Financial Planning Techniques: What Elements Are Included in a Good Financial Plan?

George M. Smerk
Indiana University
Bloomington, Indiana

Special thanks are due to Dr. Brendon Hemily for his comments, suggestions, and overall help in preparing this paper.

INTRODUCTION

Financial planning for transit has always been important. From the earliest private-enterprise days of the industry to the present day of public ownership, there has been a need to gauge the resources needed for maintaining operations, making necessary capital investments, and replenishing the transit property.

Financial planning is more important in times when money is scarce. Management effort is always directed toward the scarce resource—when labor is short, management of personnel functions becomes an important factor. With mounting concern over financial problems in transit, management's attention should be increasingly directed toward financial planning. What should be, and what is, are often two different things. Financial planning that prudence and good management demand is often missing in transit and replaced by endless anxiety, fiddling with budgets, and cost-cutting programs.

Financial planning is more difficult and necessary at present because of financial uncertainties facing transit. While uncertainty is no stranger to the transit industry, it has taken on a new dimension. From a financial viewpoint, the federal-aid program begun in 1961 has continually expanded the number of programs and federal funds available, and for many years this trend was steadily upward. Since 1981 the level of federal support has actually diminished, and there is a continuing threat from the Reagan administration to discontinue the operating-aid and capital portions of the program. Federal transit money appears to have stabilized for the moment, but the threat continues to be real because of the massive federal deficit.

Local and state transit support is another uncertainty. In recent decades, there have been substantial increases in state and local support for transit operations, capital, planning, and other programs—usually matching a federal grant—but this support tends to fluctuate with the condition of the economy. In times of depressed economics, when transit ridership and fare receipts usually fall, it is difficult for state and local governments to provide additional funds for transit. With local political conflicts between city and suburb, rising costs of labor and supplies, and a dash of citizen tax revolt, the financial situation in transit is often a trying one. This makes financial planning more important than ever.

BEGINNING OF THE FINANCIAL PLANNING PROCESS

Financial planning identifies needs, develops managerial strategies, helps make the best use of limited resources, may reduce uncertainty, and helps educate the public and public officials. A good financial plan must meet the needs of the present; however, it should be prepared with an eye to the future and molded by the long-run plans for the transit property. With long- and short-run considerations in mind, the strategic plan is the ideal starting point for development of the financial process.

Most transit properties have no strategic planning process; they are typically innocent of a solid financial planning process. There are ideal situations and normal situations for which transit properties should aim. What follows may appear too neat and precise, but it is not intelligent to dismiss a concept or an idea that may be helpful, merely because it is uncommon in a given industry.

The long-range planning process for a transit property is carried out most effectively through the development of a strategic plan. Strategic plans normally arise from the desires of a transit policy board to look beyond the immediate future. The need for long-range capital investment is often the spur to such planning. Equipment and machinery wear out, and there is a need to maintain buildings and other fixed facilities. Experienced policy makers begin to raise questions about heavy maintenance, capital replenishment needs, or new capital purchases for the next 2 to 5 years, or sometimes longer. But a strategic plan is much more than a capital investment plan; it integrates long- and short-run investment decisions with operational and human resource decisions. A strategic plan may be animated initially by capital investment considerations, but it goes beyond planning.

The strategic planning committtee established by the policy-making board should work closely with the budget committee of the board and the management team of the transit property. The budget committee should strive continuously to update the budget to reality, and the strategic planning committee should regularly survey the strategic plan and update it as needed to conform with better information and more knowledge of world conditions. Strategic planning committees are rare in the transit industry. Lack of strategic planning, that vital eye to the future, is often an unconscious decision to lock a transit property into the present, perhaps crisis-ridden management pattern. On the contrary, a strategic plan attempts to lay out the future over a period of between 1 and 10 years and move the property forward to what it should be doing in the future, based on the best available information and a vision of how transit may best serve the community. Figure 1 is a diagram of the strategic planning process.

