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Do Performance Audits Audit Performance?

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ABSTRACT

The requirements of the state of California for performance audits of publicly funded transit systems are examined. These performance audits are conducted by agencies that distribute state funds to support the operating and capital needs of public transportation systems. The objective of this examination is to discuss the intent of the audit requirement and how audits are conducted in order to determine the purpose of performance audits. The enabling legislation and its implementation are traced into practice and the processes used to conduct audits are critically examined. It is argued that performance audits focus on the management of transit systems at the expense of examining whether they are delivering the service required of them. In conclusion it is argued that performance audits that only evaluate how well systems perform do not fully evaluate transit performance. It is recommended that performance audits first determine whether transit systems are in fact meeting the demand for service. It is argued that performance audits that review the quality of service delivered are more helpful than those that focus solely on the management of the system.

In recent years federal, state, and local governments have become concerned about the rapid escalation in transit operating costs. Although operating costs have risen at rates equal to or greater than the overall rate of inflation, fare revenues have generally been unable to keep pace. Further large deficits in federal as well as state and local budgets have reduced the amount of funding available to support transit. As a consequence, agencies responsible for funding transit have begun to focus attention on evaluating the performance of transit systems. Such evaluations are considered useful in determining whether transit systems can become more efficient and maintain desired levels of service.

Recently several states, including New York, Pennsylvania, and Michigan, either began systematic performance audits of transit systems or were in the process of developing programs to do so. Furthermore, there has long been interest in using the annual reporting system of Section 15 of the Urban Mass Transportation Act of 1964 to conduct performance reviews. However, to date there has been no concerted government effort to do so. This is in large part because of many problems with the reliability of the data base.

Although the states just mentioned are now at the initial stages of their performance audit programs, California has been undertaking such audits for more than 6 years. In 1978, the California legislature passed a law that required all transit systems that receive state sales-tax assistance to have a performance audit conducted triennially. To date, all transit systems that have been in existence since 1979 have undergone at least two such performance audits. What the California performance audit requirement is and how audits have been conducted are examined in this paper. Although performance audits conducted throughout the state are considered, the focus is on those audits conducted for transit systems in the San Francisco Bay Area, which are within the jurisdiction of the Metropolitan Transportation Commission (MTC).

LEGISLATIVE MANDATE

In 1978 California Senate Bill 620 was passed, which amended certain provisions in the Transportation Development Act (TDA) (California Public Utilities Code, Sec. 99200, 1978). The TDA program was started in 1971 and provides sales-tax revenues to support transit systems. It is a multimillion-dollar-a-year program that serves as a major source of both operating and capital assistance to most California public transit systems. The requirement for performance audits is as follows (California Public Utilities Code, Sec. 99246):

> (a) The transportation planning agency shall designate entities other than itself, a county transportation commission, a transit development board, or an operator to make a performance audit of its activities, and those of county transportation commissions and transit development boards located in the area under its jurisdiction, with respect to these funds. The transportation

planning agency shall consult with the entity to be audited prior to designating the entity to make the performance audit.

Where a transit development board was created pursuant to Division 11 (commencing with Section 120000) or a county transportation commission exists, the board or commission, as the case may be, shall designate entities other than itself, a transportation planning agency, or an operator to make a performance audit of its activities and those of operators located in the area under its jurisdiction to whom it directs the allocation of funds. The board or commission shall consult with the entity to be audited prior to designating the entity to make the performance audit.

(b) The performance audit shall evaluate the efficiency, effectiveness, and economy of the operation of the entity being audited and shall be conducted in accordance with the efficiency, economy, and program results portions of the Comptroller General's "Standards for Audit of Governmental Organizations, Programs, Activities, and Functions". A performance audit shall be submitted by July 1, 1980, and triennially thereafter.

(c) With respect to an operator providing public transportation services by motor vehicles, the performance audit shall include, but not be limited to, a verification of the operator's operating cost per passenger, operating cost per vehicle service hour, passengers per vehicle service hour, passengers per vehicle service mile, and vehicle service hours per employee, as defined in Section 992457. The performance audit may include consideration of the needs and types of the passengers being served.

