Measuring Government Management Capacity: A Comparative Analysis of City Human Resources Management Systems

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ABSTRACT

This article fills a gap in both the public management and human resources literatures by applying a conceptual model supported by a criteria-based evaluative framework to assess and compare the nature and capacity of city government human resources management systems. Various management reforms have swept through many American governments recently, but practitioners and researchers have not reflected carefully on how these reforms contribute to management effectiveness. One management system that has received relatively little systematic attention is human resources management. The existing research about assessing human resources is sparse, focuses on the private sector, and fails to converge upon a set of criteria for evaluating human resources management systems comprehensively. In earlier work, we proposed a theory that dissects the black box *of government management to identify key management systems and define their contribution to management capacity and to overall government performance. In this article, we refine this model by developing a set of criteria that serve as indicators of the effectiveness of human resources management systems. We apply our framework and criteria to a sample of cities in an empirical analysis that measures human resources management capacity and controls for two key environmental contingencies: unionization and government structure. We find that higher capacity governments are able to achieve better human resources outcomes, and that more unionized governments and those that lack a senior professional administrative officer generally have lower human resources management capacity.*

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How governments translate resources into services is a question of long-standing significance to public administration,

political science, and public policy analysis. Analysis of this issue most often has focused on contingent influences on service delivery: level of economic development, partisan influence, and political/administrative structural arrangements. This article is an exploratory examination of another set of influences that are central to the question of performance: management systems and management capacity. Government management systems and capacity are key components of the *black box* of public administration; they comprise a set of intervening variables in the equation that relates public production inputs and policy and program performance.

In this article, we apply a model of government management developed in our earlier theoretical work to examine empirically variation in management systems and capacity across governments. Specifically, we evaluate human resources management systems in twenty-nine of the largest cities by revenue in the United States,[1] and we relate the capacity of these systems to specific human resources management outcomes. We also account for the extent to which two important environmental contingencies—differences in forms of urban government and level of unionization—influence human resources management.

We have chosen to pursue analysis of one management system—human resources management—for two reasons. First, this area of government management has been a target of many significant reform efforts, beginning with the 1883 Pendleton Act that first established the modern civil service and continuing through the contemporary downsizing and streamlining efforts of the National Performance Review and its local-level reinvention counterparts (Ingraham 1995; Kettl et al. 1996). Insights into the nature of and impacts on human resources management thus capture the interest of researchers, politicians, and public managers alike. Second, while human resources management functions receive considerable attention in the literature, as we will illustrate below, careful explication of how to measure and evaluate public human resources management systems is lacking and presents a compelling research opportunity. On this basis, we begin to address five primary research questions in this analysis:

- How do major city governments in the United States vary in terms of their human resources management systems and capacity?
- Is variation in human resource capacity associated with variation in critical environmental contingencies facing city governments?

[1]Based on U.S. Census figures for FY 1995.

- Is variation in human resource capacity associated with variation in the outcomes of human resources management systems in the cities?

- Is variation in critical environmental contingencies associated with variation in the outcomes of human resources management systems in the cities?

- What do these findings suggest about the linkage between management capacity and government performance generally?

The empirical work presented here is exploratory. It is a first attempt to survey the characteristics of human resources management systems comparatively, to quantify the level of management capacity that governments derive from these systems, to control for the political context, and to measure management outcomes. We are able to test hypotheses about the influences of capacity, government structure, and labor-management relations on some human resources management outcomes in a rough way and to draw some preliminary conclusions. In short, our findings demonstrate that management capacity can be quantified and that it does have an independent impact on management effectiveness. This provides some insight into two modern reform trends: the movement from patronage to modern management systems and the transformation of rigid union contracts into more flexible partnerships. It also permits us to develop a future research agenda that homes in on the relationship between government management systems, the political environment, the quality of government management, and—ultimately—policy performance, more directly and substantially.

The structure of the article is as follows: We first briefly present our earlier theoretical work and describe the larger research project that serves as the empirical context for this study. We next review the literature in which this work is grounded. Then we describe the framework for this analysis, state our hypotheses, and explain our research methods. Finally we present and discuss our findings, draw some preliminary inferences, and conclude with an outline of future research directions.

THEORETICAL AND EMPIRICAL SETTING

Comparative assessment of governments is founded in the policy analysis literature. Early efforts focused at length on the extent to which socioeconomic conditions, the development of political institutions, and the party competition and control

contributed to different policy characteristics and general level of program delivery (Gray 1973; Hofferbert 1966; Lineberry and Fowler 1967; Walker 1969). Intergovernmental influences on resources, the scope of administrative discretion and influence, and administrative reform also have received significant attention (see, for example, Bowling and Wright 1998; Schneider 1988; Carnevale 1995). Finally, more recent analysis addresses how administrative capacities and structures relate to measurable differences in public programs and policies (Lynn, Heinrich, and Hill 1999; Milward and Provan 1998; Sandfort 1999).

Although the specific characteristics or qualities of administration that are identified in these later analyses of administrative impact have varied, there is growing agreement that influences associated with administrative arrangements do matter to the efficacy of the policy and program delivery system. In many respects this new consensus has common sense appeal, but its late emergence attests to the daunting methodological challenges of specifying and measuring the complex dimensionality of government administration and the multiple and interrelated influences it is likely to have. Further, assessing the potential impact of the administrative black box on government performance requires that we formally acknowledge the profound influence administrative activities have in shaping policy and program objectives and outcomes.

As we have explained in earlier work, we propose that one approach to dissecting the government black box and understanding its operation is through the analysis of the infrastructure of public administration—which we call management systems. The goal of our broad research agenda has been to develop a comprehensive and valid evaluation of government management that at once supports fruitful academic study, effectively communicates the nature and results of government management systems to citizens, and assists public managers to understand and learn about successful management practices. In 1997, we initiated this process by proposing a preliminary model of government management performance. Later, we further developed this early model into a conceptual framework that can support comparative empirical analysis.[2]

We have argued elsewhere that government's administrative systems can contribute to an overall dimension of management capacity. We have defined this capacity as government's ability to develop, direct, and control its resources to support the discharge of its policy and program responsibilities (Ingraham and Kneedler 2000b). A government's ability to marshal its resources is housed within its core administrative functions; it involves

[2]We first presented our theoretical framework for examining government management at the fourth national Public Management Research Conference in November 1997. This early model is forthcoming in Jeffery L. Brudney, Laurence J. O'Toole, and Hal Rainey, eds. *Advancing Public Management: New developments in Theory, Methods, and Practice*. Washington, D.C.: Georgetown University Press. We have since refined our conceptualization of government management, as presented in a chapter forthcoming in Laurence E. Lynn Jr., ed. *Models and Methods for the Empirical Study of Governance* Washington, D.C.: Georgetown University Press.

