



# Zero-Base Budgeting:

Modern Experiences  
and  
Current Perspectives



## Table of Contents

Introduction .....	1
A Brief History of ZBB .....	1
The Theory of Zero-Base Budgeting .....	3
Zero-Base Budgeting in Practice .....	7
Zero Line-Item Budgeting .....	7
Service Level Budgeting .....	10
Does ZBB Work? .....	13
Is ZBB for You? .....	18
Alternatives to ZBB.....	20
Priority Budgeting .....	20
Program Review .....	21
Target-Based Budgeting .....	23
Conclusions.....	26
Bibliography .....	26

## Sponsored by the Government Finance Officers Association and the City of Calgary, Alberta.

GFOA received a grant from the City of Calgary, Alberta, to study zero-based budgeting for public employers. GFOA used the grant to conduct independent research using a survey of GFOA members, case studies, and secondary sources. The findings and resulting publication were reviewed and approved by an independent panel of GFOA members.

---

The Government Finance Officers Association  
Research and Consulting Center  
203 N. LaSalle Street, Suite 2700  
Chicago, IL 60601  
312-917-6102



## Credits

**This paper was written by Shayne C. Kavanagh**, Senior Manager of Research for the GFOA's Research and Consulting Center in Chicago, Illinois. It is a custom research project completed for the City of Calgary. To contact GFOA about the topic of this paper or to inquire about your own custom research project, please contact Mr. Kavanagh at [skavanagh@gfoa.org](mailto:skavanagh@gfoa.org).

**GFOA would like to recognize the following individuals for contributing their experiences to our research case studies:**

### Advisors

Carol Ebdon, Associate Professor, University of Nebraska  
David Fiorenza, Associate Professor of Economics, Villanova School of Business  
Merrill King, Finance Director/Treasurer, City of Minnetonka, Minnesota  
Anne Kinney, Director, Research and Consulting Center, GFOA  
Thomas F. Kuehne, Finance Director/Treasurer, Village of Arlington Heights, Illinois  
Casey Srader, Budget Manager, City of Plano, Texas  
Ari J. Sky, Director of Management and Budget, Fauquier County, Virginia  
Nancy Zielke, Senior Director, Alvarez & Marsel Public Sector

### Case Studies

Mary Ann Debrinski, Director of Urban Renewal, City of Edmonton, Alberta  
M. Katherine Barkdoll, CPA, Budget Director, City of Frederick, Maryland  
Lora A. Grogg, Budget Manager, City of Johnson City, Tennessee  
Martin Hayward, City Treasurer, Chief Financial Officer, City of London, Ontario  
Sharon Houde, CMA, Director, Business Planning, City of London, Ontario  
Rosanna Wilcox, Business Planning Process Manager, City of London, Ontario  
Karen DeAngelis, Director of Finance, City of Naperville, Illinois  
Vicki Boschert, Mg. Director of Finance, City of O'Fallon, Missouri  
Teri Doby, Budget Officer, City of Rowlett, Texas  
Len Brittain, Director, Corporate Finance, City of Toronto, Ontario  
Josie La Vita, Director, Financial Planning, City of Toronto, Ontario  
Tony Ardochini, Deputy Treasurer Financial Planning, City of Windsor, Ontario  
Onorio Colucci, CFO/City Treasurer and Corporate Leader Finance and Technology,  
City of Windsor, Ontario  
Melinda Munro, Manager of the Office of Continuous Improvement,  
City of Windsor, Ontario  
Dave Soave, Manager of Operating Budget Development and Financial  
Administration, City of Windsor, Ontario  
Eric Johnson, Director of Strategic Planning and ERP Implementation,  
Hillsborough County, Florida  
Jim Seuffert, Director, Financial Management Department, Manatee County, Florida  
Shaela E. Jones, MBA, Budget Analyst, School Employees Retirement System of Ohio  
Kathy Thornburg, CPA, Senior Accounting Analyst, School Employees Retirement  
System of Ohio  
Bill McKennan, Treasurer, Town of Orangeville, Ontario

**The survey research was conducted using [www.surveymethods.com](http://www.surveymethods.com).**

## Abstract

Zero-base budgeting (ZBB) is a budgeting process that asks managers to build a budget from the ground up, starting from zero. However, ZBB has been the subject of a fair amount of controversy over the years, owing primarily to questions about the value derived from ZBB analysis versus the cost required to put ZBB into practice.

The goal of this paper is to define what ZBB means in current practice, describe the uses of ZBB, and to help public officials facilitate a conversation in their organizations about the value of ZBB. GFOA's research found that "textbook" ZBB or ZBB systems that conform to the theoretical ideal are almost unheard of in present day financial management. However, an increasing number of governments that exhibit leadership in budgeting practices (albeit still a minority) are considering elements of ZBB and incorporating them into their budget processes. Major conclusions the paper reaches about ZBB include:

- Practical uses of ZBB streamline ZBB theory to focus on either detailed examination of expenditures or selecting between different levels of service.
- ZBB isn't for everyone. ZBB, or concepts inspired by ZBB theory, may be useful in certain situations. Ultimately, public officials must decide if the benefits of ZBB outweigh the disadvantages.
- Alternatives to ZBB exist. These alternatives can answer many of the same cut-back budgeting questions as ZBB, while sidestepping some of its disadvantages.

## Introduction

When using zero-base budgeting (ZBB), a government builds a budget from the ground up, starting from zero. Though the apex of ZBB's popularity in the late 1970s is long past, there has been renewed interest in ZBB in today's environment of fiscal constraint, not least because the "zero" in zero-base budgeting sends a powerful message that taxes and spending will be held in check. However, the time lapse between the zenith of ZBB and the present, as well as the political rhetoric surrounding it, has obscured the theory and practice of ZBB for many.

The purpose of this paper is to offer clarification on this sometimes controversial and misunderstood budgeting method. First, the paper will describe the theoretical process of ZBB, including its major theoretical advantages and disadvantages. However, because "textbook" ZBB is very rare,<sup>1</sup> the paper will describe how GFOA research found ZBB is actually used in practice and the important differences from theory. The paper will then describe the potential value of ZBB and how public officials can decide if ZBB is right for their circumstances. Since ZBB won't fit all all situations, the last section of the paper explores alternative planning and budgeting methods that achieve some of the same underlying goals while sidestepping the weaknesses of the method.

## A Brief History of ZBB

Zero-base budgeting, also known simply as ZBB, has had a long and sometimes controversial history in the public sector. Zero-base budgeting first rose to prominence in government in the 1970s when U.S. President Jimmy Carter promised to balance the federal budget in his first term and reform the federal budgeting system using zero-base budgeting, a system he had used while governor of Georgia. ZBB, as Carter and budget theorists envisioned it, requires expenditure proposals to compete for funding on an equal basis – starting from zero. In theory, the organization's entire budget needs to be justified and approved, rather than just the incremental change from the prior year.

Interest in ZBB had been in decline for many years. The large amount of paperwork and data ZBB generates, along with doubts about the method's ability to fully meet its theoretical promises, were at least partially responsible.<sup>2</sup> Also, the improving economic con-

---

### About the Survey

GFOA conducted a survey of participants in its distinguished budget presentation award program, which recognizes governments that exemplify best practices in presenting budget information to the public. Presumably, budget award winners are interested in pursuing best practices in budgeting and financial management, more generally. However, they would not necessarily be representative of all local governments. GFOA received a high number of responses (413), with the result that findings should be accurate within at least +/- 3.5% when generalized to all budget award program participants, assuming a 90% confidence range. Appendix 1 provides a summary of all survey results.\*

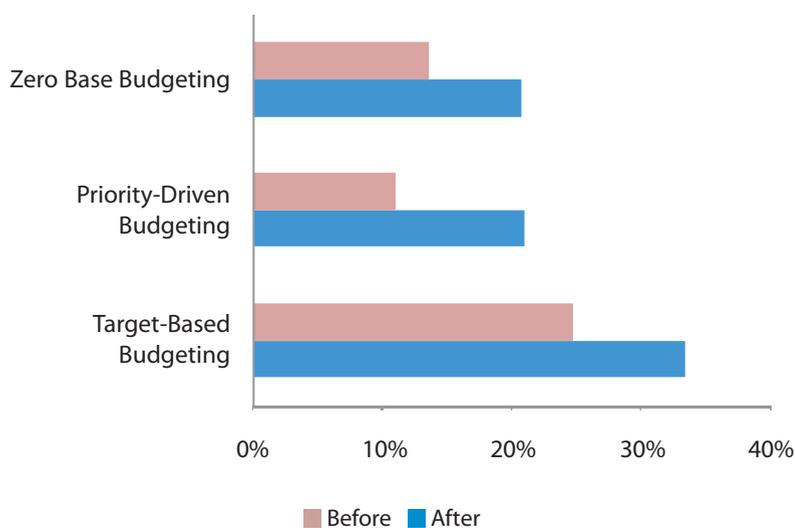
\* GFOA sent the survey to the individual listed as the main point of contact for the participating government. Typically this person would be knowledgeable about the organization's budgeting practices.

ditions from the low points of the late '70s and early '80s, in the U.S., and the early '90s, in Canada, probably reduced the perceived need for what was largely regarded as a "cutback budgeting" method.<sup>3</sup>

However, pure ZBB may have largely disappeared, but it wasn't forgotten; vestiges have lived on.<sup>4</sup> In fact, ZBB seems to be experiencing a kind of resurgence. A survey of participants in GFOA's Distinguished Budget Presentation Award Program shows that an increasing number of leading public budget practitioners (44% of all respondents) are considering ZBB. GFOA's survey also showed that actual use of ZBB-like practices is increasing. Just over 20% of those surveyed say they are now using ZBB, at least in part. This represents an increase of more than 50% in the number of governments that say they are using at least some elements of ZBB, compared with the period just before the worst financial impacts of the 2008 recession hit these governments.

