



# La Follette Policy Report

ROBERT M. LA FOLLETTE SCHOOL OF PUBLIC AFFAIRS

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## DIRECTOR'S PERSPECTIVE

As summer draws to a close on Lake Mendota, we look back to a busy spring and forward to the challenges of the fall 2001.

This fall we see inaugurated our new accelerated master's degree programs for University of Wisconsin-Madison undergraduates who have an idea of their career and education path. Especially accomplished undergraduates can take a number of La Follette courses as seniors and, by carrying four courses each semester, can complete their La Follette master's degree in only one year after they receive their bachelor's degree. This program has been of great interest in several departments, so we're eagerly looking forward to including talented and motivated undergraduates in our courses.

This issue of the *Policy Report* represents several of the facets of our work. Andrew Reschovsky's lead article high-

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## Financing Health, Education, and Welfare in the New South Africa

by Andrew Reschovsky and Howard Chernick

*The following article is based on the authors' work in South Africa. Reschovsky and Chernick served on a team of international advisers to a constitutionally created advisory body in South Africa, the Financial and Fiscal Commission. They participated in the development of a number of commission recommendations on the allocation of nationally raised revenues to South Africa's nine newly created provinces. Andrew Reschovsky is professor of public affairs and applied economics at the La Follette School of Public Affairs and in the Department of Agricultural and Applied Economics. Howard Chernick is professor of economics at Hunter College and a member of the graduate faculty in economics at the City University of New York.*

Around the world, the move from authoritarian regimes to democratically elected governments has often been accompanied by a movement away from fiscally centralized government to decentralized fiscal systems. Subnational governments have been given a substantial increase in responsibility for the provision of public services and the raising of revenues. This is certainly true in South Africa, where, with the election of Nelson Mandela as president on April 27, 1994, a nonracial government with democratically elected subnational governments serving all citizens was established.

Race was the dominant factor in explaining all aspects of life in apartheid South Africa (1949–93), including the system of public finance. For whites, South Africa under apartheid was characterized by democratic institutions of government, a well-developed system of public infrastructure, and a full array of public services, generally on a par with governmental services delivered in developed nations of the world. Blacks (called Africans in South Africa) had

very few economic and political rights, benefited from no effective democratic representation in government affairs, and had very limited access to government-provided public services. For Asians and those of mixed-racial heritage (called "Colored" in South Africa), the reality was somewhere in between.

A core element of the apartheid system was the spatial separation of the races. Although whites made up less than 15 percent of the population, 87 percent of South Africa's land area was reserved for them. Most whites lived in urban areas located in one of four provinces: Cape, Transvaal, Orange Free State, and Natal. Blacks were relegated to one of 10 "homelands," all located in the most inhospitable portions of the country. Large urban centers, which were the exclusive domain of whites, were generally surrounded by "townships" that housed black workers, often in extremely overcrowded conditions. The best known of these black townships is Soweto (Southwestern Township), located just southwest of Johannesburg.

Under the apartheid regime, the government in South Africa was highly centralized. Budget data for fiscal year 1990–91 indicate that the central government accounted for 71 percent of total government spending and collected over 80 percent of government revenues. These numbers clearly understate the importance of the central government. Although the four provinces were responsible for nearly 10 percent of total government spending in fiscal year 1991, they were little more than administrative regions of the central government, with most of their revenue derived from transfers from the central government. The black homelands had very little in the way of either fiscal or administrative capacity. As a result, the residents of these areas benefited from few public services. About 60 percent of the financing of the few public services that were provided to the homelands came from central government grants.

A highly centralized system of public finance was essential to maintain the apartheid system. From the 1970s onward, opposition to apartheid among some whites meant that providing provinces with political and fiscal autonomy might have led to movements in some areas to abandon or at least soften some of the apartheid provisions.

A major challenge in building democratic, non-racial government in South Africa is to establish truly democratic sub-national governments, and a system of government that guarantees that all South Africans, regardless of race, receive a set of basic public services. Both objectives were incorporated in the constitution adopted by the Constitutional Assembly in October 1996. The constitution sets the ground rules for democratically elected provincial and local governments, and it establishes the right of all South African citizens to a set of basic public services.

The new South African constitution establishes a system of “cooperative government” with three separate “spheres” of government—national, provincial, and local. Furthermore, the constitution specifies in considerable detail which public services are to be provided by each level of government, and which taxes each sphere can use. This level of specificity about tax and expenditure assignment has the effect of removing from political debate many of the issues that have led to conflict in other nations actively involved in fiscal decentralization.

The challenge faced by the South Africans is to build a system of public finance that fosters the delivery of basic social services in an efficient and fair manner across the entire country, while allowing a measure of fiscal decentralization. Critical to meeting this challenge is the development of an efficient and equitable system of intergovernmental finance. To advise the government and

the parliament on the design of its intergovernmental system, the constitution created the Financial and Fiscal Commission (FFC) as a permanent, 22-member, independent advisory body. In 1996, the FFC issued its first set of recommendations for the design of an intergovernmental system. Many of its recommendations were accepted by the government, and the current grant system clearly reflects the influence of the FFC. In mid-1999, the FFC undertook Project 2001, with the purpose of conducting a comprehensive review of the current intergovernmental system and, where necessary, making recommendations for improving the system. We joined a team of international advisers who assisted the FFC staff. The focus of our work was the development of a new approach for allocating revenue to the provinces for financing education, health care, and social welfare.

## The Fiscal Environment

South Africa, as it emerges from the apartheid era, is a country characterized by extreme inequalities of income and wealth. A trip through the northern suburbs of Johannesburg takes one past up-scale shopping malls, modern office parks, fancy housing developments on tree-lined streets, and luxury hotels. Visitors could easily be excused for thinking that they had suddenly been dropped into the prosperous suburbs of an American city. The

illusion would be shattered, however, if one drove a few miles into the country. There, one will before long come into areas where thousands of blacks live on treeless plains in small, rickety shacks, often with no electricity or interior plumbing.

This juxtaposition of wealth and poverty is borne out in the data, which show that the Gini coefficient of income distribution in South Africa equals 0.58, a value higher than in any other country in the world with the possible exception of Brazil, Columbia, or Venezuela. The 1996 census shows clearly that income differences occur largely along racial lines. Among South Africa’s employed population, two-thirds of blacks had monthly incomes below about \$250, while only 9 percent of whites had incomes below this level. At the other end of the income distribution, 14 percent of employed whites had monthly incomes over \$1,000 as compared to 0.6 percent of blacks.

Other measures of well-being show a similar picture. The United Nations Human Development Index (HDI), which measures life expectancy at birth, adult literacy, and school enrollment, as well as GDP per capita, characterizes South Africa somewhere in the middle among all countries. If, however, the HDI were calculated for

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**The challenge faced by South Africans is to build a system of public finance that fosters the delivery of basic social services in an efficient and fair manner across the entire country, while adhering to sound fiscal principles.**

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white South Africans, it would rank 18th in the world, about the same as New Zealand. On the other hand, an HDI calculated for black South Africans would rank the country at 118th, similar to Vietnam or Bolivia. These extremes of wealth and poverty, particularly in their spatial patterns, pose a considerable challenge to efforts to enhance both equity and fiscal decentralization.

The clear legacy of apartheid was a system of public finance where the level and quality of public services was primarily a function of one's race and place of residence. Blacks and whites received very different levels of services from the central government. One example is education: Pupil to teacher ratios through most of the apartheid period were as much as three times higher for Africans than for whites. The qualifications of teachers in white schools were also much higher than teachers in African schools.

Table 1 on page 4 illustrates disparities among the nine provinces. A sharp difference can be seen between Gauteng and the Western Cape and the other seven provinces. These two provinces, which contain the majority of the country's white population, are substantially richer than the other provinces and have highly urban populations that are relatively well served by public infrastructure (as measured by the percentage of households with running water). Among the remaining provinces, poverty is highest and economic conditions worst in the Eastern Cape and the Northern Province. Although harder to measure, administrative capacity to deliver public services also varies widely.

The first problem facing any highly centralized country attempting to undertake fiscal decentralization is coming to grips with the "assignment problem." "Assignment" concerns determining who has the authority to tax and spend. Decisions must be made concerning which level of government should be given responsibility for providing which services, and how the use of various revenue instruments should be divided between the central government and provincial and local governments.

Unlike many other countries, South Africa made most "assignments" in its constitution. The constitution includes a Bill of Rights, which in addition to guaranteeing various personal freedoms, provides all South Africans with the right to have access to "health care services," "appropriate social assistance," and "basic education" (chapter 2, sections 27 and 29). Schedule 4 of the constitution then specifies that the national and provincial governments are to share responsibility for these (and other) functions. Both levels of government, in the words of the constitution, hold "concurrent legislative competence" for these functional areas. Given the importance of these services, it is not surprising that most

provincial expenditures, 85 percent on average, go for primary and secondary education, health care, and welfare services and social assistance.

The constitution is also very specific about assigning taxes. Section 228 states that provinces may impose any tax except the personal or corporate income tax, the value-added tax, the general sales tax, the property tax, and customs duties. Under certain circumstances, however, the constitution permits provinces to levy a flat-rate surcharge on the personal income tax. Any income tax

surcharge must be authorized by an act of Parliament, and such a surcharge can be enacted only if it does not "materially and unreasonably prejudice national economic policies" (chapter 13, section 228 (2)(a)). To date, Parliament has not

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authorized provinces to levy an income tax surcharge. On average, revenues raised by provinces themselves account for less than 4 percent of total provincial revenues.

To provide a measure of fiscal autonomy to provinces, the residents of each province, through their elected provincial representatives, must have some say in the level of public services and the taxes to finance those services. The restrictions on the ability of provinces to raise their own revenues appear to be inconsistent with a commitment to fiscal decentralization. Despite an expressed goal of strengthening provincial autonomy, initially at least the objective of building a strong cohesive nation has taken precedence in South Africa. The conflict between nation-building and fiscal decentralization is particularly sharp in South Africa because of the immense differences in fiscal capacity among provinces.

As the data in table 1 show, a wide chasm exists between the public infrastructure available in the relatively rich provinces of Gauteng and Western Cape and in the poor provinces such as the Northern Province and the Eastern Cape. Allowing provinces to raise significant amounts of revenues would serve only to exacerbate these differences. For example, we estimate that a 5 percent income tax surtax would raise \$39 per capita in Gauteng and \$14 per capita in Western Cape, while the same surtax would raise only \$2 per capita in the Eastern Cape and less than \$1 per capita in the Northern Province. These fiscal disparities mean that any increase in provincial revenue-raising authority would have to be accompanied by an expanded program of equalizing grants to the poorer provinces. Without increasing the overall fiscal burden, it would be very difficult to accomplish both of these goals. In addition to these differences in tax capacity, administrative capacity to collect taxes is relatively well developed in Gauteng, the Western Cape, and Kwazulu-Natal, but almost nonexistent in most of the other provinces.