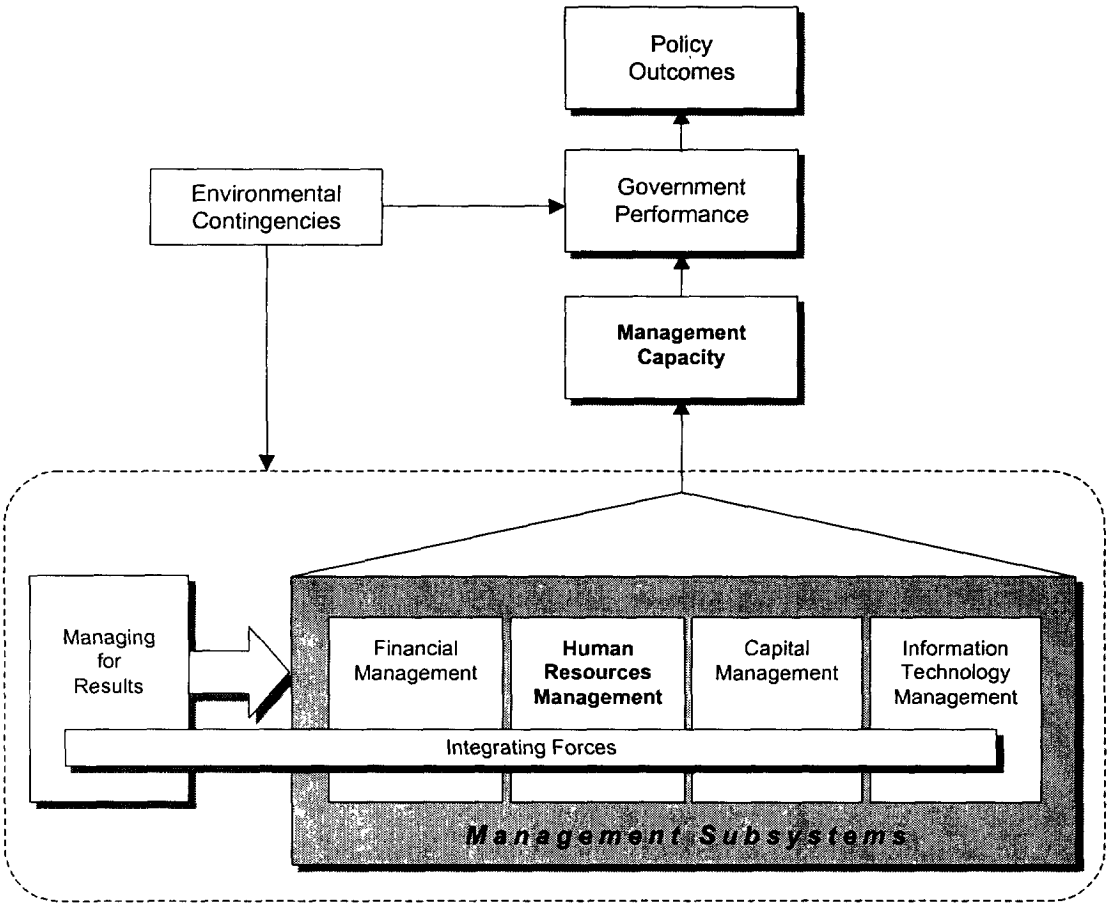
generic staff activities such as financial management, human resources management, capital management, and information technology management. These activities, immersed in a context rich in political exigencies, interact in highly complex ways to influence a government's performance.

Management capacity, in turn, is a necessary antecedent to effectiveness in government organizations because it shapes and supports longer-term performance capabilities (Ingraham and Kneedler 2000b). We have argued that management capacity is itself forged not only by the qualities of the various management systems it encompasses, but by the absence or presence of integration across the systems and by the absence or presence of a system of managing for results. The presence of both results-oriented management and integration will, we argue, optimally orient government capacity toward the pursuit of specific goals and objectives. Exhibit 1 shows our model of government management capacity.

This model undergirds a major research initiative of the Alan K. Campbell Public Affairs Institute at the Maxwell School of Citizenship and Public Affairs at Syracuse University, known as the Government Performance Project (GPP). The GPP is a five-year effort, funded by the Pew Charitable Trusts, to rate the quality of management in state and local governments and selected federal agencies in the four areas depicted in exhibit 1: financial management, human resources management, capital management, and information technology management. To accomplish as comprehensive an evaluation as possible, the GPP relies on a multimethod data gathering effort that includes a substantial written survey, collection of archival documentation, and extensive follow-up interviews with government actors and external stakeholders.

The GPP analysis depends fundamentally on criteria-based assessment. The use of this type of assessment approach is well documented and supported in the evaluation literature (Patton and Sawicki 1986; Easton 1973; Rossi and Freeman 1989; Weimer and Vining 1992; Kaplan and Norton 1996), and it also forms the basis of several well-known and accepted government assessment schemes (see, in particular, the Baldrige National Quality Program and the President's Quality Award Program). Like other report-card driven schemes, our use of criteria explicitly focuses data collection and analysis efforts around stated normative assertions about the characteristics of good management. By developing and applying a scheme of criteria that represents the desired characteristics of government management systems and the various functions and activities they comprise, we identify the

Exhibit 1
The Overall Government Management System



particular strengths and weaknesses of each government's management systems and the degree to which they affect the government's overall ability to manage. In short, we have chosen criteria that characterize a state of high management capacity; we also recognize that any of a wide array of managerial tactics can be successfully applied to achieve high capacity levels.

THE STATE OF PUBLIC HUMAN RESOURCES MANAGEMENT LITERATURE

Given this theoretical backdrop, we now set the stage for analysis of our research questions by briefly describing the state

of knowledge about human resources management systems. We will discuss the literature about personnel functions first, and then we will characterize key aspects of the public personnel environment that have important impacts on these functions. We posit that two contingent influences are critical: the political structure of urban governments and the extent to which local public workforces are unionized.

Organizations boil down to people; thus the ability to obtain and retain critical human skills and talent—the essence of human resources management—is fundamental to effective management and to organizational performance more broadly defined. Research that focuses on the linkage between public human resources management systems and government performance is sporadic and limited, however. One explanation for the paucity of work in this area is that public human resources systems have typically been equated with civil service systems as separate from executive managers or leaders. Moreover, the uniform, bureaucratic organizational structure of civil service often is viewed as counter to the prime concerns of senior managers and leaders: strategic management and long-term performance. As Perry and Mesch (1997, 24) point out, "The managers perceive personnel specialists as obstructionists, and personnelists perceive line managers as uncooperative and uninterested." Thus public personnel systems are traditionally viewed as obstacles to, rather than enablers of, government performance.

Furthermore, perspectives on the role of human resources management systems in the context of city government vary sharply. Saltzstein (1995, 50), for example, argues that "[a] creative role for the personnel administrator is one that infuses the organization with the values of the personnel professions. In local government, personnel values are not by nature important ones . . . their natural constituency may well be less powerful than others. . . ." By contrast, a major city responding to the 1999 Government Performance Project survey observed that "[t]he Human Resources Department is shifting to a leadership and consultative role . . . and (strategically) partnering with city management." This is congruent with the arguments of Perry and Mesch (1997, 25), who also characterize emergent human resources management practices and systems as "strategic" and note that a strategic human resource model places emphasis not on personnel values, but on ". . . tracking performance against mission related goals in areas such as product quality, service delivery, and customer satisfaction."

In the face of this array of views, empirical research that evaluates specific human resources management functions has

received considerable attention in recent years (Fitz-enz 1994; Collins 1997; Martinez 1996; Delaney and Huselid 1996; Caudron 1999; Gooden 1998; Laabs 1996; Roberts 1996), and many studies have focused on the organizational-level impact of human resources management practices (Martinez 1996; Markowich 1995; Davidson 1998; Ulrich 1997; Fitz-enz 1994). The literature also includes studies that focus on the performance effects of specific human resources management functions, such as training (Knoke and Kalleberg 1994) and selection (Huselid 1995). Others have examined the influence of a collection of human resources management practices on organizational outcomes (Delaney and Huselid 1996; Huselid 1995; Huselid and Becker 1996). Notably, however, much of this work has been set in the private sector.

Oddly enough, human resources management has rarely been examined as a complete system in the context of its links to an organization's overall potential to perform, though some scholars have begun to move in this direction (Tsui and Gomez-Mejia 1988; Huselid 1993; Ulrich 1997). Huselid, for example, attempts to characterize human resources management systems more comprehensively, rather than relying on a functional analysis. Straus (1993) introduced a framework for evaluating the effectiveness of public personnel departments which incorporates the perspectives of multiple constituent groups. Straus's approach allows personnel departments to assess how effectively they are serving each constituent group in order to compare their effectiveness to other personnel departments and to estimate their effectiveness over time. Finally, a recent General Accounting Office report (1999) presents a human capital self-assessment checklist for federal agencies.

Despite these important steps, however, the literature lacks careful explication of how to measure and evaluate public human resources management as an assemblage of key functions that contributes to an agency's management effectiveness and has an impact on government performance. This article begins to address these shortcomings by explicitly viewing human resources management as a component system of a government's larger administrative superstructure, by developing a comprehensive index of a government's human resources management capacity, and by measuring specific outcomes of the human resources management system. Once forged, these links will form the chain that connects people with performance; thus they will advance our understanding of the black box of government administration.

Environmental Context of Human Resources Management: Form of Government

We recognize that public human resources management does not operate in a vacuum, and we cannot fully comprehend the linkages between human capital, public management, and government effectiveness without considering the complex environment within which the human resources management system operates. We submit that, particularly at the local level, one especially influential contextual factor is the structure of a government's leadership. Research about the influence of leadership on human resources management systems is sparse, however, and precisely how different structures may relate to different management systems and capacity is open to considerable debate.

