

Identifying Government Inefficiency: A Performance-Based Audit Approach to Downsizing Efforts in Texas

Juliana D. Lilly

Department of Management
and Marketing
Sam Houston State University
Telephone: (936) 294-1275
Fax: (936) 294-3612
E-mail: lilly@shsu.edu
mailto: lilly@uta.edu

Government agencies are under increasing pressure from taxpayers and politicians to be more productive. As a result of this pressure, downsizing, competitive outsourcing, and restructuring efforts have all been used in an effort to increase government efficiency. Although past research on downsizing has focused on crucial topics such as the effect of downsizing on employee behaviors and organizational performance, few studies have focused on the importance of basic cost and productivity figures at the individual unit level when considering downsizing decisions. This article describes what happens when organizations downsize and analyzes the downsizing efforts of the Texas Department of Mental Health and Mental Retardation.

Government employees, whether federal, state or local, are under increasing pressure to become more productive from taxpayers demanding more for their tax dollars. Since most state payrolls consume 60 percent or more of state budgets, some government authorities are trying to bring efficiency into systems by privatizing services and cutting payroll expenses (Barrett & Greene, 1993; Gore, 1996; Kettl, 1993). Methods of cutting payrolls may include early retirement programs, attrition and layoffs. According to some sources, few government agencies engaged in cutting payrolls have seen genuine staff reductions because the declines in some departments have been more than matched by increases in others (Barrett & Greene, 1993). In contrast to this view, however, some reports indicate that substantial reductions in government agencies have taken place without negatively affecting services provided (Gore, 1996) while other reports indicate that staff reductions have indeed taken place, but have had performance and productivity problems as a result of the staff reductions (Edreich, 1998; GAO, 1996; Kettl, 1993). Because of these contradictory reports, efforts to assess the restructuring of government agencies have often been confusing and politically motivated. The purpose of this article is to briefly review

the literature describing what happens when organizations downsize, to analyze the downsizing efforts of the Texas Department of Mental Health and Mental Retardation, and to offer managerial implications of downsizing in the public sector.

What happens when organizations downsize?

Downsizing in the management literature has been studied primarily from two different perspectives, the human element and the strategic element. The human side of downsizing focuses on the behaviors and emotions of individuals involved in the downsizing process (individual-level variables) while the strategic element of downsizing focuses on overall organization performance (organizational-level variables). Concerning the human element, many studies have researched the effects downsizing has on individuals within the organization. For example, researchers have looked at how downsizing activity is related to employee stress (Mishra & Spreitzer, 1998), organizational commitment (Cameron, Freeman & Mishra, 1993), interpersonal conflict (Kozlowski, Chao, Smith & Hedlund, 1993), and perceptions of justice (Brockner, Konovsky, Cooper-Schneider, Folger, Martin & Bies, 1994). Employees in a downsizing organization experience emotions that are often

negative and may react by engaging in undesirable behaviors at work. Although this research is important in understanding how downsizing affects the individuals involved and how the organization may alleviate some of the employees' concerns, this research lacks an overall perspective of downsizing and often does not consider cost and performance issues in a way that can be audited in concrete dollars and cents.

Research on the strategic element of downsizing has looked at the impact of downsizing on innovation (Boomer & Jalajas, 1999; Dougherty & Bowman, 1995), competitiveness (Lewin & Johnston, 2000), and firm performance (Cascio, Young & Morris, 1997). This research has an organizational level perspective and is concerned primarily with how the overall organization copes with downsizing activity rather than how the individuals within the organization cope with downsizing. Although this perspective often looks at cost and efficiency issues, the research focuses on the overall organization and not individual departments or units within the organization, some of which may remain highly inefficient even after downsizing. There may be instances, for example, when some departments in an organization improve dramatically after downsizing—enough to cover the inefficiency of one or two “bad” departments that remain a drain on organizational productivity even after downsizing. Because of this possibility, proposals concerning the strategic element of downsizing that only interpret downsizing effects at the organizational level may not capture what is truly happening in the various units of the organization. Although it is impossible to study all aspects of downsizing in one study, it is important that quantitative measures are used to accurately measure performance to see whether the downsizing goals of cost reduction and increased efficiency are met.