Why the apparent resurgent interest in ZBB? At the core is doubtlessly the fact that we have been experiencing the worst economic slowdown in decades.<sup>5</sup> These times have imposed major fiscal challenges on local governments<sup>6</sup> and, accordingly, have required serious changes, for many, to how resources are allocated.<sup>7</sup> GFOA's survey shows that traditional budgeting methods, namely line-item and incremental budgeting, have declined in use in the last few years, while all forms of budgeting that are thought to be better adapted to cutting back the budget, not just ZBB, have increased (See Exhibit 1 - these other forms of budgeting will be briefly explained later in this paper). Finally,

**Exhibit 1:**  
**Percentage of Respondents Using Major Budget Reforms**  
**Before and After the Depths of the 2008 Recession**



behind the apparent resurgence, is that those governments that report using ZBB are using “practical” versions of ZBB that are less intensive than the theoretical model, which is presented in the following section. In fact, our research found that use of “text-book” ZBB is almost unheard of in local government today.<sup>8</sup> The attraction of ZBB, for many, is that the “zero” in ZBB sends a powerful message to all stakeholders that the line will be held on spending and that nothing will be taken for granted. Applying the ZBB label to the budgeting process makes this statement, even if the actual budget process doesn’t conform fully to ZBB theory.

## The Theory of Zero-Base Budgeting

ZBB promises to move the organization away from incremental budgeting, where last year’s budget is the starting point. Instead, the starting point becomes zero, with the implication that past patterns of spending are no longer taken as a given.

To deliver on this promise, the organization is first divided up into “decision units” – the lowest level at which budget decisions are made. Decision units could be formed along functional or organizational lines – for example, a division of a department is a common decision unit, but programs could be used as well. Managers in each decision unit then prepare a detailed description and evaluation of all activities it performs, including alternatives to current service delivery methods and the spending plans necessary to achieve the decision unit’s goals. This information is used to create a number of “decision-packages,” which show marginal spending level differences that represent varying levels of effort and cost. There should be at least three decision-packages for each decision-unit, though there could be as many as ten or even more. The three elementary categories of decision-packages are presented below. More than one decision-package could be presented for each category.

- **Base package.** This type of package meets only the most fundamental service needs of the decision unit’s clientele and represents the minimum level of funding needed for the unit’s services to remain viable. There could be multiple base packages, each addressing a different way to provide the base service. This represents an important departure from incremental budgeting in that an incremental budget never considers what the absolute minimum level of funding a program can survive on is. Rather, the current level of spending is usually considered a sort of de facto minimum.
- **Current service package.** This type describes what it takes to continue the level of service currently provided to the unit’s clientele. The difference between the base package and the current service level may be expressed by multiple decision packages, with each package representing one aspect of what it takes to get from base funding to the current service level. There could also be different decision packages describing different means for achieving the same service level.
- **Enhanced package.** This category addresses resource required to expand service beyond current levels. There could be any number of enhanced packages.

In addition to the detailed information on inputs (dollars, personnel, etc.) needed to provide the service, decision packages include performance measures that express the impact of the package on service levels. For instance, a series of decision-packages from a street repair division might use measures to describe the variation in lane miles that can be maintained and the smoothness of the car ride that will be experienced (as might be expressed through a pavement quality index).

Because of the detailed information required and because decision-packages are created for the lowest levels of budgetary decision making, ZBB requires greater involvement of mid-level and perhaps even line managers – an important difference between ZBB and many other budget processes. Because each division is creating between three and ten decision packages, along with the required supporting information for each, the documentation can be substantial.

After the decision-packages are completed, they are gathered up and ranked from top to bottom within the organizational unit in which the decision unit resides. For example, in a local government, the head of a department might gather the decision-packages from the divisions of the department and then rank them all together. Decision-packages could be gathered and ranked on an organization-wide basis, but this is uncommon due to the amount of paperwork involved and because it is usually easier for a department director to rank decision-package options within his or her own department than for a chief executive or budget office to rank packages across departments.

After the packages are ranked, the ranking is then used by central budget authorities (e.g., budget office, chief executive, governing body) as the basis for making allocations. For instance, each department would submit its suggested ranking to the chief executive, who would use those rankings to formulate a recommended budget for review by the governing body.

The foremost theoretical advantage of ZBB is that it offers a rational and comprehensive means to cut the budget. ZBB can be used to make different cuts to different services based on the perceived value to the organization (rational) and all spending is put under scrutiny (comprehensive). This compares to a traditional line-item process where only incremental spending is considered and where there is no ready means to compare the value of one service versus another, and, thus, to determine different reductions in spending for different services on a rational basis. Hence, ZBB promises to move budgeting away from the use of across-the-board cuts – a budget reduction method that does not differentiate the value of one service versus another.

The other major advantage is that it gives top management better insights into the detailed workings of departments. In theory, ZBB clearly differentiates service level options, the impact of different service levels on what the community will receive from government (through performance measures), and a detailed plan for the inputs necessary to provide those service level options.

ZBB, of course, is also theorized to have its drawbacks. The most widely known is the work associated with generating the decision-packages and then reviewing them.

Conceivably, an organization could develop hundreds of decision-packages, requiring substantial time commitments from every level of management to develop, review, and rank them.

Another important drawback is the reluctance of managers to suggest decision-packages below current spending. The advantage of an incremental budget process, for risk-averse departmental managers, is that only a marginal portion of their budget is on the line in any given year. Under ZBB, the whole budget is on the line and managers are, in fact, expected to actively provide far-reaching options for how their budget can be cut back, including revealing the absolute minimum level of funding they can accept. This dynamic might lead managers to attempt to “game” the system, such as providing a very small number of decision-packages that contain a broad array of services, so that budget decision makers are not able to identify, much less de-fund, discrete service levels. Managers of decision-units might also deliberately give low rankings to services with high public appeal knowing that budget decision makers will refuse to cut such services thereby sparing services the department had ranked higher, but which are actually less valued by the community.

The final theoretical drawback is that ZBB is not associated with an explicit planning process that is separate from the budget process. This has two primary implications. First is that ZBB does not provide a structured method for taking account of the community’s or elected officials’ views and long-term priorities. Rather, ZBB is driven largely by managers’ perceptions and preferences. Elected officials may provide input on the final ranking of decision-packages, but even this is simply reacting to staff recommendations and, in any event, is too late to make a far-reaching impact on how the budget is structured. The second implication is that because participants in the ZBB process will necessarily be preoccupied with putting together the numbers for various decision-packages, they will not be able to focus on considering significant changes to how service is provided. Rather, participants will tend to focus on the current service model and dividing that into decision-packages, instead of proposing packages for entirely new alternatives to meet the same underlying demand from the public.

Given the foregoing, how does ZBB help in an environment of fiscal constraint, where budget cutbacks are required? First, consider three essential questions of planning and budgeting, as shown in Exhibit 2. These questions are especially germane in a time where budget cuts are required, because they allow for a more rational and comprehensive approach to reducing budgets.

The first question asks, in the planning stage, what the community’s priorities are and how government might make a positive difference in the lives of constituents. Ideally, this invites the government to consider entirely new ways of meeting community needs. With respect to budgeting, the first question asks what programs or services the government should fund in the first place. Under a traditional budgeting system, the answer is simple: the same ones that were funded last year. Ideally, though, the answer will stem from a consideration of what the community’s priorities are and what programs will be most effective in reaching those outcomes.

The second question asks: assuming we are going to provide a given program or service, how much/what quality of service should we provide? Under a conventional system the answer is again, typically: the same level as last year. In a cutback environment, a traditional budgeting system often seeks to preserve the same service level by making marginal cuts to “non-essential” expenditures such as training, travel, etc. However, a planning and budget system should be more circumspect, considering if a basic level of service, a premium level, or something in between is best (i.e., best suited to need, most affordable, etc.). On the planning side, community need and preferences should be examined when deciding how much and what quality of service to provide. On the budgeting side, departments and programs are allocated funding according to the level of service that is deemed most appropriate.

The third question asks directly about the efficiency with which a service is provided. A planning process should look at all the determinants of efficiency: the processes followed to deliver a service, the knowledge, skills, and abilities of the people involved, and technology used to facilitate the work. When it comes to efficiency, a budgeting process focuses on inputs and outputs, asking if the inputs requested to provide a given service level are reasonable given the expected output. A traditional line-item budget system is focused exclusively on inputs, with little consideration given to the output being funded.

Finally, all three questions are preceded by a question of affordability – planning and budgeting decisions should be informed by knowledge of how much money is available and what the true costs of service are.

