

Audit of the Span of Control of Selected Departments in the City and County of Honolulu



Report No. 12-02/January 2012

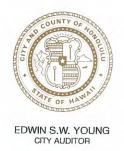
Audit of the Span of Control of Selected Departments in the City and County of Honolulu

A Report to the Mayor and the City Council of Honolulu

Submitted by

THE CITY AUDITOR
CITY AND COUNTY
OF HONOLULU
STATE OF HAWAI'I

Report No. 12-02 January 2012



OFFICE OF THE CITY AUDITOR CITY AND COUNTY OF HONOLULU

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January 25, 2012

The Honorable Ernest Y. Martin, Chair and Members Honolulu City Council 530 South King Street, Room 202 Honolulu, Hawai'i 96813

Dear Council Chair Martin:

Our office has completed its *Audit of the Span of Control of Selected Departments in the City and County of Honolulu.* The audit was self-initiated. The objective of the audit was to determine whether the city's organizational span of control was compatible with current management practices, and whether opportunities for streamlining the city's organizations are possible. This audit was conducted between August 2010 and January 2012 in accordance with generally accepted government auditing standards.

Audit Methodology

For the audit, we (1) identified the spans of controls and layers of management of selected agencies within the executive branch of the City and County of Honolulu; (2) reviewed the effect of position vacancies on reported spans of control and layers of management; (3) compared the spans of control and layers of management to recent trends and current management practices; and (4) made recommendations as appropriate.

We judgmentally selected 5 of the 21 city departments (the Departments of Budget and Fiscal Services, Enterprise Services, Environmental Services, Planning and Permitting, and Parks and Recreation). For each department, we selected the entity's organizational chart as of January 31, 2010 and used existing information reports to analyze the organizational structure. For each department, we examined the span of control, the layers of management in existence, and interviewed department staff regarding the results of our analysis. We analyzed the span of control and its underlying layers of management; analyzed in detail the organizations' operating structures; and determined if the organization or its operating subunits maximized its span of control and minimized the layers of management. We also quantified the number of vacancies and reviewed the effect of vacancies on the spans of control and layers of management. We did not perform an analysis of each department's operations to determine the appropriate span of control.

We reviewed other position vacancy reports and personal services contracts reports. We also reviewed span of control audits and literature related to best practices in this area. The data were compared to similar analyses of other jurisdictions and best practices as reported in current literature.

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Audit Results

The results of our analysis are intended to encourage the city to evaluate its existing organizational structure and to adopt spans of control and layers of management that are more consistent with existing management practices. Our analyses of the five departments were based on the total authorized full time equivalent (FTE) positions. The results indicated:

- The spans of control were generally narrower than recommended by current management practices, and the layers of management ranged from five to nine layers which were on the high end for other jurisdictions. We found that when currently vacant positions were considered, the spans of controls were further narrowed.
- Significant potential cost avoidances are possible by increasing (widening) the span of control, reducing the layers of management, and reducing the ratio of supervisory staff to nonsupervisory staff.
- Abolishing positions that have been vacant for five or more years (particularly long vacant supervisory positions) would more accurately reflect budget requirements and could reduce regular salaries requirements by over \$5 million.
- We further recommend that departments continue to minimize their use of personal services contracts.

Management Response

The Managing Director's Office reports that it agrees with most of the recommendations of the audit, but found that the report contained misleading statements and errors which incorrectly characterize the city departments reviewed. Specifically, the managing director reports that the administration:

- Generally agrees with recommendations to require each department director to conduct an
 assessment of the spans of control and layers of management for each city department. The
 assessments should be completed prior to the next budget cycle.
- Is in agreement with the need to perform an assessment of long term vacant positions to identify
 and eliminate unneeded positions to achieve organizational reform, but contends that there are
 no potential cost savings to be realized.
- It disagrees and is disappointed that the audit recommends that departments comply with the intent and guidelines of the use of personal service contracts, noting that all personal services contracts comply with legal requirements.

Our report encourages the city to adopt updated management practices. The report acknowledges that there is no single optimal span of control and never suggested such. We do find that, for the agencies reviewed, the spans of controls are generally narrower and the layers of management are greater than jurisdictions included in our research. We recommend that the agencies conduct their own detailed assessments to determine the optimal spans of control and layers of management that will result in more efficient, economical, and effective operations.

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We acknowledge that a wide range of spans of controls and layers of management exist for all jurisdictions and their agencies. What is essential in the referenced span of control assessments from the jurisdictions cited in the managing director's response is that all concluded that their existing spans of control are narrower and layers of management are greater than existing management practices.

We agree that elimination of long term vacant positions should be carefully evaluated. However, those evaluations should be performed, and positions that are no longer necessary should be abolished. We note the administration's own budget documents state that salary requirements are based on authorized full time equivalent positions, including all vacant positions. We re-affirm our position that failure to eliminate unnecessary long-term vacant positions could result in budget requests that are higher than actually needed.

Finally, with respect to personal services contracts, the managing director's response correctly notes that there is no restriction on consecutive personal services contracts issued to the same person for the same position (i.e. the contracts are for one year or less and are duly certified). Our concern is that the use of personal services contracts should not be used as a substitute for normal civil service procedures. Our examination of previous administration practices indicates that some of these personal services contracts appear to be used to fill long-term, vacant FTE positions. We question whether such use meets the intent of the personal services contracts requirements. We also question the validity of claimed vacancy cutback savings for unfilled FTE positions which are being filled, even temporarily, through personal services contracts.

Acknowledgement

We express our appreciation for the cooperation and assistance provided to us by the staffs of the Office of the Managing Director and the staffs of the Departments of Budget and Fiscal Services, Enterprise Services, Environmental Services, Planning and Permitting, and Parks and Recreation.

We are available to meet with you and your staff to discuss the review results, provide more information, and to answer any questions. If you have any questions regarding the audit report, please call the auditor-in-charge, Van Lee, or me at 768-3130.

Sincerely,

Edwin S. W. Young City Auditor

(A. 200 (A. 100 (A. 10

c: Peter Carlisle, Mayor

Douglas Chin, Managing Director

Michael Hansen, Director, Department of Budget and Fiscal Services George Keoki Miyamoto, Director, Department of Enterprise Services Timothy E. Steinberger, Director, Department of Environmental Services Gary B. Cabato, Director, Department of Parks and Recreation David K. Tanoue, Director, Department of Planning and Permitting Noel Ono, Director, Department of Human Resources

Van Lee, Deputy City Auditor



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Chapter 1

Introduction

This Audit of the Span of Control of Selected Departments in the City and County of Honolulu was self-initiated. The objective of the audit was to determine whether the city's organizational span of control was compatible with current management practices, and whether opportunities for streamlining the city's organizations are possible.