Thus the broad objectives of these performance audits are set forth. The principal purpose of these audits is to evaluate the efficiency and effectiveness of the transit system. Secondarily the audits are to verify a set of performance indicators that are to measure both efficiency and effectiveness. It is not specified how these audits are to be conducted except that they are to be done by independent auditors and that the Comptroller General's standards are to be adhered to. Beyond that the legislature has delegated full responsibility and authority for performance audits to the various planning agencies located throughout the state that administer the TDA program.

GENESIS OF THE REQUIREMENT

In 1977 the Auditor General for the state of California issued a report in which it was found, among other things, that there was no system for routinely measuring the efficiency and effectiveness of California transit systems (1). It was recommended that legislation be enacted that would require that each system undergo an evaluation. The Auditor General recommended an evaluation program that includes both performance indicators and specific comments on the efficiency and effectiveness of the operational components that affect these indicators.

The reason for this dual approach was that the Auditor General believed that indicators alone cannot be used to evaluate transit performance. This is because each transit system operates in different environments with different characteristics and audits must be sensitive to these differences. The Auditor General concluded that interoperator comparisons are difficult to make and, because of the unique circumstances under which each system must operate, are of doubtful utility. This reluctance to use interoperator comparisons has been a concern of the industry for many years. It is a point that has been stated often to those involved in performance audits.

TYPE OF APPROACH

The focus of performance audits is on evaluating the efficiency, effectiveness, and economy of the transit system's operation. The legislature clearly intended that the mandated performance measures be used to this end. However, the law was not specific in defining these measures, so the U.S. General Accounting Office (GAO) has defined two of them (2):

> Economy and Efficiency--determines whether the entity is managing or utilizing its resources (personnel, property, space, and so forth) in an economical and efficient manner and the causes of any inefficiencies or uneconomical practices, including inadequacies in management information systems, administrative procedures, or organizational structure.

In addition, the California Auditor General defines effectiveness specifically for transit as (1) "the measure of how well the system meets the needs of the residents of the area it serves."

It is important to note that the law focuses on an approach based on efficiency and effectiveness as opposed to a program-results approach to evaluation. The program-results approach is defined by GAO as follows (2):

> Program Results--determine whether the desired results are being achieved, whether the objectives established by the legislature or other authorizing body are being met, and whether the agency has considered alternatives which might yield desired results at a lower cost.

What is noteworthy about this focus is that the approach based on efficiency and effectiveness is more concerned with how the job gets done than the program-results approach, which focuses on whether the job gets done according to plan.

WHAT ARE PERFORMANCE AUDITS SUPPOSED TO DO?

The foregoing review of the enabling legislation and its genesis as well as the conceptual methodology give some indication as to what performance audits are supposed to do. The state legislature emphasized using outside independent and objective auditors. This suggests that the audits are to be candid and complete honest reviews of how well systems are being managed. This is tempered to some degree by the requirement that the systems being audited be consulted before the audit. Although the purpose and scope of this consultation are not elaborated in the law, it is clearly meant that the operators are to have a role in their audit before it takes place.

The audit requires that five performance measures be verified that are intended to provide a minimum level of information by which the systems can be audited. Although the ability and appropriateness of the measures may be questioned, it is important to realize that they require information (such as number of passengers carried and hours and miles of service provided) that is absolutely essential to the good management of a system. However, these measures are, at best, systemwide and provide only broad trends in performance. As such they are of limited use as a diagnostic tool in that they can only suggest where there may be problems. Therefore, the audits must go beyond a simple review of performance measures and determine why the measures have performed as they did.

WHAT PERFORMANCE AUDITS DO NOT DO

Although the task of the auditor as detailed earlier is quite broad and complex, there are certain things a performance audit is not intended to do. First, the performance audits do not evaluate the policies of transit systems, which are set by the board of directors. Second, these audits do not question whether a particular transit system is a worthy public endeavor and whether it should continue to provide service. Finally the audits are not meant to determine whether transit systems are accurately and correctly accounting for their funds. This is the objective of a financial audit. The verification of the five performance measures is limited to a review that checks whether the system is correctly defining the data and whether there are systems in place to calculate the measures in accordance with standards.