ZBB is of the greatest potential use in answering the second question, and also can provide value for the budgeting portion of the third question. Decision-packages present different service levels for budget authorities to choose from. The decision packages include

**Exhibit 2:  
Three Essential Questions of Planning and Budgeting**

	Planning	Budgeting
Prerequisite: What is Affordable?	What are the community’s priorities and how can government action add value?	What programs should we fund in order to best achieve the priorities?
	How much and what quality of service does the community need from a given program?	What level of service should we fund within a program?
	Is the service provided efficiently?	For a given service level, are the requested inputs reasonable for the output we expect to receive?

performance metrics to specify the outputs produced and contain detailed resource estimates, allowing budget authorities to get a sense of whether the requested inputs are reasonable in light of the outputs.

Theoretically, ZBB should also provide insight into the first budget question, because managers are expected to provide ideas for entirely new ways of meeting public demands on the government. However, as was discussed earlier, theoretical ZBB lacks a dedicated planning component, which reduces the likelihood of such radical suggestions being made.

Finally, ZBB theory does not place much emphasis on starting the ZBB process with a sense of what is affordable. It is not necessary, for example, to start the ZBB process with a forecast of revenues. Rather, the process begins with decision units developing their decision packages. These are forwarded to central budget authorities who, then, take account of available revenues to decide which decision packages to recommend to the board in order to reach a balanced budget.

So far, the discussion of ZBB has been just theoretical. The next section examines the practical implications of ZBB, using original GFOA research as well as secondary sources.

## Zero-Base Budgeting in Practice

The pure version of ZBB found in theory appears to be very rare in practice.<sup>9</sup> Rather, the label of “zero base budgeting” has been applied to budgeting methods that borrow elements of pure ZBB, but that do not conform to the theoretical ideal. According to GFOA’s case study research and survey, those describing themselves as using ZBB tend to fall into two major categories. (See Exhibit 3 for GFOA’s case-study localities.) The first group, which this paper will call “zero line-item budgeting,” focuses on answering the third budgeting question from Exhibit 2: are inputs reasonable given the expected output? This method seeks to create greater transparency in how line items are arrived at by requiring detailed justifications of line-item requests in lieu of pointing to prior years’ allocations as the justification. The second group, which this paper will refer to as “service level budgeting,” presents decision-makers with different service levels and asks decision-makers to choose between them, thus focusing on question #2 from Exhibit 2. In this method, departments concentrate on presenting decision packages and service levels with associated metrics, while there is less emphasis on detailed input estimates.

## Zero Line-Item Budgeting

This method of budgeting does not start with last year’s budget. Rather, departments are given a blank budget request form with zeros filled in for each line item, instead of last year’s budget or actual expenditures as the starting point – hence, the label of zero-base is applied. Departments then rebuild their budgets from the ground up, justifying each line item. Where possible, departments are asked to provide drivers of cost. To illustrate, for its equipment line item, the police department in the City of O’Fallon, Missouri describes the precise amounts it will need to spend on portable radio replacement parts,

flashlight parts, digital voice recorders, polygraphs, and Taser cartridges, including explanation of the need to make each of these expenditures. In some instances, the explanation is in narrative form, but in others there is more quantitative justification. For instance, the O'Fallon Police Department describes the cost per Taser cartridge and how many they need to purchase.

These requests and justifications are sent to the central budget authority (e.g., finance department, budget office, city manager, etc.), who then reviews them – using the justifications, rather than what was spent last year, as the point of comparison. The budget requests are often accompanied by service goals set by the departments in order to give budget authorities a better sense of what the output received for the input will be. Departments do not develop decision-packages to describe service levels. Central budget authorities consider the requests, along with the goals, further discuss them with departments as necessary, and then develop a final recommended budget.

GFOA's research reached a number of conclusions about this form budgeting:

- **Changes the discussion about costs.** Managers become more cost conscious and there are more in-depth discussions between budget authorities and departments about how money is spent. Further, budget discussions focus on more than just incremental changes in spending – the entire budget is looked at with a new perspective. For example, Johnson City, Tennessee, as a result of their prior ZBB experience, plans to re-conceptualize how they think about Parks and Recreation services by moving towards a park site-by-site analysis of services, rather than the traditional department-wide view of major objects of expenditure (e.g., personnel, supplies, etc.)

---

### Exhibit 3: Our Case Studies

#### GFOA conducted case studies across governments of many different sizes:

City of Toronto, Ontario (pop. 2,480,000)	City of Rowlett, Texas (pop. 54,869)
City of O'Fallon, Missouri (pop. 74,976)	Manatee County, Florida (pop. 322,833)
Hillsborough County, Florida (pop. 1,229,226)	Town of Orangeville, Ontario (pop. 26,925)
City of Frederick, Maryland (pop. 65,239)	City of Windsor, Ontario (pop. 216,473)
City of Edmonton, Alberta (pop. 752,000)	School Employees Retirement System of Ohio (204,412 Active and Retired Members)
City of Johnson City, Tennessee (pop. 63,152)	City of Naperville, Illinois (pop. 141,853)
City of London, Ontario (pop. 352,395)	

---

- **Helpful for reallocating funding within a department.** Case study participants were enthusiastic about zero line-item budgeting's ability to identify better uses of available resources within a department's budget. For example, one department came to the realization that the money being spent on uniforms for civilian employees could probably be better used elsewhere. On the whole, case study participants were less enthusiastic, however, about the ability of zero-line item budgeting to explicitly shift resources between departments. Generally, zero-line item budgeting does not have the decision-making procedures to support this more potentially controversial kind of resource shifting.
- **There are efficiency gains, but not systematic.** The increased scrutiny applied to inputs leads to efficiency gains. For instance, The City of Frederick, Maryland realized that some resources were being duplicated between departments. The Johnson City Public Works department realized when examining maintenance costs for public lands that a crew for right-of-way maintenance would visit a given location to perform basic maintenance, while, at a later date, a crew for weeding/mosquito spraying would visit the same site. The department came to the conclusion that it did not need a separate budget for spraying and that these tasks could be handled by the other crews already working at these rights-of-way. While these gains are important, in zero-line item budgeting the identification of efficiency gains is a by-product of the increased scrutiny on inputs, not the primary objective of the process. Hence, gains tend to be uneven across the government.
- **Managers are engaged.** Upper and mid-level managers have a prominent role in building the detailed budget requests and, therefore, gain familiarity with the assumptions behind the budget. As a result, these managers better understand the financial implications of the resource-use decisions they make during the succeeding year. Managers also may gain a new appreciation of how costs are accounted for. For instance, in Johnson City, the Public Works department, also as result of their examination of rights-of-way maintenance costs, came to appreciate the importance of how much it cost to service different locations in the community.
- **Becomes the basis for more centralized control.** Unsurprisingly, central budget authorities can learn a lot about the inputs that underlie a department's budget through zero-line item budgeting. This knowledge can be used to create more exacting budget-to-actual variance analysis and control. The School Employees Retirement System of Ohio monitors the level of inputs used by departments in order better understand if the department will remain within budget over the course of the fiscal year.
- **Probably more suited to smaller governments.** Most of GFOA's cases studies and survey respondents who used this form of budgeting were smaller organizations. It is likely more practical for top decision-makers to digest detailed line-item information for the entire organization when the organization is of more limited size.
- **Only partially addresses service levels.** Zero-line item budgeting is focused on inputs. The detailed discussion of inputs does help make it clearer that cutbacks

will have service implications, compared to using more general, across-the-board cuts. Also, including a narrative of department goals along with the budget submission helps put the budget requests into context. However, the detailed selection of different service options contemplated by ZBB theory is absent – hence, zero-line item budgeting does not provide a great deal of initial insight into the results obtained through public spending.

### Service Level Budgeting

Service level budgeting emphasizes the decision-package feature of ZBB theory. The detailed estimate of inputs found in zero-line item budgeting receives less emphasis. GFOA examined a number of governments using this type of budgeting, but the text will focus on the example of Hillsborough County, Florida, because Hillsborough County had used this system of budgeting for more than twenty years, thus providing substantial experience to draw upon. Also, the County's experience is representative of the approach. In Hillsborough County, departments were responsible for developing decision-packages to represent the various services and projects they would like funded. Because the department was the decision-unit (rather than divisions) it limited the total number of decision-packages produced and, therefore, the total amount of paperwork. For the most part, departments had a great deal of latitude in how to develop their decision-packages, though the central budget office did provide guidance in a few key areas:

- Foremost, departments were strongly encouraged to avoid submitting too few decision-packages. Too small a number of decision-packages would have put central budget authorities in an all-or-nothing position vis-à-vis selecting service levels. However, departments were also discouraged from submitting so many packages that employee positions were split between packages. This would make it difficult to understand the true cost the County could avoid by not funding a decision-package, since, in many cases, it would not be practical to fund only part of a position. Departments were not provided with a number of packages to aim for, but were expected to exercise professional judgment to provide budget authorities with meaningful and useful choices.
- The departments were provided context for developing decision packages, such as a five-year Countywide pro forma from the budget office and the County Board's strategic plan.
- The budget office had a Manager of Performance Management position dedicated to helping departments identify performance measures, benchmark against others, and tie those measures to the County's strategic plan.

In each decision-package, the department incorporated various pieces of supporting information. This included:

- The positions included in the decision-package

- Estimated costs by major object of expenditure (e.g., personnel services, other operating expenses, capital outlay)
- Performance measures, often showing workload or output.
- A narrative describing the impact of the decision-package
- Revenue impacts, if any.