The results of our analysis are intended to encourage the city to evaluate its existing organizational structure and to adopt spans of control that are more consistent with existing management practices. In our opinion, expanding the spans of control and reducing the layers of management could generate efficiencies and economies in operations, reduce budget deficits, and reduce salary requirements by over \$5 million.

Background

The U.S. economy experienced an economic downturn during 2008 - 2010 and Honolulu was affected by the recession. To mitigate the economic downturn and maintain a balanced budget, the city raised sewer and other fees, restricted agency budgets, implemented spending restrictions, and instituted a hiring freeze. Adding to the budget pressures were the need to provide basic city services to a population of almost one million residents; improve infrastructure; upgrade facilities such as the sewer and wastewater collection systems; and to prepare for the construction of a mass rail transit system.

The mayor of the City and County of Honolulu serves as the chief executive officer. Assisted by a managing director, the mayor is responsible for 21 departments, quasi-governmental agencies, and commissions. In fiscal year 2010, the city's operating budget was over \$1.8 billion and capital spending totaled an additional \$1.7 billion. Authorized citywide staffing was over 10,400 full-time equivalents (FTEs).

Ensuring that an agency's organization and management structure is best suited for the nature of its activities can result in more effective and efficient delivery of services and could result in opportunities for reducing the cost of operations. Organizational structures tend to evolve over time. Therefore, periodic reviews

of an organization's structure, particularly during periods of budget deficits and economic stress, could result in opportunities for reducing the organization's operating costs.

Objectives, Scope and Methodology

As mentioned earlier, the objective of the audit was to determine if the city's organizational span of control was compatible with current management practices and to determine if opportunities for streamlining the city's organizations are possible. More specifically, we (1) identified the spans of controls and layers of management of selected agencies within the executive branch of the City and County of Honolulu; (2) reviewed the effect of position vacancies on reported spans of control and layers of management; (3) compared the spans of control and layers of management to recent trends and current management practices; and (4) made recommendations as appropriate.

We judgmentally selected 5 of the 21 city departments (the Departments of Budget and Fiscal Services, Enterprise Services, Environmental Services, Planning and Permitting, and Parks and Recreation). For each department, we selected the entity's organizational chart as of January 31, 2010 and used existing information reports to analyze the organizational structure. For each department, we examined the span of control, the layers of management in existence, and interviewed department staff regarding the results of our analysis¹. We analyzed the span of control and its underlying layers of management; analyzed the organizations' operating structures; and determined if the organization or its operating subunits maximized its span of control and minimized the layers of management. We did not perform an analysis of each department's operations to determine the appropriate span of control.

We quantified the number of vacancies and reviewed the effect of vacancies on the spans of control and layers of management. For each agency selected, we compared the organizational charts with the position summary, position classification, and list of vacant positions reports as of January 31, 2010 to compile an accurate portrait of each agency's personnel structure.

¹ Our analysis is based on the updated organizational charts available during the audit. The analysis does not include any informal organization or de facto supervisory structures that were not included in the organizational charts.

We reviewed other position vacancy reports and personal services contracts reports. We also reviewed span of control audits and literature related to best practices in this area. The data were compared to similar analyses of other jurisdictions and best practices as reported in current literature.

The completed updated organizational charts were circulated to each department to verify the accuracy of the information, including the overall organizational structure, the classification of supervisory and non-supervisory personnel, and position vacancies. The agency-verified charts were then used as the basis to perform the various span of control and layers of management analyses.

As part of the verification, the agencies were asked to confirm the classification of positions as supervisory within each agency. We followed the methodology used in other audits² by including supervisory positions that were identified as managerial, formal supervisors (including those that completed performance evaluations of subordinates), and informal supervisors (including those that by job function included supervisory elements although they were not formally established in the job description)³. Each department was provided a copy of the organizational chart developed in our office and asked to confirm our characterization of a position as supervisory.

This audit was conducted from August 2010 to December 2011 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusion based on our audit objectives. To our knowledge, no previous analyses of the departments' organizational structure have been performed.

² Interim Study of Span of Control, South Florida Water Management District, 1999; Interim Span of Control Report, County of San Mateo, CA, 2010; City Responds Positively to Recommendation Made in Our 1996 Report; Ratio of Staff to Managers in City Government, Seattle City Audit, 1997.

³ For example, non-automated refuse collection routes utilize a team of three workers. The refuse truck driver is designated as *supervisor* over the other two workers although there is no formal supervisory element in the job description.

Audit Results

Our analyses of the five departments was based on the total authorized full time equivalent positions. The results indicated spans of control were generally narrower than recommended by current management practices; the layers of management ranged from five to nine layers which are on the high end for other jurisdictions. We found that when currently vacant positions were considered, the span of controls were further narrowed. Significant potential cost avoidances are possible by increasing the span of control, reducing the layers of management; and abolishing positions that have been vacant for five or more years, particularly long vacant supervisory positions.

Chapter 2

Departmental Spans of Control Could Be Increased

Our analysis is intended to encourage the city to examine its current organizational structure so that efficiencies and economies reported by other jurisdictions can be emulated within this city. Our analysis of the total authorized full time equivalent (FTE) positions indicated the spans of control among the sampled city departments were generally narrower than what is recommended by current management practices and reported by other governments. While the span of control is dependent upon a number of factors and departments may have different requirements, the potential exists to widen the departments' spans of control, as well as effectiveness and efficiency, by increasing the ratio of supervisory personnel to non-supervisory personnel.

Span of Control Terms and Background

Span of control refers to the number of employees reporting directly to a supervisor. Depending on the number of direct reports per supervisor, span of control is said to be wide (many direct reports) or narrow (few direct reports).

Span of control is expressed as a ratio of number of direct reports to a supervisor. For example if an organization with 150 employees of which 20 were identified as supervisors, the span of control would be 7.5 (150/20). In theory, the performance of any organization or operating subunit within an organization is maximized when the most ideal span of control for that unit is in place.

The *average span of control* is the ratio of all employees divided by the total number of supervisors minus one (highest ranked supervisor is not subordinate to anyone in the department). Individual spans of control within the organization are identified for each level within an organization that involves direct supervision of other employees.

Ineffective and inefficient operations are often associated with a span of control which is inappropriate to the operating characteristics of a particular unit. There are many factors that affect what is the most appropriate span of control and over time these factors may change, necessitating further re-evaluation over time. A sample of factors is shown in Exhibit 2.1 which can have the effect of narrowing or widening the preferred span of controls for an organization.