FROM LAW TO PRACTICE

As noted earlier, the legislature left it to each planning agency to implement the performance audit requirement. In 1978 the California Department of Transportation adopted regulations that provided some additional guidance to planning agencies as to what the audits were to accomplish (California Administrative Code, Sec. 66645.5):

> Performance Audits and Operators. A performance audit shall be made and submitted by July 1, 1980 and by July 1 triennially thereafter for each operator. Beginning with allocations for the 1981-82 fiscal year, no operator shall be eligible to receive an allocation under Article 4 of the Act until the transmittal of reports of the performance audit that is to be submitted by July 1 of the fiscal year prior to fiscal year of the allocation.
>
> The performance audit shall be made pursuant to Public Utilities Code Section 99246. The evaluation of the performance of the operator shall include but not be limited to:
>
> (a) The degree to which the management has established overall system goals and objectives and the degree to which these goals and objectives are being accomplished.
>
> (b) The manner and extent to which management seeks to improve the effectiveness and efficiency of its transit services by developing transit plans that are responsive to user needs.
>
> (c) The manner and extent to which management addresses the effectiveness and efficiency of the transit system's operations by developing, analyzing and acting upon information about specific performance measures.
>
> (d) The manner and extent to which management addresses effectiveness and efficiency of vehicle maintenance, complies with vehicle safety regulations and evaluates general maintenance activities and progress against established objectives and standards.
>
> (e) The manner and extent to which management addresses the effective and efficient conduct of marketing and public relations activities.
>
> (f) The manner and extent to which the budgeting and financial planning process reflects the goals and objectives for the effectiveness and efficiency of the transit system's operations.

Although these regulations provide specific aspects (such as operations, maintenance, safety) that audits are to evaluate, they provide little insight into how the audits are to be accomplished.

Not surprisingly, the first round of audit reports, due in 1980, showed little consistency in approach, style, or results. Some audits were complex reports that reviewed nearly every function of a large system. Others simply reported the five measures and included a broad statement attesting to the efficiency and effectiveness of the system audited. As to approach, some audits included interoperator comparisons of performance and included many more indicators than the five legally mandated. Others were limited to a trend analysis of the five mandated measures.

Only a few planning agencies had developed systematic audit programs for the 1980 audits. For example, the San Diego Association of Governments and MTC (for the San Francisco Bay Area) developed extensive guidebooks that specify the purpose of performance audits and lay out several approaches. The MTC guidebook, for example, is a two-volume set that identifies three approaches by which the audits may be conducted:

1. Key issues: Issues of importance to the effective and efficient operation of the system are identified by MTC for audit review.
2. Goals and objectives: It is recommended that actual performance be related to planned performance and that planned performance objectives and standards be reviewed for reasonableness.
3. Functions: Specific activities or functions (such as maintenance, purchasing, scheduling, and so on) typically performed by an operator should be reviewed.

In the MTC region (which includes nine San Francisco Bay Area counties) there are more than 20 transit systems for which performance audits must be conducted. The systems range in size from rural dial-a-ride services with one bus or van to the San Francisco Bay Area Rapid Transit District and Municipal Railway. With such a large number of operators and a wide range of complexity, MTC has had the opportunity to use all three approaches and various combinations thereof in conducting these audits.

Currently MTC uses the functional approach, for the most part, in its performance audits. This approach has been refined somewhat from the original one as set forth in the audit guide. Specifically, performance audits are broken down into two distinct phases. The first, or preaudit, phase, is a high-level examination of all functions or activities of a transit system. In addition the preaudit phase includes an examination of the five mandated performance measures. The goals of the preaudit phase are twofold: One is to collect basic information about the system and to identify issues or problems that may warrant in-depth analysis. Secondly, the preaudit phase is also intended to provide the auditor with sufficient information to verify the performance measures.

The preaudit phase culminates in a report that sets forth the auditors' preliminary findings and suggestions as to what aspects and specific issues warrant analysis in the second, or performance audit, phase. This report is reviewed by both MTC and the transit operator. On completion of this review process, which includes significant dialogue among MTC, the operator, and the auditor, the final audit work plan is developed. This work plan sets forth what issues are to be evaluated and what questions are to be answered. The purpose of this preaudit report and its review is to provide the means by which the audit can be focused and concentrated into specific and tangible aspects.