Once the decision-packages were finished, departments ranked them top-to-bottom, while placing them into various categories similar to those described by ZBB theory (see Exhibit 4 for an example of ranked decision packages for a Library). They then sent their rankings to the budget officer and County Administrator. The Administrator then examined the decision-packages, asked questions as needed, selected packages based on the

**Exhibit 4:**  
**Representation of Decision-Packages for a Library<sup>10</sup>**

Rank	Decision Package	Cost
<b>Minimum Service Level to Remain Viable</b>		
1	Main and Regional Libraries at 52.5 Hours Weekly	\$17,761,003
<b>Continuation of Current Services</b>		
2	Community Area Libraries	\$5,607,436
3	Neighborhood/Expanded Community Area Libraries	\$5,296,036
4	Expansion of Main and Regional Library Hours	\$5,960,425
5	Full Neighborhood Library Hours	\$3,090,026
6	Operating Grants to Municipals at 90%	\$46,4646
7	Enhanced Staffing for Circulation and Operations	\$527,365
8	Books and Materials at 78% of Continuation	\$500,000
9	Operating Grants to Municipals at 95%	\$23,323
10	Books and Materials at 87% of Continuation	\$550,000
11	Full Main and Regional Library Service	\$392,186
12	Operating Grants to Municipals at 100%	\$11,662
13	Books and Materials at 100% of Continuation	\$750,000
14	Computer Rotation and Replacement	\$100,000
<b>Desired New Service Level</b>		
15	Replacement of Integrated Library System (ILS)	\$824,900
16	Fund Stand-by Pay for Librarians	\$2,800
17	Achieve Library Strategic Goal No. 5 — Client Satisfaction	\$15,000
<b>GRAND TOTAL</b>		<b>\$41,458,808</b>

departments' rankings as well as his own understanding of the Board's goals, and may have made direct modifications to decision-packages as well. In cases where departments submitted too few decision-packages, the departments would be instructed to revise their submission.

Finally, all of this information, plus other considerations such as unit costs to provide a service and the proportion of the eligible population served by a service, would be used by the County Administrator and central budget office to put together a final recommended budget for the County Board. This would sometimes include reallocations between departments (compared to the prior year) based on the Administrator's sense of the County Board's priorities and which decision-packages were best aligned with those priorities.

GFOA reached the following conclusions about service-level budgeting:

- **Decision-packages have to provide detailed service level choices.** The decision-packages presented by decision-units have to be sufficiently granular to allow for meaningful selection between different service levels, and not present an all-or-nothing decision. This leads to the next conclusion.
- **Articulating service levels may be difficult.** Managers rarely have a clear understanding of the relationship between service inputs/costs and outputs (much less outcomes). Hence, translating service levels that are different from what is provided currently into dollar amounts can be a challenge.
- **It is paperwork intensive.** Service level budgeting will generate significant documentation. Those who have used this sort of budgeting took many different approaches to mitigate the paperwork. Hillsborough County went to a biennial budget process so that the work would only be required every other year. Hillsborough County used departments as the decision-unit, rather than a lower level of the organization. Similarly, Manatee County, also in Florida, uses programs as the decision-unit, which are not the lowest level of budgetary decision making available to the County. Manatee County also developed standard costs for different types of services to make it easier for departments to calculate the costs of their decision-packages. The City of Windsor, Ontario, only asked a third of departments to participate every year (i.e., the entire organization received a zero-base review over three years). The Town of Orangeville, Ontario, limits the use of ZBB to select issues where it promises to provide the most value, such as user fee reviews or build-versus-buy decisions (e.g., should Orangeville provide police services itself or contract with another level of government?).
- **Include revenue impacts in decision-making process.** A political goal commonly underlying the adoption of "zero-base budgeting" is "zero tax increases." Hence, the process of selecting and ranking decision-packages should account for the revenue producing potential of a service. This points out how a service contributes to the "top line" with out increasing tax rates.

- **Efficiency is not addressed directly.** Service level budgeting does not encourage efficiency directly. Managers are not provided incentives to be more efficient and the ability to propose different service levels does not produce efficiencies either. To the extent efficiencies are realized, they are more likely be a by-product of reduced budgets and the resulting need for managers to find ways to get along with reduced funding.
- **Good performance data is helpful to getting the most of the process.** Measures make the strategic intent behind the budget clearer. For example, a “base” decision-package will describe more modest objectives than a “current” or “expanded” package. The measures help decision-makers pick the level of service they want. Benchmarking might also be particularly helpful to service level budgeting as it provides additional context for selecting service levels.
- **Makes implications of cutback decisions clear.** Service level budgeting enables decision-makers to follow a more rational cutback strategy than across-the-board cuts. This method of budgeting makes it clear what the government will stop doing when a budget is cut.
- **Often connected to strategic planning.** A weakness of the theoretical model of ZBB is that it does not have a strong tie to organization-wide strategy – spending strategies are coming from the bottom up, rather than the top down. Practitioners of service-level budgeting often mitigate this weakness by developing an organization-wide strategic plan and using that as guidance for formulating a final budget recommendation to the governing board. However, there tends to be loose connection between the ZBB process and the strategic plan – the strategic plan helps central budget authorities to put selection of service levels into context, but the plan is not translated into a structured method to guide departments in developing decision-packages.

Our discussion of text book ZBB and its practical incarnations ends with Exhibit 5 (on the following page), which presents a summary of the ZBB typology.

## Does ZBB Work?

Given that governments who report using “zero-base budgeting” are using budgeting systems that are actually quite different, satisfaction with ZBB varies quite a bit. GFOA research found little commonality in opinion on ZBB. For example, in our survey, budget offices using one of the two practical versions of ZBB described in this paper or who were using select ZBB concepts were firmly “satisfied” with the results, on average. The budget office perceived that other stakeholders of the budget process (e.g., department heads, elected officials, chief executive) were less satisfied than the budget office, but still above the survey’s “neutral” score on average. However, among those governments that were not using ZBB, GFOA found a good deal of skepticism of ZBB. Among governments that had seriously considered ZBB and decided not to use it, the perception that ZBB is “too much work for the benefits it would produce” was, by far, the leading reason for rejecting ZBB – cited by almost 60% as being one of their reasons. When the

**Exhibit 5:  
ZBB Typology**

Textbook ZBB	Zero Line-Item Budgeting	Service Level Budgeting
<b>Key Features</b>		
<p>Budgets are built from the ground up. Decision units propose decision packages, which describe detailed resource requirements and which budget authorities use to choose service levels.</p>	<p>Line items require detailed justification, in some cases including unit costs and quantities. Last year’s spending is not the key reference point. Decision packages are not used.</p>	<p>Departments develop decision-packages to allow budget authorities to choose service levels. Less emphasis on detailed examination of line-item composition.</p>
<b>Advantages</b>		
<ul style="list-style-type: none"> <li>• Rational and comprehensive means for cutting budget</li> <li>• Gives decision makers insight into operations</li> <li>• Highlights entirely new ways of providing services.</li> <li>• Engages lower-level management in budgeting.</li> </ul>	<ul style="list-style-type: none"> <li>• Changes conversation about costs for the better.</li> <li>• Helps reallocate spending with departments.</li> <li>• Engages managers in budget discussions.</li> <li>• Can lead to efficiency gains.</li> </ul>	<ul style="list-style-type: none"> <li>• Decision-makers can select different service levels.</li> <li>• Implications of cut back decisions are very clear.</li> <li>• Often supplemented by strategic plan.</li> <li>• Approaches rationality and comprehensiveness of textbook ZBB.</li> </ul>
<b>Disadvantages</b>		
<ul style="list-style-type: none"> <li>• Amount of work to develop decision packages.</li> <li>• Reluctance of managers to propose decision packages that are less than current spending.</li> <li>• Does not have a planning process that is separate from budgeting.</li> </ul>	<ul style="list-style-type: none"> <li>• No structured means for considering different service levels.</li> <li>• Does not have a separate planning process.</li> <li>• Efficiency gains are not systematic.</li> </ul>	<ul style="list-style-type: none"> <li>• Paperwork intensive, but less than textbook ZBB.</li> <li>• Efficiency is not addressed directly.</li> <li>• Loose connection between strategic plan and budgeting.</li> <li>• Requires good performance data.</li> </ul>
<b>Who Uses It</b>		
<p>Very rare in practice. The GFOA found only two governments from a sample of 413.</p>	<p>Case examples include: City of O’Fallon, Missouri; City of Frederick, Maryland; City of Johnson City, Tennessee; School Employees Retirement System of Ohio.</p>	<p>Case examples include: Hillsborough County, Florida; Manatee County, Florida; City of Windsor, Ontario; Town of Orangeville; Ontario.</p>

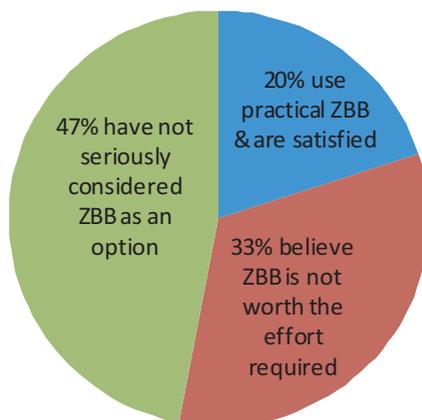
views of governments who had not seriously examined ZBB are considered, a total of almost a third of all governments surveyed held this view. Exhibit 6 summarizes the respondents' views on ZBB. Among those not accounted for in the 53% of respondents addressed in Exhibit 6, most have not seriously considered ZBB, so there was no strong opinion expressed. The remainder cited various reasons for not using ZBB – ranging from insufficient training to resistance from different stakeholder groups - with no single reason predominating. GFOA's survey findings parallel earlier academic research, which all found a range of opinions on ZBB.