Exhibit 2.1 Sample of Factors Affecting Span of Control

Factor	Effect on Span of Control
Manager's role is strictly administrative	Widens
Organizational structure is a matrix rather than hierarchical	Widens
Employees are empowered to make decisions	Widens
Senior staff coach and mentor junior employees	Widens
Effective communication and collaboration technologies are in use	Widens
Manager is highly experienced and skilled in management techniques	Widens
Employees are process workers (repetitive)	Widens
Decision making is centralized at management level	Narrows
Volume of new staff or staff turnover levels are high	Narrows
Pace of change or novelty of tasks is high	Narrows
Employees are knowledge workers (mental work)	Narrows
Employees are geographically dispersed	Narrows
Jobs are complex, ambiguous, dynamic or otherwise complicated	Narrows
Lots of interaction required between supervisor and workers	Narrows
Manager conducts hands-on work alongside staff	Narrows
Employees have diverse work roles/responsibilities	Narrows

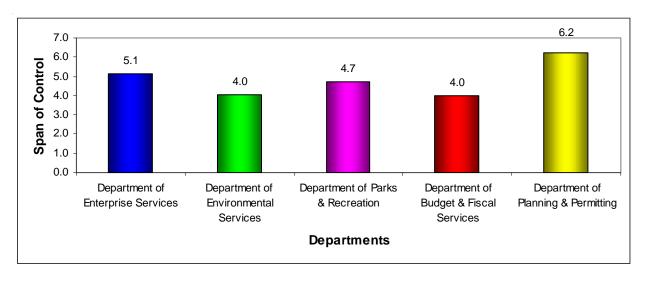
Sources: Infotech Research Group, Manager-to-Employee Ratios: Right-Size Span of Control; Answers.com, Span of Control; Reference for Business, Span of Control

A narrow span of control exists when there are relatively few employees reporting to a supervisor, while a wider span of control has more employees that report directly to a supervisor. For example, if three persons report directly to one supervisor this equals a span of control of 3.0 while nine persons reporting directly to another supervisor would equal a span of control of 9.0.

Sample of
Department Spans
of Control
Compared to a
Sample of Other
Governmental
Entities

Four of the five departments examined have narrow spans of control and are narrower than suggested by current management practices. As shown in Exhibit 2.2 the overall spans of control for the agencies ranged from 4.0 to 6.2, with a median span of control of 4.8

Exhibit 2.2 Span of Control by Department



Source: Office of the City Auditor

These spans of control are based on the ratio of the number of authorized full time equivalent positions in each agency to those positions identified as supervisory. The authorized FTEs includes FTE positions that were vacant as of January 31, 2010, and excludes employees under personal services contracts.

We compared Honolulu's spans of control to other governmental entities found in a search of available reports and found that Honolulu's spans of control were among the narrower of those reported as shown in Exhibit 2.3. If the Department of Planning and Permitting is excluded from the calculation, the four remaining departments have an average span of control of 4.45 which is the narrowest span of control among all the

organizations listed. This means that each supervisor has fewer direct reports than any of the jurisdictions listed in Exhibit 2.3.

Exhibit 2.3 Honolulu Span of Control Compared to Other Organizations

ORGANIZATION	SPAN OF CONTROL
Kansas City, Missouri, 2001	4.6
Palo Alto, California, , 2004	4.73
Honolulu, Hawaii, 2010	4.8
King County, Washington, 1994	5.6
San Mateo County, California, 2010	5.6
Seattle, Washington, 1996	5.9
California State Government, 1996	6.0
Portland, Oregon, 1994	6.5
Federal Government (1993)	7.0
Marin County, California, 2010	7.4
Contra Costa County, California, 2010	8.8
Texas State Government, 1997	9.0
Alameda County, California, 2010	9.1
Santa Clara County, California, 2010	9.6
Iowa State Government, 1996	10.0

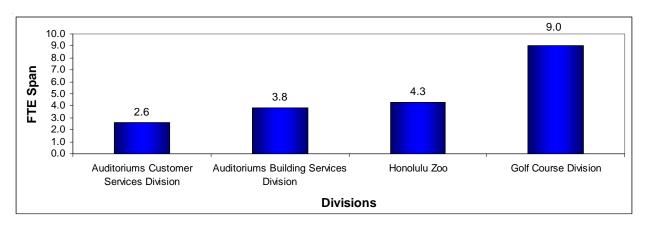
Sources: Performance Audit Span of Control, City Auditor's Office, City of Kansas City, Missouri (2002); Recommended Budget Supplemental Item – Interim Span of Control Report, County of San Mateo, California (June 18, 2010); and Office of the City Auditor, City and County of Honolulu

Division level spans of control are generally narrow

A review of the departments' spans of control at the division level confirms that, except for the Department of Planning and Permitting, the internal spans of control are narrow and could be widened. More specifically, the number of direct reports to each identified supervisory level could be expanded. In our opinion, each department needs to conduct an analysis that optimizes and expands the spans of control, and maximizes operating efficiencies and effectiveness.

Exhibits 2.4 through 2.8 show the spans of control for the departments by division level. Our analysis is based on the authorized full time equivalent (FTE) positions.⁴ From Exhibit 2.3, we selected 6.0 for our reference point.⁵

Exhibit 2.4 Span of Control within Department of Enterprise Services (by division)



Source: Office of the City Auditor

In the Department of Enterprise Services, three of the four divisions had spans of control below 6.0 . As shown in Exhibit 2.4 only the Golf Course Division exceeded the 6.0 ratio reference point.

⁴ Our analysis excludes volunteers, temporary workers, and part-time employees. City managers report these unauthorized FTEs may increase the spans of control and are not reflected in the authorized FTEs.

⁵ For our analysis, we used California's ratio of 6.0 as a reasonable span of control and was on the low end of the spans of control found. The spans of control ranged from 4.6 to 10.0 FTEs per supervisor. The midpoint was 6.5 FTEs per supervisor. California was chosen because it was close to the midpoint at 6.0 FTEs per supervisor and is considered a trend setter for the rest of the nation.

Exhibit 2.5
Span of Control within Department of Environmental Services (by division)

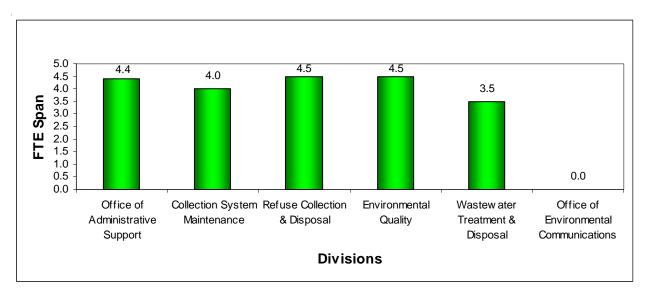


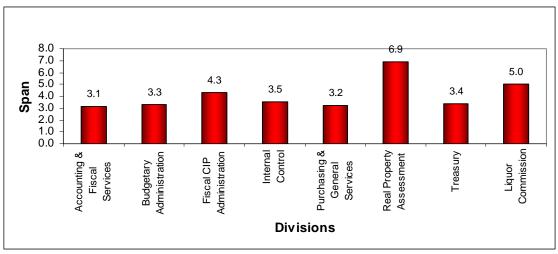
Exhibit 2.5 shows that in the Department of Environmental Services, none of the five divisions attained a 6.0 ratio. The Office of Environmental Communications, which is listed separately on the department's organization chart, has only one employee with no subordinates.