The strategic planning process begins with an analysis of the environment in which the transit property exists. This should include an assessment of the threats and opportunities that may lie partially hidden in the near and distant future. For instance, the aim of the Reagan administration to reduce expenditures for transit programs is a threat. There would be a threat in any effort on the part of a state or local government to diminish its support for transit. On the other hand, a strong local commitment to downtown redevelopment may be a good long-run opportunity for

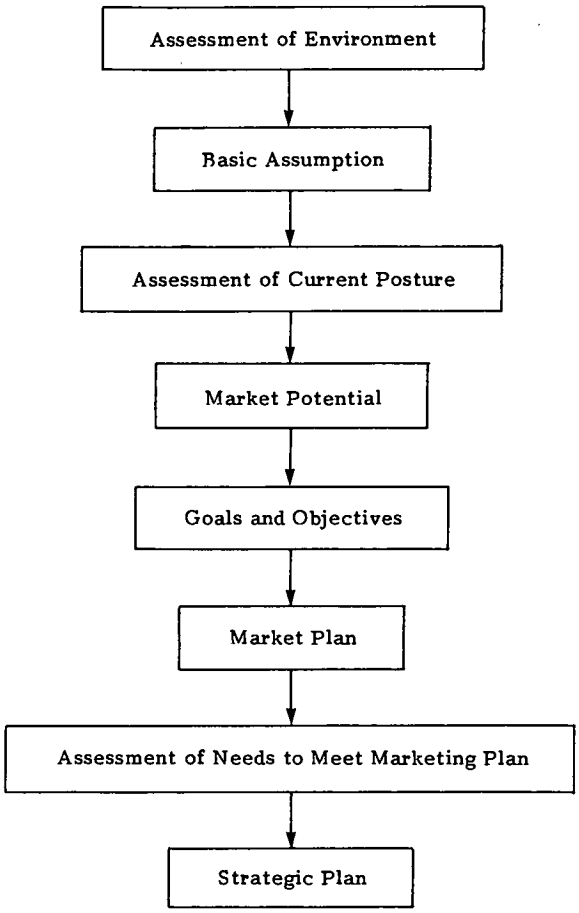

FIGURE 1 The strategic planning process.

transit. Renewal is the sort of venture with which transit can be closely identified and play an important role.

Another major factor in the strategic plan is consideration of basic assumptions regarding the property. This would include such assumptions as the continuation of certain levels of fiscal support, growth patterns in the city as they will affect transit operations, geographic expansions, a move toward a rail system, development of reserved freeway lanes for buses, or a contraction of service because of an expected sharp decline in population.

An assessment of the current posture of the property should be made. This is a measure of the material and human resources available to carry out whatever tasks are seen to be needed. The assessment should include current and future needs and directions. While anything beyond 1 or 2 years is difficult to assess, some things are rather clear. The need to replace buses or other rolling stock on a regular pattern is something relatively easy to determine, based on the economic life of the equipment. Other aspects of a property that can be examined with profit at this stage are employee turnover rates; retirement policy; the number of administrative, managerial, and staff employees; the age and training of employees; the availability of information from the management information system in place; and the image of the property as reflected by local media.

Another step to be taken is an analysis of the market potential for the transit property. This includes an estimate of future travel demand and other community needs that may affect transit. These should be projected as solidly as possible and as far as possible into the future. In this category such considerations as community development and redevelopment efforts in which transit may or must play a role should be analyzed. This step is essential in calculating revenues.

From the foregoing efforts comes the development of goals and objectives, a process that should take into account all groups and jurisdictions that will be affected. The goals of the transit agency should not be hammered out in a vacuum. In formulating goals and properties, input is necessary from the community and community leaders, as well as from transit management. The goals will be affected by the values of the community and the priority of various activities important in the community in which transit may play a role. Within the transit organization, all levels of employees should have some input in the process, particularly in the establishment of objectives. Broad participation is essential to design workable, practical objectives for a transit organization and realistic timetables for the accomplishment of those objectives.

Policy makers should use the long-range nature of the stategic plan to establish long-range goals and action priorities. The short-range needs assessments that are part of any long-range strategic plan are used to develop the short-range goals and priorities. The goals of a transit property establish ideal conditions and long-run aims. No goal in transit can be achieved quickly or by the accomplishment of any one of the objectives that flow from the goal, objective, action process. Objectives are more specific and short-run in nature and flow from the goals. The sequence of effort to achieve various objectives is the strategy; it is obviously related to priorities established by the policy makers in conjunction with outside information sources and upper levels of transit management.

