Examining Training in Large Municipalities:

Linking Individual and Organizational Training Needs

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A well-designed training system contributes to a public organization's performance by ensuring that employees have the knowledge and skills they need to meet the demands of their current and future jobs. Training may also help governments attract and retain workers in an increasingly competitive job market. Thus, it is important to understand the nature of training in public organizations. A comprehensive study of training in local government is almost nonexistent in literature.

The purpose of this article is twofold. First, using data from the Government Performance Project, it describes the training infrastructure in 33 of the largest cities by revenue. Second, it develops a framework — the Strategic Systems Training Model — that integrates the needs of individual employees and organizations, and can be used by governments to plan and analyze their training effectiveness.

Both practitioners and academics in the private, not-for-profit, and public sectors are increasingly focusing attention on organizational and human resource management performance. An important component or predictor of government performance is its training infrastructure. It helps organizations recruit and retain workers, as well as ensure that workers have the requisite skills and opportunities to perform in their current and future positions. Training is a direct means of developing individuals, and subsequently organizational capacity. This capacity, in turn, is linked to overall organizational performance. This article utilizes data collected as part of a national study of local, state, and national government — the Government Performance Project. Specifically, it focuses on training in the largest municipalities in the United States.

First, this article briefly reviews the existing research on training, demonstrating the need for a holistic examination of training in the public sector. Second, using data from the Government Performance Project, it describes the nature of training in 33 of the 35 largest cities in the United States. Finally, drawing upon what was learned through survey questions and personal interviews with city officials, this article presents a training model that integrates employees, the organization, and the environmental context in which employees and the organization operate.

Approaches to the Study of Training

Based upon our review of training literature, the article discusses three broad approaches to research. First, the bulk of research focuses on specific types of training such as management training programs and technical training, but the majority of this scholarship is directed toward private and not-for-profit sectors. Second, attention is devoted, particularly on the part of the American Society of Training and Development (ASTD) and the American Management Association (AMA), toward understanding the availability and nature of training in private firms. Again, attention toward public sector organizations is limited. Finally, existing studies of public sector training are focused primarily on case studies of specific programs, such as the United States Postal Service's technical training program.

A recurring discussion in the training literature relates to the categorization of training — management training, technical training, and skills of an aging workforce — and the inclination on the part of scholars is to limit their research to a particular type of training. These studies date as far back as Katz's 1955 piece on management training and skills.[1] More recent studies focus on technical skills, the utilization of technology for training, and information on the utilization of technology.[2] Other contemporary studies explore how to teach the aging workforce the skills needed to work in the information technology workplace. Yet another category of research explores how to improve the learning process of older employees.[3]

In addition to studies focused narrowly on specific types of training, a body of work exists that examines the availability and nature of training in the United States. Because of the studies' designs, they focus minimally on opportunities available in the public sector. Surveys conducted by ASTD and the AMA review a cross-section of large organizations across the country. However, government organizations comprise only seven percent of the ASTD sample.[4] The AMA study reported findings only related to basic skills training offered by private sector employers.[5] Although both the ASTD and AMA studies had large sample sizes and used extensive survey methods, the underrepresentation of public sector organizations in these studies means that the largest employer in the country is not being fully evaluated.

As implied by the proceeding discussion, scholars and professional associations have devoted considerably less attention toward understanding training within the public domain.[6] Of the research that exists, the dominant methodological approach is the case study design. These studies typically focus on a specific, specialized training program available to few employees.[7] One example of such a case study is a review of the Senior Managers Program at the U.S. Department of Education.[8] Other public sector training studies highlight skilled apprenticeship programs, although the prevalence of these programs may be diminishing.[9] Moreover, recently published public sector training manuals include few references and examples of training in local governments.[10] Most studies focus on federal and state government training; little is understood about the nature of training in local government.

As responsibility for the delivery of public sector goods and services is passed down to local governments, understanding the opportunities and mechanisms for developing employees becomes increasingly more important. With this delegation of responsibility come expectations that local government employees will deliver an increasing range of services. The need to provide additional services corresponds to a need to train employees for the delivery of extended services. Furthermore, in an increasingly competitive job market, it is essential that governments explore training as both an opportunity to retain employees and as a means to attract and develop new employees.

This article is designed to fill the gap of knowledge about training in local governments by examining and discussing training for all employees and managers. In addition, this article will look at the relationship between different measures related to training and the environment. Finally, based upon data collected and analyzed, we develop a framework that can be used to guide government planning and training analysis.