6.0 5.0 5.0 4.1 Span of Control 4.0 3.0 2.5 2.0 1.0 0.0 **Executive Services Urban Forestry** Park Maintenance & Recreational Services **Divisions**

Exhibit 2.6
Span of Control within Department of Parks and Recreation (by division)

Similarly, Exhibit 2.6 shows that in the Department of Parks and Recreation, all three divisions had spans of control below the 6.0 ratio reference point.





Source: Office of the City Auditor

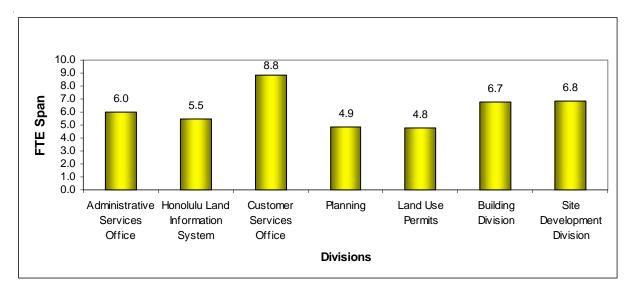
Exhibit 2.7 shows that seven of the eight divisions in the Department of Budget and Fiscal Services had spans of control that ranged from 3.1 to 5.0 and were lower than 6.0 . Only one division exceeded the 6.0 ratio we used as a reference point

Wider spans of control in the City are possible

The Department of Planning and Permitting indicates that a span of control of 6.0 or higher is possible in the city. Four of its seven divisions had spans of control exceeding the 6.0 reference point and ranged from 6.0 to 8.8. Exhibit 2.8 quantifies the span of control for each of planning and permitting's divisions.

Exhibit 2.8

Span of Control within Department of Planning and Permitting (by division)



Source: Office of the City Auditor

In addition, as previously shown in Exhibit 2.4, the Department of Enterprise Services' Golf Course Division had a span of control of 9.0. Although no optimal span of control exists, these examples indicate the opportunity for wider spans of control are possible.

Current Management Experts Advocate Increasing Spans of Control

A narrow span of control does indicate a systematic review of the departmental organization is warranted. By increasing the span of control, the departments and divisions could streamline their organization to achieve efficiencies and economies that are needed by the city to reduce budget deficits.

Contemporary management theory⁶ generally advocates that organizations can improve performance through wider spans of control. The most appropriate ratio of staff to managers can only be determined by carefully evaluating and balancing the particular purposes and characteristics of an organizational unit. While contemporary management theory no longer contends that there is a single optimal span of control for an organization, many leading management theorists agree that spans of control can be widened.

Spans of control that are too wide or too narrow both have drawbacks. Despite this, most contemporary management experts advocate spans of control that are wider than what we found for the five Honolulu departments. It has also been noted that the general trend in organizations since the 1990's has been to widen the organizational span of control. The trends are not new, but continue to be current. Exhibit 2.9 lists the recommendations of several experts for spans of control.

⁶ Contemporary management theory includes: Encyclopedia of Management, Span of Control, 2006, Gale Cengage; Span of Control, Encyclopedia of Business, 2nd Edition, 2006; Simple Models of Hierarchical Organizations, Ali Yassine, David Goldberg, Tian-Li Yu, Department of General Engineering, University of Illinois; Structure and the Performance of Public Organizations: Task Difficulty and Span of Control, John Bohte, Department of Political Science, Oakland University, and Kenneth J. Meir, Department of Political Science, Texas A&M University; Ode to Luther Gulick: Span of Control and Organizational Performance, John Bohte, Department of Political Science, Oakland University, and Kenneth J. Meir, Department of Political Science, Texas A&M University; Sound Off – On Achieving Excellence, Tom Peters, April 1994; The Coming of the New Organization, Peter F. Drucker, Harvard Business Review, January/ February 1988; How to Establish the Proper Span of Control for Managers, Industrial Management, November/December 1993; and Thriving on Chaos: Handbook for a Management Revolution, Tom Peters, 1987.

Exhibit 2.9

Spans of Control Recommended by Management Experts

Management Expert	Span of Control and Manager/Staff Ratios Recommended	Comments
Edward Lawler	15+ per manager	Author of The Ultimate Advantage.
Tom Peters	25+ per manager	Business author recommends that high- performance organizations should never have less than 15 staff per manager and should usually have more.
President Clinton National Performance Review	14 staff per manager	Directed federal government to double spans of control to 14 staff per manager based on 1993 report <i>Transforming Organizational Structures: Accompanying Report of the National Performance Review.</i>
James O'Toole	10 Staff per supervisor	University of Southern California professor whose study of spans of control shows an average of 10 staff per manager. He concluded that American workers are oversupervised.
Peter Drucker		Business author concludes that more staff per manager and fewer management layers lead to improved management and organizational performance.
National Commission on State and Local Public Service		Recommends decreasing the ratio of managers to staff and flattening the bureaucracy to increase accountability, save money, and shift personnel to the front line.
The Economist Magazine, November 9, 2009 ¹	The consensus of the size of the ideal span rose to between 15 and 25.	After 1960, Flatter, less hierarchical and more loosely structured organizations implied larger spans of control.
Himanshu Juneja ²	An ideal span of control is an organization, according to modern authors is around 15 to 20 subordinates per manager	

¹ Adapted from *The Economist Guide to Management Ideas and Gurus*, by Tim Hindle

Source: Audit of Restructuring Efforts and Management Span of Control with Organization Charts, April 2004, City Auditor's Office, City of Palo Alto, California

² Himanshu Juneja, Information Technology and Services Consultant, www.managementstudyguide.com, 2011

Current Trend Is to Widen the Spans of Control

Span of control concepts have changed over time. The literature notes⁶ that the changes in the beliefs about optimal spans of control reflect changing work conditions. Early span of control theorists believed that supervisors needed to maintain close control over subordinates and effective spans of control needed to be somewhat narrow.

Over time, the nature of work has changed. By the 1980s, the development of inexpensive information technology significantly altered the nature of the employee. Greater employee independence and interaction resulted, and spans of control widened as many middle management tasks were eliminated, reducing the need for middle managers. Today, there is greater reliance upon individual worker performance, with the role of supervisors changing from one of control to support.

Organizations with narrow spans of control tend to disperse decision authority through many layers of management with the final decision often at high levels of management. This usually increases the time it takes to make decisions and usually results in less responsive organizations and higher administrative expenses.