MTC has used this approach in all the major operator audits conducted over the last 3 years. The reasons for focusing the in-depth analyses are important. First, because of financial, time, and personnel constraints, the auditor cannot thoroughly and adequately review a large and complex transit system such as Alameda-Contra Costa Transit, which has an annual budget of $95 million and operates some 600 buses during the peak hour. Furthermore, it is doubtful whether a comprehensive audit would be worthwhile except to verify that some functions are operating well and with few problems. By focusing the audit, MTC hopes that those issues and problems that are most critical will be examined.

HOW IS PERFORMANCE ANALYZED?

Earlier in this paper, reference was made to interoperator comparisons and the problems associated with that diagnostic tool. In audits done several years ago for MTC, interoperator comparisons were used to evaluate performance. Since then transit operators have strenuously objected to this technique and today such comparisons are not allowed by MTC. This prohibition is quite common in California. However, in some regions comparisons have been made against the industry as a whole. Again MTC does not allow such comparisons because the yardstick--the industry average--is more amorphous than a comparison with a particular system. The industry average is only a statistic, and a comparison to an average is dubious at best. This prohibition obviously constrains the auditor. However, MTC has another practice that further constrains the auditor.

The prohibition is against using any measure to evaluate performance that is not embraced by the operator. MTC believes that audits should be evaluations of actual performance against standards set by the operator. Any other performance measurement may result in criticisms that have little bearing on what the operator recognizes as a problem or goal. Further, MTC actively encourages and supports transit systems in preparing transit development plans that specify goals, objectives, and standards.

Performance then is to be judged in this process by examining trends in the five mandated measures and any other measures the operator may use. Although the basis for the evaluation is goals and objectives, the analysis is not intended to be only a report as to whether the goals and objectives were attained. Rather the auditor is to determine why certain goals and objectives were attained and others were not. The focus on goals and objectives is meant to ensure that operators not be audited against standards or measures that are inappropriate or misleading. The use of performance measures by themselves can be especially misleading in that there are never enough measures (or base data from which they may be derived) to really explain what may be occurring in a particular function or subfunction.

The MTC approach to audits closely follows the original idea that the state Auditor General had for transit system audits. Specifically the Auditor General recommended an audit program that looked at performance measures as a tool to uncover problems and then a commentary on the efficiency and effectiveness of those components that affect the measures.

In contrast to MTC's approach is that of the state performance audit guide, which is a nonbinding audit program for small and medium-sized (up to 500 buses) operations. This guide was developed in 1982 after the first round of audits had been finished. Several small planning agencies requested that it be developed to serve as a source document for them to use in their regions to develop uniform audit reports. The approach set forth in this document is almost totally a performance-measure approach. For small systems (1 to 20 vehicles), the audit is predicated on a review of a set of measures followed by interviews about goals and objectives with management. The resulting report is a high-level one with little detail and few recommendations. For larger systems the state guide uses a preaudit and an audit phase as does MTC. However, whereas MTC's preaudit phase is based on interviews, document reviews, and site visits, the approach of the state guide relies on the use of measures to analyze performance. Likewise, the approach of the state guide uses many measures in the audit phase, whereas the MTC approach continues to rely more on interviews with management and other operator personnel.

ANALYSIS OF THE METHODOLOGIES

It can be argued that the MTC approach with its many prohibitions is a conservative one in that it is quite process oriented. The MTC approach places a great burden on the auditor to determine how well a system is performing and what its problems are within the context of what the operator has defined as his goals, objectives, and standards. Without using intersystem comparisons and measures not used by the operator, the auditor must quickly and accurately identify issues and develop justifications as to why they are significant enough to evaluate.

On the other hand, the approach of the state guide provides quick and easily verifiable information as to how a particular component of a system is working. Once there is agreement on the accuracy of the data used to derive the measures, the auditor can make objective judgments as to efficiency and effectiveness.

However, the performance-measure approach has its limitations. For example, it cannot tell the auditor why the system and its components are performing as indicated. Nor can it truly tell the auditor whether performance is good or bad. Measures, per se, do not judge performance. Rather they provide some basic information that must be put into a context that assesses whether the system is operating efficiently and effectively. There is an easy trap to fall into when audits rely exclusively on measures to judge performance. The trap is quite simply that numbers are merely information and not answers.