Table 1

## Demographic and Economic Characteristics of South Africa's Provinces

Province	Provincial Population 1999	Share of Total Population (%)	Percent of 1996 Population			Percent Living in Rural Areas	Average Annual Household Income	Households		Percent of Adults (>19) With No Education
			Black	White	Colored			Percent Poor (inc. < R12,000)	Percent with Running Water	
Eastern Cape	6,658,670	15.5	86.4	5.2	7.4	63.4	R24,000	72.2	24.7	20.9
Free State	2,714,654	6.3	84.4	12.0	3.0	31.4	R25,000	63.1	40.6	16.1
Gauteng	7,807,273	18.1	70.0	23.2	3.8	3.0	R71,000	42.4	67.7	9.5
KwaZulu Natal	8,924,643	20.7	81.7	6.6	1.4	56.9	R37,000	60.5	39.8	22.9
Mpumulanga	3,003,327	7.0	89.2	9.0	0.7	60.9	R30,000	63.4	37.3	29.4
Northern Cape	875,222	2.0	33.2	13.3	51.8	29.9	R31,000	56.9	50.0	21.7
Northern Province	5,337,267	12.4	96.7	2.4	0.2	89.0	R31,000	76.7	17.8	36.9
North West	3,562,280	8.3	91.2	6.6	1.4	65.1	R30,000	60.2	30.6	22.7
Western Cape	4,170,971	9.7	20.9	20.8	54.2	11.1	R53,000	35.6	76.4	6.7
Total	43,054,307	100.0	76.7	10.9	8.9	46.3	R37,000	57.6	44.7	19.3

Note: The data in the last eight columns are from the 1996 South African census. Average annual household income is for the year 1995.

Source: Authors, compilation of data from Statistics South Africa.

Writing a new constitution for South Africa was a difficult and contentious process. Although the African National Congress (ANC) had broad support in the majority of the provinces, in Kwazulu-Natal, where the Inkatha Freedom Party held power, a strong separatist movement arose. Providing provinces with significant taxing authority would have had the potential of strengthening the independence movement in Kwazulu-Natal. Thus it could be argued that restraining provinces' ability to raise revenues was essential for maintaining national cohesion and a necessary step in nation-building.

The consequence of making provinces responsible for a wide range of public services, yet severely restricting their ability to raise their own revenues, is the creation of a large fiscal gap between the amount of money provinces need to fulfill their fiscal responsibilities and their ability to raise their own revenues. On average, revenues raised by provinces themselves account for less than 4 percent of total provincial revenues. It is thus not surprising that, according to one measure, South Africa's current fiscal gap is larger than the fiscal gap in most, if not all, other countries. Of the 52 countries throughout the world for which the World Bank, in its 1999–2000 *World Development Report*, provides data on the percentages of total government expenditures and tax revenues received by subnational governments, South Africa's fiscal gap—the arithmetic difference between these two percentages—is not only larger than the gap in all 51 other countries, but is in fact much larger than the country with the second largest gap.

The South African constitution implicitly recognizes the existence of the fiscal gap by requiring that each of the three spheres of government be allocated an equitable share of nationally raised revenues. The constitution also states that each province's equitable share allocation should be sufficient to “enable it to provide basic services and perform the functions allocated to it” (chapter 13, Section 227(1)(a)).

The first equitable share allocations to provinces were made in fiscal year 1997–98. Each year's allocations are determined by the Department of Finance (now the National Treasury), although in the first year, the allocations were largely based on FFC recommendations. The formula used to determine the current equitable share allocations to provinces has seven components, including separate allocations for education, health, and welfare. The overall proportions of the provincial equitable share distributed to each of these components are based largely on past patterns of expenditures. Each separate component is allocated according to relatively simple demographically based formulas. For example, the education component is allocated on the basis of student enrollment with extra weight given to school-age children, and the health component is allocated on the basis of provincial population with extra weight given to residents without private health insurance.

## The Costed-Norms Approach

In developing their recommendations for the allocation of the equitable share among the nine provinces, the FFC wanted both to build on their previous recommendations and to improve and refine them by more closely linking the allocations to constitutional principles.

The starting point for developing new formulas for the allocation of the equitable share was to articulate several guiding principles. These principles reflect both the constitutional framework and generally accepted practices in public finance.

- In light of provinces' inability to raise their own revenue, provinces must be provided with enough equitable share revenue to fulfill their constitutional obligations to provide “basic services” in health, education, and welfare. Ensuring that every South African is guaranteed a minimum level of core public services is seen as a key element in building a fair and democratic society in South Africa.
- In order to encourage provincial fiscal autonomy and to provide an incentive for building administrative capacity at the provincial level, equitable share allocations should be in the form of unconditional grants.
- Provincial governments should be held accountable if they do not meet the norms and standards for the delivery of basic services that have been identified and mandated by national government.
- The actual level of provincial spending should in no way influence the amount of the grant received. Provinces should have no incentive to change their spending priorities so as to influence the size of their equitable share allocation. Instead, the grant formulas should reflect factors that are clearly outside the control of provincial officials.
- The formulas for distributing the equitable share must be clear and transparent and provide a stable source of funding.

These five principles serve as the foundation for a set of FFC recommendations. The FFC chose to characterize its recommendations as the costed norms approach to the distribution of the provincial equitable share.

Whereas the constitution mandates that provinces receive equitable share allocations that are large enough to allow them to provide the “basic services” for which they are responsible, it does not provide a definition of these basic services. The national government, in consultation with the provinces, must define a set of “norms and standards” for each constitutionally guaranteed public service. These norms and standards serve to define public service minimums. Thus, for example, the “norms” for education could define “basic” education services as achieving a ninth grade reading level for all (or nearly

all) students. Basic health services might include providing prenatal care for every pregnant woman in South Africa. The constitution also makes it clear that norms and standards will need to be “progressively realized,” with the norms increasing as the South African economy grows.

The foundation of this costed-norms approach to allocating the equitable share is that each province’s allocation should be set equal to the minimum amount of money a province needs to achieve the basic public output goals or “norms and standards” defined by the government. The underlying premise is that these amounts of money, or “costs” in the language of economists, are likely to vary across provinces. Thus any formula designed to finance the provision of basic services in each province must include the social, economic, and demographic factors that lead to differences in the costs of public service provision among the provinces. For example, the cost of providing prenatal health care may differ across provinces not only because fertility rates vary, but because the incidence of poverty and AIDS differs across provinces, and women living in unsanitary conditions or who have been infected with the HIV virus generally require more prenatal health care services than women liv-

ing under better circumstances.

In developed nations such as England, Canada, Italy, Australia, and the United States, considerable research has been conducted on how to design intergovernmental grant formulas that reflect spatial differences in costs or needs. A number of methodologies have been used. In some cases, a structured search for “best practices” allows for the identification of the costs of achieving various public sector goals. In other cases, various statistical methods have been used to estimate cost functions. The information gleaned from these studies is beginning to be incorporated into some grant formulas in those countries.

This kind of sophisticated statistical approach to estimating costs is very difficult to conduct in South Africa. Although in the last few years great strides have been made in developing high quality data on many aspects of private and public life, much remains unmeasured. In particular, data on provincial government performance in a wide range of areas is still rudimentary. The true challenge facing the FFC was to use available data to develop measures of the relative costs across the provinces of providing basic public services.

With the limited availability of data, it was necessary to draw on research from other countries on the costs of providing public goods. Of particular importance is information on the costs of providing services to individuals in different demographic, economic, or social groups. As very little is currently known about the total resources necessary to achieve any given public service output goal, the FFC concentrated on measuring cost differences across provinces. In the future, with more experience and data, better cost estimates will be feasible. Elementary and secondary education, health, and welfare are referred to as the “social sector.” In developing a formula for the horizontal allocation of the provincial equitable share, the FFC chose to use the costed-norms approach to develop separate subformulas for health, education, and welfare. They proposed that the remaining provincial expenditure responsibilities would be funded through a simple per capita formula with an extra weight for individuals living in poor households.

In the following paragraphs, we briefly describe the three formulas that were developed for the allocation of social sector portion of the provincial equitable share. If the FFC recommendations are accepted, the equitable share would be distributed in part on the basis of these formulas. However, as is currently the case, each province would receive a single equitable share payment in the form of an unconditional grant. This means that it would be free to spend its equitable share allocation as it wishes as long as the province meets its obligation to provide basic services as specified in the constitution and by statute.

**The Education Component.** The goal of the costed norms approach is to develop formulas that will allocate to each province the amount of money that it must spend to provide its residents with “basic services.” In the case

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of education, the formula should allocate funds on the basis of how much it costs each province to provide constitutionally mandated basic education.

For economists, the term “costs” has a very specific meaning. In the context of public service delivery, costs refer to the minimum amount of money that must be spent to produce or deliver a specified good or service. There is strong evidence, both from limited studies within South Africa and from a number of studies in other countries, that the amount of money necessary to meet any given educational standard will vary both across and within provinces for reasons beyond the control of provincial and local school officials. These differences in costs will occur in part because it takes more resources to educate some children (up to some given level of student achievement) than other children, and because some schools operate in environments and under conditions where educating children is more difficult. In these schools extra resources will have to be devoted to education in order to compensate for the impacts of a harsh environment on student performance.

The FFC’s proposed formula attempts to reflect these cost differences by assigning students from different backgrounds different student weights. Thus by assigning a student who comes from a poor family and resides in a rural part of the country a weight of 1.25, the FFC is assuming that 25 percent more resources are needed to educate a poor, rural child than a child growing up in urban South Africa and coming from a nonpoor family.

To complete the allocation formula it is necessary to multiply the number of weighted pupils by an average cost per student, where, as in all countries, the main contributor to costs is teacher salaries. In South Africa, public employee salaries, including those for teachers, are set at the national level. Despite this fact, data for 1999 indicate that the average remuneration per educator varies substantially across provinces. These differences primarily reflect different degrees of seniority and different qualifications among teachers. Allowing the allocation formula to reflect current differences in average remuneration rates across provinces will reduce the incentive for provinces with above-average remuneration rates to take steps to bring teacher costs in line with national norms.

To the extent that more highly paid teachers are more effective educators provinces should be able to substitute teachers for other inputs (e.g., by having larger class sizes). On the other hand, taking no account of existing cross-provincial differences in average remuneration rates will in the short-run penalize provinces that have no power to remove highly paid educators. In the longer

run it might create an incentive for provinces to reduce (or avoid raising) the level of teacher qualifications. The FFC approach is to have the equitable share allocation formula account for some differences in teacher costs across provinces, thereby reflecting differences in the labor market.

*The Health Component.* The FFC’s health formula is designed to provide each province with sufficient funds to finance primary health care services. In South Africa these include primarily health care provided through community health centers and clinics. A large body of international research indicates that to maintain basic standards of health, certain demographic groups need to utilize more health care services (more inputs) than other groups. To reflect these differential utilization requirements, the FFC’s proposed formula assigns a higher than normal weight to children under the age of five, women of child-bearing age, and the elderly.

Evidence also suggests that the incidence of disease is inversely correlated with economic well-being. Poverty correlates strongly with factors posing health risks, including hazardous jobs, poor nutrition, and limited sanitation. Poverty rates are also correlated with direct measures of health status, such as infant

mortality. For this reason, relative poverty levels were incorporated into the formula. Finally, in order to guarantee citizens access to primary health care, on a per capita basis more clinics are needed in the sparsely settled rural areas of the country. Thus a relative population density variable is included in the formula to reflect economies of scale in primary health care delivery that are possible in more urban areas of the country.