Organizations with wider spans of control permit decisionmaking authority at lower levels of management. This allows faster and more customer-oriented decision making. Other advantages of a wider span of control include:

- Greater employee satisfaction and motivation
- More opportunities for development of employee skills
- Less duplication of tasks, roles, and responsibilities
- Lower management costs
- Decreased need for management-support staff
- Fewer planning and coordination meetings
- Less paperwork due to fewer reporting requirements
- Greater management focus on planning and goals

- Less micro-management and faster decision making
- Clearer communication between the bottom and top layers of the organization

In addition it is reported that many public sector organizations have shifted from high-specialization to cross-functional teams and decentralization. Spans of control which are too narrow do not fully utilize managerial staff and may not be giving appropriate authority to staff that could assume more responsibility. Failure of management to consider or identify spans of control that are most appropriate to its needs, could therefore result in inappropriate management structures which reduce operational efficiency and effectiveness, in addition to incurring unnecessary costs.

In summary, the shift in preferred organizational structure to a wider span of control, as well as reduced layers of management, is based on changes in the nature of today's workforce. Workers today are more independent and collaborative; there is a greater focus on individual worker performance and less on supervision; organizations have streamlined to reduce the number of supervisors and managers; and the role of supervisors has changed from control to support.

Recommendation

1. The mayor and managing director should require each department director to conduct an assessment of the optimal spans of control for each city department and its departmental activities; develop plans to implement changes needed to achieve those spans of controls; and implement goals and actions necessary to expand the spans of control.

Chapter 3

Layers of Management Can Be Reduced

Management experts⁶ today recommend reducing the layers of management and flattening organizations to enhance organizational efficiency and effectiveness. Organizations with a narrow span of control tend to have more layers of management. As spans of control are widened, there is a tendency to reduce the number of layers of management. We found that the overall layers of management ranged from seven to nine for the five departments examined. This is at the high end for layers of management reported by other jurisdictions. Reducing the layers of management could improve the city's effectiveness and efficiency, and reduce the cost of operations.

Layers of Management Terms and Background

Layers of management is another term used to describe how an organization is managed, and is defined as the number of levels of management within an organization. The number of supervisory or management layers an employee must go through to reach the top management official in an organization determines the layers of management. Typically organizations with a narrow span of control have more layers of management while those with a wider span of control have less layers of management. Reducing the layers of management can produce efficiencies, effectiveness, and economies in operations that will allow an organization to be more flexible and responsive to changing environments and competition.

For purposes of this audit, layers of management for each department was defined as the maximum number of layers that any individual would have to report to before he or she reached the department director. We did not include the additional layers of management between the department head and the mayor.⁷

Per the audit methodology used by other audits, we treated the department director and the deputy director as two layers. The city department managers and the Human Resources director contend the department director and deputy director should be considered one layer.

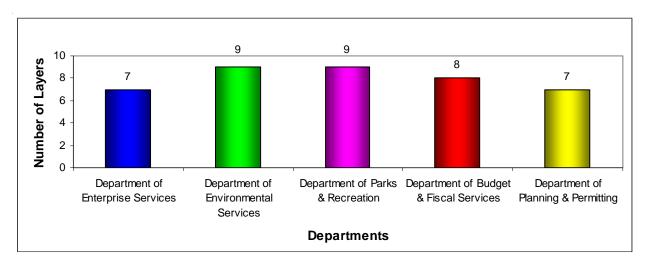
Department Layers of Management Can be Reduced

Experts⁶ advocate reducing the layers of management to enhance organizational efficiency and effectiveness. Our analysis of the five departments is shown in Exhibit 3.1. The layers of management ranged from seven to nine layers or an average of 8.8 layers of management across the five departments. We compared the city departments to other jurisdictions (Exhibit 3.2) and found Honolulu's seven to nine layers of management were at the high end for management layers established by other entities. According to management experts, reducing the layers of management may make it possible to improve city performance, customer service, ownership of a problem, and the quality of problem resolutions.

Exhibit 3.1 shows the departmental management layers based on our analysis of the departmental organizational charts.

Exhibit 3.1

Department Management Layers (lowest level to department director)



Source: Office of the City Auditor

Exhibit 3.2 shows examples of the layers of management of other jurisdictions based on our research of available literature.⁶

Exhibit 3.2 Layers of Management in Other Jurisdictions

Jurisdiction	Layers of Management	Comment
Palo Alto, California	Between 1 and 5	Although no excessive layers noted, additional savings in personnel costs and possible enhanced organizational effectiveness are possible through further reductions.
King County, Washington	An average of 5 layers, ranging from 4 - 9	Recommends reducing layers of management
Seattle, Washington	Range of 1 – 8 with two thirds of employees managed with between 5 to 6 layers	Estimated \$3.1 million savings generated through restructuring
Portland Oregon	Maximum of 7 layers	This includes the top layer of management (mayor) which was not included in our analysis
Iowa State	Reported management layers decreased from 3.5 to 2.7 between 1991 and 1994	1992 lowa legislation called for a reduction in layers of management

Source: Audit of Restructuring Efforts and Management Span of Control with Organization Charts, April 2004, City Auditor's Office, City of Palo Alto, California; Performance Audit, Span of Control, April 2002, City Auditor's Office, City of Kansas City, Missouri.

Division Layers of Management Can Be Reduced

Division level layers of management can be reduced. Exhibits 3.3 through 3.7 show the layers of management among the department divisions. The number of layers from the lowest employee level to the division chief ranged from two to seven layers of management. The additional layers of management between the division chief and department director added two layers of management and totaled four to nine layers of management. Reducing the layers of management among the divisions could reduce division costs and improve efficiency and effectiveness.

Exhibit 3.3

Department of Enterprise Services' Levels of Management (by division)

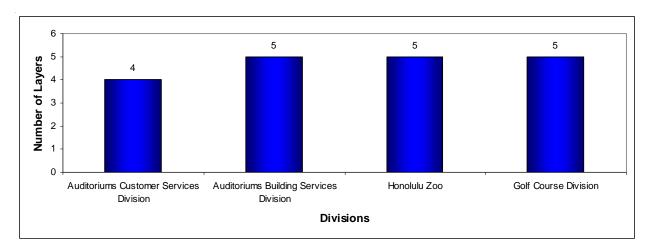
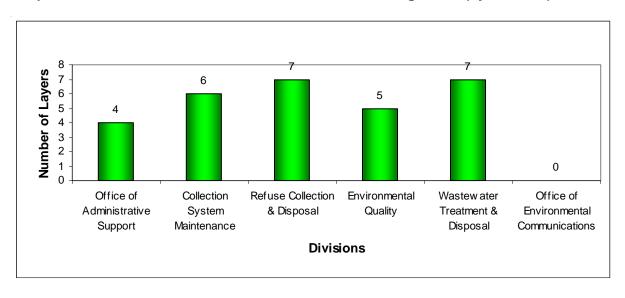


Exhibit 3.4

Department of Environmental Services' Levels of Management (by division)



Note: The Office of Environmental Communications, which is listed separately on the department's organization chart, has only one employee with no subordinates.