The MTC approach avoids this trap by making the auditor go behind the numbers to determine how well things are or are not working. Although the operator may be able to hide poor performance by judicious use of objectives and standards, the MTC auditor does not rely on standards alone. Instead, the auditor interviews staff, reviews documents, and visits facilities to develop conclusions. This is a conservative approach, but it tends to be more honest in that it recognizes the certain fallacies of an audit approach predicated on performance-measure analysis.

The MTC approach does not allow either the operator or the auditor distant reality by selected use of measures. Therefore, it should be more adept at identifying the causes of problems, assuming that the operator cooperates and that the auditor is competent.

AUDITOR AS EXPERT

Perhaps the most critical issue regarding the question of whether performance audits do in fact audit performance is this: "Who is the performance auditor?" The obvious assumption in the enabling legislation and in the auditing profession is that the auditor is an expert with, perhaps, special knowledge of how things are supposed to work. The auditor is seen as someone who can use an audit program to identify problems, determine their causes, and develop solutions.

If in fact it is believed implicitly or otherwise that the auditor is an expert, the next question is, "What sort of expert is this auditor?" Earlier in this paper it was argued that performance audits focus on how well things are done rather than on program results. Therefore, it is logical to conclude that the performance auditor is an expert on how organizations are supposed to perform. Or, more explicitly, auditors are experts on how well transit systems are managed and whether management is directing the system and its components to function efficiently and effectively.

If the argument just stated is sound, the inescapable conclusion is that what performance audits do is not to audit performance in the broadest possible interpretation of the term, but rather to audit the management of transit systems. It has been argued in this paper that performance cannot be judged solely by numbers, but that a context must exist within which performance indicators can be used to provide a diagnosis of what may be happening in a transit system. It has also been argued that a critical part of this is the human element--the auditor. To accomplish this, it is required that the auditor be an expert, a person with special knowledge who can judge whether things are operating well or not.

Obviously the level of expertise needed from the auditor can vary considerably. For instance, it takes little expertise to know that an operations division is having difficulties in providing service when the auditor has experienced waiting for a bus that did not show up a few times. It is clear that the schedule is not being met but not why. Is it an operator problem, a routing or scheduling problem, or a maintenance problem or are there simply circumstances beyond anyone's control? These are the types of questions performance auditors need to answer. Therefore, it appears that the auditor must be many experts--schedule, maintenance, operations, planning, and financing--to determine why a system cannot do its job well.

Given this conclusion, what then do audits reveal? Current thought and statutes have created an expectation that auditors are experts who can determine why things are not working well (if they are not) and how to fix them. But as currently constructed, performance audits evaluate process and not results. All operators have goals relating to the essential purpose of transit--to carry people from one place to another. However, the current practice of performance auditing is almost exclusively restricted to evaluating whether service is being provided in an economical manner.

Performance audits rarely determine whether transit systems are providing the type and amount of service needed at the right time. Furthermore, audits do not tell anything about the untapped market of those who are not using transit and why they are not using it.

The fundamental issues facing the transit industry are to maintain the current ridership and to find new riders. Performance audits oriented toward management do not wrestle with this issue. As currently practiced, audits can tell how well a system is fulfilling its prime objective. For example, a system that carries few people but maintains its schedule and operates in an efficient manner might be seen as a good system by the auditor. As such, the audit has not revealed whether anyone is using the system and if not, why not. Until these fundamental questions are considered, performance audits are not fully auditing performance. The first issue an audit might address is whether the system is being used and then to what extent. After these issues have been resolved, the audits might then examine the reasons behind underuse. At that time the auditor should focus on how well the system is managed to determine whether that is the cause of the low use. Critical components that would be addressed at that stage are the marketing and planning functions. It is conceivable that the operator does not know what and where the market is and how it can be reached.

For those systems that suffer from overuse the primary focus of the auditor would have to be somewhat different. In such cases the auditor should examine how capacity can be increased in the most economical manner. It can also be argued that from a program-results standpoint there is little need for the audit. The danger with this arrangement is that a shift too far toward a results-only approach would also be narrow. It would ignore other performance problems. The ideal compromise then should be performance audits that look at both process and results with equal attention.

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