Data and Methods

Training is described using 1999 data from the Government Performance Project (GPP). In March 1999, the GPP administered a survey to the 35 largest cities (by revenue) regarding their human resource management practices (see Appendix A). Two cities were excluded from analysis because of insufficient data, leaving 33 cities, or 94.3 percent of the sample. The human resource management survey instrument contained a series of multi-part, open-ended questions designed to yield information about a given city's training system. The survey instrument was designed and pretested in four states, four local governments, and four federal agencies in 1997. Based on this pilot study, the instrument was revised and streamlined to focus as directly as possible on the evaluation criteria for human resource management. After completing a survey of 50 states in 1998, the survey was revised.

Data Coding

Since the survey instrument consisted of open-ended questions, the following procedure was used to code the data for quantitative analysis:[11]

1. Designed a coding scheme for systematic conversion of the qualitative survey responses and supporting city documentation into quantified variables.
2. Pretested the coding scheme using the survey responses and supporting documentation of five cities.
3. Revised the coding scheme, reflecting feedback from the pretest.
4. Two raters assigned to code each case (city).[12]
5. Computed the inter-rater reliability.
6. Developed process for resolving coding discrepancies: two additional coders reexamined the responses, discussed each, and reached a joint consensus. [13]

Index Construction

The analysis is based on four indexes: general training diversity, managerial training diversity, overall training diversity (combines general and managerial training indices), and the GPP's training capacity index. Appendix B presents a list of questions by index and the corresponding alpha coefficients.[14]

Data Analysis

The data is analyzed using descriptive statistics — frequencies and bivariate correlations. The results are presented and discussed in the next section.

Nature of Training in Large Municipalities

As shown in Table 1, cities offer a diverse array of training opportunities. Seamless service training is provided the least often, with only 6.1 percent of the cities offering this type of training, and management training is offered the most, provided by approximately 76 percent of respondents. Interestingly, less than 50 percent of cities provide new employee orientation, which is an employee's first chance to learn about a city's rules, regulations, and policies.

Table 1. Types of Training Offered by Cities

Types of Training	Percentage of Cities that Offer Training (n=33)
Seamless service training	6.1%
Ethics	18.2%
Regulation training	21.2%
Technical (apprenticeship)	30.3%
First aid training	33.3%
Performance management	36.4%
Basic skills	48.5%
New employee orientation	48.5%
Computer service training	60.6%
Leadership development	60.6%
Supervisory skills	60.6%
Computer use	66.7%
Management skills	75.8%
Other training[15]	75.8%

More fundamental training about government regulations, ethics, and basic skills are offered by less than 50 percent of the responding cities. While less than a majority of cities offer training in these areas, a few cities excel in their provision of these courses. For example, Phoenix and Austin offer in-depth training on ethics. Austin utilizes a case-based approach that requires employees to simulate and address different

ethical situations. Computer service training and computer use, offered by 60.6 percent and 66.7 percent of the cities respectively, are the only general training courses offered by a majority of the cities. The growing importance of technology in nearly every aspect of work creates an increased need for training in this area.

More specialized training, designed for a more select target group, is offered in greater frequency than many of the fundamental training courses. For example, approximately 60 percent of cities teach courses on leadership development, supervisory skills, and management skills. Management skills training is the most common type of training offered by the cities. They most frequently offer 13 groups of managerial training (Table 2) that fall into two broad categories: 1) policies and regulation and 2) administrative skills. Training in the policies and regulation category is designed to provide managers with a working understanding of both internal and external laws and guidelines that govern the workplace environment. Examples include training on Equal Employment Opportunity, the Americans with Disabilities Act, and sexual harassment. Administrative skills training is intended to develop a manager's capacity to perform specific human resource management functions including recruiting, disciplining, and terminating employees.

Table 2. Percentage of Cities Offering Management Training Courses[16]

Types of Management Training	Percentage of Cities Who Offer Training
Customer assistance program	6.3%
Employee assistance program	9.4%
Sexual harassment	18.8%
Diversity/EEO	31.3%
General personnel policies	37.5%
Reward policy and procedures	37.5%
Termination policy	43.8%
Testing	43.8%
Grievance policy	56.3%
Recruiting	56.3%
Hiring	59.4%
Disciplinary policy	68.8%
Performance appraisal	78.3%

The discussion thus far has focused on the diversity of the classes available to municipal employees. These data begin to present a picture of training, yet there are many other aspects that contribute to understanding a city's training environment. Specifically, what management systems have a city adopted to support training? How do cities track training? What techniques do cities use to disseminate training opportunities? What incentives exist for employees to take courses?

