only on tape. Comparisons of actual and scheduled vehicle revenue miles can provide a measure of one aspect of service reliability.

**SUMMARY OF PROPOSED OPERATIONAL IMPROVEMENTS**

On the basis of comments from the rulemaking process and the industry Section 15 advisory groups, FTA is undertaking extensive operational improvements to the program. The purpose of these improvements is to ease the burden of reporting and improve the usefulness of the data base. The simplified and rationalized content and structure of the systems and streamlined reporting procedures will improve the quality of the data base and provide the foundation for the next stage of the Section 15 program: emphasis on improved data applications by all industry groups.

FTA has implemented several procedural changes that will ease reporting. The requirement for a full report for contract service will be raised from 50 to 100 vehicles in maximum service, substantially reducing the burden for reporting on the growing number of contract services.

FTA will waive specific reporting requirements that are particularly burdensome for small reporters. Reporters operating 25 or fewer revenue vehicles currently are not required to provide data on operator wages, fringe benefits, and pension plans. In addition, sampling or other procedures that meet prescribed precision and confidence levels need only be applied every third year by reporters that (a) serve urbanized areas with populations less than 500,000; (b) directly operate fewer than 100 revenue vehicles for all modes in maximum service; or (c) use purchased transportation services (private or public carriers providing transit service under contract to a public agency, except those purchased transportation services submitting separate Section 15 reports).

FTA will rewrite program documentation to accommodate the structural changes resulting from the rulemaking and to update and clarify definitions of terms. The original documentation on the systems (8) will be rewritten, and the Reporting Manual (9) will continue to be updated each year.

In response to requests for streamlined reporting and improved data access, FTA will develop software to allow reporters to perform basic validation checks before filing reports on diskettes. This procedure will provide reporters with their own data in machine-readable form. Respondents enthusiastically supported development of this capability.

FTA will take several steps to improve the usefulness of the data base to industry analysts. The Data User’s Guide to the FTA Section 15 Reporting System (10) will be updated to document changes from the rulemaking and will help data users identify and apply required data, particularly for time-series analyses.

FTA will improve data applications through new means of computerized access and production of new products. All data submitted by reporters currently are stored on magnetic tapes available for public use. Currently, only a subset of the complete data base containing some, but not all, required-level data is published in the annual report and distributed on diskettes for use in spreadsheets. Much of the revenue and financial details provided by voluntary-level reporters and some required-level details, including operator time and fleet inventories, are available only on tape and must be run on mainframe computers.

According to the comments, the tapes discourage applications of the unpublished data. Respondents also requested
better automated access to the data base through new computer formats or on-line access. To improve access, the entire data base defined in the final rule will be accessible to the public for use on microcomputers running standard spreadsheet and data base software. Beginning with the 1990 data base, all operating expense and revenue data, including that previously available only on tape, will be available for microcomputer applications.

Beginning with the 1991 report year, FTA will produce several new reports: transit profiles for individual reporters, with key data items, performance measures, and graphic displays, grouped by the 30 largest operators (11), operators serving urbanized areas of more than 200,000 (12), and operators serving urbanized areas of fewer than 200,000 (13); a new annual report of national summaries and trends (14); and a new annual data table report (15). To ease the transition to the restructured system, FTA will continue to provide training for reporters and will develop training and guides to encourage applications of the data base.

Although completion of the rulemaking will represent a major stage in the evolution of the Section 15 program, improvements will continue to ease reporting and encourage data applications. The mechanisms for these ongoing improvements will continue to be the Reporting Manual, published annually. FTA will continue to respond to the concerns of reporters and data users and will work cooperatively with APTA, TRB, and other industry groups to ensure that the Section 15 program realizes its potential as a vital resource to the industry.

REFERENCES


DISCUSSION

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Lyons and Fleischman describe the pending changes in the federal transit reporting system—changes that should provide a strong foundation for further improvements in the accuracy, timeliness, and relevance of this vital national data base. This discussion explores some of the issues raised by the agencies responsible for submitting the Section 15 reports.

In May 1983, APTA formed a special committee to analyze problems in the Section 15 system and propose solutions. APTA completed its review in 1988, delivering a complete set of recommendations to UMTA (not FTA).