Source: Office of the City Auditor

8 7 7 Number of Layers 6 5 5 4 3 2 1 0 **Executive Services Urban Forestry** Park Maintenance & Recreational Services **Divisions**

Exhibit 3.5

Department of Parks and Recreation's Levels of Management (by division)

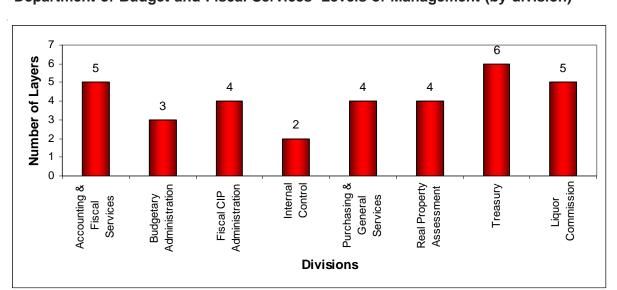


Exhibit 3.6

Department of Budget and Fiscal Services' Levels of Management (by division)

Source: Office of the City Auditor

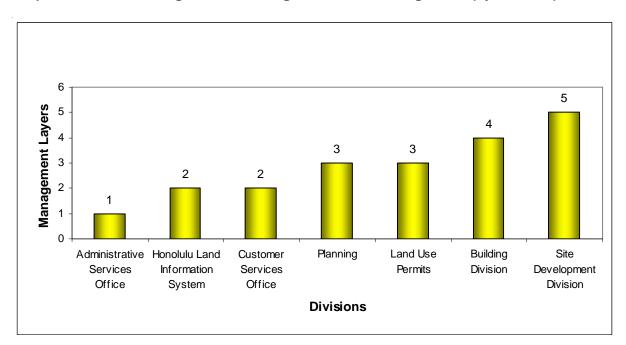


Exhibit 3.7

Department of Planning and Permitting's Levels of Management (by division)

The exhibits indicate the layers of management can be reduced. For example, in Exhibit 3.6, the Department of Budget and Fiscal Services' Internal Control Division operated with two layers of management. As shown in Exhibit 3.7, five of the seven divisions in the Department of Planning and Permitting had three or fewer levels of management from the lowest level employee to the division director. If the other departments emulated the budget and fiscal services' Internal Control Division and the planning and permitting's divisions, the layers of management could be reduced and significant personnel savings could occur. For example, four of the five divisions in the Department of Environmental Services had layers of management ranging from four to seven layers. Reducing the layers of management to three could reduce department and division operating costs.

As discussed earlier, two layers of management exist from the division director to the department director. So the actual layers of management in the exhibits are understated. For example, in all five divisions of the Department of Environmental Services, the department director and deputy director increase the layers of management to six to nine layers between the lowest level employee and the department director. Reducing the layers of

management at the division levels to three levels would streamline the department operations and reduce the personnel costs for the department.

Recommendation

2. The mayor and managing director should direct each department director to assess the layers of management within their departments and implement reductions in the layers of management that will result in enhanced efficiency and effectiveness.

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Chapter 4

Vacancies Further Narrow the Span of Control

The executive branch has 21 departments with an authorized workforce of over 10,400 full time equivalents (FTEs). Of these positions, over 2,100 FTEs (19.3 percent) were vacant as of January 31, 2010. A number of positions have been vacant for extended periods of time. Retaining the vacant authorized positions has inflated the spans of control.

Vacancy Background

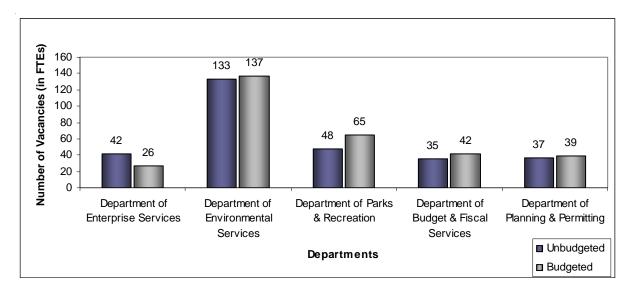
For our analysis, we used the overall personnel staffing as of January 31, 2010. We examined the *List of Vacant Positions as of 1/31/2010* report; the fiscal year 2011 line item detailed operating budget; and the *Position Summary by Position Classification Report* for each department. Exhibit 4.1 shows the total positions listed as vacant and Exhibit 4.2 shows whether the department had budgeted to fill the positions or not.

Exhibit 4.1 Total Vacancies Included in Sample (as of January 31, 2010)

Department	Total Vacancies (FTE)		
Enterprise Services	68		
Environmental Services	270		
Parks and Recreation	113		
Budget and Fiscal Services	77		
Planning and Permitting	76		
Total	604		

^{*} Total vacancies (FTE) are rounded to nearest FTE

Exhibit 4.2 Vacant Positions by Department (Budgeted and Unbudgeted) (as of January 31, 2010)



Vacancy Rates Reduce the Spans of Control

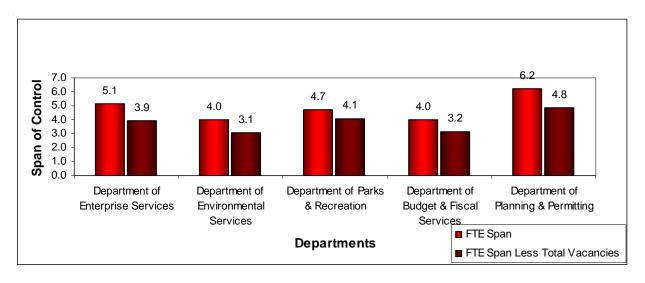
We reviewed the position vacancies as of January 31, 2010 for each of the five departments and adjusted the spans of control based on the vacancies. We found that each of department's spans of control narrowed. For example, the planning and permitting department's span of control narrowed from 6.2 to 4.8 after adjusting for the vacancies. The Department of Enterprise Services' span of control declined from 5.1 to 3.9 after adjusting for the vacant positions.

This is not unexpected since the administration has maintained a policy of vacancy cutbacks for budget control purposes. The budget submitted by the administration to the City Council reflects the total salary requirements for all positions, including all vacant positions. For various budgetary purposes, not all vacant positions are funded. This is reflected in a lump sum cut in salaries, known as *vacancy cutbacks*. The result of vacancy cutbacks is that there are insufficient funds to fund all vacant positions and agencies must prioritize what vacant positions can be filled with the available resources. The administration reports that cutting costs through vacancy cutbacks are prudent and necessary economic actions, but such practices also result in positions continuing to remain vacant for longer periods of time.