Scholars and practitioners have yet to categorize clearly local government structures with precise definitions, or even with a common framework. Much of what is perceived about city governments is anecdotal, inconsistent, and not founded in systematic empirical work. In general, though, we view local governments as arrayed along a continuum according to the extent to which they have institutionalized professional management.[3] Anchoring one end of the spectrum are traditional, patronage-driven governments, typically associated with pre-Progressive era machine politics. Here may be found many of today's strong-mayor forms of government. At the other extreme are governments administered by professional city managers, often referred to as reformed governments. This government form was created to move away from the machine politics model, and movement from partisan hiring to neutral merit systems was one part of the reform agenda. Between these opposing poles range governments that have adopted professional management to varying degrees. Generally, these governments are led by a mayor with the assistance of a chief appointed official (CAO) who serves as a senior administrator and whose role is to enhance the flexibility of the government's administrative framework—most particularly its personnel structure—to enable the government to meet its strategic objectives more efficiently and effectively.

In reality, this conceptual continuum masks much of the complexity of the political environment. Machine politics had effectively defined who was hired, who was promoted, and who was not eligible for public employment. While reformed governments were intended to replace these systems, history shows that new merit systems often had only a modest impact on hiring, firing, and promotion. Merit systems were not well funded or staffed, and although the total number of governments with merit systems continued to expand until the 1930s, the actual scope of

[3]Other scholars pursue similar reasoning. In particular, our thanks to Kenneth J. Meier, George Frederickson, Gary Johnson, and ICMA's Michele Frisby for their insights about classifying governments. Frisby noted that practical convention does distinguish city governments but is based primarily on anecdotes and case studies and not on clear criteria or systematic data. Frederickson and Johnson (1999) do establish a conceptual continuum ranging from *political* to *administrative* governments, and they identify an emerging form, which they term *adapted*, characterized by a symbiotic coexistence of political and administrative components. In addition, Hansell (1999) defines four variations on the mayor-council-manager form of government. Finally, for a detailed discussion of the history of machine politics and reform, see especially Ross and Levine 1996.

the systems was limited. As Dresang (1999, 28) notes, formal adoption of a merit system was sometimes ". . . little more than a symbolic gesture, and old hiring and promotion systems quickly found ways around the new."

Further, the reformed governments' emphasis on professional management suggested better support of human resource needs than civil service systems actually provided, and the goals of merit were often ignored. As Nigro and Nigro (1994, 23) point out, "In many localities and states, the spoils systems were still deeply entrenched . . . little attention was paid to potential connections between personnel practices and organizational productivity and effectiveness." Thus the very civil service structures created to sustain merit were frequently as unwieldy as the patronage systems they supplemented or supplanted. In fact, some more traditional strong-mayor cities, such as Indianapolis, have successfully emphasized the connection between human capital, streamlined management systems, and better performance, suggesting that the separations and distinctions between political environment and human resources management systems may be becoming less clear.

Although the literature has yet to sort out the nature of city government leadership and its relationship to human resources management, we suggest that each point on the structure of government continuum is likely to have a different relationship to the acquisition and retention of human resources. In general, we would expect that because critical skills are not a prerequisite for patronage appointments, more patronage-based systems would have lower workforce capacity, on average, than those with civil service systems administered by professional public managers. To disentangle and quantify the array of possible government forms is well beyond the scope of this research effort. Nonetheless, we can make some rudimentary distinctions between governments that appear to have institutionalized professional management and those that do not, to help control for the nature of political environment in our analysis.

Environmental Context of Human Resources Management: Unionization

The nature and level of unionization and the extent of collective bargaining are also likely to have an impact on human resources management systems and capacity. Comparative analysis of the relationships between levels of unionization and government performance and productivity are limited. We do know, however, that collective bargaining has become well established as a component of all levels of government (Goldfield

1989; Reeves 1997). While estimates of membership vary, the Winter Commission reported that about 38 percent of all public employees and approximately 53 percent of municipal employees were union members at the end of the 1980s (Ban and Riccucci 1993, 79-82). Moreover, empirical evidence from local school districts and fire services suggests that high levels of unionization constrain both flexibility and productivity (Babcock and Engberg 1997; Smith and Lyons 1980). This perception underpins many current labor-management partnership reforms in reinventing government and elsewhere (Douglas 1992; Kearney and Hays 1994; Hays and Kearney 1995).

The rigidity and complexity produced by bureaucratic civil service systems with well-developed union clout will be, we argue, a significant constraint on the ability of top leaders to acquire and use the flexibility necessary to link human resources management to clear performance objectives. The highest degree of managerial autonomy and the strongest performance orientation are likely to be present, therefore, either in cities with collaborative union relationships or in cities in a nonunionized environment (Goldsmith 1998).

ANALYTICAL FRAMEWORK AND HYPOTHESES

We have argued that a government's human resources management system has independent effects on its performance, and thus it should be distinguished and examined in order to develop a richer understanding of a government's management effectiveness. We also have acknowledged that environmental contingencies can powerfully affect the ability of a government's administrative functions to operate effectively and efficiently, and we have identified and described the state of knowledge about two important contingencies that are likely to affect human resources management. We now apply the general framework described in exhibit 1 to evaluate the ability of public entities to effectively acquire, sustain, maintain, and deploy a workforce in circumstances shaped by structural reforms and labor-management relations.

As we have said, the core of our conceptual approach is management capacity, such that a government's human resources management capacity fundamentally depends on the configuration, procedures, and work processes of the government's human resources management systems. Our definition of human resources management capacity is also intertemporal—that is, it depends on the extent to which a government can maintain a reliable and appropriately configured base of human capital over time, success at which necessitates functions such as strategic

workforce planning. These dimensions of human resources management capacity, and the relationships between them, are shown in exhibit 2, which serves as the basis for our empirical analysis.

Hypotheses

Given this theoretical setting and our research questions, we posit five hypotheses about human resources management in city governments:

Hypothesis 1: Human resources management capacity is positively correlated with human resources management outcomes.

Hypothesis 2: The level of unionization is negatively correlated with human resources management capacity.

Hypothesis 3: More traditional strong mayor governments will have less human resources management capacity.

Hypothesis 4: The level of unionization is negatively correlated with better human resources management outcomes.

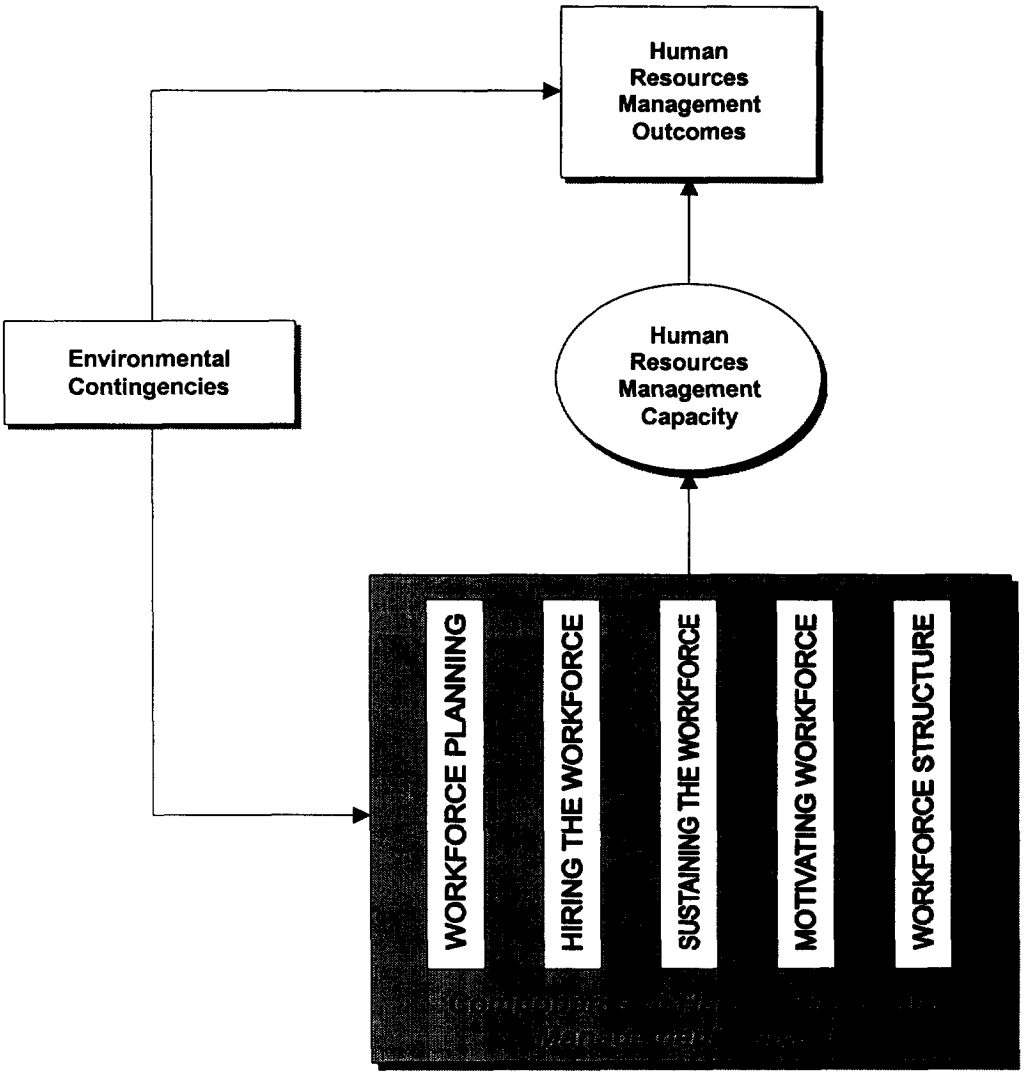
Hypothesis 5: More traditional strong mayor governments will have poorer human resources management outcomes.