Downsizing the Public Sector

A 1996 National Performance Review report states that in 1993, one in every three government employees was part of a network of micromanagers who were writing and monitoring compliance with internal rules that often kept

employees from being productive (Gore, 1996). The report also suggested that if agencies could determine which employees within this group did not contribute to fulfilling the agency's mission then the government should be able to cut overhead employment without affecting services. But how does an agency determine which positions are unnecessary to fulfilling its mission? One basic method that has been suggested for identifying overall cost reductions in government agencies is the performance audit approach (Raaum & Soniat, 1993).

The steps in conducting a performance audit approach are as follows:

- (1) Select audit subject
- (2) Develop the performance measures
- (3) Compare performance with similar organizations
- (4) Identify potential savings
- (5) Analyze differences in performance
- (6) Associate savings with root causes

Measuring efficiency can be difficult because it involves not only numeric calculations, but also elements of quality that may not be quantifiable. Ratio analysis has been used frequently to compare measurable efficiency between two or more organizations. For example, ratios such as food cost per person per day or meals produced per man hour calculated for a prison food service operation in Texas can easily be compared to a prison food service operation in any other state. The two figures can then be compared to determine if one facility's costs or productivity vary significantly from the other. In a 1999 article, Craycraft reviewed statistical techniques used to measure efficiency and concluded that ratio analysis is particularly useful in pinpointing specific problem areas of an organization's operations, although frontier analysis is most appropriate for an overall measure of organization efficiency.

Using a performance approach audit and ratio analysis, auditors could select one department within a government agency and compare its performance to either another government agency or to a similar organization in the private sector. It is reasonable to believe that a huge majority of government employees are dedicated, hard-working individuals, but if their jobs do not add value to the core goal of their employer, their jobs may

need to be eliminated. A case study may help in determining one method for analyzing public sector efficiency.

Case Study

In 1991, the Texas Legislature adopted Senate Bill 111 that required the Legislative Budget Board to review all programs, services, and activities operated by state agencies in Texas. The purpose of the review was to ensure that tax dollars were being allocated wisely, and the reviewers were directed to make specific recommendations on restructuring or budget changes to the legislature. From this directive, a process known as the Texas Performance Review (TPR) was created. This case study focuses on the Texas Department of Mental Health and Mental Retardation (TXMHMR).

TXMHMR provides services for residents in the state of Texas who have mental disabilities, and consumes billions of dollars each year in state and federal funding. A comprehensive review of TXMHMR began in 1995, the findings were presented in 1996, and several recommendations were made to reduce costs and improve productivity. One recommendation was that TXMHMR eliminate 1800 positions within the agency (Sharp, 1996).

The TPR report specifically identified 290 staff positions that could be eliminated by outsourcing to private contractors, and suggested that another 207 administrative positions should be eliminated in seven different areas or departments within TXMHMR. Outside of these 497 positions, TPR recommended another 1300 positions be cut using guidelines such as benchmarking, span of control analysis, and ratio analysis (Sharp, 1996). Although the TPR report offers a wealth of information, it lacks specific detailed instructions to individual departments that would help determine exactly which positions in each department can be eliminated. These instructions are important because TXMHMR employed about 30,000 people in 1996, and identifying 1300 positions to be eliminated out of 30,000 can be a difficult task. In this situation, a performance audit approach conducted at the individual department level of analysis would be useful.

Performance audit – individual level of analysis

In 1996, TXMHMR had 12 state schools and 13 state hospitals housing people with mental disabilities. Each facility had a superintendent who oversaw all functions of the facility including direct care of the individual and support functions such as maintenance, food service and purchasing. The food service function in Lufkin State School (LSS) is the model for this case study since food service can be compared using cost and productivity factors to other food service operations both public and private. LSS is located in Lufkin, Texas, which has a population of 35,000. Seven private nursing homes operate in Lufkin.

Following the performance audit approach, step one of selecting the audit subject has been completed. Step two, developing the performance measure, can be completed by determining unit cost (the average cost of food for one person per day including meal supplements) and productivity measures (the average number of meals produced per man hour).

Table 1 shows a comparison of unit costs and productivity measures between LSS food service department and two private nursing homes located in Lufkin. In both measures, the private sector outperforms the public sector. The issue of food cost does not seem to fit into a discussion of downsizing, but the procedures used to purchase food for TXMHMR involved a number of employees whose sole job was to manage the current purchasing system. For example, food service directors at private nursing homes were authorized to order groceries directly from vendors to be delivered when needed. In contrast, the food service director at LSS had to calculate the amount of groceries needed for a three month period, six months before the food was delivered. The grocery order for LSS was then combined with the order for all other facilities in TXMHMR, and the purchasing staff at TXMHMR Headquarters in Austin would order groceries for all facilities at one time.