Given the findings of GFOA's research, it is not possible to come to global conclusions on the efficacy of ZBB, practical or theoretical. Instead, this section will summarize major strengths and weaknesses of the practical incarnation of ZBB by drawing on GFOA's findings as well as the work of others. The strengths of ZBB include:

- **ZBB moves the organization away from incremental budgeting.** ZBB helps participants think about the whole budget, not just the increments.
- **ZBB rationalizes budget cuts.** Our case studies showed that users of ZBB tend to have high confidence in their cutback decisions and often are able to avoid across-the-board cuts. The service-level budgeting variety of ZBB is especially good for arraying alternative funding levels for decision makers, or, in other words, displaying the marginal utility of additional dollars in programs.<sup>11</sup>
- **ZBB makes the trade-offs between inputs and outputs more transparent.** Across-the-board cuts are often associated with the view that departments will need to provide the same level of service for less money. ZBB highlights changes in what departments will provide in relation to the dollars spent.

---

**Exhibit 6:**  
**What Survey Respondents Think of ZBB**



- **ZBB can be used to centralize budget decision-making, if that is a goal of budget reform.** The detail provided by ZBB helps central authorities understand department budget requests more precisely and the decision-packages allow authorities to make more fine-grained distinctions on what to fund and not fund.
- **ZBB is effective for re-allocating resources within departments.** GFOA's case study research found that many users of ZBB were enthusiastic about ZBB's value for re-allocating from higher to lower priorities within a department. There was far less enthusiasm when it came to re-allocating between departments. This is understandable because the ranking of decision-packages within a department provides for a reasonably objective and uncontroversial method for the former. However, ZBB provides no structured method for comparing decision-packages between departments. The governments that did use ZBB to re-allocate between departments tended to do so based on a more subjective, less structured determination on the part of empowered central budget authorities.
- **ZBB does not preclude use of other budget-balancing techniques.** Governments that use ZBB also can use other methods of balancing the budget such as changing employee benefits, improving revenues, or seeking efficiencies in the delivery of services.

The weaknesses of practical ZBB that GFOA found are presented below. Some of the issues, such as finding alternative service delivery options and efficiencies, stem from weakness in theoretical ZBB. Other issues, such as the increased paperwork and the need for good performance measures, are, to some extent, issues with any budget reform that attempts to introduce a more rational, comprehensive perspective.

- **ZBB is managerially driven.** ZBB, in any form, entails digging into the details of the budget as a starting point. While there is potential value to this, as the advantages of ZBB attest, it does color the role of elected decision-makers. With the zero-line item approach to ZBB, it means that elected officials are asked to use detailed operational information in order to make their budget decisions, rather than to use the bigger-picture strategic questions to which elected officials are best suited.<sup>12</sup> In the service level approach, elected officials primarily respond to staff rankings of services. Because ZBB does not necessarily include a strategic planning element, whether these rankings are reflective of elected officials' priorities will depend on the extent to which staff has made an effort to understand officials' priorities and integrate them into the budget process.
- **ZBB does not directly address whether a government should be in the business of providing a service in the first place.** It largely assumes the current mix of programs and services and focuses on the level at which they should be provided. This is partially a product of the fact that the ZBB process is managerially driven (most managers would probably think the government should continue to provide

their program). However, it is mainly because managers tend to concentrate on looking for opportunities to make cuts to the current way of doing things to an extent that will be acceptable to central budget authorities (e.g., find a way to cut 10%), rather than looking for ways to spend the bulk of their budget (e.g., 90%) in new ways.<sup>13</sup>

- **ZBB is more effective when good performance measures are in place.** However, few governments have a detailed, quantified understanding of what their service levels are, much less of the relationship between service levels and cost. Hence, they cannot accurately select a service level and then estimate the cost for that new service level. Rather, they tend to budget by inputs, and then estimate service impacts at different input levels. While lack of good performance measures will be a drag on any budget process that looks to introduce more objective performance information into resourcing decisions, it can be particularly problematic in ZBB. This is because ZBB is predicated on the assumption that decision-makers will be able to make choices between detailed service level options, which then will drive resourcing decisions. A lack of good measures to support decisions means that ZBB is less likely to result in serious examination of significantly different ways of providing service.
- **ZBB is perceived to require too much paperwork.** GFOA's case study governments rarely cited paperwork as an important problem in practice, likely because they were using a modified, streamlined approach to ZBB. However, the perception is important because it elicits resistance. This challenge is most acute when ZBB is rushed into place in response to financial distress because insufficient planning and preparation result in a less clear and harder to follow process. It is important to note, though, that even modified ZBB does require substantial documentation and what is deemed "excessive" is often relative. For example, some of our case studies pointed out that elected officials, at first, appreciated learning about the details of services, but later tired of the amount of documentation.
- **ZBB doesn't address alternative service delivery options.** In theory, ZBB does allow and even encourages managers to submit decision-packages for alternative service delivery options (i.e., entirely different methods for achieving the same outcome). However, this very rarely works in practice. Because the ZBB process is intensive, departments are unlikely to seriously think about alternatives at the same time as putting together spending plans. Also, ZBB assumes that managers of departments will know the best means of delivering a service. This means that ZBB is really more about managerial preferences than true alternatives. In many cases, managers are likely to believe that they've been doing the right things all along, so will concentrate on doing more of the same.<sup>14</sup> Finally, the environment of financial austerity that is often associated with ZBB is not generally conducive to the risk taking associated with proposing alternatives.
- **ZBB doesn't directly address efficiency of services.** Making inputs more transparent doesn't make for more efficiency by itself. Increased scrutiny on inputs may inspire some cost saving innovations on an ad hoc basis, and reducing budgets will

force managers to think of better ways to use their more limited resources, but these are secondary effects. This is important to understand because finding efficiencies is a common motivation for adopting ZBB. Recognizing this problem, some of GFOA's case study governments adopted efficiency enhancing programs along side of ZBB (e.g., an employee suggestion program, managed competition).

While, certainly, no budget process will ever be all things to all people, it is important to understand what ZBB can and cannot accomplish. In light of the strengths and weaknesses of ZBB, the next section presents considerations for deciding if ZBB may be a good fit for your organization.

## Is ZBB for You?

GFOA's research has shown that there is a variety of opinions on ZBB and that experiences with ZBB vary widely. Here are questions to consider when deciding if ZBB is right for you.<sup>15</sup>

**What is ZBB replacing?** If the current system of budgeting is not working – for example, it is incremental, relies on across-the-board budget cuts, or does not recognize that service impacts are sometimes an inevitable trade-off for budget cuts - then ZBB could represent an improvement.

**Is performance data available to help make different funding levels meaningful?** If the organization has good experience with performance measures and understands the relationship between costs and service levels and between service levels and community impact, it could make more effective use of ZBB. Also, management's attitude about using data to describe service levels and make decisions is important. If managers, especially at the top, don't place much importance on using data to drive decision, then consideration of service levels will be less meaningful.

**How much work will be required to implement ZBB?** The availability of central budget staff to develop forms and training for ZBB is crucial to ZBB success. Also important are the analytical skills and capacity of department managers to engage in ZBB analysis. The availability of these resources needs to be compared to the time available and the goals for ZBB. If the organization is facing a large budget deficit and needs to come to a solution in short time, ZBB may not be the answer. However, if a longer time frame is available or if central budget staff are able to develop good supporting forms and tools then ZBB could have potential.

There are methods to spread out the work associated with ZBB, such as rotating ZBB through departments on a multi-year (e.g., three year) cycle or conversion to a biennial budget process. However, either approach requires the discipline to rely on the most recently available ZBB information to address unexpected budget shortfalls.

**How "comprehensive" a budget process does the organization want?** Do elected officials want to delve into the details of operating departments? In some of our case studies, ZBB was driven by elected officials' interest in knowing what the organization does at a

detailed level. In others, elected officials did not find the details helpful, leading to a negative experience with ZBB. Also, is the organization willing and able to have conversations about funding “basic” or “core” services? Some organizations may be able to use these conversations to question long-standing assumptions. In others, such conversations might be not be seen as worthwhile because there is little expectation that much will change as a result.

**How sustainable should budget reform be?** Many organizations begin ZBB with the intention of only using it for a set period of time or for certain parts of the organization. For instance, the City of Windsor reviewed one-third of the organization each year for three years and then discontinued ZBB. The logic behind such an approach is that ZBB analysis will provide diminishing returns over time – the first analysis may provide large benefits, but subsequent analysis will provide much less. If the organization has the willingness to experiment with a budget approach that could provide important, but potentially temporary, net benefits then ZBB ideas may be worth exploring. If the organization is looking for a budget process than can be reliably repeated year-after-year, then a different approach may be called for.

**How does the organization’s leadership view ZBB?** Given the theoretical and practical challenges associated with ZBB, it takes a clear endorsement from the organization’s leadership to make it work. For example, the case study governments that have found

---

### Inspired by ZBB: Using Zero-Based Concepts for Better Budget Decisions

While this paper presents two major archetypes of practical ZBB, GFOA’s research found that a number of governments were using methods inspired by ZBB to make better budgeting decisions without committing to a full ZBB process.