A market plan must be developed. This will include thoughts about the segments of the market to be pursued. A key decision has to be made about whether the transit property will seek to serve only captive riders or will seek to serve a more general public. The types of service, the structure of the system, and the kinds of management activities will vary according to these different goals. The type of transit product should be considered here, along with the pricing schemes and promotional plans that will be used to market different types of transit service to various segments of the urban travel market that will be pursued.

Facilities, equipment, organizational resources, and political and legislative requirements needed to achieve the objectives and serve the target markets must be determined. The selection of what is to be done and the sequence of the actions are the strategic plan.

TURNING STRATEGY INTO A FINANCIAL PLAN

A strategy must be developed into a financial plan (see Figure 2). Many questions will have to be raised, such as what the long-range financial implications of the plan are; what is to be done to implement the plan that may require additional resources; and determination of whether there is need for legislation, referendums, or additional planning. In moving from the strategy to the financial plan, the planners need to focus on the financial impact of programs that will be undertaken. An obvious step here is a review of the ongoing programs, including the present operations, with the cost of those operations projected into the future as accurately as possible for the next year or two. Routine capital replacement costs are also part of the financial planning process. The horizon timespan is no set term of years; it is as far into the future as one may expect a transit property or the community it serves to stay generally the same, with no transit capital undertakings of large magnitude or cataclysmic changes in the urban place itself.

Considering new programs in keeping with the overall strategy, financial planners assess what needs to be done. The new programs would be based on the near-term goals and priorities for the next few fiscal years of the property

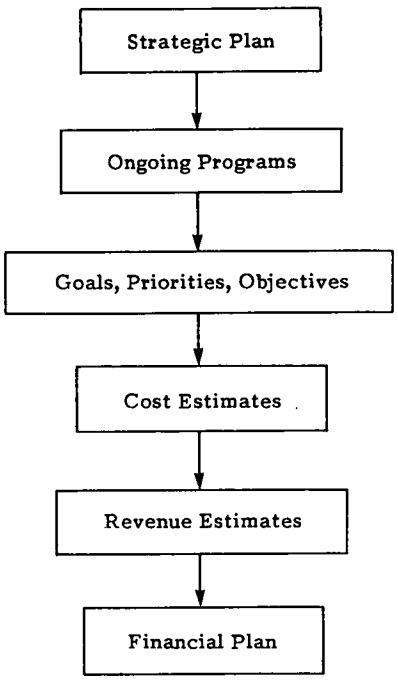

FIGURE 2 Financial planning.

and should be based closely on the objectives established for these new undertakings. In moving from the strategic to the financial plan, financial planners must determine whether funding levels are realistic, based on the best estimate of what may be available. The ongoing and new program elements of the financial plan should be coordinated by means of a formal programming system on which the various tasks to be achieved, and their costs and budgets, are itemized with a timetable for the expenditures.

Cost estimates are the next step. Estimating costs is never easy—for example, financial planners have to forecast labor costs. This is usually done by using trends, including agreements in the labor contract that must be honored throughout the life of the contract. Certain assumptions regarding productivity have to be made at this point. In making this judgment, financial planners need to know the status of pay and work conditions in the transit industry, as well as the impact that industry conditions elsewhere may have on local rates of pay and conditions of future contracts. Often there are bellwether cities, the labor agreements of which are raised by union bargainers in other cities. Careful attention should be paid to these cities.

The organization of the transit property and its personnel should be considered along with plans for any necessary changes in the number or type of personnel and the way the property is organized. If the strategic plan foresees the construction of several additional storage and maintenance facilities to service difficult divisions of an expanding transit service, personnel costs will change because planners and construction engineers will be needed. With divisionalization of a transit property, the need to modify the organizational structure arises that may have other cost ramifications.

Forecasting maintenance costs is usually accomplished by trend analysis. Some transit properties have done an excellent job of costing out maintenance; others have very limited information available. Consideration should be given to new maintenance procedures, new equipment, or new facilities coming on-line that may increase productivity in maintenance, or decrease it in the case of new, more complicated equipment. If good information is available, it may be possible to make certain assumptions about productivity in the maintenance realm. Improved maintenance management practices may lead to an increase in productivity. Standard costs are useful for certain kinds of routine maintenance jobs, such as changing bus brake linings.

Energy costs now are a major element in the cost of transit operations, whether electricity or petroleum-based fuels are used for power. Diesel fuel cost estimates are usually based on past trends and the state of the world economy as it affects crude oil prices. Because oil prices are related to the world political and economic situation, world affairs need to be monitored. The possible trend of rates with the local power company and the potential impact careful negotiation might have on rate trends need to be assessed by management of electrically powered systems.