The exploratory analysis in this article begins the complex and challenging task of examining these hypotheses by evaluating whether a government is able to locate the right people in the right places at the right time to meet its administrative needs. Our assessment is based on a set of criteria that define the character of a government's human resources management system and indicate the extent to which it is effective. We will now present the development and substance of these criteria.

Human Resources Management Assessment Criteria

An important component of our approach throughout the Government Performance Project has been to define the criteria by which we assess governments. To accomplish this, we convened a broad group of practitioners and scholars who are considered to be experts in each area of government management of concern to the GPP, and we asked them what they consider to be the most significant elements of these management systems, based on the literature of the field, their experience, and their

Exhibit 2
The Human Resources Management System



own research. Through an iterative series of meetings and written feedback, we discovered a high degree of consensus about what mattered most to successful government management, and we converted these findings into evaluation criteria that met the approval of the entire group.

This study uses five criteria to characterize sound human resources management in city governments. The criteria describe

what are generally held to be the vital components of successful systems, generally capturing recruiting, hiring, retaining, promoting, appraising, compensating, motivating, training, and terminating public employees. They also reflect an emerging, broad consensus in the literature and among our expert advisors about the critical levers of effectiveness in human resources management (Perry and Mesch 1997; National Institute of Standards and Technology 1999; OPM 1999; USGAO 1999). In particular, we found widespread agreement that key components of good human resources management systems include the use of coherent rules and procedures; efforts at workforce planning; the ability to facilitate timely hiring; sophisticated professional development programs; and meaningful reward structures and disciplinary procedures. In addition, because increased flexibility, discretion, and delegation of authority in the human resources management process have been a consistent focus of administrative reform, many agreed that it is also important to consider where in the system and for whom such flexibility exists. Finally, as we have already noted, contextual factors—such as the relationship between political appointees and career civil servants within governments and the disposition of labor-management relations—were seen to have significant impacts on the ability of governments to marshal their human capital effectively. Our criteria ultimately were presented to the National Association of State Personnel Executives, which concurred with their definition.

To facilitate data gathering and analysis, we consolidated the viewpoints of our advisors and reviewers into the following five criteria:

Criterion 1: Planning for the Workforce. This criterion hinges on the extent to which a government is aware of and addresses its personnel capacity over time, particularly the sophistication with which the government conducts strategic analysis of present and future human resource needs and availability. Such foresight depends on three key activities. First, the government must collect sufficient data about its workforce to support evaluation of its current status and projections of future requirements. Second, the government must actively engage in comprehensive needs analysis. Third, the government must develop detailed action and contingency plans to meet the future workforce needs it identifies. An outcome associated directly with this criterion is whether the government has adequate information about its workforce to plan effectively.

Criterion 2: Hiring the Workforce. This criterion addresses the extent to which the government is able to obtain the employees it needs. To accomplish this, a government must be

able to conduct effective recruiting efforts and to hire appropriately skilled and qualified employees. An outcome associated directly with this criterion is the ability hire employees in a timely manner. Substantial evidence suggests that obstacles to timely hiring of qualified public employees, such as the inability to compete with private-sector salaries and benefits and complex procedural requirements, drastically inhibit the efficiency of public agencies. There is also wide agreement that the managers within the government's subunits are likely to know the most about what kind of staff that unit needs, and thus these managers must have discretion in the hiring process.

Criterion 3: Sustaining the Workforce. This criterion concerns the government's ability to maintain an appropriately skilled workforce by conducting or providing training to develop and maintain employee skills, by retaining skilled and experienced employees, by disciplining poor performers, and by terminating employees who cannot or will not meet performance standards. In this case, governments must invest in programs that directly address employee performance, and focus on improving it or bringing it in line with organizational objectives. In addition, this criterion suggests that a government should separate an employee as soon as it is evident that he or she is not capable of contributing to overall performance of the government. An outcome based on this criterion is the ability of a government to terminate an employee in a timely manner.

Criterion 4: Motivating the Workforce. This criterion focuses on whether a government is able to encourage employees to perform effectively in support of the government's goals. Effective motivation typically rests on the use of appropriate monetary and nonmonetary rewards and incentives, an effective performance appraisal system, and sound mechanisms that facilitate employee feedback. Governments are oft cited as laggards with respect to the adoption of effective motivational devices, particularly with respect to pay and benefits, leaving them encumbered by problems of complacency and poor morale. Those that can overcome these challenges can be expected to achieve their performance goals more readily.

Criterion 5: Structuring the Workforce. This criterion captures the degree to which the government's human resources structure supports its ability to achieve its workforce goals. This includes having a coherent and appropriately sized classifications system reinforced by personnel policies that are flexible in terms of promotion and compensation. While there is some debate in the public human resources field about what structural forms are best, recent reform trends emphasize flexibility and performance.

In particular, there is clear movement, both in the United States and internationally, toward simplification of personnel rules and procedures and increased use of provisional workers.

DATA, MEASURES, AND METHODS[4]

The hypotheses are examined using data from the Government Performance Project. In March 1999, the GPP administered to the thirty-five largest cities (by FY 1995 revenue) in the United States a survey that included a section about human resources management practices. At the time of our analysis, twenty-nine cities had completed and returned surveys for a response rate of approximately 82.9 percent (a list of respondent cities is presented in exhibit 3). The human resources management section of the survey instrument contained twenty-four multipart open-ended questions designed to yield information about a given city's status with respect to each of the criteria described above. The survey instrument was pretested in four states, four local governments, and four federal agencies in 1997. Based on this pilot study, the instrument was revised, streamlined to focus as directly as possible on the evaluation criteria, and customized to each level of government. After completing a survey of fifty states in 1998, the survey was again revised.

Since the survey instrument consisted of open-ended questions, the following procedure was used to code the data (Larsson 1993):

- A coding scheme was designed for systematic conversion of the qualitative survey responses and supporting city documentation (see appendix 1) into quantified variables.
- The coding scheme was pretested, using the survey responses and supporting documentation of five cities.
- The coding scheme was revised, reflecting feedback from the pretest.
- The survey responses were coded, using two raters for each criteria.[5]
- Inter-rater reliability was computed.
- A process for resolving coding discrepancies was developed and employed.

We checked interrater reliability by using two techniques. First, we computed the pairwise percentage agreement (Larsson 1993).

[4]We would like to thank Yilin Hou, Willow Jacobsen, Ellen Rubin, and Jessica Sowa for their research assistance.

[5]As suggested by Larsson (1993, 1532), the designer of the coding scheme was not used to code the responses. Five Syracuse University graduate students were hired to code the original survey responses. The designer of the coding scheme briefed each rater and provided grading instructions.