Agency spans of control are narrowed when position vacancies are taken into consideration.

Exhibit 4.3 shows the narrowing in the span of control for each department when taking position vacancies into account.

Exhibit 4.3
Span of Control Adjusted for Vacancies (FTE by department)



Source: Office of the City Auditor

Exhibits 4.4 through 4.8 show the narrowing in the spans of control for each division by department when vacancies are considered. For instance, the budget and fiscal services' Real Property Division (Exhibit 4.7) span of control decreased from 6.9 to 5.4 after adjusting the span of control for vacancies. The environmental services' Collection System and Maintenance Division (Exhibit 4.5) span of control declined from 4.0 to 2.6 after adjusting for the vacancies. The parks and recreation's Park Maintenance and Recreational Services Division (Exhibit 4.6) span of control dropped from 5.0 to 4.4 after adjusting for the vacancies. While departmental vacancies are variable, the vacancy cutback budget practices, staff turnovers, hiring freezes and other budgetary control measures have resulted in longer term periods with staffing at less than the fully authorized FTE count for each department. Regardless of the legitimacy or reasons for vacant positions, it has the effect of narrowing an agency's span of control.

Exhibit 4.4

Department of Enterprise Services' Span of Control Adjusted for Vacancies (FTE by division)

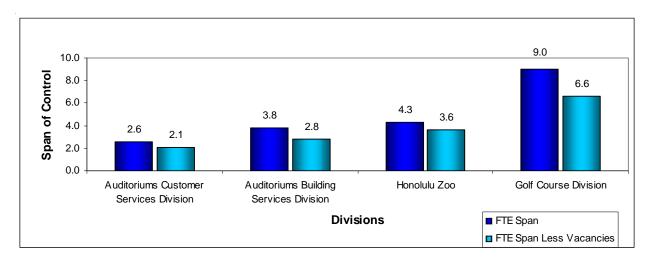
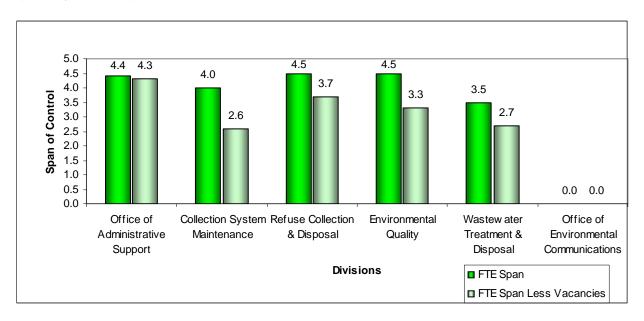


Exhibit 4.5

Department of Environmental Services' Span of Control Adjusted for Vacancies (FTE by division)



Note: The Office of Environmental Communications, which is listed separately on the department's organization chart, has only one employee with no subordinates.

Exhibit 4.6

Department of Parks and Recreation's Span of Control Adjusted for Vacancies (FTE by division)

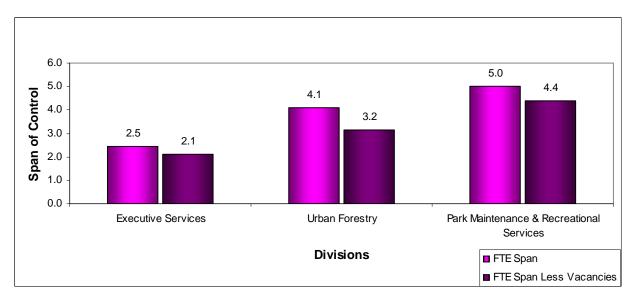


Exhibit 4.7

Department of Budget and Fiscal Services' Span of Control Adjusted for Vacancies (FTE by division)

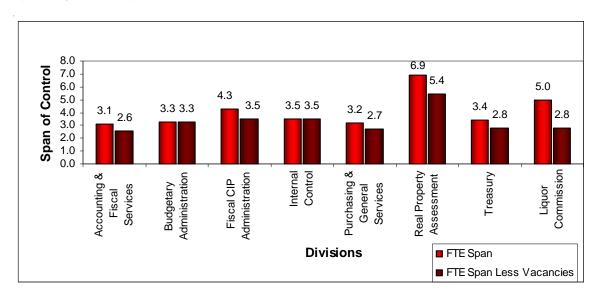
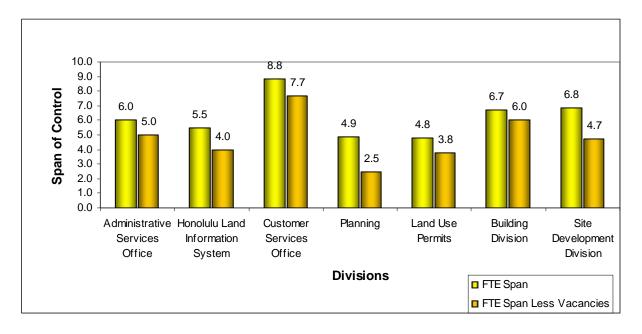


Exhibit 4.8

Department of Planning and Permitting's Span of Control Adjusted for Vacancies (FTE by division)



Eliminating Long Term Vacancies Would More Accurately Reflect Budget Needs Positions that have been vacant for extended periods of time should be reviewed to determine whether the positions are really needed for departmental operations. Reducing the number of vacant positions could more accurately reflect budget requirements.

Our examination of vacancies showed each department had a number of positions that had been vacant for extended periods of time. We reviewed the position vacancy report as of January 31, 2010 and identified positions that had been reported vacant for five or more years, as shown in Exhibit 4.9.

Exhibit 4.9 Positions Vacant 5 or More Years (by department)

Agency	Number of Vacant Positions (as of 1/31/10)	Number of Positions Vacant 5 or more years (as of 1/31/10)	Percent of Positions Vacant 5 or more years
Department of Budget and Fiscal Services	77	17	22%
Department of Enterprise Services	68	19	28%
Department of Environmental Services	270	81	30%
Department of Parks and Recreation	113	20	18%
Department of Planning and Permitting	76	9	12%

Department staff informed us the vacant positions were not eliminated because of the difficulties they encountered in getting any position authorized and creating new positions. The departments are therefore reluctant to give up any authorized position, whether there continues to be a need or not. However, we question whether a position that has remained vacant for an extended period of time is necessary for department operations, particularly if the position impacts the city's budget.

The city administration currently budgets its salary requirements based on the authorized full time equivalent positions, including all vacant positions. The budget amount requested is reduced by a lump sum amount identified as the *vacancy cutback*. Under the current city practices, any appropriated amounts that exceed the department's salary requirements can be used to fill additional vacancies. That is, each department is allowed to use personnel salary and benefits funds for personnel-related purposes.