Estimating capital costs reflects two elements. The first is the need to modernize and sustain existing plant and equipment, based on a routine capital replacement plan, that should be relatively straightforward. The need to improve and expand the level of service, however, involves a decision that has to be based on the timing and extent of investments. Input needed here is the projected demand for transit over the period of the strategic plan and the capacity of the existing system to meet that demand. From this information, the strategic plan should lay out certain activities and efforts of a capital nature, and the financial planners need to know and understand the impact on capital expenditures and the timing of expenditures.

In estimating revenues, there is need to forecast the number of passengers. The average fare paid is also a necessary part of the information. With the cooperation of the service planning department, an estimate of the number of passengers in the current year and years in the future must be made. Adjustments have to be made also for the patterns of demand related to changes and fares. Perhaps more difficult is forecasting the subsidies flowing to transit over a protracted period of time. The federal subsidies are based on appropriations, as well as authorization for the different programs. The program to be supported and the funds allocated have a known life; the subsequent authorizations and budget appropriations are a matter of conjecture.

Nonfederal government subsidies generally are based on extrapolation of past trends. When there is a question about dedicated tax receipts supporting a bond issue, most transit properties hire consultants to forecast tax receipts because this type of forecasting calls for a specific expertise. The forecast of the yield from a new or proposed dedicated tax is required also. The quality of the forecasting depends on the management information system developed by the transit property. The difficult but essential decision relative to a management information system is to consider what and how much information to collect.

The financial planning process requires some formal iterative procedure for regularly matching revenues and costs. This is a speculative undertaking, especially when projecting far into the future. The best suggestion is the use of scenario planning, with each scenario based on different assumptions about such key factors as ridership, federal support, new taxes, fare changes, labor costs, inflation rates, and so on. A convenient way to handle this is with a spreadsheet on a microcomputer so that various combinations of factors can be tried and examples carried out more quickly than if performed manually. Such planning is vital in that it provides a variety of options for the policy board to consider, and the impact of a variety of factors over the next 5 to 10 years (or whatever the strategic planning and strategic financial planning time horizon may be) can be compared and assessed. The various scenarios should be reasonable; windfalls, total disasters, or any extreme speculations should be avoided. The board must choose the scenario it believes is most likely or the one it prefers; from this choice there is a resulting set of financial assumptions, implications, and decisions to be made.

BUDGETING

The budget process turns the ideas and desires concerning a financial plan into a concrete, annual plan. Budgeting for a transit property—or any enterprise—is the annual, detailed planning and implementation of key decisions laid out in the financial plan. The purpose of the budget is clear-cut. It is an aid in making and coordinating short-range plans, a succinct device for communicating plans to the managers of specific activity centers, and acts as a potent, quantitative means of motivating managers to achieve established budget targets. A budget is also a benchmark for controlling ongoing activities and the basis for monitoring centers of financial responsibility and their managers for performance and achievement of objectives, and serves as a means of educating managers to the process of managing because it helps weave together the fiscal aspects of a property's activities.

There are several budget components. The operating budget reveals the planned operations for the coming year and includes the expected revenues and expenses. One way of doing this chore is through the use of a program budget that shows the estimated revenues and costs of the major programs of the transit property, arranged by department or service with the revenues and costs of each spelled out.

Another means of preparing an operating budget is by use of responsibility-center budgets, setting forth plans in terms of responsibility centers. Responsibility-center budgets are most often used in construction and are usually broken down into cost elements such as labor, materials, fuel, and so on.

In preparing the operating budget, a budget committee is useful. This committee, separated from the policy board budget committee, is usually guided by a budget director and is a top management group that recommends the budget guidelines the organization is to follow for the budget period. The budget committee coordinates the separate budgets prepared by the various organizational units, helps to resolve any differences that may exist among the units, tidies up the product, and submits the final budget to top management for approval.

The budget staff may do a large share of the budget work in any organization. Nevertheless, the most crucial budgeting is really done by the line organization; they play a key role in helping establish objectives for the transit property and deciding what financial resources will be needed to achieve the objectives. "Bottom-up budgeting" is the term often used to describe this procedure, and the process lets those closest to the action set their budgets. This procedure is useful in setting the total amount of the budget and the pace of expenditure.

