ZERO-BASE BUDGETING

A Concept whose Time Has Come — Again

BY G. CHRIS HARTUNG
The City of Garland, Texas, has a long and interesting history with zero-base budgeting, often referred to as ZBB. In the 1970s, Garland was not trying to deal with a stagnant or declining economy or revenue base; in fact, at the time, it was in a very good financial position and was experiencing growing revenues. The city needed ways to accommodate a large number of competing interests as it dealt with rapid growth. Today, cities must balance stagnant or declining revenues with the traditional citizen demands for services, the need to address aging infrastructure, and other increased costs for pensions and health-care for employees and retirees. The competition for limited resources is potentially catastrophic. In the ’70s, Garland embraced zero-base budgeting as a way forward, and jurisdictions today can do the same. The purpose of this article is to explain the zero-base budgeting process, to discuss what was learned in Garland during and after its implementation, and to comment on the usefulness of ZBB in today’s local government environment.

**BLAZING A TRAIL**

In the early 1970s, the City of Garland, a suburb of Dallas, was experiencing a population explosion. City growth during this period reached 10-12 percent annually, and such rapid expansion presented a number of challenges. Municipal leaders had to oversee major infrastructure requirements and also increase staff to provide the services the expanding population required. Garland operated a municipal electric system, which also involved the city in the first stages of the 1970s energy crisis. International events caused the price of the natural gas, used as fuel for the city’s electric generation plants, to skyrocket from 22 cents to more than $2 per million cubic feet. Questions surfaced regarding Garland’s future ability to even obtain natural gas for the plants. The community’s rapid growth, combined with steadily rising fuel costs for the electric utility, resulted in greatly increasing expenses.

The city manager at the time directed all executive staff members to look for new ways to conduct business. The motivation was not merely to cut costs, but to find better ways of allocating the city’s limited resources to meet the increasing demands of the populace. During this time, Garland learned about a program that had been implemented in the State of Georgia (by then-governor Jimmy Carter) — zero-base budgeting, or ZBB. It turned out that zero-base budgeting had been initially developed in a manufacturing environment at Texas Instruments, whose Dallas headquarters was located just a few miles from the Garland city limits. After contacting Peter A. Phyrr, the consultant who worked with Governor Carter, it turned out that not only had Phyrr originally developed ZBB at Texas Instruments, but that he literally wrote the book on the subject. After further investigation, the city contracted with Phyrr to implement ZBB for the City of Garland — the first time a local government implemented ZBB, as far as anyone knew.

**NOT JUST ANOTHER ACCOUNTING TOOL**

The methodology of ZBB was developed to address a major criticism of then-current budgeting systems in both the public and private sectors. Invariably, the baseline for discussions of the next budget cycle was the dollar amount of the current budget. As a result, budget discussions typically revolved around the amounts of additional funding a department would receive. Little, if any, justification was presented for the existing level of expenditures. If reductions were required, they were typically accomplished across the board. Evaluations relating to the effectiveness of existing programs or their priority in the current economic environment were seldom discussed. New programs did not compete against existing expenditures, which meant they had to be funded by additional revenues or increased rates. Zero-base budgeting was intended to force the organization to analyze its activities back to zero; that is, to consider the potential result if an activity were not funded at all. As Phyrr wrote, “The process requires each manager to justify his entire budget request in detail, and puts the burden of proof on him to justify why he should spend any money.”

ZBB was envisioned as a planning and budgeting tool for operational managers, not as just another accounting tool for the finance and budget managers to manipulate. As Phyrr explained, planning is involved in identifying the desired output and budgeting is concerned with inputs. In his book, Phyrr addressed his specific intent to correct problems associated with the planning, programming, and budgeting systems
that had been attempted in the federal government and many state and local governments in the mid- to late sixties. Phyrr also emphasized that ZBB, like any major organizational change, must have active support from top management.

Phyrr’s book depicted ZBB as a two-step process. The first step in developing the ZBB budget requires organizational units to identify “decision packages” that effectively divide the budget into discrete pieces built around activities, programs, or functions at the sub-department or subdivision level. Decision packages should be meaningful for both operational managers and top-level decision makers. Consequently, Phyrr recommended that the detailed decision packages should be developed at the lowest practical level in the organization, the program or activity manager level, under the guidance of senior management. For instance, tuition reimbursement, typically a line item of expenditure, could qualify as a decision package.

Each decision package was to include all costs associated with the function or activity as well as a statement of the activity’s purpose, other ways to achieve the purpose, measures of performance, and a statement describing the consequences of not undertaking the activity. Requiring managers to answer the question, “What happens if we don’t fund this activity or program at all or at least at this level?” created a major change to the budget decision-making process. The stipulation of annually evaluating alternative means of providing the service opened up the discussion of contact services, multi-jurisdictional operations, or other methods of meeting service necessities.