Some cities track employees' training records centrally, while others assign this responsibility to individual agencies in which employees work. Specifically, in 76.0 percent of cities, the central personnel department keeps records of individual employee training, and in 66.6 percent, individual departments keep records. Records kept by the central office were computerized more frequently (82.6 percent) than those kept at the department level (50.0 percent). Computerized records allow managers and policy makers easier access for planning and analysis.

Cities may elect to publicize training opportunities to employees. The GPP's research shows that only 50 percent of cities distribute a training catalog, and only 23.1 percent have a training catalog available on the Web. Having a training catalog on the Web can make it easier for employees to stay up-to-date with course offerings. Honolulu and Jacksonville are two cities that provide online training catalogs.

Finally, cities may offer incentives to encourage training. The survey responses identified two ways cities do this. First, employers offer to pay for employees' training programs, conference fees, or college courses. Second, employers offer non-monetary and direct monetary rewards such as college credit, recognition, and skill pay.

In 75.8 percent of the cities surveyed, financial incentives are used to encourage outside training. The most frequently offered incentive is tuition reimbursement, with 83.5 percent of cities offering some amount of money for reimbursements. In addition to tuition reimbursement, 34.8 percent of cities offer to pay for training. Only a few cities offer to pay more than $500 a year. For example, Milwaukee's maximum allotment of funds for conferences and other external training is $300 per employee per year.

Along with the variation in their monetary value, the requirements for tuition reimbursement vary. For example, some cities require employees to receive a minimum grade to qualify for reimbursement. Others provide a sliding scale of reimbursement that is directly related to the grade received or degree program the employee is enrolled in. For example, Denver will reimburse employees for half of their tuition expenses up to an annual limit of $1,000 toward an associate's degree, $1,200 toward a bachelor's degree, and $1,400 toward a master's degree.

Other incentives for obtaining training are the rewards employees receive for completion. The GPP identified five possible rewards for training: class certification, college credit, recognition by supervisor(s), meal (ceremony), and skill pay. Rewards for training can motivate employees to not only seek, but complete training. Despite their potential positive impact, the survey results show that less than a third of cities offer rewards for completing training (Table 3).

Table 3. Incentives to Encourage Employee Participation in Training

Type of reward	Percent that offer (n=31)
Class certification	19.4%
College credit	19.4%
Recognition by supervisor	6.5%
Meal (ceremony)	3.2%
Skill pay	29.0%
Other	16.1%

Rewards and financial incentives may encourage employees to participate in additional training, but for employees to take advantage of training opportunities, they must be aware of the types of training available to them. Cities have used various measures to create systems that support and encourage training. Some efforts are made to heighten employee awareness by disseminating materials on available training to employees. Some cities are more aggressive in their approach, offering to pay for courses, conferences, and skills obtained in specific courses. The following section probes the relationship between a city's training infrastructure and internal and external environmental factors.

Training and its Relationship to a City's HRM System

When exploring the relationships between training and environmental variables, interesting relationships emerge that may be overlooked when exploring training only at an aggregate level. Specifically, we explore four training-related measures (see Appendix B): training capacity, diversity of training courses, and monetary encouragement to complete training. We look at the relationship of each of these factors with different external and internal environmental factors including unionization, workforce planning, and workforce age.

Unionization

Unions are major stakeholders in many cities.[17] The cities range in their extent of unionization from no union representation to 99 percent of city employees belonging to a union (Appendix C).[18] The level of unionization is correlated with several aspects of training. Increased unionization is associated with a greater diversity of training courses offered, greater overall performance in training, and the use of incentives.

Course diversity and training capacity[19] are positively and significantly correlated with unionization ($r=0.432$ and $r=0.482$, respectively). Our findings support the earlier work of Knoke and Kalleberg (1994), who found a positive and significant relationship between training availability and unionization.[20] Despite city reports of challenging relationships with employee unions, the data suggests that as the number of

employees covered by unions increases, cities offer employees more course diversity. While cities with greater union presence are more likely to offer monetary encouragement to employees for training completion, the relationship is not statistically significant.