There are many questions concerning the relationship and interaction between the budget committee, the finance director, the general manager, the finance committee of the board of directors, and the board as a whole. Whatever differences and problems there are should be solved as quickly as possible, so the budgeting, financial planning, and strategic planning processes can move along smoothly.

The budget is usually developed on an annual basis. In some cases, monthly information is provided—the annual budget is broken down into monthly periods to provide benchmarks. Another common practice is to prepare quarterly budgets for a year and make regular updates. This procedure is particularly appropriate where the situation is volatile or where close control is desired.

Regular budgeting within the fiscal year framework is a good idea, to take account of any unexpected changes that may occur. This process is becoming easier because the use of electronic data processing has made information available on a more timely basis than was possible in the past. In the best situation, adherence to the overall budget should be monitored on a monthly basis, as well as on a departmental or other organizational unit level.

A revenue or sales budget may be prepared in addition to an operating budget. A revenue budget is a statistical forecast based in a mathematical analysis of general conditions in the economy; local market conditions; tax drawdowns for the transit property; and receipts of grants from federal, state, and local governments. It is also a concoction that includes judgmental estimates as a cure for the problem of uncertainty and reflects negotiation between top management and underlying management on just what revenues will be.

Another type of budget is the cash budget that shows revenues and expenses, cash inflows, and outflows. The inflow and outflow of cash is the main concern in timing of certain expenditures. The cash budget begins as a budget balance sheet and income statement, adjusted to reflect the planned sources and uses of cash over a relevant time period. This is important to use in analyzing plans having cash flow implications to estimate each of the sources and uses of cash. No transit property or other enterprise wants to be embarrassed, or cast into serious fiscal difficulties, by not having sufficient cash on hand when it is needed. Grant reimbursement procedures from government often lead to cash flow problems for a property.

The capital expenditures budget lists the expenditures for capital to be made in a given time period and is usually prepared separately from the operating budget. The wisest course is to separate capital replenishment projects or replacements of equipment, such as new buses for old, from the budgets for completely new capital investments.

PROBLEMS AND PITFALLS

There are a number of problems and pitfalls having to do with the financial world of transit that should be considered when involved in financial planning, including

- Expansion of service area
- Inflation-sensitive financing
- Predicting fares
- Elasticity of demand
- Ability to control costs

Many transit properties have been involved in expanding the tax base by expanding the service area; that is, transit properties have moved from serving principally a major city jurisdiction to providing service on a countywide or multiple-county basis; the allure is not only the sense of serving the whole of a metropolitan region, but a larger tax base. Such territorial expansions have been popular notions for years and are especially tempting when federal aid is uncertain. The problem is that service may have to be so greatly expanded to touch the whole of the jurisdiction of the subventions that the increased tax and farebox revenues from the expansion of service will be far outrun by the expanded costs. In such circumstances, expanding the service and tax base becomes self-defeating from a financial viewpoint. Experience shows that transit properties should be wary about substantial increases in the service and tax areas. Little good is achieved if a larger number of dollars are being spread more thinly than before.

With the need to depend on state and local fiscal sources on an increasing basis, there is a natural desire to find some source of financing that keeps up with inflation. Looking at the spectrum of choices possible, a property tax is sluggish and unpopular and has some real problems. It requires reassessment of values on a frequent basis to stay up with changing property values, and reassessment is not done with sufficient frequency in most places.

A sales tax is more reflective of the state of the economy and inflation and is attractive, because as prices go up the sales-tax revenues go up. However, it is usually considered to be highly regressive toward low-income persons. Even so, a sales tax may be justified depending on the degree of relative benefit received by various groups. If the poor benefit more from transit, there may be nothing wrong with their paying a larger proportion of their income for transit support. To reduce conflict over the regressive

nature of sales taxes, such basic items as food and medicine may be exempt from the sales tax; or a piggyback on a local sales tax for transit—an extra half cent—may be required, and not be levied on items such as food and medicine.

The income tax is attractive because it reflects the ability of persons to pay, but this raises other questions. Should all residents or all workers in the transit authority area pay the income tax? Those who pay the most income tax may use transit the least and, with some justice, may question the equity. Income tax is linked closely to the general condition of the economy and level of unemployment. The consensus is that income tax is not a good source of tax revenue for downside situations.