Exhibit 3
Human Resources Management Capacity Scores by City

City	Capacity Score	City	Capacity Score
Austin	58	Memphis	24
Baltimore	29	Milwaukee	39
Boston	19	Minneapolis	53
Buffalo	14	Nashville	40
Chicago	22	New Orleans	20
Cleveland	22	New York	42
Columbus	24	Philadelphia	48
Dallas	27	Phoenix	65
Denver	46	Richmond	23
Detroit	46	San Antonio	45
Houston	22	San Jose	26
Indianapolis	45	Seattle	39
Jacksonville	32	Virginia Beach	32
Kansas City	31	Washington, D.C.	35
Los Angeles	29	*Mean = 34.4; SD = 12.73*	

In total, we had 6,760 observations evaluated by two raters. The raters coded responses alike for 6,561 observations for a pairwise percent agreement of 97.06. Second, we computed the correlation between the two coders' ratings. The correlation is 0.96, which suggests a great degree of consistency between the raters. To resolve the 199 discrepancies that arose between raters, a Syracuse University graduate student and the designer of the coding scheme reexamined the observations, discussed the responses, conducted follow-up interviews with city officials where necessary, and reached a joint consensus about how to code them (Larsson 1993, 1532).[6]

The GPP survey was designed to assess five criteria. An important issue when criteria-based assessment is used is the choice of a coherent structure for the system of evaluation indicators that assigns them appropriate weights.[7] In this study, the human resources management variables we coded were grouped by criteria, were explicitly assigned weights, and were summed to create an index per criteria and an overall capacity index (DeVellis 1991). We used the following approach to construct the indices:

- We linked the quantified human resources variables to each criterion (see appendix 2).

[6]Larsson (1993) recommends a consensus approach as opposed to an averaging approach to resolve coding discrepancies.

[7]A weighting scheme is necessary to explain why a government's human resources capacity depends unevenly on the characteristics of various human resources management functions—in other words, assessment of a government's management capacity ought to address both the government's managerial strengths and weaknesses and the relative impact or importance of these strengths and weaknesses for capacity. For example, it may be more important that the government plan ahead to meet its future workforce needs than that the government provide sufficient opportunities for employee feedback, though both factors contribute to human resources management capacity and ultimately to a government's overall management effectiveness.

- We assigned weights to each variable assigned to each criterion.[8]
- We summed the weighted variables.
- We standardized the scales.[9]
- We computed a measure of human resources management capacity for each city by summing the five standardized scales (overall Cronbach's alpha = .76).
- We applied two other weighting schemes to assess the sensitivity of the human resources management capacity measure and determined it to be robust.

Appendix 1 presents the quantified variables associated with each criterion, the Cronbach's alpha for each criterion, and the means and standard deviations of the index scores across cities.

We also included two critical environmental contingencies in this study. The first was the extent of unionization in a city, as measured by the percentage of the city's workforce that is covered by collective bargaining agreements. This information was reported by each city in its response to our written survey. The second was the form of government. Here we sought to distinguish between more traditional, patronage-driven, strong mayor forms of government and those that have professional managers in place, either as a mayor's chief appointed official (CAO) or as a city manager. Following Frederickson and Johnson (1999), we assigned each city in our sample to one of three categories:

- Political (or traditional): Those cities in which the mayor acts as the chief executive officer with administrative authority over the executive function of the city under a mayor-council form of government.
- Adapted: Those cities in which the responsibility for administrative functions is shared between the mayor and a professional manager.[10]
- Administrative (or reformed): Those cities in which a professional administrator, appointed by the elected body, has responsibility for implementing the city's laws and policies.

Cities were classified on the basis of four sources of data. The International City-County Management Association (ICMA) classified the cities in our study according to whether or not they

[8]A detailed summary of the employed weighting schemes is available by request from the authors. Carmines and Zeller (1979) indicate that it is desirable to have an alpha coefficient of .70 or more. However, DeVellis (1991, 85) views alpha coefficients between .60 and .70 as acceptable, though not desirable. Although criteria 2, 4, and 5 have alphas falling within this range, they are relatively stable when items are added or removed (DeVellis 1991). This is particularly important in our study given the relatively small sample size (DeVellis 1991, 86).

[9]Out of 100 points, we assigned criteria 1-4 a value of 22.5 and criterion 5 a value of 10 (for a maximum value of 100).

[10]For a case example of the adapted type of government, see *Governing* magazine's recent story on Oakland, California (Gurwitt 2000).

have a CAO.[11] We also examined city organizational charts, reviewed city web pages, and conducted follow-up interviews to reconcile discrepancies. We then created a city classification continuum that assigned a value of 1 to political/traditional governments, a value of 2 to adapted cities, and a value of 3 to administrative/reformed governments.[12] Appendix 3 presents the measurement scale, mean, and standard deviation for both control variables.

Finally, the study examines four human resources management outcomes:

- whether the city has the information it needs about its workforce to plan effectively;
- the average time it takes a city to hire someone to fill a position;
- the average time it takes a city to terminate an employee; and
- the percentage of employees who are terminated during probation.

This information was reported by each city in its response to our written survey. Appendix 3 presents the measurement scale, mean, and standard deviation of each outcome variable.

In light of the exploratory nature of this analysis, we examine the hypotheses enumerated above using bivariate and partial correlations. In addition, we rate cities according to their human resource capacity, and we provide descriptive statistics about the sample, high performers, and low performers. We will then present and discuss our results.

FINDINGS AND DISCUSSION

Overall, we find that the cities in our sample vary a great deal in terms of their human management systems and capacity. The index of human resources management capacity by city is presented alphabetically in exhibit 3. Scores range from a high of 65 to a low of 14, with a mean of 34.44 and a standard deviation of 12.73. Phoenix and Austin receive the highest capacity scores (65 and 58, respectively), while Buffalo and Boston register the lowest (14 and 19, respectively). Virginia Beach, Jacksonville, and—surprisingly, given its unique situation and anecdotal history of poor management and system abuses—Washington, D.C. are about average in terms of human resources management capacity.

[11]Our thanks to ICMA's Michele Frisby for providing this information.

[12]The classifications of the cities in our sample are available from the authors upon request.

The highest capacity cities are interesting because these are the cities that others are likely to copy—high performers frequently serve as benchmarks. As Meier and Gill (2000, 1) point out, "The supposition that public managers seek to identify and emulate the average performing case is simply wrong." Conversely, the reason to look at poor performers is to gain a better understanding of the constraints on performance and the barriers to good management that are faced by these cities. Exhibit 4 compares the critical contingencies and organizational characteristics of the best performers and the poorest performers as well as the sample of cities as a whole.

As exhibit 4 shows, the size of the workforce in the highest and the lowest performing cities is similar, on average. The variation of the number of classification titles is also small across these cities. Turnover is almost 4 percent higher in the highest capacity cities. Finally, New York City is an outlier in the data, with over 111,000 provisional and nonclassified employees, or 45 percent of their workforce. If New York is omitted from the sample calculations, the mean percentage of provisional and nonclassified employees across the cities in the sample falls to 18 percent from the 26.8 percent reported in exhibit 4. Thus, we

Exhibit 4
Critical Contingencies and Organizational Characteristics of High and Low Performers

	Cities with Highest Capacity (Mean)	Cities with Lowest Capacity (Mean)	Entire Sample of Cities (Mean)
Contingencies			
Unionization	34.5%	88%	60%
Administrative/reformed	1.00	0.00	0.28
Traditional/political	0.00	1.00	0.48
Characteristics			
FY 95 revenue (dollars)	1,369,573	1,442,833	3,478,310†
1998 population estimate	875,249	428,082	1,110,073††
Total employees	12,895	12,341	23,394
Classified employees	10,579 (82%)	10,828 (87.7%)	17,126 (73.2%)
Provisional/nonclassified	2,316 (18%)	1,513 (12.3%)	6,268 (26.8%)‡
Classification titles	851	900	950
1998 turnover	9.28%	5.50%	8.76%

†This falls to 1,913,137 if New York city is omitted
††This falls to 884,713 if New York city is omitted
‡This falls to 18% if New York city is omitted—see discussion

can see that substantially fewer provisional and nonclassified workers are employed in the lowest performing cities.