Workforce Planning

Cities that formally plan for their future workforce are more likely to offer a greater diversity of training opportunities and are more likely to do well in training overall ($r=0.496$ and $r=0.465$, respectively). The data suggests that cities with the foresight to plan for the future are more likely to understand the importance of training in developing a workforce that will meet the needs of both the city and the employees. Workforce planning enables a city to understand its workforce strengths and weaknesses and to create systems within HRM that compensate for future shortcomings. One such system is training.

Workforce Age

As the average age of the public sector workforce rises, it is important to understand if, and how, management responds to the aging workforce in regards to training. The average age of the workforce is negatively related to the level of encouragement offered for completing training ($r=-0.380$). The results indicate that as the workforce ages, the number of monetary incentives offered to employees decreases. This finding may suggest that managers see older employees as more skilled and less likely to leave. Therefore, governments may not perceive the need to support training because much of the workforce is viewed as skilled, and therefore training is not seen as a good investment for the city. Moreover, management may assume that additional incentives will not impact the likelihood that senior workers will leave city employment. West and Berman, who found a low incidence of job retraining for aging workers, support this finding.[21]

This section explored a series of bivariate relationships between training-related measures and environmental factors including unionization, workforce planning, and workforce age. Unionization and workforce planning are significantly associated with diversity of training opportunities and training capacity. Monetary encouragement is significantly associated with average workforce age; however, the nature of this relationship is negative. While our data is useful in providing information about the array of courses offered and a broad sense of the training environment structure, it offers limited insights about the quality of course offerings or the extent to which training meets the strategic needs of the government. As a result, this article develops a framework that structures our understanding of training from both the individual employee perspective and the organizational perspective. The following model is the result of an inductive process of extensive and thorough examination of the material from the GPP's research on city governments. The model clarifies how the organization's training structure represents two distinct components and how these components may be prioritized.

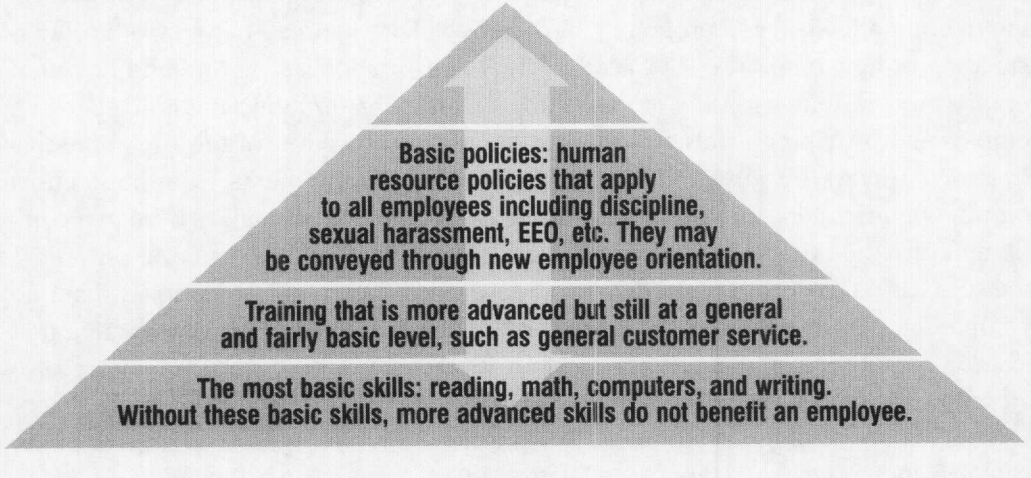
Strategic Systems Training Model: An Integrated Approach

The Strategic Systems Training Model (SSTM) is based on the premise presented by Abraham Maslow's *A Theory of Human Motivation* (1943) in which he describes a hierarchy of needs: when a foundational need is met, a more complex need emerges that an individual strives to fulfill. It is the emerging tension that motivates employees. Maslow's model is based on the assumption that all individuals have needs that underlie their motivational structure, and as a lower level need is fulfilled, that need no longer drives behavior. However, a new higher order need becomes the source for motivation.[22]

Component 1: The Individual Employee

Using Maslow's model as a starting point, he argues that humans have individual motivational structures. We take a similar approach and argue that individuals have individual training structures. In Maslow's model, individuals are motivated at the most basic level by "physiological" needs that include their basic survival needs. In the individual's training structure, the most basic level of need is training on minimal occupational skills needed for basic employment survival. Depending on the individual, this may be basic literacy training or basic computer training. As shown in Figure 1, as an individual moves up the hierarchy, his or her motivation becomes more refined and specific. Similarly, as public sector employees progress through the training hierarchy of needs, the training requested becomes more advanced and specialized.