The requirement for advance grocery orders resulted in fluctuating inventories since some items were often

delivered late or not at all, and orders could not be adjusted to meet changing needs. When items were not delivered, facilities had to purchase them locally or change the menu, increasing costs and overhead expenses. Because TXMHMR was required by law to purchase frozen foods and groceries through the state's General Services Commission, the TPR report proposed a change in the law so that food purchasing operations could be subjected to competition. Competition would increase the individual food service directors' control over inventory and eliminate the need for purchasing staff in Austin.

Subjecting some government activities to competition has been shown to result in savings at the federal level. For example, the Department of Defense has used competitive sourcing as a means of achieving economies and efficiencies in operations (Sharp, 1996). The Federal Activities Inventory Reform (FAIR) Act of 1998 requires agencies to list government activities that are not inherently governmental in nature and subject those activities to competition for outsourcing. Private companies and government employees may both submit bids to perform the work. As of September 2000, the number of full-time federal employees identified as performing commercial activities had increased, suggesting that the FAIR Act has been successful in requiring government agencies to define those activities that can be outsourced (GAO, 2000).

The difference in productivity measures between public and private sectors in Table 1 is very large. The state school is nearly five times the size of the largest private nursing home and should reap benefits from economies of scale, but does not. Although quality of service is not addressed in these numbers, all three institutions are required to meet similar certification standards by the state and federal agencies that oversee their operations. Thus, assuming that all three institutions are similar in quality because of similar certification standards, the numbers from Table 1 indicate the state school should be able to produce the same number of meals with about half the number of people now employed. According to the performance audit approach, step three, comparison of performance with a similar organization has been accomplished and potential savings identified, step four.

After the Texas Comptroller's Office proposed that TXMHMR subject its food service operations to private vendor competition in 1996, TXMHMR began to reduce some of the bureaucratic red tape that had created excessive costs and chaos in the food purchasing system. The results of these efforts are illustrated in Figure 1, and show that TXMHMR food costs have dropped for the most part since 1998 in state schools, but not in state hospitals. Given that state hospital food costs were considerably lower than state school food costs in

TABLE 1
Comparison of Food Cost and Productivity Measures Between TXMHMR and Private Nursing Homes in Lufkin - 1996

	Number of Patients	Average Food Cost*	Productivity Measure**
TXMHMR	459	\$3.65	3.77
Private Nursing Home 1	60	\$3.10	6.07
Private Nursing Home 2	90	\$3.15	8.00

*Average food cost is the cost of feeding one person three meals per day with nutritional supplements. It includes only the cost of food.

**Productivity measure is the number of meals produced per man hour.

Source: TXMHMR annual reports, 1996 and private nursing home dietitians

1996, the increase should not be of great concern. However, the figures in Figure 1 are aggregate figures that include 18 different facilities across the state. Individual facility comparisons such as that used in the case of Lufkin State School would help determine on a case by case basis which facilities are cost efficient and which are not. It is also important to note that the food cost figures for 1999 and 2000 do not include the cost of USDA products which were included in the figures for 1996 – 1998.

This mini-analysis of TXMHMR is far from complete. However, the similarities between a private nursing home food service and TXMHMR food service are numerous. Both have residential populations with varied dietetic needs, both use nutritional supplements (an expensive addition to food costs), and both use the same type of equipment and labor to produce the output. Government employees often state that their services cannot be compared to anything in private industry because the service they provide is unique. In fact this very argument was advocated in years past by a number of food service managers and dietitians working for TXMHMR throughout the entire state, but the argument is weak. Comparisons can be made if the indi-

vidual making the comparison is familiar with the work being completed, and there are thousands of professional food service managers with experience in both institutional and private sector food service. Therefore, all steps of the performance audit have been completed with the exception of analyzing the differences in performance between public and private facilities in Lufkin and associating the savings with root causes. Further investigation into staffing procedures and evaluations for the state school would be appropriate to help understand why overstaffing seems to be a problem at Lufkin State School.