In one case, the Town of Orangeville, Ontario, has found success using ZBB as a tool to analyze specific issues on an as-needed basis, rather than as an organization-wide budgeting system. For example, ZBB was used to analyze a proposal to increase after-school programs by 30%. The gut reaction of some decision-makers was that this would be unaffordable. A ZBB-like analysis showed this could be accomplished at no cost to the taxpayer by using existing capacity and new user fees.

In another example, the City of Naperville, Illinois developed what it called “service-based budgeting,” taking inspiration from ZBB’s emphasis on selecting service levels. The intent was to reframe the budgeting conversation with the Council – moving away from departments and divisions, towards services provided to constituents. Focusing on the services enabled a conversation about what level of performance the community expected and what could be provided with the money available. Departments made recommendations for how service levels could be reduced with the least negative impact on the community, but without going through the process of developing formal decision-packages. Council, for their part, appreciated the greater understanding of what, precisely, the City was giving up because of budget cuts and the ability to better articulate which services they would prefer not be negatively impacted by budget cuts.

---

success with ZBB reported minimal problems with the budgetary “game-playing” that is theorized to afflict ZBB. This is likely because top leaders in those organizations made it clear that attempts to game the system would not be tolerated. Hence, if ZBB is thought by organizational leadership to provide a useful frame on information for budgetary decision-making, then it could be successful. For example, ZBB may have value where leaders have a desire to understand services inputs and outputs at a detailed level or wish to change service levels.

**What issues are driving interest in ZBB?** ZBB is, of course, a means to an end, not an end unto itself. As such, consider the issues that are driving interest in ZBB and determine if there is a better way to solve them. For example, the next section of this paper presents three major alternatives to ZBB. These alternatives can sometimes better answer questions that ZBB is used to address. More generally, though, ZBB’s strength is in looking at what is done today, understanding it in more depth, and making marginal adjustments to inputs and, consequently, service levels. ZBB is less effective for making major changes in how services are delivered or how community needs will be met.

## Alternatives to ZBB

This section presents three major alternatives to ZBB. Each alternative addresses some of the planning and budget questions that ZBB is often intended to address. This section will use the framework presented in Exhibit 2 in order to explain the alternatives to ZBB: priority budgeting; program review; and target-based budgeting.

### Priority Budgeting

Under this system, the government first determines how much revenue it has available, then identifies the community’s most important priorities and allocates resources to the priorities rather than directly to departments, and then ranks programs according to how well they align with the priorities. “Budgeting for Outcomes” is the most well known variant of priority budgeting. Governments have applied variations of Budgeting for Outcomes to fit their own circumstances. GFOA’s survey shows that priority-focused budgeting is the fastest growing type of budget reform, with a 90% increase in the number of respondents using it (see Exhibit 1) – 11% of respondents used it prior to the 2008 Recession versus 21% afterwards. GFOA has also recognized priority-focused budgeting as a public finance best practice<sup>16</sup> and has published a whitepaper on the topic.<sup>17</sup>

Priority budgeting combines a planning and budgeting system to focus on the first question of Exhibit 2. Priority budgeting systems represents an alternative to ZBB for the following reasons:

- **Explicit spending vs. service trade-offs.** Like ZBB, priority budgeting makes explicit trade-offs between what is spent and what is to be provided. However, it is important to note that ZBB does this while focusing on only the budgeting half of question #2 from Exhibit 2. ZBB theory does not provide for a planning component

that asks explicitly about “community need.” Rather, management is expected to use their expertise to judge which service levels are appropriate. In contrast, understanding community need is an integral part of priority budgeting.

- **The process builds up costs through a ranking process rather than cutting from last year’s base costs.** Priority budgeting provides a transparent, structured approach for allocating funding both between and within departments by directly funding priorities and programs, rather than departments (once programs have been funded, departmental budgets reflect the total of all approved programs by department). Hence, the budget is balanced rationally and strategically rather than arbitrarily (for example, through across-the-board percentage cutting). ZBB theory has a structured approach for re-allocating within departments, but not between them. As mentioned earlier in this paper, the service level budgeting variety of ZBB often has a strategic planning element to mitigate this weakness of ZBB. However, GFOA observed ZBB tends to be a less structured and less transparent decision-making approach for allocating funding between departments compared to priority budgeting.
- **Not incremental.** Priority budgeting is not based on incremental spending decisions – programmatic spending is comprehensively prioritized and spending allocated accordingly.

However, given that priority budgeting seeks to introduce a more rational-comprehensive approach to budgeting, compared to traditional incremental approaches, it can be complex to use. Like ZBB, it also is more effective when used with a good set of performance data. Hence, it does require more analytical work than traditional budgeting. That said, priority budgeting appears to entail less administrative effort than a pure form of ZBB.

### Program Review

Program review is a planning method used to examine, outside of the budget process, how a program is provided. A program review can consider any or all of the three planning questions in Exhibit 2. A program review is often designed to reveal alternative service delivery and efficiency opportunities. Theoretically, ZBB can be used to consider alternatives, but research shows this rarely happens because of time constraints in the budget process and because the managers who put together decision-packages tend to be focused on status quo means of service provision. ZBB’s limitations for improving efficiency have been discussed earlier. The experiences of the City of Toronto and the City of Windsor illustrate how program review can provide an alternative to ZBB.

At the City of Toronto, Ontario, ZBB had been raised as a potential means to address a chronic structural deficit, but staff did not believe that ZBB would adequately tell the story of what the City was spending it on and how it was being spent – put another way, ZBB wouldn’t adequately answer the planning questions shown in Exhibit 2. Instead, Toronto embarked on a comprehensive program review method to answer the following:

- **What does the City do?** The City inventoried its entire service offering and categorized each service as core or discretionary, including a review of relevant laws to determine which services were truly “mandatory.” The City also reviewed the level of service provided by each program to see if it was above or below standards consistent with legislation, best practices, or relevant benchmarks from other cities. Finally, the public was engaged in order to understand the relative priority that citizens place on different programs.
- **How well is the City doing it?** Efficiency reviews were undertaken for each program to identify opportunities for efficiency and economies. The opportunities revealed covered a wide spectrum including, but not limited to: outsourcing, consolidating similar services, and even divestment of programs.
- **How is the City paying for it?** The City conducted a review of revenues generated by programs in order to get a better sense of the extent to which a program supports itself from user fees, grants, or other program-generated revenues versus relying on general tax dollars. The objective was to apply the full cost (direct and indirect costs) of providing a service to the user fee calculation. A subsequent step is to determine the level of property tax subsidy appropriate for each of those services, ranging from no subsidy (fully user fee supported) to partial subsidy to full subsidy (no user fee).

As of this writing, Toronto is still working through their program review process, so definitive results are not yet available. However, the City can say that the program review has been successful in identifying many opportunities for improvement, has aligned with the Toronto’s elected officials’ desire to take a hard look at what the city spends money on how it spends it, and has engaged citizens in a discussion about the right balance of taxes and services.

The City of Windsor had been facing financial distress for a number of years. As one approach to better sizing and shaping the services offered by City government to this environment, the City used ZBB over a three year period. However, the City found that ZBB was not very useful for answering the question of: what services should the City be in the business of providing (essentially, the first planning question from Exhibit 2)? This question was of special interest to Windsor because persistent low economic growth meant that Windsor might have to consider discontinuing some municipal services in order to balance the budget. Windsor’s Mayor, therefore, initiated a program review project. Currently, Windsor has inventoried its programs and services (between 2008 and 2010) and just this one activity led to a number of serendipitous opportunities to improve efficiency. For example, the inventory revealed opportunities for consolidating similar services across departments, leading to \$2.5 million in operating budget savings for 2010.

Program review appears to be a promising alternative to ZBB for governments who are not dissatisfied with their current budget process, but feel that more insight is needed on the three planning questions in Exhibit 2. Program review may be particularly helpful for governments that want to consider far-reaching changes for how a given service is provided.

### Target-Based Budgeting

Target-based budgeting (TBB) gained popularity in the 1980s, perhaps as a simplifying response to the perceived complexity of ZBB.<sup>18</sup> TBB makes no attempt to comprehensively re-examine base spending. Rather, each decision unit (typically a department) is given a target spending amount (e.g., 90% of what was spent last year) and is asked to submit a budget for that amount. The total target for the organization is necessarily less than what is affordable. This is because the difference between the target and what is affordable is used to fund additional activities through decision-packages.<sup>19</sup>

Departments submit decision-packages to request funding for activities they cannot fit within target spending – either continuation of existing services or entirely new services. Like ZBB, departments prioritize their decision packages, but they are often guided in what decision-packages to propose and prioritize by a set of organization-wide goals distributed by central management. Central authorities then examine the decision-packages and decide which to fund and which not to fund. Unlike ZBB, there is no emphasis on discovering and examining the minimum feasible funding for a program (i.e., the base package). Rather, departments fit as much service as they can within the target spending and decision-packages are used to evaluate additional spending.

The City of Edmonton, Alberta, illustrates TBB. The City of Edmonton initially considered ZBB in response to a serious financial challenge, going so far as to conduct a pilot project with its fire inspection services. Edmonton found that ZBB did not meet its needs, particularly because the large amount of work required didn't provide for the efficiency gains Edmonton was looking for and because the performance data required to make meaningful service level decisions was not available.