Figure 1. The Individual Training System



Each employee has his or her own training structure based on the skills the individual has previously mastered and the nature of the work the person is undertaking. Employees with math and writing abilities will not need training to develop these skills

and may instead seek training related to such topics as personal or leadership development and customer service that are higher in the training system pyramid.

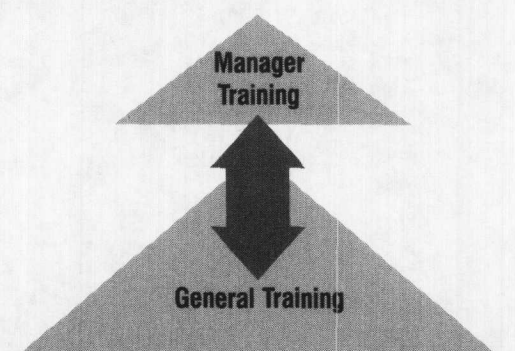
In Maslow's model, individuals still need to fulfill lower-level needs as they progress up the hierarchy. The training model begins to deviate from Maslow's model at this point. Basic training does not need to be continually re-taught as more advanced training is undertaken, but the basic skills gained through previous training do need to be maintained. An individual's training structure is the blueprint for the training the individual needs to build his or her capacity, based upon the foundation of skills and training the person has already received.

Component 2: The Organization

An organization, like an individual, has its own training structure based on its needs and the skills of its workforce.[23] The training structure for an organization is made up of its employees, who bring their own training structures. Employees fill the layers within an organization; the organization needs to be aware of an employee's current level of need and train him or her accordingly. The organization must also consider how the different needs and skills of its employees fit within the overall needs and mission of the organization. An organization that works to train all employees at the most basic level can then shift resources to other areas of training the organization needs to prosper. Furthermore, an organization must reconcile the obligation of meeting the training needs of its individual employees with its responsibility to develop an organizational training structure that suits its overall needs. An organization with a strategic focus advances and develops through its acquisition of new human capital and the development and training of its current human capital.

The diversity of employees' training needs means that an organization has to carefully plan its training structure to train employees at the appropriate level according to both individual and programmatic needs, which requires a more holistic understanding of how employees fit into the larger organizational structure and how that employee contributes to the accomplishment of the organization's mission. Matching employees to training levels actually results in the separation of the organizational training structure into two training sub-structures or components: one that focuses on training managers and the other that focuses on general training. These two components are then treated as separate but interactive pieces of the organization's training structure. They can be prioritized and developed differently. The priority that one component may receive over the other is often due to limited resources, training philosophy, or other contextual factors. In an ideal system, both components receive attention. In reality, one part is often prioritized over another due to budget constraints and other limited resources. This prioritization often relates to greater philosophical and contextual factors (see Figure 2).

Figure 2. Organizational Training Components

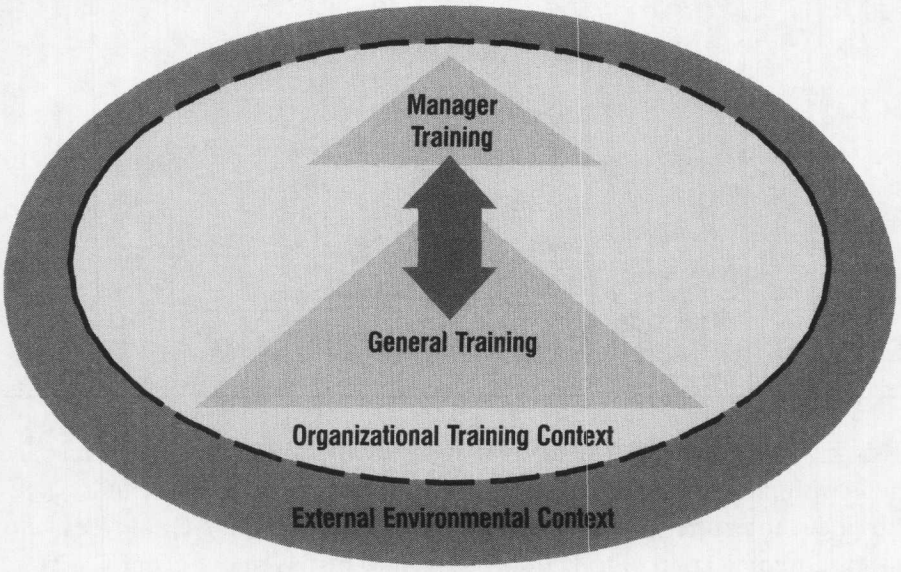


For example, cities that believe in succession planning, or filling management positions with people that have worked their way up through government, are more likely to focus their attention on the bottom triangle, expecting employees who complete those training courses to later progress into management positions. Thus, they want to advance the individual within that individual's training structure because they will take those skills to their next positions. This type of city is likely to prioritize the general training component.