The proposed health formula determines the allocation for each province by multiplying each province’s demographic and economically weighted population by an estimate of the average per capita cost of providing a basic package of primary health care services. The average cost number comes from a detailed study of health care utilization and costs at a sample of community health care centers and clinics.

The proposed health formula excludes any specific factor for the incidence of HIV/AIDS. Despite the severity of the HIV/AIDS epidemic in South Africa, inclusion in the formula could create an incentive for provinces to try to influence their grant amounts by over-reporting the incidence of the disease. Moreover, needs and priorities will change over time, as new problems are identified. Including specific disease factors in the formula tends to lock in patterns of aid distribution, making it more difficult to respond to changing needs. This is not meant to imply that the HIV/AIDS epidemic is not a

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**The consequence of making provinces responsible for a wide range of public services, yet severely restricting their ability to raise their own revenues, is the creation of a large fiscal gap.**

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# Putting Performance Management to Work in the Federal Government

by Donald F. Kettl

*This article was written and first published as an open letter to President Bush, encouraging him to embrace the principles of performance management in his administration. Donald F. Kettl is professor of public affairs and political science at the University of Wisconsin–Madison. Printed with permission of PriceWaterhouseCoopers.*

The biggest mistake that we can make in pursuing performance measurement is to conceive of it as primarily a measurement problem. It would be deceptively easy to allow government performance to degenerate into a process-based, numbers-driven exercise. In fact, that is precisely what undermined previous federal experiments with tactics like the Planning-Programming-Budgeting System, Management by Objectives, and Zero-Base Budgeting.

## Performance Management Is About Communication

Performance measurement is not really about measurement. It is, rather, about communication. It is a way to talk better about what results government programs produce and, therefore, to make better decisions about what ought to be done, how much ought to be spent in doing it, and how the work could be done better. In brief, performance measurement seeks to answer the basic political question of public budgeting: What do we get for the money we spend?

I find it more useful, in fact, to talk about performance-based management than performance measurement. This change in terms underlines the broader purposes that performance measures must serve if they are to be effective. The performance process works best when we can build on the measures to improve management. Moreover, to allow the performance process to focus narrowly on measurement too often leaves the key decisions to the measurers.

Performance-based management can help everyone in the process think more strategically. It can help government managers focus on how to do their jobs better and explain to elected officials how they are trying to translate legislative goals into results. It can help elected officials weigh competing claims for scarce resources and put the money where it will do the most good. And, most important, it can help citizens understand better what value they receive for the taxes they pay.

Put simply, performance-based management is about

political communication. It has value only to the degree to which it improves that communication. This communication occurs on three different levels:

*Within the agency.* Agency managers inevitably have a great deal of discretion. They need to chart which problems will get their strongest attention and how best to go about solving them. The tighter resources (money, people, and technology) are, the more important it is to solve these problems well. Performance-based management at this level builds on the strategic planning process mandated by the Government Performance and Results Act (GPRA).

*Between the Executive Office of the President and the agency.* Key agency decisions inevitably percolate up to the Executive Office of the President. Some decisions are budgetary: How much an agency ought to spend on which programs, and how money ought to be distributed among agencies and programs. Some are programmatic: Which new initiatives ought to be launched? And some are managerial: Which problems ought to be attacked

first, and how? Performance-based management can never resolve the questions; no information system or data analysis can ever resolve what are fundamentally political judgments. But it can

provide additional useful information that, on the margin, can help lead decision makers to smarter decisions. And it is on the margins, given scarce money and even more scarce time, that the most critical decisions are always made.

*Between the executive branch and Congress.* Congress cannot be an uninvolved bystander or an arms-length participant in the performance management process. It cannot look on GPRA as a job for executive branch officials. Many federal managers have confided that their biggest fear about GPRA is that Congress either will not pay any attention to the measures they develop or that, having exposed themselves and their operations through the process, members of Congress will use the measures against them. The experiences of other nations show that successful use of performance measurement systems hinges on careful integration of politics and management. Congress is the ultimate audience for agencies'

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performance measures. The measures offer great potential for improving legislative oversight (It's easier to ask good questions about results if results-based information is readily available). And they offer great potential for enhancing congressional budgeting (It's easier to target scarce budgetary dollars on important problems if Congress knows which programs are most likely to deliver solid results).

In the end, performance is much more about communication than measurement. And it is Congress's appetite for and use of performance information that will determine the ultimate success of GPRA and similar performance-based management systems.

## Performance Management Is About Building Good Measures

How can performance measures be developed, and how can they be used? Several questions help us sort through these issues.

### Approaches

1. Where do the goals come from? The performance management process starts with comparing results with goals. Without a careful definition of goals, it is hard to measure performance. The goals of federal programs come from legislation, and legislative goals typically are multiple and fuzzy. Critics of the performance measurement process argue that it is fruitless even to try to gauge results until Congress writes more specific goals.

The clearer the goals, of course, the easier performance measurement is. The legislative process, of course, is not devoted either to defining goals clearly or making measurement easy. To hold performance measurement hostage to a process devoted to compromise is to doom it before it starts. Moreover, this approach to performance management stipulates a neat linear process that does not match the way managers manage or legislators legislate. The process does not follow a neat, linear path to defining problems, developing clear legislative solutions, devising administrative strategies to implement these solutions, and measuring results against goals. It is a far more interactive and reciprocal process in which we tend to decide what we want after we see what we can get. Even in programs whose legislative goals are relatively fuzzy, it is possible to devise general, multiple indicators of success and then to revise them as experience accumulates.

Moreover, because the performance management process works on different levels, and because any set of legislative goals inevitably gives administrators substan-

tial discretion on how to achieve them, performance management can produce significant advances even in the absence of clear goals. If managers stipulate what they are trying to accomplish and measure how well they succeed, the information can improve both their own strategic management and congressional oversight.

Performance measurement would undoubtedly be easier under conditions of clear goals, conditions that are unlikely ever to exist. The very process of defining the goals to drive performance management can help managers focus more crisply on what they're actually trying to accomplish. It can also help, if modestly, build consensus on what policymakers actually hope to achieve.

2. How can managers be encouraged to take the risks that performance management requires? The basic goal of performance management is to measure how effectively managers translate goals into results. Foggy uncertainty typically protects them from close scrutiny. Making both goals and results more explicit is risky for managers.

Solving these problems requires at least two things. One is strong and effective leadership by top agency officials, especially political appointees, to help shape goals, analyze results, and protect employees from sniping. Another is to construct incentives that reward superior performance. This second step, in particular, would require substantial time and a major reform of the civil service system. But such incentives have been the core of reforms in other nations

and deserve exploration in the United States as well.

3. How should performance-based measures be managed over time? Experience abroad demonstrates the folly of conceiving of performance measurement as a one-time-only, start-and-be-done process. Both the measures and the processes they support must be evolutionary. Goals change; measures improve; incentives shift; the problems for which programs are designed mutate. Moreover, those involved in a performance management system tend over time to adjust to existing measures. The measures drive managers' behavior (If police officers' performance is gauged by the number of speeding tickets they issue, they will devote far more time to catching speeders). Agency leaders can promote breakthroughs by periodically raising the hurdles that managers must cross.

4. How is performance management linked to reengineering and benchmarking? Performance management is the building block for other administrative reforms. Benchmarking management practice against recognized standards requires at least a fundamental performance measurement system. Reengineering, moreover, focuses

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on improving performance by redesigning work processes. It is possible to develop performance measurement, benchmarking, and reengineering processes with varying degrees of sophistication. But it is impossible to take any of these steps without focusing on outputs and outcomes instead of inputs.

We also need to avoid falling into some common traps. This may occur when various actors' expectations are too high or when not everyone involved has bought into or understands the process. The pitfalls are most likely to fall into a few categories. Being aware can help everyone involved avoid them.

### *Pitfalls*

1. The Superman fallacy. Textbook descriptions of performance management, coupled with glowing descriptions of successes abroad (often emphasizing the positives without assessing the costs), can lead analysts, managers, and elected officials to overpromise what the process can deliver. Enough evidence has accumulated to suggest performance management's genuine potential. But the evidence also shows just how hard it is to design a good process, to use the results effectively, and to nurture it over time. Performance-based management has to begin with a heavy dose of modesty that must continually be reinforced.

2. Ducking the process. If managers are confronted with an inescapable imperative to develop performance measures, it is tempting to set the hurdles so low that they can easily be jumped with little change in routine. They can be tempted to retreat back to inputs (how many inspections they conduct or how many tax returns are audited). They can be tempted to choose output measures that make sense only inside the agency and are indecipherable to outside observers. This process, like any process, can be gamed, and its players have incentives to rig it so they win.

3. Irrelevance. Managers can develop full-blown performance measures but fail to integrate the information into the key management decisions of their agencies. If managers approach the performance measurement process as an unfortunate intrusion into their "real" work, as a "have-to" step that must be done but that can then be ignored, it will provide employment for some consultants but have little real impact. Performance measures will improve management only if they evolve into performance management—if output and outcome measures are integrated into the basic information systems and management strategies of government agencies.

4. Exuberance. The reverse can be equally dangerous. In their enthusiasm to improve operations, managers can put excessive trust in the measures. Performance

measurement can provide valuable clues about what works and what doesn't, but they cannot explain why. Hard-pressed managers can easily be tempted to hide behind the measures or use the measures to duck tough strategic choices. It is deceptively easy to jump to conclusions beyond what the process would support.

## **Performance Management Is About Governance**

Performance measures offer genuine potential for improving the management of the federal government. They provide a way of answering the keystone question: What value do taxpayers receive for the money they pay? This question in turn provides managers with an important tool in developing more effective and efficient strategies.

It provides the president and his staff with better information for making critical strategic choices. And it provides members of Congress with a way to improve their oversight of the executive branch.

Nevertheless, the evidence accumulated by

other nations, state and local governments and the federal government's own experience suggests three important conclusions.

*Don't overpromise.* Performance-based management has great potential, but it imposes difficult technical requirements and an even more difficult job of integrating the measures into the management process. These jobs are so daunting that, in fact, they are never done; the process is an ongoing, evolutionary one. Yet despite the challenges, no nation that has launched a major performance-based management system, including Great Britain, New Zealand, and Australia, has abandoned it.

*Focus on communication, not measurement.* The biggest trap in performance measurement is to get lost in the arcane world of measurement. Performance measures cannot be allowed to become ends in themselves. They are useful only to the degree they improve discussion of critical management issues and shift the incentives of managers to increase the quality of their work.

*Be clear: Congress is the ultimate audience for measures.* Congress is doubly important to performance-based management. First, the measures are most important in helping Congress improve its policymaking and oversight process. Second, Congress is most responsible for creating the incentives that will shape the process's ultimate success.

Performance measurement is too important to be considered as simply a measurement process or as a governance process that can be left solely to administrators. It is a process whose potential lies in improving management and, even more important, accountability and governance. ■

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**The measures and the processes they support must be evolutionary. Goals change; measures improve; incentives shift; the problems for which programs are designed mutate.**

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# Winners and Losers in the Public Arena: The Economics of Professional Sports Stadiums

By Jeffrey Sachse

*The following article is an abbreviated version of the student research paper that won the 2001 Clara Penniman Prize at the La Follette School of Public Affairs. Sachse graduated from the La Follette School's Master of Public Affairs program in May 2001.*

On Friday, April 6, 2001, 42,024 cheering fans crowded into Milwaukee's Miller Park to witness the first home opener in the stadium's history. The game itself lived up to the years of expectations with the first pitch being thrown by President George W. Bush and the hometown Brewers defeating the Cincinnati Reds (whose new stadium, the Great American Ballpark, is currently under construction) by a score of five to four. Long after the last pitch was thrown, however, much of the crowd remained seated. It was in these moments after the game that it became apparent who the real star was on this night. As the strains of the theme to "2001: A Space Odyssey" echoed through the ballpark, the stadium's massive retractable roof and outfield panels began to move, followed by a roar of applause. A new, \$385 million era of baseball had come to Milwaukee.