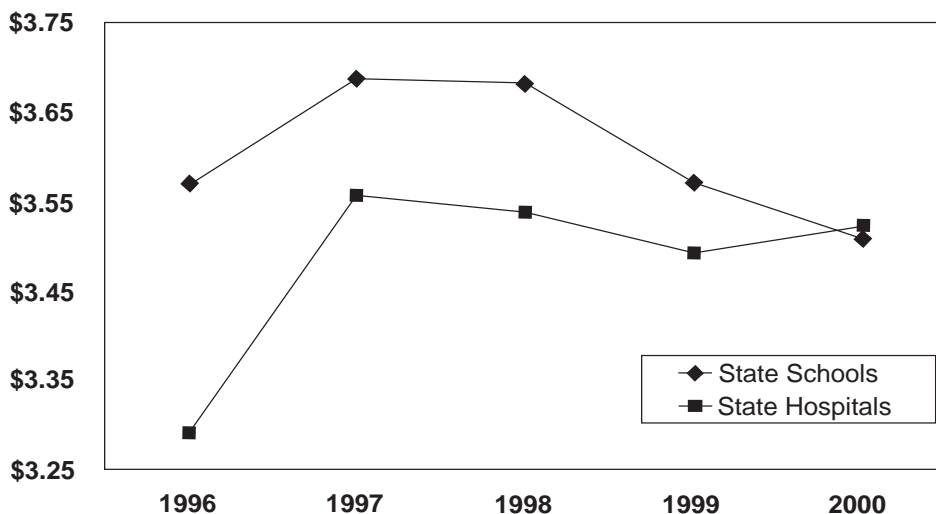
TPR auditors evaluated the organizational structures, management layers, business processes and staffing functions of each TXMHMR facility, including the Central Office (headquarter) functions located in Austin. The final report suggested that managerial salaries were being paid for non-managerial work because of too many managers and not enough administrative work. The report also suggested that satisfactory performance by a technical employee is often rewarded by awarding a management title at a higher salary, leading to the excessive number of managers (Sharp, 1996).

At LSS, some employees with

administrative titles were given new job titles to make them technical employees rather than administrative employees. For example, a woman with the title of Program Administrator I was given a new job title of Nutritionist III, even though the job duties remained the same. This type of action is similar to that outlined at the federal level in a report on federal downsizing. Some agencies tried to meet National Performance Review goals without making meaningful changes to their organizational structures, and one method of doing this was to reclassify managers to non-management positions without changing their salary grades (GAO, 2000).

One way to determine if employee cuts have truly been made is to look directly at the number of employees on a yearly basis. This method, however, may be misleading if the number of individuals served by the government agency has increased or decreased. Therefore, to determine if employee downsizing has actually occurred in TXMHMR, the number of full-time equivalents (FTE's) per individual served can be calculated. As seen in Table 2, the number of patients served per FTE has remained fairly constant over a five year period. If downsizing had, in fact, occurred, the number of patients served per FTE should have increased because TXMHMR would be serving more patients with fewer employees. Since downsizing is often implemented to increase productivity, tracking productivity figures over time is another way to determine if downsizing activity has occurred and if the effort to downsize was effective. As seen in Table 3, the productivity figures for TXMHMR show that productivity has remained fairly constant over a five year period. If downsizing had occurred, the productivity levels should have increased since fewer employees would be producing the same number of meals. Thus, based on the figures from Table 2 and Table 3, it appears that efforts to downsize the food service function of TXMHMR have not been successful in terms of increasing productivity or in terms of reducing the number of employees as a ratio to the number of individuals served. Of course, these numbers are average figures for the entire state. Individual facilities may have shown progress in their downsizing

FIGURE 1
TXMHMR Average Food Cost 1996-2000



Source: TXMHMR annual reports, 1996-2000

TABLE 2
Average Number of Full-time Equivalent Employees
for TXMHMR 1996-2000

Year	Average number of patients per year	Average number of FTE's per year	Average patient to FTE ratio per year
State Schools			
1996	4620	669	6.90
1997	4640	682	6.80
1998	5270	759	6.94
1999	5120	751	6.82
2000	5070	747	6.78
State Hospitals			
1996	3120	436	7.17
1997	2730	405	6.74
1998	3060	306	9.99
1999	2930	477	6.14
2000	2740	413	7.12

Source: TXMHMR annual reports, 1996-2000

efforts, and it is this level of analysis that is crucial to determining which facilities are making progress and which facilities are not.