Cities that place a priority on the manager training structure might feel that trained managers transfer information to employees, so general training is not as important. This notion implies that managers act as trainers for employees, and as a result, fewer formal courses may be offered to general employees. This could lead to a less-developed training program. The transfer of training through informal networks does not allow for formal record keeping of an employee's progress, thus making it difficult for the organization to accurately plan organizational training that meets individuals' needs. Another explanation for the focus on the manager component could be justified by cities that are undertaking massive change; the priority may be to familiarize managers with changes so they can help transition the organization.

Research has demonstrated the significance of the environment on organizational structure and behavior.[24] These examples demonstrate this significance by presenting factors that are outside the organization's training structure, yet have a serious impact on how the training system operates. The influence of these contextual factors on the training system are included as important explanatory factors in this model (see Figure 3).

Figure 3. Comprehensive Model



Illustrating the Framework

To demonstrate the points presented in the model, we provide the following examples of how two cities have prioritized their organization's training components in light of contextual factors.

New Orleans is an example of a city that focuses on teaching basic skills to its employees, thus placing primary importance on the general training component. As an uncompetitive pay rate and minimal benefit package make hiring qualified applicants more challenging, the city is hiring people who need basic math and literacy training in order to serve the public and meet the demands of their positions. The city anticipates working with local schools to provide additional literacy training to its employees.

Detroit serves as an example of a city that places emphasis on the management component. Currently undergoing major policy changes, Detroit is moving toward a management system that allows increased managerial flexibility as a result of decentralizing many core human resource management functions, while at the same time instituting workforce planning and a new employee performance appraisal system. Training in Detroit is focused on a comprehensive management training program that covers the following topics in the course of five days: the role of the supervisor, city goals, communication, effective work groups, performance evaluations, effective employee relations, conflict management, and implementing change. In a system with limited resources, the new organization philosophy can be communicated from the recently trained managers to the employees. Instilling the new values in managers enables the organization to pave the way for the new management philosophy to ease the transition.

Cities can use the SSTM model to analyze the components of their training structures and the skill needs of their employees. Picturing training systems through this structural form helps cities understand the significance of each employee's training needs and how each employee's skills fit into the greater organizational context. Knowing what training is appropriate at different levels and delivering training appropriately is of value to employees and management alike. Training plans can be created to ensure that employees are being appropriately developed to meet the demands of their current and future positions.

This model serves two purposes in the planning process. First, it allows planning for individual training needs, and second, it allows planning at the organizational level. This second purpose is multidimensional, including the individuals that make up the organization, the capacity they bring to the organization, and how this interacts with meeting the future goals of the organization. For example, if an organization plans to make changes in the future and realizes that its employees do not have the skills to implement or respond to those changes, the success of the organization will depend on the identification of and response to employee training needs.

The SSTM model would serve a city well during workforce planning efforts. Understanding the skills employees bring to their positions allows cities to determine individual training needs, thus the training opportunities that should be available throughout the city. This understanding also enables the city to identify skill vacuums to be filled, especially when faced with a large percentage of retirements in the coming decade.

Conclusion

This article presented a picture of training in 33 city governments, as well as key relationships that help us to understand training capacity, both overall and in relation to some of its key components. Cities offer a range of courses to general employees, ranging from the most basic to more advanced skills. Interestingly, fewer cities offer basic training than a more specialized set of training courses. For example, less than half offer new employee orientation, while 60.6 percent offer leadership training. Management training is typically broken into two types: policy and regulations and administrative skills. Our research shows that training responsibility is more often placed centrally, as is record keeping and the offering of citywide training. Encouragement and rewards are used by a majority of cities, with tuition reimbursement being the most common form.

In addition, key relationships emerged. The level of unionization was found to be positively and significantly related to training diversity and overall performance. The presence of a formal workforce plan was also related to the previously mentioned factors. The use of monetary rewards was negatively related to the average age of the workforce.