This same scene has played out in thirteen other cities over the past decade. With the exception of Atlanta's Turner Field and San Francisco's Pacific Bell Ballpark, the stadiums constructed after 1990 have been financed largely through public participation. In fact, of the thirty major league ballparks standing today, twenty-four (80%) utilized some type of public funding. The Marquette University National Sports Law Institute reports that the amount of public funds spent for the construction of baseball stadiums alone has been approximately \$3.1 billion. The direct outlay of funding, however, does not represent the sole public cost of financing these stadiums.

Nowhere has the social cost of the public financing of baseball been more evident than in Cincinnati. In a city rocked by rioting in April 2001, Paul Brown Stadium sits on the bank of the Ohio River. Although the new \$500 million home of the NFL's Cincinnati Bengals was designed to rejuvenate an ailing franchise, not everyone in the city was so positive. Councilman Jim Tarbell, for example, who represents the most impoverished neighborhoods of Cincinnati, pointed out that even 1 percent of the \$500 million spent would have made a tremendous difference in his area.

Councilman Tarbell's comments highlight several of the criticisms commonly levied against public involvement in professional sports. Despite the revenue generated by the franchises, the actual contribution to a city's economy is rather small. Also, the employment effect of a professional sports franchise is small compared with

the aggregate. Finally, there are concerns as to who actually benefits from the presence of a new stadium and who pays for its construction. In the final analysis, a consensus has developed among scholars and skeptics alike that in the game of stadium-building the public typically loses. To understand why, we must first examine why stadiums are built.

## How Are Stadiums Justified?

Major League Baseball has long been criticized as inequitable. The Commissioner's Blue Ribbon Panel on Baseball Economics found that only three teams—the Cleveland Indians, Colorado Rockies, and New York Yankees—posted profits over the five-year period from 1995 to 1999. Two of the three franchises—Cleveland and Colorado—opened new stadiums either during or shortly before this period.

The panel also found that of the 158 postseason games played between 1995 and 1999 (Division Series, League Championship Series, and World Series), teams with the seven highest payrolls in any given year won 134 of 158 games. Meanwhile, teams with the bottom fifteen payrolls failed to make a single postseason appearance. While this article is not intended to examine the disparities between franchises, it is easy to see that postseason appearances result in significant revenues—that success brings profitability.

Finally, the panel found that, as a general rule, local revenues for franchises increased over the period studied. Of the thirty major league franchises, two experienced significant losses—Minnesota (18%) and Montreal (40%). Both have issued ultimatums to their respective municipalities that a new stadium must be constructed to avoid the possibility of team relocation. All of the franchises that opened new stadiums in the 1990s experienced significant revenue increases in the year following the stadium's opening. Atlanta, for example, built Turner Field, and local revenue increased from \$76.6 million to \$105.6 million in 1997; Colorado, with its Coors Field, saw revenue increase from \$88.41 million to \$101.52 million in 1998; in Seattle, where Safeco Field opened in 1999, local revenue increased from \$67.86 million to \$96.78 million.

Scholars argue that this revenue gain, commonly known as the "novelty effect," is fleeting at best. Robert Baade, an economist at Lake Forest College, has esti-

mated the duration of this effect to be between seven and ten years. With a typical stadium lease lasting 20–30 years, local governments cannot rely on this income effect as a perpetual source of prosperity.

While the potential direct fiscal benefits of a new stadium are apparent and easily demonstrated, other intangible benefits have been cited by franchises as justification for stadium development. James Gray and Martin Greenberg of the National Sports Law Institute at Marquette University in Milwaukee put these justifications into five categories: obsolescence, competitive balance, expanding attendance, increasing costs, and economic development. Obsolescence is a basic tenet of real estate development—as buildings age, they become obsolete and must be replaced. This justification is tied closely to the competitive balance argument. It is no longer enough to field a competitive team; a successful franchise must now have skyboxes, a retractable roof, and a wide variety of concessions options.

James Earl Jones has best expressed the expanding attendance justification in the seminal baseball film “Field of Dreams”—“If you build it, he will come.” In this case, “he” is the average consumer. The irony, however, is that new stadiums are being built with smaller total capacities in order to accommodate other amenities. This also has the added benefit of increasing the chances of a sellout crowd. This theory is also tied to the novelty effect posited by Baade and others. In the absence of a competitive team, though, it will be difficult to draw return customers.

The justification that the cost of maintaining an aging stadium is greater than with a new facility also poses a problem. While newer stadiums as a whole are more efficient facilities, franchises fail to mention the added cost of debt service for the new facility when making this pitch to the public. This omission is understandable, as in most cases the cost of debt service is borne by the taxpayers rather than the franchise. Taking all associated costs into account, however, the annual costs associated with a new facility generally represent a significant increase over the operating costs of an existing facility.

The fifth justification used by franchises, that of the stadium serving as a catalyst for economic development, requires more detailed study.

## Another Cog in the Economy’s Engine

Without doubt, a professional sports franchise benefits a metropolitan economy. Many government and tourism officials would agree that the distinction of being a “major league” city is worth millions of dollars and thousands of visitors annually. The myth that is perpetuated by the franchises, however, when they approach local governments for assistance in constructing

new facilities, relates to the magnitude of the economic benefit. For example, in Wisconsin, the NBA’s Milwaukee Bucks and the NFL’s Green Bay Packers have estimated their impact on the local economy to be \$140 million and \$170 million annually. The Milwaukee Brewers, in presenting a proposal for the construction of Miller Park, estimated that over the course of the first seven years of operation, a \$48 million benefit would accrue to the community. While at first glance these impacts appear to be significant, when the size of the metropolitan economy is taken into account, their effect is diminished. Extrapolating from the 1998 U.S. Census estimates of personal income, we can see that the combined \$188 million annual impact of the Brewers and Bucks accounts for 0.42 percent of metropolitan Milwaukee’s economic output. In a larger economy, the impact of professional sports is diminished further. A study conducted by the City of New York’s Independent Budget Office found that the \$300 million combined

annual impact of the New York Mets and Yankees accounted for a miniscule 0.09 percent of economic output.

The relatively small impact of professional sports franchises is further demonstrated when one analyzes the effect of these franchises on the local labor force. By its very nature, the act of staging a professional sporting event is labor intensive. Maintenance crews, ushers, ticket takers, concessions workers, and other personnel are integral to every event. Numerous jobs are created by the existence of a professional sports franchise, but the actual effect is marginal.

The case of the Colorado Rockies is an example. A feasibility study prepared by the consulting firm of Brown, Bortz, and Coddington suggested that the construction of Coors Field would generate 584 new jobs in construction and operations. The construction jobs, however, although generally high paying, are temporary. Second, and perhaps more important, the majority of the jobs associated with game day operations are seasonal and low paying. In fact, using a 40-hour workweek as the measure of full-time employment, the study found that the stadium actually generated about 130 full-time positions. In the case of Miller Park in Milwaukee, 60 new jobs were created.

Consider also the costs associated with creating new jobs. In the case of a publicly financed stadium, these costs are borne to a great degree by the public. The estimated economic impact of stadium-related employment varies, depending on which study one reads. For example, a 1995 study produced by the management consulting firm of Peat Marwick found that a major league franchise would bring \$3 million in income tax revenue to the Washington, D.C., area, but another study, published by the Congressional Research Service, found that the

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**Of the thirty major league ballparks standing today, twenty-four utilized some type of public funding.**

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cost of generating new employment for Baltimore's Camden Yards was estimated at \$42.4 million, or \$172,000 per job. One side note to the Baltimore study is that the Sunny Day Fund, a nonprofit agency dedicated to workforce development whose funding was cut as a result of the public's participation in the Camden Yards development, generated five times the stadium-related employment annually at a cost of \$6,250 per job.

The two most obvious economic benefits, direct revenue and employment, have been overestimated, but one economic concept must still be examined—the economic base multipliers associated with stadium development. Even those, however, are minor as well.

## The Multiplier Effect

In estimates of the economic impact of professional sports franchises in a metropolitan area, the multiplier effect of revenues generated by these teams is often emphasized and somewhat overstated. The difficulty in assessing the actual multiplied effect of sports teams comes in determining where revenue is re-

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spent. As Robert Baade and Richard Dye pointed out in a 1990 study, highly paid athletes and baseball executives may not reside in the area of the stadium, and the concessionaires may also bring their supplies from outside the area of the stadium. To the extent that either of these phenomena occurs the multiplier effect would be reduced.

Furthermore, in an article in *Growth and Change*, Baade and Dye point out an important distinction that is also seen in the substitution effects that were previously analyzed: "Although the revenue is seemingly increased because of an increase in spending, no new revenue is actually being generated other than the initial investment." And, as Mark S. Rosentraub states in another study, this revenue, in large part, is pulled from other markets. Therefore, the only actual new revenue generated in a regional economy is the revenue that comes in the form of tourism from outside the region.

In analyzing the actual effects of the multiplier, one must pay particular attention to which multiplier is used. As Rosentraub points out, multipliers, which are commonly based on empirical research, can easily be skewed to achieve the desired results. Nonetheless, two researchers looking at the same region can form two different multipliers, and—in theory—each researcher's multiplier could be accurate.

In the case of multipliers used to state the effect of professional sports franchises, a special caveat is often issued. Commonly, multipliers are based on the spending patterns of a median population—an "average person." Given the status and salaries of professional athletes and

officials, however, one can easily conclude that many of their spending patterns are not representative of the patterns used to calculate the multiplier. Therefore, the multiplier used may not accurately depict the true impact of the franchise.

In the case of all sectors related to the operation of a professional sports franchise, Rosentraub estimates that a multiplier of two should be used, based on the average of U.S. Department of Commerce multipliers for five metropolitan regions. Using this multiplier in the cases of Milwaukee and Green Bay, and assuming that all revenue received by a franchise will remain in a region, the total economic impact of the two franchises can be calculated at \$175,334,220 for the Milwaukee Brewers and \$83,524,400 for the Green Bay Packers. This conclusion is significant insofar as it could be used to justify the public financing of a stadium. As already noted, however, much of the revenue earned by a team is either not directly attributable to the team or is not re-

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spent in the area of the stadium.

Besides ticket receipts and concession sales, the primary source of revenue for professional sports franchises is in the form of broadcasting rights for radio and television stations. The impact of this revenue, however, is dependent both on the location of the stations broadcasting the games and how the revenue is handled within each respective league. With the exception of Major League Baseball, all other professional sports leagues have instituted a form of revenue sharing with respect to media rights and merchandising sales. Therefore, the revenue collected may not remain in the region, adding further to the difficulty of estimating the economic impact of a stadium.