The ZBB methodology also required managers to develop decision packages built around a minimum level of service, which was usually defined as between 50 and 75 percent of the current funding level. Managers were expected to describe the results that this level of funding would achieve. In other words, the new baseline for the department or division would be decision packages whose funding totaled 50 to 75 percent of the current dollar amount in its budget without completely eliminating the service. For instance, the department might consider reducing library hours while still maintaining library services. Each department could then develop additional discrete decision packages to provide for the remainder of its funding requests, including building back to the current level of service (which might require a higher level of expenditures than the current dollar amount), as well as any new or expanded programs or activities.

The final step of the ZBB budget process involves ranking the decision packages. Again, Phyrr wrote that the ranking process “involves evaluating and ranking these packages in order of importance through cost/benefit analysis or subjective means.” This ranking process allows the organization to evaluate new programs or activities against existing ones. Phyrr offers several approaches to the ranking process. Garland used what it referred to as the P-5 process: Pete Phyrr’s Pragmatic Pointscore Procedure. This process involved the six-point rating scale outlined in Exhibit 1.

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<th>Exhibit 1: Ranking Decision Packages</th>
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* Recommendation: Goal Expenditure Level — The current expenditure level is a good reference point for decision making, since each manager can evaluate whether he or she thinks a new function or expanded function is important enough to be voted 4, 5, or 6, with this additional expenditure obtained by reducing or eliminating current functions.

The six-point ranking system provides evaluators with a useful reference tool. Typically, the items awarded a 6 are obvious critical services or activities. Items that are ranked as a 1 are clearly a low priority, possibly even frivolous, in some cases. The critical ranking numbers tend to be 3 and 4, because these are typically assigned to decision packages that are directly on the cusp for funding. Evaluators were instructed to give a decision package a 3 if they considered it somewhat important, but that it should only be funded if all critical needs were funded or if there were additional revenues. Similarly, evaluators were told to rank a decision package as a 4 if they thought it should be funded, but dropped if
funding levels were exceeded. In the Garland application, the number of 6s and even 5s that could be used was limited to minimize potential gamesmanship.

WHAT GARLAND LEARNED

Garland chose to use a staff team comprising the executive staff and the department heads to conduct the final combined ranking of decision packages because of their inherent knowledge of city operations. Each department was charged with ranking its own decision packages before submitting them to the city manager.

ZBB represented a major change in the way Garland approached budgeting. At the time, the city’s budget was organized around department and division organizational unit budgets that were presented in a line-item form. In most cases, the departmental budget requests were prepared by the department heads, with some input from their immediate staff, but with little involvement from program or activity managers. The city had followed the typical use of the baseline as representing 100 percent of the current budget when discussing the next fiscal year’s spending. ZBB required a significant increase in paperwork during budget preparation, a situation that today’s computers and software would alleviate. City management charged departments with preparing decision packages that represented the smallest meaningful budget increment, which meant that much more analysis and planning were required to prepare the organization’s budget requests. Information about alternatives and performance measures would have to be much more detailed than in the past. This factor alone argued for decentralizing the budget preparation process in all but the smallest departments or divisions. Department and division heads had to involve lower-level managers in the budget process just to get the decision packages developed on time. The biggest signal that managerial budgeting was replacing the old line-item budgeting was when the city manager invited mid-tier managers and supervisors to attend the budget training without first asking permission of the department heads. This process also allowed the organization to more clearly define lower-level manager responsibility for results and expenditure levels.

THE RESULTS

The requirement to develop alternative methods of providing a service or function did not produce any significant recommended changes in the first year of ZBB implementation. Garland found it difficult to conduct this kind of basic analysis during the typically short planning period available for the annual budget preparation. The city also found that the statements of what would happen if the department did not fund a particular activity or function were fairly superficial. Fundamental analysis of this kind, as important as it is, needs to occur outside of the annual budget process. Questions about the basic need for a program or function, as well as questions regarding alternative service delivery methods, are better considered during other periods of the year. However, it is important to conduct these analyses regularly and consistently.

Developing minimum levels of service for the decision packages was a major improvement in the organization’s approach to evaluating a wide variety of funding requests from very dissimilar areas. This process effectively reduced the baseline for discussions of the next fiscal year’s expenditures to 75 percent of the current funding level. Coupled with the decision package ranking process, this mechanism allowed top management to evaluate the continuation of current service levels in one area against expanded or new programs or activities in other areas of the organization. This minimum-level budget methodology has been continued in many organizations as “target level budgeting,” and that was the evolution of ZBB in Garland.