Finally, this article provides a model that helps to conceptualize individual training structures and the organizational structures, keeping in mind the contextual fac-

tors involved. This model presents a structure that places training needs into a hierarchy for individuals, based on both their past training and future training needs to meet present and future organizational needs. The organizational structure of this model demonstrates how cities break training into two components, general and managerial, and how these components are treated and prioritized differently, often because of the contextual factors the city faces. It is important to explore the relationship between individuals and the organizational training structures in order to adequately plan for the needs of both the organization and its members.

Implications

Despite the efforts this article makes to fill the gap in public sector training research, there remains a need for future research that addresses the effectiveness of training structures. Our model indicates that to adequately meet the current and future demands of citizens, governments need to conduct assessments that evaluate the training needs of both individual employees and the organization. Furthermore, analyzing the cities indicated that few incorporate training in their workforce planning efforts. Cities should evaluate the outcomes of their training, reviewing if courses meet the needs of individual employees and if training results in improved job performance. As governments face a large percentage of retirements in the coming decade, needs assessment and evaluation related to training can serve as an important tool in meeting the skill vacuum that may ensue without adequate planning.

Appendix A: Top 35 Cities by Revenue

Top 35 Cities by Revenue

1. New York, NY
2. Los Angeles, CA
3. Washington, DC
4. Chicago, IL
5. Philadelphia, PA
6. San Francisco, CA
7. Detroit, MI
8. Baltimore, MD
9. Boston, MA
10. Memphis, TN
11. Houston, TX
12. Nashville & Davidson County, TN
13. San Antonio, TX
14. Jacksonville, FL
15. San Diego, CA
16. Dallas, TX
17. Denver, CO
18. Phoenix, AZ
19. Austin, TX
20. Seattle, WA
21. Indianapolis, IN
22. Honolulu, HI
23. San Jose, CA
24. Minneapolis, MN
25. Atlanta, GA
26. Anchorage, AK
27. Richmond, VA
28. Long Beach, CA
29. Cleveland, OH
30. Milwaukee, WI
31. Virginia Beach, VA
32. Columbus, OH
33. New Orleans, LA
34. Kansas City, MO
35. Buffalo, NY

These cities are listed in order of their overall revenue. Two of the cities on this list, Anchorage, AL, and Long Beach, CA, were excluded from this analysis due to insufficient data.

Appendix B: Coding Scheme by Index

Index 1. Diversity of General Training

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 = 1-13
Alpha =0.76
Mean = 6.45
SD = 3.2

Index 2. Diversity of Management Training

Management training

- Recruiting
- Testing
- Hiring
- Evaluating employee performance
- Disciplinary procedures
- Grievance procedures
- Termination procedures
- Reward procedures
- Diversity
- Employee assistance programs
- Customer relations and services
- Sexual harassment
- General HRM procedures

Range = 1-13
Alpha =0.85
Mean = 5.9
SD = 3.51

Index 3. Diversity of Training (Components of Index 1 and 2)

Range = 1-26
Alpha =0.84
Mean = 12.36
SD = 5.72

Index 4: GPP's Training Capacity Index

Assessing Training Capacity

Availability of training

Employee awareness of training opportunities

Maintenance of individual training records

Frequency of general training

- Grievance procedures
- 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

Frequency of management training

- Selection
- Evaluating employee performance
- Disciplinary 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

Range = 1-23

Alpha =0.77

Mean = 13.66

SD = 7.1578

Appendix C: Average Workforce Age, Unionization, Published Grades, and Training Index Score

City	Average Workforce Age	Percent Unionized	Human Resource Grade	Overall Grade	Training Index Score
Atlanta			B-	C+	7
Austin	39	0	A-	A-	22
Baltimore	43	90	C+	B-	24
Boston	44	99	C-	B-	1
Buffalo	43	86	D	C-	2
Chicago	44	85.6	C-	B-	12
Cleveland	42	79	C-	C	14
Columbus	42	97	C-	C	14
Dallas	42.1	0	C	C+	2
Denver	28	B-	B-	22	
Detroit	42	90	B-	B-	18
Honolulu	44	C	B	17	
Houston	42	0	C	C+	9
Indianapolis	41	67	A-	B+	14
Jacksonville	41	90	C+	B-	17
Kansas City	41.6	64	B-	B-	13
Los Angeles	97.6	C-	C	12	
Memphis	40	75	D	C+	13
Milwaukee	46.3	85	C+	B	15
Minneapolis	42	93	B	B+	14
Nashville	42.06	0	B	C+	11
New Orleans	0	F	C-	6	
New York	40	85	B-	B	17
Philadelphia	42.26	85	B-	B	23
Phoenix	40.7	69	A	A	28
Richmond	0	C	C+	2	
San Antonio	40.68	27	B+	B	23
San Diego	95	C	B	2	
San Francisco	98	C	C+	17	
San Jose	43	95	C	B-	18
Seattle	40	75	B	B	21
Virginia Beach	40	0	B	B+	8
Washington, DC	44.6	73	B-	C+	13