## Stadium Development Costs

In the push for local support for new stadium funding, team officials and politicians alike readily and frequently point out the potential benefits of a new stadium. Local governments often receive two different types of benefits from new stadiums. First, local governments may benefit from increased tax revenues off the sales of concessions and souvenirs. They may also benefit from added sales tax revenue from businesses that benefit from the stadium's presence. In many cases, this may be the only tax revenue received by a city or county, as many teams receive property tax exemptions as a condition of the development. The irony in this is that although added tax revenues represent direct benefits to the local government, these revenues often represent the primary source of debt service on stadium costs. The second benefit to local governments—an enhanced reputation—is also fiscal in nature, but is more indirect.

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**While newer stadiums as a whole are more efficient facilities, franchises fail to mention the added cost of debt service for the new facility.**

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This benefit is perhaps best illustrated by considering the case of a host of the Olympic games. During televised coverage of the events, local attractions are often featured in commercial lead-ins, and local human interest stories are often used as filler. This exposure can represent millions of dollars in free marketing for the host city. Similar benefits exist in professional sports as well, particularly with respect to nationally televised events.

The primary source of public funding of stadium developments has been an increase in the sales tax. In many cases, the increase in the tax is restricted to a specific geographic area determined to benefit the most from the stadium's existence. Also, the relative increase in the tax is usually small—ranging from 0.1 percent to 0.25 percent. While the percentage increase is small, the revenue raised through the increase can be substantial. Another common source of stadium-related taxation is an increase in a city's hotel and rental car taxes. Third, many municipalities have imposed additional "sin" taxes, taxes on alcohol and tobacco products, for example. Fourth, several municipalities have imposed a per-ticket surcharge to help finance a stadium. Two stadiums, Oriole Park at Camden Yards in Baltimore and Safeco Field in Seattle, have been partially financed with revenues raised through the creation of a sports lottery.

Just as the funding sources used to finance stadium developments are diverse, the incidence of these taxes and fees also varies. According to the benefit principle of taxation, as described by Dennis Zimmerman in a study published by the Brookings Institution, the proper level of per capita taxation used to support a program or development should be proportional or equal to the level of benefit received from the program or development financed. Thus the revenue sources for financing a stadium should closely match the

benefits received from the stadium. For example, a per-ticket surcharge would be considered equitable under this principle because those attending games directly benefit from a franchise's presence. Another example of an equitable tax under the benefit principle would be a personal seat license, which is a fee charged to season ticket holders for the rights to purchase premium seats.

The majority of the revenue sources used in recent stadium deals, however, are not considered equitable under the benefit principle. The first type of tax commonly used that does not fit this principle is the hotel or motel room tax. Not all of the guests staying in area hotel rooms are there to attend a sporting event. The sin tax also does not satisfy the benefit principle because it is difficult to correlate alcohol consumption with the development of a new stadium. The only two plausible scenarios in which this tax may be equitable are the tax on alcohol consumed at sporting events and at establishments where sporting events are televised.

In most cases the sales tax also does not fit the benefit principle. A 2000 survey conducted by Team Marketing Report found that the average cost for a family of four to attend a sporting event ranged from \$131 for a Major League baseball game to \$267 for an NBA game. Locally, the same survey found that the average cost of attending a Milwaukee Brewers game (before Miller Park) was \$101; for a Green Bay Packers football game it was \$235. After these averages were released, Joanna Cagan, writing in *The Village Voice*, commented, "Truly, baseball has become a middle-class pastime." Commenting specifically on the 0.1% sales tax levied in Milwaukee, Ozaukee, Racine, Washington, and Waukesha Counties as part of the Miller Park plan, Zimmerman concludes that while those in attendance pay the tax, it fails to include those who benefit indirectly from the presence of the stadium.

The final, widely used source of revenue for stadiums that fails the benefit principle of taxation is the sports lottery. Proponents of the lottery have argued that it is essentially cost-free because it is a voluntary program that returns a portion of the program revenue in the form of winnings. It has been used in Baltimore and Seattle for stadium-related debt service, but it is inequitable, largely because lower-income people tend to spend a higher proportion of their income on the lottery than do the more affluent.

The disparity between who benefits and who pays is not restricted to the immediate geographic area in which a stadium is located. Perhaps the best criticism waged against the public financing of professional stadiums

relates to the use of tax-exempt bonding used to finance stadiums. The practice of using publicly issued, tax-exempt bonding to finance private projects is not new. Local development and housing

authorities have traditionally issued such debt in the form of industrial revenue bonds or low-income housing bonds. In each of these uses some public interest is served. In fact, in the process of applying for funding, private interests must usually demonstrate that there is a significant public benefit from a project and agree to certain conditions prior to approval. In the case of many stadium projects, however, similar guarantees have not been required.

For example, in the original agreement between the Milwaukee Brewers and the Southeast Wisconsin Professional Baseball Park District, statutory guidelines dictated that 25 percent of all contract expenditures be awarded to minority businesses and at least 5 percent to women's businesses. Employment levels for minorities and women were also established. In June 1999 the Legislative Audit Bureau reported that these goals were either met or exceeded, but it stopped short of unequivocally praising the baseball park district's efforts. The two

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audits conducted by Milwaukee County Disadvantaged Business Development Program, which had been contracted as an independent monitor on the project, produced insufficient evidence of the statutory goals having been met. By their very nature, tax-exempt stadium bonds represent a public subsidy to the franchise, as these bonds carry with them significant interest savings over conventional, privately issued bonds. Also, the forgone tax payments on interest represent a subsidy.

## Rethinking the Notion of “Green Cathedrals”

If the public is to continue funding stadiums, several changes should occur. First, more vigorous, impartial examinations of the economic impact of a new development on the community should be made, and should be made public. This information might make it possible not to sacrifice programs important to the community in order to fund stadium development, as happened, for example, with Cleveland’s after-school programs and Maryland’s Sunny Day Business Development Fund.

Second, there must be a greater attempt to ensure that those bearing the cost of a stadium receive a clear benefit. This begins with increased franchise participation, either through financing obligations or the inclusion of a non-relocation clause in all stadium agreements. Also, game-day-related taxes and fees should be used to a greater extent.

Third, agreements should be structured so that franchises are not tax exemption. Franchises should be responsible for a minimum of abated property tax payments on the facility, akin to the payments made by the Gateway Development Corporation for Jacobs Field and Gund Arena. Also, the loopholes that allow for stadiums to receive the benefits of tax-exempt bonding should be closed. An attempt to do this was made in the 1986 Tax Reform Act. It included, however, a provision that allowed for bonding for up-front expenditures. This has allowed for stadium authorities to borrow an amount equal to the total estimated cost of construction and draw these funds down. Prohibiting this practice, as was proposed by Senator Daniel Moynihan in 1997, would eliminate the perceived federal subsidy.

Finally, and perhaps most important, franchises and local officials should expand planned developments to include supporting businesses, such as restaurants and hotels. Milwaukee’s Miller Park is a prime example of the failure of this principle, although recent actions by the Department of City Development to condemn and acquire property immediately east of the stadium site represent positive strides.

Professional sports franchises and the stadiums that they play in have an intrinsic value to a community. They represent what George Will has called the “crown jewel of a metropolis.” Their value in many regards is intangible and cannot be easily quantified in dollars and cents. With the recent growth of public involvement in stadium

finance, however, quantification has become necessary. The public must realize that professional sports is an industry like manufacturing, mining, or any other. If a blend of civic pride and economic reality can be achieved, citizens and policymakers can make more informed decisions on the future of public involvement in professional sports. In the end, our national pastimes will be preserved. ■

## DIRECTOR’S PERSPECTIVE

*continued from page 1*

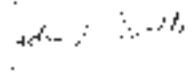
lights his and his colleague’s work in South Africa since the end of apartheid. Building subnational governments and including ways to finance local government activities is a huge challenge in this new government. Reschovsky and Chernick have made numerous trips to South Africa, and their advice is highly sought after by policymakers there.

Donald Kettl’s piece on performance management, meant originally for officials in the Bush administration, outlines his hopes for improved communication within and between agencies in the executive branch. Kettl is continually called upon by federal executive agencies and legislative committees for his insights on issues relating to public management. Back from a semester’s sabbatical for this coming fall, he will be teaching courses on the policy process and public management for both the domestic and the international degree programs.

This issue of the *La Follette Policy Report* includes two examples of graduate student work. Each spring the Workshop in Policy Analysis gives students real-world experience as analysts in government agencies. One of the projects undertaken for the City of Milwaukee this past spring considered the issue of snow and ice removal. After the severe winter of 2001, the city found itself exceeding its snow and ice removal budget by 67 percent, so an analysis of that operation was included in our students’ list of projects. A version of the students’ report, minus the detailed descriptions of their sophisticated use of econometric analysis, is reproduced here as an example of the kind of projects our students undertake that connects the classroom to the world of policy analysis and politics.

The final example of student work published here is a paper written by Jeffrey Sachse on the issue of public financing of sports stadiums, an ever-present controversy in big cities with baseball and football franchises. While the conventional wisdom among economists is that these ventures are money-losers for the public, a number of considerations must perennially be weighed. Sachse has done a good job of outlining the various factors that go into such decisions.

In other news, La Follette and the Department of Political Science have formed a joint Board of Visitors from whom our two departments can seek advice on a range of matters, particularly how to handle the growth we face as we continue to attract more students and positive attention. The group convened in May and plans another session in September. We look forward to working with them on an ongoing basis.



# Milwaukee's Snow and Ice Control Service

by Gordon Hintz, Anna Kettlewell, Erick Shambarger, and Tim Sweeney

*This article is an abbreviated version of a report prepared by students in the Public Affairs Workshop (PA 869) as part of their Master of Public Affairs degree requirements. Each spring semester, under the guidance of Professor Andrew Reschovsky, teams of La Follette graduate students work with officials in Milwaukee's Department of Administration to analyze various timely issues. The students who prepared this report would like to acknowledge especially the helpful staff in the Milwaukee Budget Office and the Department of Public Works, as well as Aldermen Mike D'Amato, Thomas Nardelli, and Bob Donovan. The full study is available upon request from the Publications Office of the La Follette School of Public Affairs.*

The National Weather Service estimates that in an average winter Milwaukee receives 47.5 inches of snow. Seventy percent of that snow typically falls between December and March. In December 2000, Milwaukee received 49.5 inches of snow, four times the December average of twelve inches. It snowed 27 out of 31 days that month. By the end of December, the city had exceeded its annual snow and ice operations budget by \$4,303,819, or 67 percent. Although the city cannot control the weather, it can control the level of snow and ice control service it provides. It can also control how the service is funded and administered.

## Background

The Milwaukee Department of Public Works (DPW) is charged with the responsibility of plowing all city streets. Of the \$7.5 million budgeted for snow removal in 2001, \$4.3 million came from the Solid Waste Fund, \$3.1 million from the Buildings and Fleet Division, \$159,000 from the Administrative Services budget. The current snow and ice policy requires plowing from curb to curb, following a "bare pavement" policy. The goal is to plow the whole street in a reasonable time frame to prevent ice from bonding to the pavement. Although DPW does not plow alleyways, it does plow all arterial and residential streets. City officials estimate that in 2000, city streets were plowed within 12.32 hours on average. Times varied, of course, depending on the severity of the storm and the type of snow.