For Lufkin State School, the figures in Table 4 show that the number of FTE's has decreased as it should since the number of individuals served has also decreased, but productivity and the number of individuals served per FTE have also dropped slightly. Part of the reason for the decrease in productivity could be due to a correction in economies of scale such that fewer individuals served causes less efficiency in service delivery. Nevertheless, the figures seem to indicate that no "true" downsizing has occurred in the food service operation at Lufkin State School, and the productivity figure from 2000 continues to be much lower than that of the private nursing homes shown in Table 1. To fully analyze what has happened, it would be helpful to compare the figures for Lufkin State School to other food service operations in TXMHMR facilities.

Unfortunately, the TXMHMR food service annual reports state that a "direct comparison between facilities may be invalid due to differences in type of meal service and other factors." Although this statement emphasizes the need to ensure appropriate standards are in place that

will allow auditors to make comparisons between facilities, the statement may also serve as an excuse for allowing some facilities to be less efficient than others. A 1996 survey shows that 72 percent of federal agency employees

TABLE 3
Average Productivity Measures
for TXMHMR 1996-2000

Year	Productivity measure*
State Schools	
1996	3.36
1997	3.80
1998	3.89
1999	3.82
2000	3.88
State Hospitals	
1996	3.89
1997	3.89
1998	5.88
1999	3.60
2000	4.44

*Productivity measure is the number of meals produced per man hour.

Source: TXMHMR annual reports, 1996-2000

surveyed disagreed with the following statement, "A private sector company could perform the work of my organization just as effectively as the Government does," (Merit Systems Protection Board, 1996). Government employees who feel threatened by competition may offer a number of reasons as to why their situation is unique and why their work should not be compared to others, but many work practices and productivity figures in government can be compared to similar situations either in the private sector or in other government agencies. If the food service function of TXMHMR cannot make accurate comparisons between its own facilities, this situation would suggest that basic standards need to be implemented; otherwise, there is no accountability for variation between facilities.

When government employees argue that the unique nature of their task negates any possible benefits from contracting out their duties, they may have a point in some circumstances. For example, there are some government functions that legislators should carefully consider before contracting out to private vendors. This would include functions such as security and education since few people would feel comfortable with a private vendor providing police protection or a private vendor providing public education services, especially if those private agencies do not have to answer to the public at large. In the case of mental health services, however, a number of private firms have already entered the Texas market to provide mental health services in a non-institutional setting. These private firms are regulated by state and federal agencies to ensure quality services are given, and many consumers of mental health services choose these private firms over the institutional option provided by the state. The TPR proposes that TXMHMR expand the use of these private service providers by the use of vouchers to increase consumer choice and to save nearly \$20 million over a six year period (Sharp, 1996, p. 107-111).

Obviously, there will be some resistance to downsizing both in the public and private sectors, and employees will do their best to save jobs. However, organizations truly needing to restructure should keep employees

TABLE 4
Productivity Measures for Lufkin State School, 1996-2000

Year	Number of Patients Served*	FTE's	Productivity Measure**	Patient to FTE Ratio*
1996	465	66	3.73	7.07
1997	449	65	3.63	6.90
1998	436	63	3.65	6.93
1999	421	63	3.50	6.65
2000	411	63	3.44	6.54

*Figures are taken directly from TXMHMR annual reports as an average for the year specified. Some numbers do not match exactly with calculation using number of patients served divided by FTE's.

**Productivity measure is the number of meals produced per man hour.

Source: TXMHMR annual reports, 1996-2000

informed of what is happening and why to prevent outdated or inefficient jobs from being saved. Here the research on individual emotions and behavior would be very useful in forming a plan of action to help downsized employees cope with the situation and to help surviving employees understand what is now expected of them and why the changes need to be made. First and foremost, however, organizations wishing to downsize must look at the monetary value expected from eliminating jobs, and they must begin at the individual unit or departmental level within the organization.

Implications for public sector managers

This paper focuses on downsizing in individual units within public agencies and emphasizes the importance of basic cost and productivity figures at the individual unit level within an organization. Only after these measures are analyzed should the decision to consider eliminating jobs be made. If it is determined that positions should be eliminated, careful attention should be paid to the human element of downsizing. The human element is not the least important, but it is the last step in the process and the most challenging to complete.

No matter what results are tabulated from an audit, there will be feelings of

anxiety in the workforce. It is therefore important to implement guidelines to ensure that personnel will not suffer from low morale which leads to lower productivity. Audits should be implemented by top-level managers with recommendations from lower-level employees regarding job and task analyses. Independent auditing firms should be engaged to implement audits at the top levels of organizations. Many employees are aware of the problems involved in their work, but have never been given the chance to voice concerns or to correct the problems. Even if audit results are negative, involving employees gives them an opportunity to change situations, become more productive, and thereby improve quality of service.