The draft federal proposal (7) was a pleasant surprise for the APTA committee members who had been promoting their recommendations over the years. As Table 1 indicates, many of the significant APTA committee recommendations were addressed in the draft rule. The only significant issues raised by the committee over the draft are described in the following.

SIGNIFICANT ISSUES

Voluntary Reporting

The APTA committee believes that a voluntary reporting level is inherently inconsistent with the central goal of a comparable, relevant, and complete national data base. Any analyst attempting to use voluntarily reported data is faced, by definition, with a nonrepresentative sample, the analysis of which is necessarily incomplete and ambiguous and cannot be generalized.

Reporting of Flawed Data

The committee strongly believes that it is better to have gaps in the historical data base than to maintain data known to be wrong, misleading, or useless. Even though a data item might be desirable, if it cannot be rigorously defined and accurately collected, it should not be reported. This long-standing debate is summarized in the two slogans of the opposing players: “Some data are better than no data!” versus “No data are better than bad data!” In the APTA committee’s view, two
TABLE 1 APTA COMMITTEE RECOMMENDATIONS VERSUS FEDERAL DRAFT RULE

<table>
<thead>
<tr>
<th>APTA Committee Recommendation</th>
<th>FTA Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forms 001-006</td>
<td></td>
</tr>
<tr>
<td>Drop Forms 003-004</td>
<td>Done</td>
</tr>
<tr>
<td>Clarify MPO data</td>
<td></td>
</tr>
<tr>
<td>100- and 200-Series forms</td>
<td></td>
</tr>
<tr>
<td>Drop balance sheet</td>
<td></td>
</tr>
<tr>
<td>New capital form</td>
<td>Done</td>
</tr>
<tr>
<td>Reduce revenue detail</td>
<td>?</td>
</tr>
<tr>
<td>Maintain voluntary modal fares</td>
<td>Done</td>
</tr>
<tr>
<td>300-Series forms</td>
<td></td>
</tr>
<tr>
<td>Correct ticketing and security</td>
<td></td>
</tr>
<tr>
<td>Drop employee benefit contrib</td>
<td>Done</td>
</tr>
<tr>
<td>Drop pension form</td>
<td>Done</td>
</tr>
<tr>
<td>Simplify 321 (wages)</td>
<td>Under develop</td>
</tr>
<tr>
<td>Clarify joint expenses</td>
<td>?</td>
</tr>
<tr>
<td>Break out propulsion power</td>
<td>?</td>
</tr>
<tr>
<td>Align taxes with expense</td>
<td>?</td>
</tr>
<tr>
<td>400-Series forms</td>
<td></td>
</tr>
<tr>
<td>Drop 401</td>
<td>Done</td>
</tr>
<tr>
<td>Drop passenger miles</td>
<td>No</td>
</tr>
<tr>
<td>Drop capacity miles</td>
<td>No</td>
</tr>
<tr>
<td>Drop roadcalls</td>
<td>No</td>
</tr>
<tr>
<td>Use labor hours, not FTEs</td>
<td>Done</td>
</tr>
<tr>
<td>Revise accident form</td>
<td>?</td>
</tr>
<tr>
<td>Reduce 406 data</td>
<td>?</td>
</tr>
<tr>
<td>Add fleet summary</td>
<td>No</td>
</tr>
<tr>
<td>General</td>
<td></td>
</tr>
<tr>
<td>Eliminate voluntary</td>
<td>No</td>
</tr>
<tr>
<td>True “voluntary”</td>
<td>Done</td>
</tr>
<tr>
<td>Increased training</td>
<td>Done</td>
</tr>
<tr>
<td>Increased automation</td>
<td>Under develop</td>
</tr>
<tr>
<td>Improved access to data</td>
<td>Under develop</td>
</tr>
<tr>
<td>Ongoing improvement process</td>
<td>?</td>
</tr>
</tbody>
</table>

Done = Included in latest federal draft rule (NPRM).
? = Not clear how issue was addressed.
No = Appears to have been rejected.
Under development = FTA commitment to pursue further but specifics unknown.

Items remaining in the NPRM fall under the latter category: capacity miles and roadcalls. These data are inconsistently reported, they lack comparability across operators, and they lead to erroneous or meaningless conclusions.