Instead, Edmonton used a TBB approach they called their “service review method.” Edmonton selected 80% as their target because their forecasts showed that the City would have to make a 20% cut to balance its budget without raising any taxes. Each department was asked to develop four decision-packages of 5% net impact to the budget (either revenue enhancements or spending cuts), thereby equaling 20%. Departments prioritized their decision-packages and the City's central management then reviewed them and made the decision on which packages to accept. Ultimately, just under half of the packages were selected and new taxes were used to cover the rest.

Compared to their original reasons for rejecting ZBB, Edmonton found TBB to be an adequate solution. Performance measures were used for those decision-packages where they could be applied for the least cost and greatest usefulness. In order to bring objectivity to the selection of decision-packages, central management was guided by a set of decision-principles derived from previous strategic and master planning work the City had done. In terms of efficiency gains, Edmonton relied on ideas offered through decision-packages and the natural need for managers to find more efficient ways to accom-

plish their jobs within their reduced base/target spending. This isn't much different from how ZBB accomplishes efficiency gains, and Edmonton recognized the limitation, but felt the gains came through a less onerous process.

Given the Edmonton experience and academic evaluations, here is how TBB compares to ZBB as an alternative:

- **Greater emphasis on revenue forecasting.** TBB places a greater premium on revenue forecasting in order to set a viable target up front and also tell departments how much extra is available for funding decision-packages. Under ZBB, forecasts are less important because departments are expected to build their budgets from zero regardless.
- **Answers same basic questions of cut-back budgeting.** TBB focuses on question 2 and touches upon question 3 from the budgeting questions in Exhibit 2. It does not examine the questions in as much depth as ZBB would. However, TBB does tend to be associated with a more in-depth planning component, used to help guide decision-package formulation and selection.<sup>20</sup>
- **Some rationality to cuts.** TBB lends greater rationality to cut-back decisions than a traditional budget process by way of decision-package creation, ranking, and selecting. In this way, funds are re-allocated from lower to higher priority areas. However, the initial target setting is often undifferentiated (e.g., all departments' targets are set at X% of last year's spending), so may have a significant across-the-board character. ZBB, by contrast, makes no such assumptions based on prior years' spending.
- **Not comprehensive.** The spending that is fit within the target does not receive as high a level of scrutiny as base and continuation spending in ZBB. In fact, TBB gives departments significant latitude to shield favored programs from cuts by fitting in within target spending. In contrast, under ZBB, all spending must be put into decision-packages and ranked, including the most basic services. Whether there is value to applying such scrutiny to base spending is something each organization will need to decide for themselves. Still, TBB does question a greater marginal portion of spending than a purely incremental process.
- **Fewer options for decision-makers.** A product of its less comprehensive nature, TBB provides fewer options to decision-makers for cutting the budget. Under ZBB, decision makers can select from packages all the way down to the base package. Under TBB, decision-makers can only select down to the target amount. Having only a limited set of options could be a particularly important problem when large cuts are required.
- **Less work.** As the foregoing two points imply, there is much less analytical work involved in TBB. Also, academic evaluations of TBB show that it is common for governments to make long-term use of TBB,<sup>21</sup> whereas ZBB tends to have more temporary or at least intermittent use.<sup>22</sup> In GFOA's survey, TBB was the most pop-

ular budgeting reform of all those presented in this paper, with about one-third of respondents using it. This could also imply that TBB requires less administrative effort than ZBB.

Our discussion of the alternatives to ZBB ends with Exhibit 7, which recapitulates the alternatives.

**Exhibit 7:  
Alternatives to ZBB**

Priority Budgeting	Target-Based Budgeting	Program Review
<b>Key Features</b>		
Explicit planning process used to identify organization-wide priority goals. Funding then allocated to programs according to how well they achieve goals.	Departments given a spending target, set at some percentage of last year’s spending (e.g., 85%) and must submit decision packages and justifications for spending above the target.	A planning method to examine, outside of the budget process, how a program is provided. Can consider community need, service levels, efficiency, or alternative service delivery programs.
<b>Advantages</b>		
<ul style="list-style-type: none"> <li>• Explicit spending versus service tradeoffs.</li> <li>• Not incremental — last year’s spending is not the basis for the next year.</li> <li>• Rationally considers relative value of different programs versus community need.</li> </ul>	<ul style="list-style-type: none"> <li>• Provides some rationality to cuts through decision packages.</li> <li>• Less work involved. Fewer decision packages are produced, and less scrutiny is applied to total spending.</li> </ul>	<ul style="list-style-type: none"> <li>• Offers in-depth look at questions of community need, service levels, and efficiency.</li> <li>• The analysis is free from the immediate pressures of the budget process.</li> </ul>
<b>Disadvantages</b>		
<ul style="list-style-type: none"> <li>• More administrative and analytical work than traditional budgeting, but less than textbook ZBB.</li> <li>• Requires performance for best results.</li> <li>• Less focus on service level options than ZBB.</li> </ul>	<ul style="list-style-type: none"> <li>• Does not comprehensively examine spending — base spending is not heavily scrutinized.</li> <li>• Fewer options for decision makers. Decision packages only cover above-base spending.</li> </ul>	<ul style="list-style-type: none"> <li>• No firmly established means for eventually integrating results into the budget process.</li> <li>• It is an additional level of effort beyond what is required for budgeting.</li> </ul>
<b>Who Uses It</b>		
The GFOA survey found that 21% of respondents use it.	GFOA survey found 33% of respondents use it.	Case examples include: City of Toronto, Ontario; City of London, Ontario; City of Windsor, Ontario.

## Conclusions

Like most budget reforms that promise to bring more rationality and comprehensive decision-making to cut-back budgeting, zero-base budgeting has limitations. Budget is always art as much as it is science, and it is up to public officials to decide the extent to which ZBB, or at least elements of it, facilitates the presentation of financial and service information to decision-makers in a way that will help them reach a structurally balanced budget that meets the needs of the community. Public officials might consider the essential questions of planning and budgeting found in Exhibit 2 as basis for defining which questions are of greatest interest to stakeholders, which the organization most needs to address, and whether ZBB ideas, the alternatives presented in this paper, or some other budget reform can provide the answer.

## Bibliography

Robert L. Bland and Irene S. Rubin. *Budgeting: A Guide for Local Governments*. International City/County Management Association: Washington, D.C. 1997.

Logan M. Cheek. *Zero-Base Budgeting Comes of Age: What It Is and What It Takes to Make It Work*. American Management Association: New York, New York. 1977.

Frank D. Draper and Bernard T. Pitsvada. "ZBB-Looking Back after Ten Years" *Public Administration Review*, Vol. 41, No. 1 (Jan. - Feb., 1981), pp. 76-83

Robert K. Goertz. "Target-Based Budgeting & Adaptations to Fiscal Uncertainty." *Public Productivity & Management Review*, Vol. 16, No. 4. (Summer, 1993), pp. 425-429.

Perry Moore. "Zero-Base Budgeting in American Cities." *Public Administration Review*, Vol. 40, No. 3 (May - Jun., 1980), pp. 253-258.

Irene S. Rubin. "Budget Reform and Political Reform: Conclusions from Six Cities." *Public Administration Review*, Vol. 52, No. 5 (Sep. - Oct., 1992), pp. 454-466.

Irene Rubin. "Budgeting for Our Times: Target Base Budgeting." *Public Budgeting and Finance*, (Fall 1991), pp 5-14.

Irene S. Rubin and Lana Stein. "Budget Reform in St. Louis: Why Does Budgeting Change?" *Public Administration Review*. Vol. 50, No. 4 (Jul. - Aug., 1990), pp. 420-426.

Allen Schick and Harry Hatry. "Zero Base Budgeting: The Manager's Budget." *Public Budgeting & Finance* Vol. 2, No 1, pages 72-87, 1982.

Mark J. Versel. "Zero-Base Budgeting: Setting Priorities through the Ranking Process." *Public Administration Review*, Vol. 38, No. 6 (Nov. - Dec., 1978), pp. 524-527.

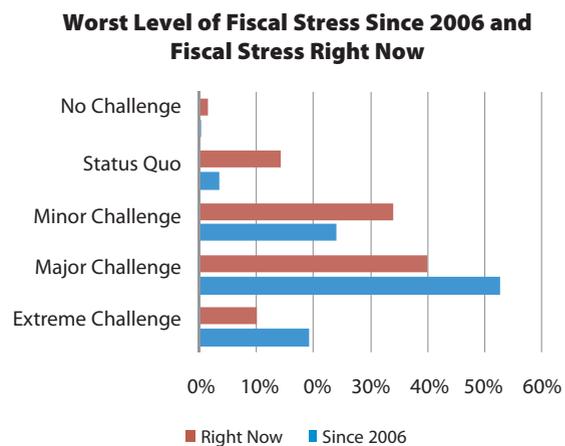
## Appendix 1: Survey Results Summary

This appendix presents the results of the GFOA. Each table describes how our respondents replied to key questions or series of questions.