In terms of the two critical contingencies we discuss and measure, exhibit 4 shows that, on average, 34.5 percent of the highest performing cities' workforces are unionized, compared to 88 percent of the lowest performers' workforces and 60 percent of the sample cities' workforces, on average. Additionally, both of the highest performing cities have administrative/reformed governments, while the two lowest performing cities are traditional—operated by a mayor without a CAO. In the sample, 27.6 percent of the cities have administrative/reformed governments, 24.1 percent of the cities have adapted governments, and 48.3 percent of the cities have political/traditional governments.

Examination of the highest and lowest human resources management capacity cities suggests support for our second and third hypotheses. Moreover, as exhibit 5 shows, more traditional and political governments are moderately associated with lower overall human resources management capacity. Unionization, on the other hand, does not appear to be correlated with overall capacity. A review of capacity disaggregated by criteria reveals the nuances of these associations, however. Both workforce unionization and political/traditional government are significantly associated with less capacity to hire and to motivate city workforces. Neither unionization nor city classification are significantly associated with sustaining or structuring the workforce or with workforce planning.

These findings are consistent with our expectations; the literature suggests that unions constrain managerial autonomy.

Exhibit 5
Correlation of Human Resources Management Capacity Criteria and Critical Contingencies

Contingency	Overall HRM Capacity	Criterion 1 (planning)	Criterion 2 (hiring)	Criterion 3 (sustaining)	Criterion 4 (motivating)	Criterion 5 (structuring)
Unionization	-.04	.09	-.32**	.18	-.29*	.06
City classification†	-.27*	-.17	-.42**	.03	-.39**	-.13

†Classification is: 1 = traditional/political; 2 = adapted; 3 = administrative/reformed
*Significant at 0.10 **Significant at 0.05 ***Significant at 0.01

That is, unions traditionally promote standardized rules and agreements rather than flexibility and managerial discretion. The areas where unions frequently exert their influence are in hiring standards and rewards systems; this is supported by our results. In particular, the components of motivating the workforce that are included in our assessment are performance-driven tools administered at the discretion of managers. Unions, in general, are more concerned with rewarding seniority according to a prescribed system.

Similarly, our findings are sensible in terms of city classification. Cities with strong mayors and without professional managers can be expected to have more entrenched, traditional, patronage-driven personnel systems. These mayors are less likely to delegate flexibility in hiring and for administering performance appraisals and rewards systems. They are less likely to solicit feedback from employees, as well. Moreover, the recent emphasis on strategic workforce planning has arisen with the advent of professional management. Political machines have not traditionally been concerned with skills assessment, merit-based hiring, and other strategic activities.

We also find support for our first hypothesis: Higher human resource capacity is associated with better human resource

Exhibit 6
Correlation of Human Resources Management Capacity Criteria and Human Resources Management Outcomes

HRM Outcome	Overall HRM Capacity	Criterion 1 (planning)	Criterion 2 (hiring)	Criterion 3 (sustaining)	Criterion 4 (motivating)	Criterion 5 (structuring)
Has information it needs about its workforce to plan effectively	.44**	.55***	.13	.46**	.07	.14
Average time to hire to fill a position	-.41**	-.16	-.51**	-.29*	-.62***	-.24*
Average time to terminate an employee	-.24*	-.13	-.30*	-.22*	-.23*	-.12
Percent of persons terminated during probationary period	.49**	.47**	.39**	.31*	.49**	.20

*Significant at 0.10 **Significant at 0.05 ***Significant at 0.01

outcomes, as demonstrated by the bivariate analysis presented in exhibit 6 and the multivariate analysis in exhibit 8. We find that cities with more human resource capacity are significantly more likely to have the information they need about their workforces to plan effectively, and they are able to fill positions more quickly. They are also more prone to release persons who do not perform adequately during the probationary period. Finally, the average time to terminate is lower in cities with higher capacity. These correlations are statistically significant in both the bivariate and multivariate cases.

An examination of the correlation between the four outcomes and the individual criteria reveal further complexity (see exhibit 6). As expected, cities with more information available about their workforce have better workforce planning. We also find that time to hire is significantly associated with four of the criteria. As expected, cities with more hiring capacity are able to hire more quickly. Additionally, cities with more capacity to develop and motivate their employees, and cities with more coherent structures, secure faster rates of hire. The criteria used to capture flexibilities within the discipline and termination processes are associated with faster rates of separation, and cities with more hiring and motivational capacities also terminate employees significantly faster. Finally, we find that cities with more planning, developmental, and motivational capacity release more persons during the probationary period. Our interpretation of these results is that managers in cities with higher capacity truly view human resources *as resources*, and not as a burden, an obstacle, or a necessary evil—thus they seek to retain the highest quality and eliminate potential performance problems early.

As we have argued, factors other than human resources management capacity may influence human resources management outcomes. Exhibit 7 shows our results with respect to this issue. We find partial support for our fourth hypothesis. As unionization increases, the time it takes to fill a position grows significantly. This makes sense because rigid union-sanctioned procedures set out in contracts specify cumbersome selection systems, including time-consuming screening criteria and testing procedures. Moreover, as unionization increases, the city structure is more likely to resemble a classic bureaucracy with all the associated rules and rigidity. Unexpectedly, however, we found that cities with more unionization terminated employees significantly faster. This result is puzzling, though it may reflect the termination of the poorest performers or those who are guilty of the most egregious behavior—those who even unions refuse to protect. Unionization is not significantly associated with

Exhibit 7
Correlation of Critical Contingencies and Human Resources Management Outcomes

HRM Outcome	Unionization	City Classification†
Has information it needs about its workforce to plan	-.01	.32**
Average time to hire to fill a position	.35**	-.43**
Average time to terminate an employee	-.27*	.01
Percent of persons terminated during probationary period	-.03	.09

†Classification is: 1=traditional/political; 2=adapted; 3=administrative/reformed
*Significant at 0.10 **Significant at 0.05 ***Significant at 0.01

Exhibit 8
Partial Correlations of Human Resources Management Capacity and Human Resources Management Outcomes, Controlling for Critical Contingencies

HRM Outcome	HRM Capacity
Has information it needs about its workforce to plan effectively	.54***
Average time to hire to fill a position	-.36**
Average time to terminate an employee	-.29**
Percent of persons terminated during probationary period	.56**

*Significant at 0.10 **Significant at 0.05 ***Significant at 0.01

information availability or release of persons during the probationary period.

Finally, considering our fifth hypothesis, traditional/political governments are negatively correlated with better human resources management outcomes. Again, we found only partial support for this supposition because two of the four correlations are not significant. We do find that more professional governments have more information about their workforces. We also find that more political cities take significantly longer to fill positions on average, as we would expect. This, we believe, means that beyond their patronage appointments, these mayors are bound by the

civil service system and structure. Since these mayors tend to retain authority, rather than to delegate discretion to managers, these cities are constrained by the rules and regulations of unreformed systems.

CONCLUSIONS AND FUTURE DIRECTIONS

Human resources management is a vital issue to city government. In a sense, the historical struggles about the structure of government initiated by Progressive-era reforms and about the power and role of unions are fundamentally about who controls the public workforce and how. The current emphasis on performance in public organizations may be changing the ways in which top elected officials view the potential of the public workforce and the systems by which it is managed. For a local government to be most effective in this environment, the critical point may be not to remove the human resource capability from political officials, but to ensure that key capacities and flexibilities are available to their managers. In this article, we have begun to explore these issues.

This preliminary work makes three main contributions to the field of public management and to the human resources literature. First, it provides an empirical test of a theoretical model of government management that starts to unpack the black box of public management and demonstrates variation in management systems across governments. Second, it begins to examine the contextual and contingent nature of management. Third, it systematically analyzes the concept of management capacity as it relates to human resources management and provides empirical evidence that management capacity can have an independent impact on management outcomes.

This is exploratory work, and we recognize it confronts some methodological limitations, which are opportunities for further research. For example, our model does not estimate the interaction and interrelationships between and within the criteria. Also, it does not model the likely presence of endogenous relationships, as between management functions and environmental factors, heretofore viewed as exogenous conditions. Finally, we acknowledge that some of our constructs could be measured more directly and precisely.