Specific Forms

Form 001 (Identification)

Form 001 is where FTA proposed to include data on service area population and land area (7, p. 38259). However, the proposed elimination of a separate MPO statement brings into question the lack of consistency in definitions and methods around the country. The lack of standardized procedures will lead to noncomparable and therefore unusable statistics. The purpose of these data was to allow a basis to normalize some information per capita or per square mile. With no consistency established, such comparisons will be meaningless.

Form 321 (Operator Wages)

FTA has agreed to simplify the overly detailed operator wages form (7, p. 38261) but did not elaborate. This can be a very difficult form to complete, depending on the specifics of internal payroll systems and labor contract provisions. The committee spent considerable effort developing its 1988 proposal for this form to reflect a useful level of detail while recognizing practical limitations in achieving consistency.

Accident Form (405)

The introduction of a new Form 405 in the 1990 manual resulted in great confusion among reporters and will probably result in an inconsistent and incomplete 1990 submission. The original form needed improvement, but a revised form needs to be more thoroughly thought through and tested. The APTA 1988 proposal includes a simplified form that clarifies data on the previous FTA form but does not address the same concerns contained on the newer FTA form.

Form 406/407 (Service Supplied and Consumed)

APTA’s members repeatedly stressed that forms 406 and 407 can take as much effort to complete as all the financial forms combined. The 1988 proposal recommended that the two forms be combined and that unnecessary details be eliminated. The NPRM Table 7 on Operating Data Elements (7, p. 38272) and the discussion on page 38262 appear to continue the same level of detailed reporting as in the past. In addition, the discussion recommends using a ratio of actual versus scheduled data as a measure of service quality. The APTA committee believes both positions to be mistaken.

The committee believes that its 1988 proposal would save valuable operator staff time and cost, while providing more useful and relevant data for analysts. Although APTA supports the pursuit of research into appropriate measures of service quality, the FTA proposal will not serve the desired end. Deviations of actual from scheduled miles can be caused by any number of operational reasons, reflecting little or nothing about service reliability. The right performance measures should go into Section 15, but there is no useful purpose in promoting the wrong measures.

Form 408 (Vehicle Inventory)

In addition to deleting “Standing Capacity” and “Average Lifetime Mileage,” the 1988 APTA proposal recommended adding a new fleet summary form to explicitly clarify the vehicle classifications by ownership and usage. The new form was intended to eliminate the confusion over varying definitions of fleet size and spare ratios and is still needed.

Other Issues

Training

FTA’s new commitment to Section 15 user training is encouraging. More workshops should be scheduled in more locations to reduce the travel burden.
In addition to user training, some attention should be given to training for auditors, many of whom have few transit clients and little familiarity with the transit industry. This type of training will help avoid future reporting problems.

More should be done to reduce, consolidate, and simplify the amount of reference documentation that Section 15 reporters are expected to have on hand. Manuals, notices, circulars, and other reports comprise a daunting library that is difficult to use when seeking answers to typical questions. It may be possible in the future to have on-line help as an adjunct to the proposed computerization of the input procedure.

**Automation**

FTA’s desire to make better use of readily available personal computer hardware and software throughout the Section 15 system is an excellent idea that APTA strongly supports. On-screen data entry with self-validation checks will ensure more accurate submittals, will cut down on the need for the validation contractor to correct problems, and will surely speed production of the annual data compilation. Publication of the data in diskette form will make the information more readily accessible to typical data users.

**FUTURE ENHANCEMENTS**

More important than all the specifics on forms and definitions is FTA’s commitment to annual review and improvement to the Section 15 system (7, p. 38257). The proposed “reasonable notice” definitions (7, p. 38263) will place a premium on getting expeditious input from the transit community on any revisions. To continue the great progress the NPRM represents, FTA should consider how to best establish a process for ongoing consultation with reporters and users. FTA should continue to discuss any future Section 15 revisions with representatives of the industry and users on an ongoing basis. This is the best way to ensure the continuing improvement of this vital national information resource. The method chosen is unimportant. The important point is that ongoing improvements require the active participation of those closest to the data. Industry and TRB representatives should be eager to work with FTA to facilitate such a process.

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