The city relies heavily on multipurpose vehicles. Garbage trucks are equipped with snowplows when plowing is needed, and dump trucks used in summer construction projects are fitted with rear-attached electronic salt-spreaders. By relying almost exclusively on multipurpose vehicles, DPW reduces the number of vehicles not in use at any one time. By having fewer single-purpose vehicles, the need for storage is also diminished. Because DPW uses garbage trucks to plow the streets, however, sanitation services may be delayed by a snowstorm.

The snow and ice control policies have evolved into their current form over the last few decades. Technological improvements, political and social pressures, and the improved knowledge of DPW officials have led to steady improvement in snow and ice control. One of the biggest changes in snow and ice removal has been the

emphasis on plowing and salting early and often during a winter storm. Prior to the winter storm of 1978–79, it was common for the snow removal crews to wait for significant accumulation before plowing the streets in order to reduce the number of times trucks had to plow individual streets. While this strategy was more cost effective in the short run, streets that received several inches of wet snow before getting plowed often became glazed with ice which remained for most of the winter. This led to safety hazards and more expensive cleanup operations. Now, with greater emphasis on public safety, Milwaukee's snow and ice strategy involves pre-storm salting and early plowing of streets at the beginning of storms to prevent the snow and ice from bonding to road surfaces.

With improved technology, Milwaukee's snow and ice removal operations have become more efficient in several areas. Weather forecasting equipment, GIS routing systems, multipurpose equipment, and recognition of best practices have modernized the operations. Despite these improvements, however, snow and ice removal remains costly. Even in winters when snowfall is light and funds are not fully used, the majority of the budget is required to cover base costs for readiness, including staffing and procurement of equipment and materials. According to the City of Milwaukee's snow and ice control policy, "the goal is to restore safe motorist and pedestrian travel to minimize economic losses to the community and the industry when workers are unable to get to or perform their jobs, and to facilitate Fire and Police Department responses to emergencies."

According to Dave Lorbeske, superintendent of the Sanitation Division and coordinator for snow and ice control operations for Milwaukee, the emphasis on a high level of snow and ice removal service in Milwaukee began after World War II. Today, DPW sees a public mandate for a high level of service because of the perceived benefits of clean streets. Even when the budget is tight, DPW will plow all city streets to the pavement in order to maintain public safety and commerce.

Milwaukee's snow and ice control program has proven effective even in the worst of storms. While comparisons between cities and their services are imprecise for several reasons, examining a storm that hit much of the Midwest in 1999 can be useful. Detroit and Milwaukee, for example, receive similar annual snowfall, yet the

snow removal policies and the money spent on them differ greatly. Detroit's snow and ice removal budget for 1999 was \$1.5 million compared with the \$8.6 million spent by Milwaukee. Part of this difference can be explained by the fact that Milwaukee clears all arterial and residential streets, while Detroit clears only major thoroughfares.

On January 2–3, 1999, more than a foot of snow fell on both Detroit and Milwaukee. With substantial effort, Milwaukee kept its streets open for operation, and schools were open by January 4. Detroit residents experienced a different situation. Schools were closed more than five days in the following two weeks, keeping 180,000 students out of school; delivery trucks were unable to get to small neighborhood food stores; Detroit Metropolitan Airport was crippled not only by the weather, but because workers were unable to get to work; and more than 15,000 addresses did not receive mail for more than two weeks. While storms like these may be uncommon, Detroit did not have the resources to address

these problems, and the storm's impact on safety and the economy was severe. By comparison, Milwaukee's more costly service benefited citizens and saved millions of dollars by keeping the streets open.

The decision for schools to remain open is also often based on the condition of the streets and the ability of buses and cars to transfer students safely. If children are unable to attend class, some community benefit associated with the education is lost, and if parents stay at home with a child, some Milwaukee businesses may lose productivity and families may lose income.

### Factors to Consider

To study the issue of snow and ice removal, we had to consider several factors: what other cities are doing and have done and at what cost, how budgets are drawn up when weather is unpredictable, how to measure the type of storm and the effectiveness of the removal op-

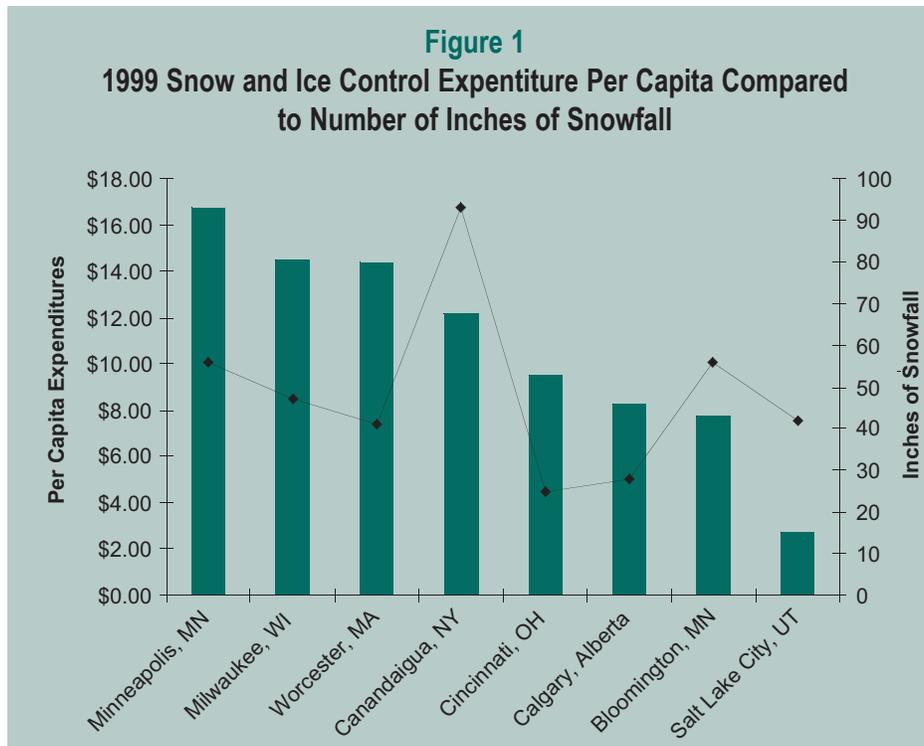
erations, how parked cars are handled during and after snowstorms, and the effect that plowing has on garbage collection.

### Comparison with Other Cities

Every city that receives heavy snowfall has its own unique characteristics, including climate, street layout, and geography. Cities base their level of service on historical, cultural, political, and operational factors that have evolved over time. Because of the unique factors surrounding every city's snow and ice operation, comparing costs or services of two or more cities can

be a significant challenge. To demonstrate how Milwaukee compares to other cities, we have selected several cities that receive different levels of snow and ice each year.

Figure 1, based on International City/County Management Association (ICMA) data, shows that Milwaukee has some of the highest per capita expenditures for snow and ice control of cities with heavy amounts of snow, with each resident paying more than

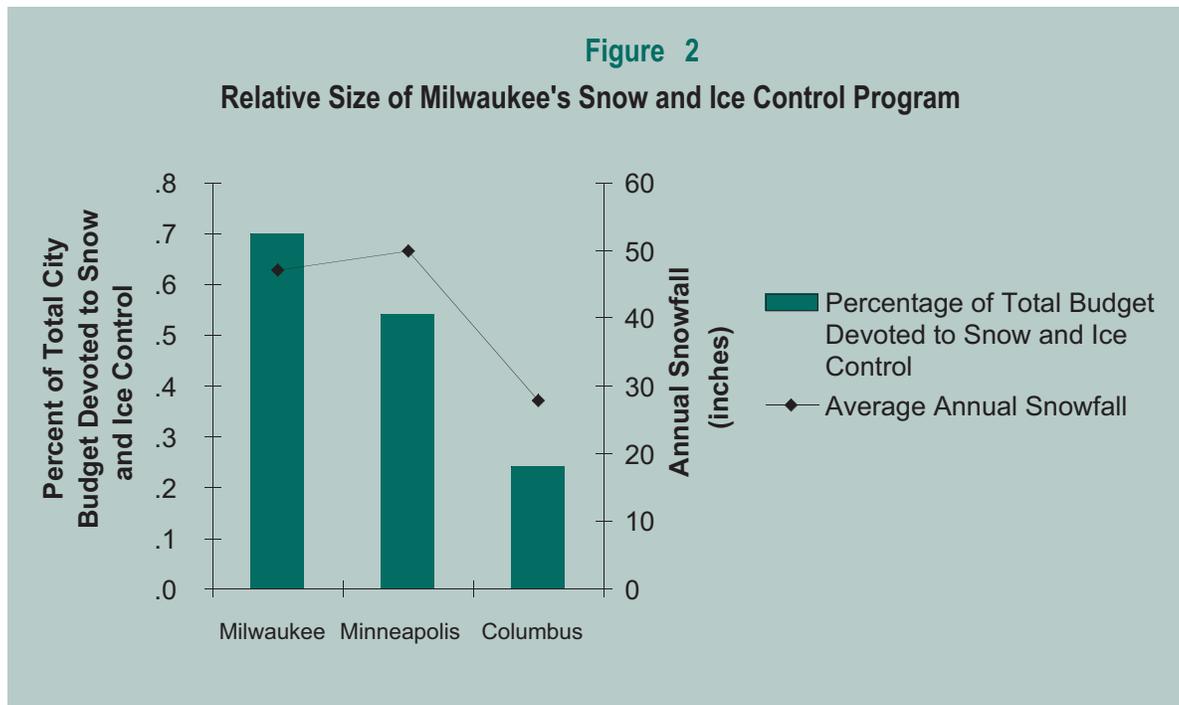


\$14 in 1999. The data include only two explanatory variables for this high cost of service—snowfall and lane miles in the city. A regression analysis of thirteen cities shows that only snowfall is a statistically significant variable. Lane miles are probably not statistically significant because they are most likely correlated with population. In the regression, population is controlled for because we look for per-capita cost estimates. Forty-five percent of the variation in per-capita costs can be attributed to snowfall and lane miles. Since Milwaukee had high snowfall (59 inches in 1999) and many lane miles to plow (7,112), it is reasonable to expect high per-capita costs. Yet Milwaukee still spends slightly more than what would be expected. After applying the regression model, however, Milwaukee's actual snow and ice control expenditures exceed the predicted per-capita expenditures by approximately 50¢ per person. In a city of 596,974 citizens, that amounts to approximately \$300,000 more than predicted for a city with as much snowfall and as

many lane miles. Figure 2 shows that Milwaukee spends a higher proportion of its budget on snow and ice control than Minneapolis or Columbus, even though its snowfall is not inordinately high.

### Budget Challenge

Because of uncertain weather, no precise method of budgeting for snow and ice removal can be created. Besides average annual snowfall, several other factors affect the actual cost of snow and ice removal operations. The air temperature, rate of snowfall, time of day and week, and the overall severity of winter weather also affect the cost of operations.