Even with these constraints, this effort serves as an important and practicable launch point for additional efforts that polish our model, measures, and method to home in on the nature and magnitude of management capacity in governments. In the future, we seek to more carefully identify and refine our measures of

human resources management capacity, of environmental contingencies, and of human resources management outcomes. At the same time, we plan to improve the formal specification of our model to account for nonlinear relationships that arise from interactions and endogeneity. Finally, we are already expanding our empirical work to examine other government management systems.

Over the past two decades, governments at all levels in the United States have reflected more diverse and flexible administrative structures and management systems.[13] City governments, with the variation they present in political and administrative structures as well as in levels of unionization and collective bargaining arrangements, have offered us fertile ground for the analysis of differences in human resources management systems, their capacity, and their outcomes. This exploration begins to till this soil and to reap knowledge of the nature and influence of government management—and it hints at the abundant fruit further efforts will bear.

[13]For documentation and evidence of this trend, see especially Thompson (1993); Dresang (1999); Ingraham, Selden, and Moynihan (1999); Wright and Cho (1999).

APPENDIX 1
Supporting Documentation Provided with City Government Surveys

- Strategic workforce plan
- HRM department strategic plan
- Discipline policies
- Termination policies
- Grievance policies
- Training catalogues
- Compensation policies
- Pay schedule
- Classification scheme
- HR-related self-studies

APPENDIX 2
Construction of Human Resources Management Capacity (Overall Alpha=.76)

Criteria 1: Planning for the Workforce

- Formal workforce plan
- Employees covered
- Frequency of update
- Content
  - -Short-term recruiting
  - -Short-term hiring
  - -Long-term recruiting
  - -Long-term hiring
  - -Short-term staffing/retention/promotion
  - -Long-term staffing/retention/promotion
  - -Critical hiring areas
  - -Development and training
  - -Labor market supply assessment
  - -Downsizing
  - -Retirement (turnover)

Range = 1-22.5
Alpha = .79
Mean = 6.20
SD = 6.34

. . . continued

APPENDIX 2 (continued)

Criteria 2: Hiring the Workforce

- Centralization/decentralization of recruiting
- Centralization/decentralization of testing
- Centralization/decentralization of appointment decisions
- Restrictiveness of hiring list
- Recruiting techniques
  - -Job fairs
  - -Open houses
  - -Campus visits
  - -Letter campaigns
  - -Job bulletin
  - -Print advertising
  - -Advertising in trade publications
  - -On-line job listings and recruiting
  - -Application available on-line
  - -Twenty-four hour telephone job line
  - -Paying travel for interviews
  - -Satellite offices (malls)
  - -Job kiosks
  - -Professional recruitment firms
  - -Other techniques

Range = 1-22.5
Alpha = .60
Mean = 8.23
SD = 3.14

Criteria 3: Sustaining the Workforce

- Availability of training
- Employee awareness of training opportunities
- Maintenance of individual training records
- Frequency of general training
  - -New employee orientation
  - -Basic skills
  - -Technical (apprenticeship)
  - -Regulation training
  - -Computer software training
  - -Computer service training
  - -Performance management
  - -Seamless service training
  - -Ethics
  - -Supervisory skills
  - -Management skills
  - -Leadership development
  - -Other training

Range = 1-22.5
Alpha = .77
Mean = 10.34
SD = 2.66

- Frequency of management training
  - -Selection
  - -Evaluating employee performance
  - -Disciplinary procedures
  - -Grievance procedures
  - -Termination procedures
  - -Reward procedures
  - -Diversity
  - -Sexual harassment
  - -General HRM procedures
- Training encouragement and rewards
  - -Tuition reimbursement
  - -Funding available for training
  - -Skill pay
  - -Promotion based on training
  - -Continuing education or college credit
  - -Formal recognition
- Disciplinary and termination process
  - -Centralization/decentralization of disciplinary process
  - -Extent of manager discretion in discipline
  - -Centralization/decentralization of termination process
  - -Extent of manager discretion in termination

Criteria 4: Motivating the Workforce

- Centralization/decentralization of performance appraisal development
- Centralization/decentralization of performance appraisal administration
- Extent of discretion over appraisal instrument
- Frequency of performance feedback
- Monetary remuneration
  - -Merit pay
  - -Group performance bonus
  - -Individual performance bonus
  - -Gain sharing
  - -Skill-based pay
- Employee suggestion program
  - -Utilization of formal program
  - -Awards available for suggestion program
  - -Monetary reward
  - -Employee recognition
  - -Employee survey
  - -Utilization of employee survey

. . . *continued*

APPENDIX 2 (continued)

• Nonmonetary motivators	
-Job flexibility (including flex time)	
-Performance recognition program	*Range = 1-22.5*
-Public service recognition program	*Alpha = .64*
-Employee of the month	*Mean = 6.11*
-Commendation award	*SD = 2.24*

Criteria 5: Structuring the Workforce

• Flexibilities within classification system	• Centralization/decentralization of classification system
-Broad banding	• Compensation system
-Multitasked/multiskilled classification	-Performance based
-Hiring in grade based on market analysis	-Skill based
• Movement between grades within system	-Market based
-Performance/skill	-Graded based
-Examination	
-Promotion	
-Time	*Range = 1-10*
• Structure	*Alpha = .63*
-Ratio of titles to # of classified employees	*Mean = 3.56*
-Proportion of provisional employees	*SD = 1.41*

APPENDIX 3
Human Resources Management Outcomes and Contingencies

HRM Outcomes	Mean	Std. Dev.
Average time to hire to fill a position (days)	77.37	74.83
Average time to terminate an employee (1-4) 1 = less than 30 days 2 = 30-120 days 3 = 121-170 days 4 = more than 270 days	1.69	.97
Percentage of persons terminated during probationary period	4.55	3.55
Has information it needs about its workforce to plan effectively (1 = yes)	.50	.51

Critical Contingencies	Mean	Std. Dev.
Unionization	59.83	38.25
City classification	2.21	.86

REFERENCES

Babcock, Linda C., and Engberg, John B.
1997 "A Dynamic Model of Public Sector Employer Response to Unionization." *Journal of Labor Research* 18:2:265-86.

Ban, Carolyn, and Riccucci, Norma M.
1993 "Personnel Systems and Labor Relations: Steps Toward a Quiet Revitalization." In Frank J. Thompson, ed. *Revitalizing State and Local Public Service: Strengthening Performance, Accountability, and Citizen Confidence* San Francisco: Jossey-Bass.

Bowling, Cynthia J., and Wright, Deil S.
1998 "Change and Continuity in State Administration: Administrative Leadership Across Four Decades." *Public Administration Review* 58:5:429-45.

Carmines, Edward G., and Zeller, Richard A.
1979 *Reliability and Validity Assessment*. Newbury Park, Calif.: SAGE.

Carnevale, David G.
1995 *Merit System Reform in the States: Partnerships for Change*. Norman: University of Oklahoma.

Caudron, Shari.
1999 "Productive Conflict Has Value." *Workforce* 78:2:25-27.

Collins, Dale R.
1997 "Human Resource Assessment—The Link to Mission." *Public Personnel Management* 26:1: 1-6.

Davidson, Linda.
1998 "Measure What You Bring to the Bottom Line." *Workforce* 77:9:34-39.

Delaney, John T., and Huselid, Mark A.
1996 "The Impact of Human Resources Management Practices on Perceptions of Organizational Performance." *Academy of Management Journal* 39:4:949-70.

DeVellis, Robert F.
1991 *Scale Development: Theory and Applications*. Newbury Park, Calif.: SAGE.

Douglas, Joel M.
1992 "State Civil Service and Collective Bargaining: Systems in Conflict." *Public Administration Review* 52:162-72.

Dresang, Dennis.
1999 *Public Personnel Management and Public Policy*, 3d ed. New York: Addison Wesley Longman.

Easton, Allan.
1973 *Complex Managerial Decisions Involving Multiple Objectives*. New York: Wiley.

Fitz-enz, Jac.
1994 "HR's New Score Card." *Personnel Journal* 73:2:84-87.

Frederickson, H. George, and Johnson, Gary Alan.
1999 "The Adapted American City: A Study of Institutional Dynamics." Paper presented to the fifth national Public Management Research Conference, College Station, Tex., December 3-6.