An empty cell indicates no value was reported in the survey response. Average workforce age and percent unionized were reported by the cities in survey responses. HR Grade and Overall Grade represent those published in the February 2000 edition of Governing Magazine. The training index score was calculated by the GPP through Index 4, the training capacity index, as presented in Appendix B.

Notes

[1] Katz, Robert. "Skills of an Effective Administrator." *Harvard Business Review*. January/February 1955. According to Katz, three skill sets held by successful administrators include technical, human, and conceptual skills.

[2] Rogers, Robert. "Distance Learning: It Played Well in Peoria." *Training*. November 1994.
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Lynch, Lisa and Sandra Black. "Beyond the Incidence of Employer-Provided Training." *Industrial and Labor Relations Review*. Vol 52, number 1, October 1998. Pg 64.

[3] West, Jonathan and Evan Berman. "Managerial Responses to and Aging Municipal Workforce: A National Survey." *Review of Public Personnel Administration*. Vol XVI, number 3, Summer 1996. Pg 38.

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Bassi, Laurie and Mark Van Buren. "1999 ASTD State of the Industry Report." *Training and Development*. Vol 53, January 1999.

[5] Sherman, Ellen. "Back to Basics to Improve Skills." *Personnel*. Vol 66, number 7, July 1989. Pg 22.

[6] Cosier, Richard and Dan Dalton. "Management Training and Development in a Non-Profit Organization." *Public Personnel Management*. Vol 22, number 1, Spring 1993.

[7] Whitehall, Betty and Barbara McDonald. "Improving Learning Persistence of Military Personnel by Enhancing Motivation in a Technical Training Program." *Simulation and Gaming*. Vol 24, number 3, September 1993.

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[10] Van Wart, Montgomery, N. Joseph Cayer, and Steve Cook. *Handbook of Training and Development for the Public Sector*. Jossey Bass Publishers. 1993.

[11] Larsson, Rikard. "Case Survey Methodology: Quantitative Analysis of Patterns Across Case Studies." *Academy of Management Journal*. Vol. 36, 1993.

[12] Donahue, Amy K., Sally Coleman Selden, and Patricia W. Ingraham. "Measuring Government Management Capacity: A Comparative Analysis of City Human Resources Management Systems." *Journal of Public Administration and Theory*. Vol. 10, 2000.

[13] As suggested by Larrson, the designer of the coding scheme did not 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. To resolve the 199 discrepancies, a Syracuse University graduate student and the designer of the coding scheme reexamined the observations, discussed, and reached a joint consensus about how to code them. Larsson recommends a consensus approach as opposed to an averaging approach to resolve coding discrepancies.

[14] Donahue, Amy K., Sally Coleman Selden, and Patricia W. Ingraham. "Measuring Government Management Capacity: A Comparative Analysis of City Human Resources Management Systems." *Journal of Public Administration and Theory*. Vol. 10, 2000.

[15] Although general categories encompass the bulk of training offered, there remains training particular to locality such as Total Quality Management, foreign language training, or pay for performance systems. Their lack of proliferation throughout the different cities did not warrant inclusion of a specific category.

[16] The "other" category described previously has been excluded from this table for clarity of presentations; 46.88 percent of cities offer a training course to managers that would be labeled as "other."

[17] Donahue, Amy K., Sally Coleman Selden, and Patricia W. Ingraham. "Measuring Government Management Capacity: A Comparative Analysis of City Human Resources Management Systems." *Journal of Public Administration and Theory*. Vol. 10, 2000.

[18] This measure of unionization is self-reported by the cities.

[19] This measure is based on the index created for the GPP analysis.

[20] Knoke, David and Arne Kalleberg. " Job training in U.S. Organizations." *American Sociological Review*. Vol. 59, Issue 4, 1994.

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