While four inches of snow is used as the theoretical standard for when the city will plow, it actually serves as more of a budgetary tool. When to plow and salt is a reactive and subjective decision that DPW makes “to provide the highest level of public safety.” No two snow events or circumstances are the same, so each decision requires careful consideration. For instance, a three-inch snowfall in January may require plowing and anti-icing on the roads, while a six-inch snowfall in late March followed by warmer weather may require little action. Timing also influences plowing and de-icing decisions. When snowfall occurs on a weeknight, the streets will be plowed aggressively for the following morning rush hour. On a weekend, when there is less public safety risk, DPW will take more time to clear the streets. Personnel costs vary depending on whether plowing occurs during the normal workday or on a holiday or weekend when employees must receive overtime pay.

### Parking

Because of illegally parked and abandoned vehicles, the city must plow some streets multiple times. One consistent comment from all of our interviews with other cities was the high cost associated with illegally parked cars in winter. While no exact data are available on the additional expense associated with these multiple plowings, DPW managers estimate that multiple plowings add substantially to the snow and ice removal budget. Collecting data on the number of times plows return to streets because of parked cars would be extremely helpful in measuring service and costs.

On most nights, parking is typically allowed on only one side of a street. When snowfall is heavy and the city declares a snow emergency, vehicles cannot be legally parked on certain streets at all. DPW is responsible for enforcing this policy by ticketing and towing offending vehicles.

The parking problem is the most severe on Milwaukee’s east side. Parking there is normally allowed on both sides of the street, but on only one side of the street during snow

emergencies. However, due to a lack of parking lots and garages, residents often ignore snow emergency rules and remain parked on both sides of the streets. Cars become covered with snow, and when the owner of a car then moves the car, this snow typically gets piled into the road. Often when the drivers return to park on the street, they typically park farther from the curb to leave room for passenger doors to open. Parked cars continue to move toward the center of the road until the street is no longer wide enough for two-way traffic. This is especially dangerous if emergency vehicles need access to the street. Tow trucks remove illegally parked cars, but there are usually more cars than the current towing operation can handle. DPW is unwilling to tow aggressively because of the scarcity of off-street parking. According to department sources, they are currently looking to renew old agreements with public schools to allow residents to park in public school lots during snow emergencies.

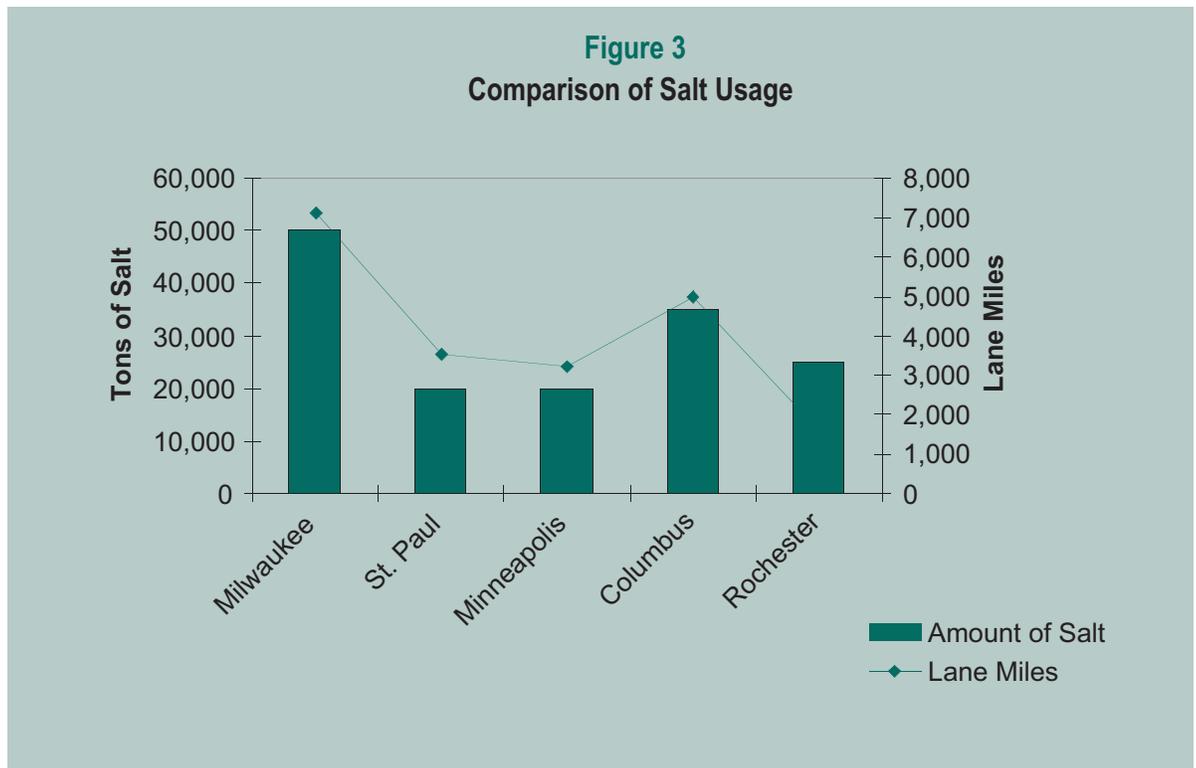
Throughout the rest of the city, DPW parking checkers have struggled to keep pace with parking offenders. The city had previously employed 40 parking checkers but recently has added an additional 20 checkers in an effort to enforce existing parking regulations. DPW officials also note that limited space in tow lots in December hindered towing efforts. The towing that was done may have assisted the plowing efforts considerably, however. A February 14, 2001, article from the *Milwaukee Journal-Sentinel* reports that after parking checking responsibilities moved from the Police Department to DPW, the number of parking tickets written fell by 5 percent. The intention of moving the parking checkers from the Police Department to the DPW was to increase the enforcement of parking regulations and to increase revenue for the city. An unintended consequence of the move has been the reduction in tickets issued by the Police Department's regular patrol officers. While it may be too early to evaluate this move, the initial result is that Milwaukee has brought in less revenue than originally projected.

### Garbage Collection

Because garbage trucks fitted with plows are used for snow and ice removal, garbage collection crews sometimes must plow in lieu of collecting garbage after snowstorms. In the winter, residents are not required to put their garbage on the curb, since collection on specific days is not guaranteed due to the use of the garbage crews to plow and salt roads. Rather, residents place their garbage cans in an accessible location not on the curb, and when garbage collection is possible, workers must walk around houses to find trash receptacles before unloading them into trucks. This clearly reduces the efficiency of trash collection and delays trash pickup. In the winter of 2001, when some refuse spilled over into the streets, it became a major sanitation issue.

### Analysis

How much service the program should provide is a complex question. A more fundamental question is what level of snow and ice control service DPW currently provides. The answer even to that question is surprisingly elusive, since measuring service benefits quantitatively is difficult. Although the cost of the program can be easily measured, the benefits of snow and ice control cannot. The two major objectives of the program are to minimize the number of snow- and ice-related traffic accidents and avoid disruptions to everyday life and to economic activity caused by winter storms. Selecting criteria to measure these outcomes is



difficult. One possible criterion for measuring public safety is the number of traffic accidents the snow removal program precludes. For instance, we could measure accidents on a plowed street or accidents on an unplowed street compared to accidents on those same streets during good weather. This measure is not necessarily practical, because it is difficult to prove how many accidents were caused strictly by poor street conditions. Furthermore, if unplowed streets prevent cars from moving at all, then poor service might actually reduce accidents by keeping drivers off the road. Measuring public safety is therefore beyond the scope of this analysis.

Keeping the city “open for business” after a snowstorm is another possible outcome by which to evaluate service level. To measure this, one could examine sales of businesses, delays and cancellations in public trans-

portation, school closings, and emergency vehicle response times. The time and cost required to collect this data, however, outweighs its benefits. The bigger conceptual problem is determining whether people stayed home for reasons unrelated to the quality of the roads or because of unplowed roads.

Because outcomes are difficult to quantify, a growing practice within city governments across the country is to evaluate service using performance measures. Performance measures quantify the relationship of the inputs and outputs of a service. Inputs primarily include costs, but can also include man-hours, and number of trucks used. Outputs include number of lane miles plowed, amount of snow plowed, and the quality of that plowing. DPW does measure some outputs associated with snow and ice removal. The department knows the average time it takes to do a first-run plow, how much salt is used, its total expenditures for recent years, and other figures. However, more figures could be recorded after each plowing or salting, and entered in a data management system.

## Policy Options

To stay within the budget in winters with above-average snowfall, the city has several policy options. These include reducing service levels (in a variety of ways), removing cars from streets more effectively, changing administrative practices, and budgeting carefully.

### *Reducing Service Levels*

Although Milwaukee residents seem generally pleased with the current level of service, several options for reducing service may be feasible. The current policy is to send crews on a “full” plow when snowfall reaches four inches. That standard could be increased to six inches. Another option would be to increase the time allotted to clear the streets, reducing overtime expenses.

Salt application also could be reduced. Figure 3 shows how Milwaukee compares with four other cities in its use of salt. Although reductions in service using any of these methods would cut costs for the city, safety could diminish. Political obstacles to service reduction would also arise.

### *Removing Parked Cars*

Because of illegally parked cars, plows must return to the same streets repeatedly. One option for dealing with illegally parked cars is to increase the availability of off-street parking. Some arrangements are already in process with schools, but area businesses or churches also might be persuaded to make their lots available (for a fee) during winter storms. With more off-street parking, the city would be freer to ticket and tow more aggressively.

Another option is to increase fees for parking on the street at night to a rate higher than the off-street lots. If enough off-street lots were available, drivers might opt for the lower-priced off-street lots, making it easier for the plows to navigate the streets.

## *Administrative and Budgeting Changes*

One way to lower costs might be to reduce overtime pay for plow drivers. If workers were scheduled on rotational shifts, overtime pay would be less necessary. Labor contracts may inhibit such a change, however.

Establishing a system of performance measures would enable the city to determine the efficiency, effectiveness, and cost-effectiveness of various snow removal procedures. The city might then base its snow removal budget on formulas. Another budgetary alternative might be to set up a DPW snow contingency fund, to be drawn on only in harsher winters.

A third, less tried option would be to purchase snow insurance. Presumably the city would pay more in premiums than it would collect from the company (in order to make it profitable for the insurance company), but the city would have to decide how much reducing the financial impact of a winter like 2000-01 is worth.

A fourth alternative would be for DPW—separately from the rest of the city budget—to establish a snow contingency fund. It would build the fund in years when snow and ice removal costs were under budget and draw on it during harsher winters. Keeping it separate from the city’s general fund would protect it from other emergency budget requests.

## Recommendations

Our examination did not reveal substantial inefficiencies in the way DPW provides service. Moreover, cuts in service would likely cause a public outcry, and both public and private sectors would suffer. We therefore recommend that current levels of snow and ice removal continue. The following practices, however, could be implemented in order to reduce costs while maintaining current service levels:

- Begin rotational scheduling of plow drivers during the winter;
- Increase off-street parking through cooperative efforts with private sector establishments;
- Increase towing during snow emergencies;
- Adopt performance measures that factored in (1) the amount and type of freezing participation; (2) lane miles plowed; (3) rating system for streets after plowings; (4) number of plow passes on the same street after a single snowfall; and (5) detailed records of expenditures, including overtime paid for snow and ice removal operations.
- Create a snow contingency fund within DPW.

Milwaukee’s Department of Public Works provides excellent snow and ice control service to the residents of Milwaukee. Implementing the above recommendations would allow DPW to maintain its tradition of excellent service but at a lower and more consistent price. ■

*continued from page 7*

serious threat to social welfare in South Africa. Rather, it suggests that additional funding from the national equitable share, perhaps in the form of categorical grants, would be appropriate.