Who were the respondents?		How big were their budgets?*	
Municipality	61.4%	Less than \$10 million	4.9%
County	18.9%	\$10-24 million	9.7%
School	5.3%	\$25-50 million	15.8%
State/Province	1.0%	\$50-100 million	17.4%
Utility	2.4%	\$100-300 million	26.3%
Other Special District	11.0%	\$300-500 million	5.8%
		More than \$500 million	20.2%

What is the worst level of fiscal stress they experienced since 2006, and what level of fiscal stress are they experiencing right now?	Since 2006	Right Now
Extreme Challenge. They had to make major adjustments including significant layoffs, raising taxes, and/or cuts to core services.	19.3%	10.1%
Major Challenge. They had to make some adjustments to personnel, look at new sources of revenue, but have largely avoided cuts to core service.	52.6%	40.0%
Minor challenge. They have been able to get by using minor retrenchment techniques like hiring freezes, deferring capital projects, etc.	24.0%	34.0%
Status quo challenge. Things have not changed much.	3.6%	14.3%
No challenge at all. Things have been better than before.	0.5%	1.6%

During what calendar year was fiscal stress the worst?	
CY 2006	1.8%
CY 2007	0.8%
CY 2008	5.0%
CY 2009	28.9%
CY 2010	35.3%



\* Budget defined as total projected operating, capital, and debt service expenditures in the upcoming budget year.

**What have been the most important strategies for dealing with financial challenges? (% rating this either important or very important)**

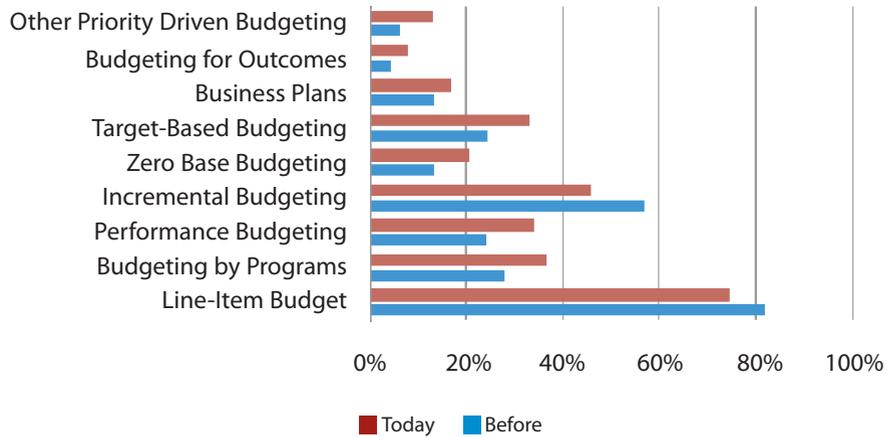
Making existing personnel, processes, & services more efficient	91.1%
Basic retrenchment tactics (e.g., hiring freeze, defer capital spending)	88.2%
Improving economy	75.8%
Other longer-term, strategic restructuring approaches	61.6%
Changes to the budget process	56.6%
Providing services in an entirely new way (e.g., outsourcing, sharing services with other governments)	55.8%
Raising existing fees	50.3%
New or changed planning process outside of the budget process	46.6%
Creating new fees or taxes	34.7%
Raising existing taxes	27.4%

**Which budget system or systems were they using before the 2008 recession, and today?\***

	Before	Today
Line-item budget (budgeting is done primarily by spending or revenue line items like personnel, materials, personal services, etc.)	81.6%	74.5%
Budgeting by programs (programs are the main unit of analysis, rather than departments or divisions)	27.9%	36.6%
Performance budgeting (performance measures are included for each budgetary unit of analysis and used in budget discussions)	24.2%	34.0%
Incremental budgeting (last year's budget or actual is the starting point for the next year's budget discussion)	56.8%	46.0%
Zero-base budgeting (departments or programs must completely re-justify their spending, starting from zero)	13.7%	20.8%
Target-based budgeting (departments or divisions are given a spending target, set at some percentage of last year's spending (e.g., 85%) and must submit decision-packages and justifications for spending above the target)	24.7%	33.4%
Business plans (departments or divisions are required to produce detailed operating plans for the next one to three years and budgets are then derived from these plans)	13.7%	17.1%
Budgeting for outcomes (the budgeting method described in the book, <i>The Price of Government</i> )	4.5%	7.9%
Other priority-driven budgeting system (budgeting other than budgeting for outcomes that allocates resources according to how well a given program accomplishes organization objectives and not based on what was spent on that program in the past)	6.6%	13.2%

\* Respondents were allowed to pick more than one, recognizing that many governments use hybrid systems.

**Budget Systems Before the 2008 Recession and Today**



**If they have not used ZBB, why not?\***

Zero-base budgeting is perceived as being too much work	42.8%
No one has raised zero base budgeting as a serious option	35.7%
Insufficient knowledge, training, technical support available	14.8%
Departments were resistant to zero-base budgeting	12.7%
Central management was resistant to ZBB	8.5%
Elected officials resistant to ZBB	6.0%
Central budget staff were resistant to ZBB	5.6%
Have not heard of zero-base budgeting /don't know what it is	1.8%
Other**	30.0%

**If they are using ZBB, how satisfied are they? (% responding satisfied or very satisfied)+**

Central budget office	71.0%
Chief executive officer	65.8%
Governing board	57.9%

\* Respondents could pick more than one.  
 \*\* A variety of other reasons were offered, many having to do with bad prior experiences of doubts about the effectiveness of ZBB.  
 + Satisfaction levels based on respondents' perception.

## Notes

1 GFOA's survey found only one government that reported using "textbook" ZBB. As the paper explains, others that reported using ZBB are using budgeting methods that are, in part, inspired by ZBB ideas.

2 ZBB was subject to a great deal of academic evaluation in the early 1980s. These evaluations document many of these perceived short-comings. See, for example: Perry Moore. "Zero-Base Budgeting in American Cities." *Public Administration Review*, Vol. 40, No. 3 (May - Jun., 1980), pp. 253-258 and Allen Schick, Harry Hatry. "Zero Base Budgeting: The Manager's Budget." *Public Budgeting & Finance* Volume 2, Issue 1, pages 72-87, arch 1982.

3 Irene Rubin and Lana Stein point out that poor economic conditions cause a demand for more activist local government, which, in turn, creates a demand for budgeting systems that feature greater flexibility and responsiveness (See Rubin and Stein, "Budget Reform in St. Louis," 1990). Presumably, when conditions improve a budgeting process that suits a caretaker approach to governing becomes acceptable.

4 See: Robert L. Bland and Irene S. Rubin. *Budgeting: A Guide for Local Governments*. International City/County Management Association. 1997. pg 14.

5 The five-year average real GDP growth for the United States for 1982 and 1983 was by far the worst of the entire post-World War II era, until 2009 and 2010. In Canada, one has to go back to the early 1990s to find a period of GDP growth so consistently low as it was at end of the first decade of the 21st century.

6 GFOA's survey shows that almost three-quarters of respondents have experienced either "major" or "extreme" fiscal stress in the last few years.

7 More than half of our survey respondents rated "budget reform" as either very important or important to successfully dealing with financial distress.

8 GFOA's survey found only one government that reported using "textbook" ZBB. As the paper explains, others that reported using ZBB are using budgeting methods that are, in part, inspired by ZBB ideas.

9 GFOA's survey research found only two governments that reported using "textbook" ZBB.

10 Exhibit adapted from Hillsborough County budget documents, but simplified for presentation purposes.

11 Allen Schick, Harry Hatry. "Zero Base Budgeting: The Manager's Budget." *Public Budgeting & Finance* Volume 2, Issue 1, pages 72-87, arch 1982.

12 The work of John Carver describes how governing boards in mission driven organiza-

tions create the most value for their constituencies when they focus on strategic concerns and create less when engaged in issues of operational detail. See for example: John Carver. *Boards That Make a Difference: A New Design for Leadership in Nonprofit and Public Organizations*. Jossey-Bass. 2006.

13 Allen Schick, Harry Hatry. "Zero Base Budgeting: The Manager's Budget." *Public Budgeting & Finance* Volume 2, Issue 1, pages 72-87, arch 1982.

14 Schick and Hatry. "Zero Base Budgeting." 1982.

15 Questions adapted from: Frank D. Draper and Bernard T. Pitsvada. "ZBB-Looking Back after Ten Years" *Public Administration Review*, Vol. 41, No. 1 (Jan. - Feb., 1981), pp. 76-83.

16 See GFOA's "Best Practice: Budgeting for Results and Outcomes." 2007. at [www.gfoa.org](http://www.gfoa.org).

17 See "Anatomy of a Priority Driven Budgeting Process" at [www.gfoaconsulting.org](http://www.gfoaconsulting.org).

18 See: Robert L. Bland and Irene S. Rubin. *Budgeting: A Guide for Local Governments*. International City/County Management Association. 1997. pg 14.

19 The use of decision-packages in TBB is fully described in: Irene S. Rubin. "Budgeting for Our Times: Target Base Budgeting." *Public Budgeting and Finance*. Fall 1991. Pg. 5 - 14.

20 See Goertz. "Target-Based Budgeting and Adaptations to Fiscal Uncertainty." 1993. While Goetz does not suggest the planning is a major strength of TBB, he does suggest that it is characterized by better up-front direction to departments from central management with respect to the goals and priorities that will guide selection of decision-packages.

21 See Irene S. Rubin. "Budgeting for Our Times: Target Base Budgeting." *Public Budgeting and Finance*. Fall 1991. Pg. 5 -14.

22 Most of organizations GFOA conducted research with made temporary use of ZBB to address a perceived need at a point in time and/or cycled departments' participation in ZBB over a three to five year cycle.