Goldfield, Michael.
1989 "Public Sector Union Growth and Public Policy." *Policy Studies Journal* 18:404-20

Goldsmith, Stephen.
1998 "Can-do Unions: Competition Brings Out Best in Government Workers." *Policy Review* 88:24-28.

Gooden, Vincent.
1998 "Contracting and Negotiation: Effective Practices of Successful Human Service Contract Managers." *Public Administration Review* 58:6:499.

Gray, Virginia.
1973 "Innovation in the States: A Diffusion Study." *The American Political Science Review* 67:4:1174-85.

Gurwitt, Rob.
2000 "Mayor Brown & Mr. Bobb." *Governing* (Jan.):16-20.

Hansell, Bill.
1999 "Reforming the Reform." *Public Management* 81:28.

Hays, Steven W., and Kearney, Richard C.
1995 *Public Personnel Administration*. Englewood Cliffs, N.J.. Prentice-Hall.

Hofferbert, Richard I
1966 "Ecological Development and Policy Change in the American States." *Midwest Journal of Political Science* 10:4:464-83.

Huselid, Mark A.
1993 "The Impact of Environmental Volatility on Human Resource Planning a Strategic Human Resources Management." *Human Resource Planning* 16:3:35-52.
1995 "The Impact of Human Resources Management Practices on Turnover, Productivity, and Corporate Financial Performance." *Academy of Management Journal* 38:3:635-72.

Huselid, Mark A., and Becker, Brian E.
1996 "Methodological Issues in Cross-sectional and Panel Estimates of the Human Resource-Firm Performance Link." *Industrial Relations* 35:3:400-22.

Ingraham, Patricia W.
1995 *The Foundation of Merit: Public Service in American Democracy*. Baltimore: Johns Hopkins University Press.

Ingraham, Patricia W., and Kneedler, Amy E.
2000a "Dissecting the Black Box: Toward a Model and Measures of Government Management Performance." In Jeffery L. Brudney, Laurence J. O'Toole, and Hal Rainey, eds. *Advancing Public Management: New Developments in Theory, Methods, and Practice*. Washington, D.C.: Georgetown University Press.
2000b "Dissecting the Black Box Revisited: Characterizing Government Management Capacity." In Laurence E. Lynn Jr., ed. *Models and Methods for the Empirical Study of Governance*. Washington, D.C.: Georgetown University Press.

Ingraham, Patricia W.; Selden, Sally Coleman; and Moynihan, Donald P.
1999 "People and Performance: Challenges for the Future Public Service." Report from the Alan K. Campbell Institute's Wye Conference, June 27-30 and September 29, The Wye River Plantation, Maryland.

Kaplan, Robert S., and Norton, David P.
1996 *The Balanced Scorecard: Translating Strategy into Action*. Boston: Harvard Business School Press.

Kearney, Richard C., and Hays, Steven W.
1994 "Labor-Management Relations and Participative Decision Making: Toward a New Paradigm." *Public Administration Review* 54:1:44-51.

Kettl, Donald F.; Ingraham, Patricia W.; Sanders, Ronald P.; and Horner, Constance.
1996 *Civil Service Reform: Building a Government That Works*. Washington, D.C.: Brookings.

Knoke, David, and Kalleberg, Arne L.
1994 "Job Training in U.S. Organizations." *American Sociological Review* 59:4:537-47.

Laabs, Jennifer J.
1996 "Duke's Newest Power Tool: New Workforce-Planning Process at Duke Power Co." *Personnel Journal* 75:6:44-50.

Larsson, Rikard.
1993 "Case Survey Methodology: Quantitative Analysis of Patterns Across Case Studies." *Academy of Management Journal* 36: 1515-47.

Lineberry, Robert L., and Fowler, Edmund P.
1967 "Reformism and Public Policies in American Cities." *American Political Science Review* 61:3:701-16.

Lynn, Laurence E.; Heinrich, Carolyn J.; and Hill, Carolyn J.
1999 "The Empirical Study of Governance: Theories, Models, and Methods." Draft manuscript prepared for the Workshop on Models, and Methods for the Empirical Study of Governance, Tucson, Ariz., April 29-May 1.

Markowich, M. Michael.
1995 "HR's Leadership in the Third Wave Era." *HRMagazine* 40:9:92.

Martinez, Michelle Neely.
1996 "3 Strategies for Successful Business Partners." *HRMagazine* 41:10:S1.

Meier, Kenneth J., and Gill, Jeff.
2000 *Substantively Weighted Analytical Techniques: A New Approach to Program and Policy Analysis*. Boulder, Colo.: Westview

Milward, H. Brinton, and Provan, Keith G.
1998 "Principles for Controlling Agents: The Political Economy of Network Structure." *Journal of Public Administration Research and Theory* 8:2:203-22.

National Institute of Standards and Technology.
1999 "Baldrige National Quality Program: 1999 Criteria for Performance Excellence." www.quality.nist.gov.

Nigro, Lloyd G., and Nigro, Felix A.
1994 *The New Public Personnel Administration*, 4th ed. Itasca, Ill.: Peacock.

Patton, Carl V., and Sawicki, David S.
1986 *Basic Methods of Policy Analysis and Planning*. Englewood Cliffs, N.J.: Prentice-Hall.

Perry, James L., and Mesch, Debra.
1997 "Strategic Human Resource Management." In Carolyn Ban and Norma M. Riccucci, eds. *Public Personnel Management: Current Concerns, Future Challenges*. New York: Longman.

Reeves, T. Zane.
1997 "Labor-Management Partnerships in the Public Sector." In Carolyn Ban and Norma M. Riccucci, eds. *Public Personnel Management: Current Concerns, Future Challenges*. New York: Longman.

Roberts, Gary E.
1996 "A Case Study in Performance Appraisal System Development: Lessons from a Municipal Police Department. *American Review of Public Administration* 26:3:361-85.

Ross, Bernard, and Levine, Myron A.
1996 *Urban Politics: Power in Metropolitan America*. Itasca, Ill : Peacock.

Rossi, Peter H., and Freeman, Howard E.
1989 *Evaluation: A Systematic Approach*. Newbury Park, Calif.: SAGE.

Saltzstein, Alan.
1995 "Personnel Management in the Local Government Setting." In Hays and Kearney, eds.

Sandfort, Jodi R.
1999 "The Structural Impediments to Human Service Collaboration: The Case of Welfare Reform." *Social Service Review* 73:3:314-39.

Schneider, Saundra K.
1988 "Intergovernmental Influences on Medicaid Program Expenditures." *Public Administration Review* 48:4:756-63.

Smith, Russell L., and Lyons, William.
1980 "The Impact of Fire Fighter Unionization on Wages and Working Hours in American Cities." *Public Administration Review* 40:6:568-74.

Straus, Stephen K.
1993 "Still Not Developing After All These Years? The Intra-organizational Role of Public Personnel Departments." *American Review of Public Administration* 23:4:385-402.

Thompson, Frank J.
1993 *Revitalizing State and Local Public Service: Strengthening Performance, Accountability, and Citizen Confidence*. San Francisco: Jossey-Bass.

Tsui, Anne S., and Gomez-Mejia, Luis R.
1988 "Evaluating Human Resource Effectiveness." In Lee Dyer, ed. *Human Resources Management Evolving Roles & Responsibilities*. Washington, D.C.: Bureau of National Affairs.

Ulrich, Dave.
1997 "Measuring Human Resources: An Overview of Practice and a Prescription for Results." *Human Resources Management* 36:5:303-20.

United States Government Accounting Office (USGAO).
1999 "Human Capital: A Self-Assessment Checklist for Agency Leaders." Washington, D.C.: GAO/GGD-99-179.

United States Office of Personnel Management (OPM).
1999 "The President's Quality Award Program: 2000 Information and Application." www.opm.gov/quality.

Walker, Jack L.
1969 "The Diffusion of Innovations Among the American States." *American Political Science Review* 63:3:880-99.

Weimer, David L., and Vining, Aidan R.
1992 *Policy Analysis: Concepts and Practice*. Englewood Cliffs, N.J.: Prentice-Hall.

Wright, Deil S., and Cho, Chung Lae.
1999 "Measuring and Explaining Reinventing Government: Administrative Reforms in the American States, 1994 and 1998." Prepared for discussion purposes at the spring meeting, National Academy of Public Administration, Wilmington, Del., June 10-13.