**The Welfare Component.** Provincial governments in South Africa finance a set of grants paid directly to needy individuals and collectively called social security, as well as a number of social welfare services aimed at both poverty alleviation and social development. The largest social security grant is for poor, elderly individuals. Other grants go to disabled individuals whose disability prevents them from working, to persons caring for foster children, and children with disabilities. The newest social security grant is a small grant for children under the age of seven who are being raised in poor families. The national government sets eligibility requirements and payment levels for the social security grants, while the administration and financing of these grants is a provincial function, with funding coming primarily from provinces' equitable share allocations.

In principle it is easy to apply the costed-norms approach to social security. National legislation has defined both the eligibility criteria and the grant amounts for each program. Multiplying the number of eligible recipients by the grant amounts provides, by definition, a measure of the costs of meeting the government-determined "norms and standards" for the social security programs. As is usually the case, however, implementation is complicated because of the absence of appropriate data.

Although data on the number of current beneficiaries is easily accessible, the use of these data as a basis for allocating social security funding would be totally inappropriate. First, the existing spatial patterns of social security benefits still reflect to some extent apartheid-era practices of restricting the use of some benefits to whites. Second, using current beneficiary data would also favor the provinces with the most highly developed administrative apparatus, namely Gauteng and the Western Cape. Finally, the use of beneficiary data in the allocation formulas would destroy any incentive for provinces to purge the rolls of ineligible individuals.

The FFC's approach is to rely primarily on census data to obtain an objective measure of the potential population eligible for various social security transfers. Income-based means tests specified in social security regulations are then applied to the demographic data in order to estimate the number of individuals eligible for each type of cash transfer. For example, to calculate eligibility for the old age pension, data on the income distribution of individuals characterized by both age and gender are used. For each social security grant, the esti-

mated number of eligible individuals is then multiplied by a monthly grant amount specified in current legislation.

## Evaluating the FFC Proposals

The constitution specifies that an equitable share of nationally raised revenues must be allocated to provincial governments so that they will have the resources necessary to fulfill their constitutionally mandated responsibilities to deliver public services. The FFC has proposed a five-part formula that is to be used to calculate each province's allocation. Each province can treat its allocation as an unconditional grant. Each of the five sub-formulas calculates what can be called a "notional" amount, namely, an estimate of the money needed to achieve a specified national goal. Subject, however, to the requirement that they fulfill their constitutionally mandated responsibilities to provide certain basic services, provincial governments are free to spend their allocation in any way they please.

The FFC proposals highlight the conflict faced by all countries with multilevel fiscal systems. On one hand, it can be argued that national goals such as economic growth and development, poverty reduction, or the elimination of illiteracy can best be achieved if the national government re-

tains tight control over the allocation of public resources. On the other hand, local officials' superior knowledge of local conditions and preferences suggests that there will be substantial gains in efficiency if decisions about the provision of publicly provided goods and services remain in the hands of these officials. Local control over spending decisions is also important if local political officials are to be held accountable for their actions.

Given that most provincial expenditures in South Africa must be financed by grants from the central government, the conflict between centralized and decentralized control becomes a question of whether grants are conditional or unconditional. The fiscal instrument best suited to achieving nationally defined objectives for specific sectors is a set of conditional grants. The strings attached to conditional grants, however, create a conflict with the objective of enhancing local control. For promoting local autonomy, unconditional aid seems more appropriate. Both types of grants are permitted under the South African constitution, and in principle, a combination of conditional and unconditional grants can be used.

The FFC has chosen to emphasize the unconditional approach. Provinces are given the opportunity to reallocate resources so as to choose their preferred mix of

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**The national government faces the difficult task of defining a set of "norms and standards" for each constitutionally guaranteed public service.**

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expenditures, for example, between health and education. Reallocation is defined by reference to a base position given either by previous budgetary patterns or by the notional or indicative allocations indicated by the equitable share formulas for the specific subsectors—health, education, or welfare—of the overall social sector. Within a specific subsector such as health, the province can also make tradeoffs between different levels of care, choosing to allocate more money to primary care clinics instead of hospitals, or toward prenatal care rather than care for the elderly. In making these resource decisions, however, the province is both guided and constrained by minimum national standards for primary care.

Advocacy groups and service providers (including their representative national departments) have strong preferences for particular services, such as welfare or health care, or even for particular subcategories of service within these broad areas, such as social welfare services or district hospitals. Interest groups would likely prefer an intergovernmental grant system that guarantees certain amounts of spending targeted to their specific concerns. The result is proposals for conditional grants and for regulations meant to control how provinces spend their fiscal resources. One way to impose floors on spending in specific areas is to specify input ratios, such as a required number of teachers per pupil.

The FFC has resisted these pressures and has opposed the broader use of conditional grants for financing general provincial functions. Unconditional grants allow provincial governments the freedom to determine how best to provide public services given local conditions. With a fixed budget calculated on the basis of the costs necessary to achieve specific goals, provincial governments are forced to take account of the corresponding reduction in other services implied by an increase in any given service. Using a costed norms approach to determining the amount of the global equitable share to the province also provides each government an incentive to find innovative, cost-saving ways to meet the social service goals specified by the national government. The incentive comes from the fact that if a province is able to save money by using more efficient service delivery methods it will not have its allocation reduced. Instead, such efficiencies will free up monies which can be used to enhance services, either in the particular sector of savings or elsewhere in the provincial budget.

The FFC, in presenting its recommendations, has emphasized that an integral part of the costed norms approach to intergovernmental finance is the monitoring by the national government of the extent to which

provincial governments achieve the norms and standards for public service delivery for the basic social services mentioned in the constitution. The costed norms approach can be helpful in placing limits on the ability of provinces to reallocate resources in ways that are inconsistent with national objectives. If grant amounts are linked to the cost of providing services, and service outputs are monitored effectively, then the annual negotiation over the grant amount can be used to enforce the service standards. If, for example, a province continually reallocates large amounts of its allocation away from the health sector and negative consequences in health out-

comes or services provided can be documented, then these negative outcomes provide a basis for re-negotiation of the province's grant level, or an agreement by provincial governments to redirect their spending in a manner consistent with national goals. Thus the monitoring process is es-

sential in getting provinces to realize that increased spending in one area means that there will be service delivery consequences in other areas.

On the other hand, the general principle that underlies the unconditional grants is that the provinces are not just the agents of the national government, but separate and accountable democratic units. The more the national government constrains their choices, the more the system departs from that ideal and the harder it is to move toward the goal of a more decentralized system of public finance.

If the costed-norms approach is adopted, the focus of national-provincial consultation would be on ascertaining the true costs of providing the public services for which provinces are responsible. Although the national government has an incentive to argue that the costs of meeting national social service goals are relatively low while provincial governments have an incentive to argue that costs are relatively high, both spheres of government would be able to base their interactions on the collected data that are needed to support cost-based allocation of the equitable share. The provincial governments and the national departments thus share an important interest in the quality and timeliness of such data.

One further advantage of the costed-norms approach is that it helps highlight the opportunity costs associated with public sector wage increases. Given the dominant importance of wage costs in provincial budgets, national wage-setting patterns have important implications for the ability of provinces to deliver required social services. The costed-norms approach is particularly useful when public sector wages are negotiated nationally—

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**The strings attached to conditional grants create a conflict with the objective of enhancing local control . . . . Unconditional grants allow provincial governments the freedom to determine how best to provide public services given local conditions.**

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national wage bargain agreements are immediately translated into provincial costs of service delivery, forcing the national government to increase provincial governments' equitable share, reduce the service norms for the provision of social services, or raise national revenues.

The costed norms approach presupposes that it is possible to estimate costs of providing basic services with sufficient accuracy to allocate provincial shares. The ability to estimate costs, however, varies by type of public service. In particular, the more diffuse the type of service offered, the more difficult it is to estimate costs. In the welfare sector, the costs of cash assistance are easier to determine than are the costs of social welfare services. In health, it is more feasible to tabulate costs of primary health care services than of district hospital services. The solution to this problem that was adopted by the FFC has been to place those service categories that are most difficult to cost out into a basic grant, which would in effect become a kind of residual grant.

Even as more is learned about estimating cost differentials in South Africa, there will always be differences in the degree of firmness which can be attached to the cost estimates for different services. Hence a question arises as to whether there might be an unintended bias in the allocations within the equitable share toward those services that are costed out and labeled, such as education, versus those that go into the basic grant. If there proves to be a tendency for the costed services to crowd out those services whose costs are more difficult to measure, and hence insufficient funds are allocated to the basic grant, a decision will need to be made to adjust upward the provinces' share of the total equitable share and/or adjust downward the norms and standards implied by the social sector formulas. Because the costed norms approach is in its infancy, we do not yet know whether systematic biases will emerge. The potential difficulties, however, only highlight the importance of systematic monitoring of service outcomes and of generating the best cost estimates possible for all types of services.

### **Costed Norms Approach and Redistribution**

South Africa faces difficult economic tradeoffs in trying to overcome the extreme differences in income and wealth that exist throughout the country and the inequities in public services that are one of the primary legacies of apartheid. The income divide is at the same time both racial and geographic. Provinces with higher proportions of whites are substantially richer than other provinces. Hence the formulas for allocating

funds to the provinces help to translate the tradeoffs into concrete resource allocation decisions.

As with grant formulas in all countries, the proposed formulas start with the population of the province as the basic cost allocator. Given the prior history of inequities in South Africa, equal aid per capita represents an enormous increase in redistribution, and an improvement in social equity. If we treat equal aid per capita as a kind of fiscal baseline, however, then the difference between an equal per capita allocation and the proposed allocation in the costed norms formulas reflects the degree to which South Africa chooses to redistribute resources to more needy groups.

Operationally, the degree of redistribution is determined through the choice of various "weights" used in equitable share formulas. In the education and health components and in the basic grant, higher weights are given to the poor. These weights reflect the current state of knowledge concerning the extra costs that are necessary to provide the poor with a set of basic public services.

At this point the knowledge base is thin and the values chosen for the poverty weights are at best educated guesses of the true nature of the relationship between poverty and the production and provision of various public services. An important goal of future re-

search is to explore these cost relationships and to generate more accurate estimates of the underlying costs of providing basic public services.

It is, nevertheless, unrealistic to think that the costs can ever be measured perfectly. The assignment of poverty weights will always to some extent reflect political judgments about the appropriate degree and rate of redistribution. The goal of the costed norms approach is not to replace political judgment, but to give political decision-makers as much information as possible about the underlying costs of providing public services to various groups.

The costed norms approach can also contribute a better sense of the opportunity costs of changing the weights assigned to poverty and other characteristics of the population. As one lowers the weights, what are costs in terms of basic services not provided or delayed? As the poverty weights are raised, wealthier provinces are increasingly forced to seek alternative revenue sources, including private sector provision and fees for service.

What will be the reaction of individuals and governments in the wealthier provinces? What are the implications for "nation-building" of the choices made? These are some of the larger issues that will have to be resolved as South Africa moves toward a more decentralized system of government. ■

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**The general principle that underlies the unconditional grants is that the provinces are not just the agents of the national government but separate and accountable democratic units.**

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