Garland also found that the threat of not funding the full operation — especially when made to the police or fire chief,
or most other department heads — was something best done no more than once every few years. This exercise can be useful in the first year of ZBB because it encourages managers to entertain alternatives. However, after the first year, the organization runs the risk of turning this part of the analysis into an academic exercise that robs time and results in minimal payoff. A subsequent city manager in Garland developed a practice of rotating the zero-base analysis around the organization over a five-year period instead of requiring every department to conduct this analysis annually.

One criticism of ZBB is that it has been used to develop the staff’s budget recommendations without input from elected officials. In Garland, the city manager had an annual practice of meeting with the city council in strategic planning sessions before the budget process began. During these sessions, which were also attended by department heads, the city council developed a ranked list of planning issues that represented their priorities for the coming year. The staff used this list of priorities as input when ranking decision packages. Through this process, staff was able to connect the council’s priorities to the city manager’s budget recommendations.

During this period, members of the Garland staff and council would occasionally attend professional meetings where they would relate the city’s ZBB experiences. It was not unusual to have others at the meeting remark that they were also using ZBB, or had used ZBB, or wouldn’t use ZBB on a bet. Upon closer questioning, it became clear that many had no idea what ZBB actually involved. This experience serves as a good example of what generally happens when a methodology, practice, or program becomes a topic of general discussion; the same reaction followed the introduction of techniques such as management by objectives, total quality management, and other management strategies.

**Today’s Environment**

Many organizations continue to use the current funding level as the baseline for discussions about the upcoming budget. In some cases, the baseline is increased by additional amounts to compensate for population growth and inflation. As in the past, the budget discussions typically address levels of additional funding over the baseline, and little attention is given to the efficacy of the current service levels. ZBB conceptually offers a technique for institutionalizing a continual effort to answer the same basic questions that Peter Phyr framed in his book:

1. Where and how can we most effectively spend our money?
2. How much money should we spend? (What should the dollar amount of limited resources be? We can always increase expenditures in industry at the expense of profits or increase expenditures in government at the expense of the taxpayer.)

Garland’s experience indicates that this part of zero-base analysis should be driven by top management and policymakers. The organization should not leave the identification and analysis of alternative methodologies, including the acceptance or dismissal of organizational functions, to lower-level or even departmental managers. To that end, the government should aggressively develop the capability to monitor and identify best practices and alternative service delivery methods used by other local governments to determine how applicable they might be to the organization. Alternative practices, such as managed competition and joint-service delivery with other agencies, offer opportunities to evaluate and cost other service delivery methods. Once alternatives are identified, they can be developed into decision packages by the appropriate organizational unit for inclusion in the budget-planning process.

**Discrete Decision Packages**

Developing discrete decision packages gives top management and elected officials a better picture of how the organization is spending money, and the process should provide them with more flexibility in dealing with limited or declining resources in the face of increasing demands. Currently, most attempts to reduce spending are implemented as across-the-board cuts (for example, 5-10 percent cuts, reducing travel, eliminating training, etc.), which can penalize high priority programs and more efficient organizational units. Other attempts to control budget spending often sacrifice new, high-priority programs and...
activities in order to continue existing lower-priority programs and activities.

The ability to deal with reduced or stagnant revenue levels is enhanced by the minimum funding levels for programs and activities developed as part of ZBB. This effort forces managers to consider the lowest level of activity that will produce some level of results. In periods of severe financial distress, this provides policymakers with more options in managing the need to accommodate changing priorities. By using the lower end of the range for these minimum levels, say 50 to 55 percent of current funding, policymakers could make significant headway.

ZBB assumes that the organization has the ability to develop results-oriented performance measures. Historically, local governments have tended to develop performance measures that are measurements of input and not measurements of results. We count the number of inspections or the number of permits issued, but not the results of the activity. Often, the budget office or finance department develops these measures, not the operational managers. Forming meaningful decision packages hinges on training operational managers to create meaningful (to them) results-oriented performance measures.

CONCLUSIONS

While there are no “silver bullets” that will solve all of a local government’s funding problems, the methodology of zero-base budgeting does offer a process for improving decision making throughout the organization. The method could be especially helpful for organizations that are facing stagnant or declining revenues. 1

Notes
2. Ibid.
3. Ibid.

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Hartung would like to acknowledge the influence of Charles E. Duckworth, city manager of Garland in the early 1970s when Hartung was assistant city manager, along with Lewis McLain, former budget director; Don Paschal, former community services administrator; and Fred Greene, former city manager.