No tax is safe and sure and free from ups and downs. A spectrum of local tax sources probably is best. With a variety of taxes, the likelihood of instability of financial resources may be diminished. It should be noted that any effort requiring a referendum to be passed imposes yet another level of difficulty on management. It forces management into the political arena—there is no way to avoid politics when trying to develop a positive referendum situation.

Another problem arises with predicting fare receipts. Many transit properties have poor information available, and, whether good or not, detailed passenger data available is doubtful. Does transit management know who rides, who pays, and what they pay? How many classes of fare are there to dilute the base fare, and exactly what is the average fare? The average fare calculation should be made on a regular basis because it is important in predicting the yield from various changes in passenger demand. Sampling should be carried out regularly to determine as accurately as possible what is the average fare being paid.

One of the more difficult items to estimate is the elasticity of demand in regard to fare changes. In some cases a rise in fares has clearly cut patronage; in others it has had no observable impact. Probably the worst situation is to raise fares and cut service at the same time, which puts a double hit on the passenger and is sure to alienate present and potential riders. Another question to answer is whether there are riders who will pay a high fare because the service is good, such as for express service. These are passengers to covet because of their potential contribution to revenues. Sufficient promotional effort should be aimed at this group to encourage their participation in the transit system. Promotional efforts must be used to boost patronage and information on the impact of the promotional effort gathered. The transit agency must be capable of contracting out or providing special services to boost its revenues. All of these factors make predicting fare receipts very difficult, especially over an extended time period.

There are serious questions about the transit property being able to control its costs successfully, either because of uncertain cost estimates or lack of cost information. Do the costs control the property? Is the concern about costs the major driving force of the system? Are there broader, more cogent concerns? While control of costs is important, it is not the sole reason transit service exists or the singular justification for the presence of a management team. The amount and degree of detail in cost information is important in any effort to manage transit property. The costs should be broken down sufficiently so that management can take intelligent action. For example, in labor costs, pull-out, pull-in, overtime, relief time, and report time should be calculated separately and not lumped together as labor costs. Cost calculations should be made on per route basis so the costs to operate a given route or a given trip can be determined. If only average costs are available, management is in trouble, because it is difficult to manage on the basis of average costs. In many cases a dangerous situation exists where costs are merely projected up and down without adjustments being made for inflation or ability to control certain cost elements.

In the maintenance field, costs are often not estimated carefully or accurately, and detailed information is not kept. Vehicle histories with detailed costs should be available so the maintenance manager can understand the strengths of given types of equipment or parts and knows what needs to be ordered to complete a job in the future; also information about whether there are standard costs per job. Many transit properties have no idea what a job should cost and have no guideline for the effort. Automatic escalating costs are important, such as cost-of-living allowances and health insurance premiums. These are major cost elements in transit in recent years and therefore strict attention must be directed to them.

CONCLUSION

An orderly financial planning process such as that discussed here is rarely used in the transit industry. Most transit properties have no strategic plan, goals, or objectives, and have no idea what it is they are trying to achieve except in the short term. Lack of interest on the part of the policy-making board is one reason that little may be done in either strategic or financial planning. This may be due to amateurism on the part of the board or the short-run thinking that permeates the political atmosphere. Transit, as a public enterprise, is inescapably a part of the political arena. Management may lack the professionalism to give thought to the processes of strategic or financial planning. Moreover, the transit industry has no tradition of the kind of long-run thinking needed for the efforts required. Even where policy makers and management want to do long-range strategic and financial planning, a lack of staff and shortage of good information may doom the effort from the start.

Whatever the reasons, most transit properties have reduced financial planning to nothing more than annual budget preparation, and for most transit agencies poor information has resulted in the need for supplemental budgets each year. Transit properties without any kind of strategic planning or financial planning have foregone the opportunity to take advantage of the process of giving careful thought to helping to shape the future.

The financial plan is derived from the strategic plan and the strategic plan is long-run in nature. Therefore, financial planning is not just for the immediate future but for the long run. From the strategic plan, goals, priorities, and objectives are derived and agreed upon by the policy-making board and top levels of management. The financial plan is based on established goals, objectives, and priorities.

From the financial plan the budget is prepared, and the budget is a detailed, annual financial plan. The goals, priorities, objectives, strategic plan, financial plan, and budget should be reviewed regularly.