If audit results indicate that some employees must be terminated, long-term goals for organizational re-design should be developed to ensure that workers are not terminated just to be rehired in the next several months. For positions which are terminated, the organization should attempt to soften the blow by allowing older workers to accept early retirement or by allowing positions to slowly disappear through attrition. At the very least, the organization should offer assistance in obtaining employment elsewhere if possible. When Texas first considered closing state schools, a private consulting firm concluded that closure would have little

effect on state employee levels since the facilities would be converted to an alternate use that would provide substantial new employment opportunities for displaced employees (Braddock, 1991).

Communication is the key to making audits and terminations work for an organization. All employees should be fully informed as to what is happening and why. Despite the negative aspects associated with downsizing, eliminating jobs may be the only way to save organizational integrity, and if public leaders are serious about improving service to taxpayers, it is imperative that all avenues to quality are considered.

References

- Barrett, K. and Greene, R. (1993). "Public sector wonderland," *Financial World*, 162(10), pp. 34-38.
- Boomer, M. and Jalajas, D. (1999). "The threat of organizational downsizing on the innovative propensity of R & D professionals," *R & D Management*, 29, 27-34.
- Braddock, D. (1991). "Issues in the Closure of State Schools in Texas: A Briefing Paper."
- Brockner, J., Konovsky, M., Cooper-Schneider, R., Folger, R., Martin C. and Bies, R. (1994). "Interactive effects of procedural justice and outcome negativity on victims and survivors of job loss," *Academy of Management Journal*, 37, 397-409.
- Cameron, K., Freeman, S. and Mishra, A. (1993). "Downsizing and redesigning organizations," In G. P. Huber and W.H. Glick (Eds.), *Organizational Change and Redesign*, pp. 19-63. New York: Oxford University Press.
- Cascio, W. F., Young, C. E. and Morris, J. R. (1997). "Financial consequences of employment-change decisions in major U.S. Corporations," *Academy of Management Journal*, 40, 1175-1189.

- Craycraft, C. (1999). "A review of statistical techniques in measuring efficiency." *Journal of Public Budgeting, Accounting, and Financial Management*, 11, 19-27.
- Dougherty, D. and Bowman, E. H. (1995). "The effects of organizational downsizing on product innovation," *California Management Review*, 37, 28-44.
- Erdreich, B. L. (1998). *Changing Federal Workplace: Employee Perspectives*. Washington, D.C.: U.S. Government Printing Office.
- GAO. (1996). *Federal Downsizing: Better Workforce and Strategic Planning Could Have Made Buyouts More Effective*. Washington, D.C.: US General Accounting Office.
- GAO. (2000). RPT-Number: GAO/GGD/NSIAD-00-244 B-283779. *Competitive Contracting – Agencies Upheld Few Challenges and Appeals Under the FAIR Act*. Washington, D.C.: eMediaMillWorks, Inc.
- Gore, A. (1996). *National Performance Review Report, 1996: The Best Kept Secrets in Government*. Washington, D.C.: U.S. Government Printing Office.
- Kettl, D. F. (1993). *Sharing Power: Public Governance and Private Markets*. Washington, D.C.: The Brookings Institution.
- Kozlowski, S., Chao, G., Smith, E. and Hedlund, J. (1993). "Organizational downsizing: Strategies, interventions, and research implications," *In International Review of Industrial and Organizational Psychology*. New York: John Wiley.
- Lewin, J. and Johnston, W. (2000). "The impact of downsizing and restructuring on organizational competitiveness," *Competitiveness Review*, 10: 45-55.
- Merit Systems Protection Board. (1996). 1996 Merit Principles Survey, In Erdreich, B. L. 1998. *Changing Federal Workplace: Employee Perspectives*. Washington, D.C.: U.S. Government Printing Office.
- Mishra, A. and Spreitzer, G. (1998). "Explaining how survivors respond to downsizing: The role of trust, empowerment, justice, and work redesign," *Academy of Management Review*, 23: 567-588.
- Raam, R. B. and Soniat, E. (1993). "Measurement based performance audits: a tool for downsizing government," *Government Accountants Journal*, 42: 61-70.
- Sharp, J. (1996). *Special Delivery: New Models of Care. A report on the Texas Department of Mental Health and Mental Retardation by the Texas Performance Review*. Published by the Texas Comptroller Office.