The departments state that maintaining vacant positions allows the departments the flexibility to fill any vacant position as need dictates and funding permits. According to the city administration, this practice gives the departments flexibility and allows them to use available funds to address evolving priorities. In our opinion, this practice could result in budget requests that are higher than the amount the departments actually need. We believe this practice could also result in inflated budget savings, inadequate *vacancy cutbacks*, and salary savings for positions departments do not plan to fill.

For example, long term vacant positions are included in the budget under *regular pay* (object code 1101). If the *vacancy cutback* excludes a long term vacant position, the vacancy would be funded and, if the position is not filled, the department would have extra funds for personnel-related purposes or could claim salary savings. Abolishing the long-term vacant positions, particularly those that have been vacant five or more years, would ensure funds are not provided for the vacancies.

Potential cost avoidances

To illustrate the potential cost avoidances possible, we identified those positions reported vacant for five or more years on the *List of Vacant Positions as of 1/31/2010* and totaled the estimated salaries for these positions as shown in Exhibit 4.10. The total estimated cost for the five agencies is \$5,678,746. By eliminating vacancies that have not been filled for five or more years, the administration could reduce salary requirements and budget deficits related to the vacancies by over \$5 million.

City managers report that budget requests are based on the funds available to fill vacancies. That is, if funds are not available, the vacancies are not filled. Unfortunately, the unfunded vacancies are included as part of *vacancy cutbacks* and, in our opinion, could be claimed as savings. Eliminating the long term vacancies would more accurately reflect the amount needed for the regular salary budgets.

\$4,000,000 \$3,462,078 \$3,500,000 \$3,000,000 \$2,500,000 \$2,000,000 \$1,500,000 \$1,000,000 \$635,908 \$608,232 \$545,124 \$427,404 \$500,000 \$0 Department of Department of Department of Department of Parks Department of **Budget & Fiscal Enterprise Services** Environmental & Recreation Planning & Permitting Services Services **Departments**

Exhibit 4.10
Estimated Annual Salary Costs of Positions Vacant for 5 or More Years (as of January 31, 2010)

Some personal service contracts warrant review

Personal services contracts are used to temporarily fill vacant positions and are not included in the span of control calculations. Nevertheless, we sampled personal services contracts in the five departments and compared them to authorized positions that were reported as vacant. We found that several part-time positions in the Department of Enterprise Services matched several positions listed on the vacancy reports that were vacant for five or more years.

In some cases, the same person was repeatedly hired under personal services contracts for the same position.⁸ This practice may have violated city charter and state laws which limit personal

⁸ In our 2006 report, Audit of the City's Personal Services Contract Practices, Report No. 06-02, we found that the "...city's executive departments and agencies routinely maintain long-term personal services contracts commonly exceeding one year of employment in violation of the city charter." The Department of Human Resources reported in our Audit Recommendations Status Report, April 2004 to July 2010, Report No. 11-04, "...that the department tries to ensure departments use personal services contracts properly...".

service contracts to services of a temporary nature that do not exceed one year.⁹

Recommendations

The mayor and managing director should:

- 3. Require department directors to perform assessments of long term vacant positions to identify unneeded positions, determine if any positions can be abolished, and abolish long term vacant positions (particularly positions vacant five or more years) from authorized staffing (FTEs), budget calculations, and funding requests.
- 4. Require departments to comply with the intent and guidelines for the use of personal services contracts, and minimize the use of personal service contracts to fill vacant positions.

⁹ The Revised Charter of Honolulu, Section 6-1103, defines personal services as temporary, needed in the public interest, and does not exceed one year. The Hawaii Revised Statutes, Volume 2, Section 46-33 defines personal services obtained by contract as unique, essential to the public interest, cannot be obtained through normal civil service procedures, and may not exceed one year.

Chapter 5

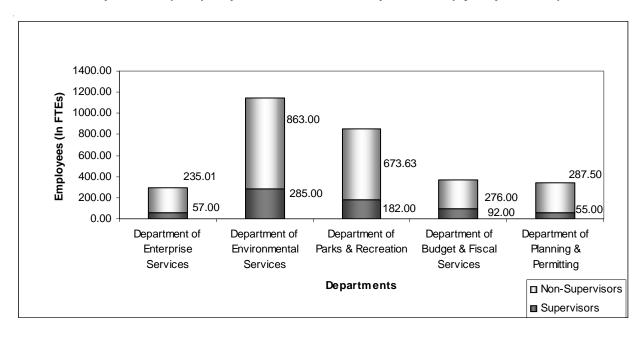
Cost Avoidances Related to Supervisors May Be Possible by Increasing the Span of Control

Supervisory personnel costs in the five sampled departments totaled over \$36 million (see Exhibit 5.4). Expanding the spans of control could result in fewer supervisors. As discussed in Chapter 2, each department and division will have to determine the optimal span of control for their operations. By abolishing supervisory positions that have been vacant five or more years, each entity could reduce the number of supervisors and avoid the salary costs associated with the vacant positions.

Supervisor Background

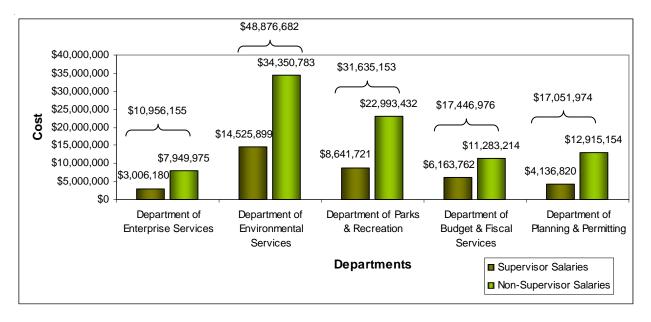
We verified the full time equivalent (FTE) positions classified as supervisors with the departments. Exhibit 5.1 shows the results of our analysis.

Exhibit 5.1
Full Time Equivalent (FTE) Supervisors vs. Non-Supervisors (by department)



We quantified the salaries for supervisory and non-supervisor staff for each department. The results are shown in Exhibit 5.2.

Exhibit 5.2 Salary Costs for Supervisors vs. Non-Supervisors (by department)(\$)



Note: Salaries are rounded to nearest dollar

Source: Office of the City Auditor and City and County of Honolulu's Position Summary by Position Classification as of 1/31/10

Reducing the Cost and Number of Supervisors is Possible

Management experts⁶ report departments with narrow spans of control have relatively more supervisors than departments with wide spans of control. As illustrated in Exhibit 5.3, except for the parks and recreation department, our analysis indicated this observation is generally valid for the departments reviewed.

Exhibit 5.3
Ratio of Supervisors to Non-Supervisors (by department)

Department	Span of Control (excluding vacancies) (FTE)	Supervisors	Non- Supervisors	Total FTE	Supervisor (%)
Enterprise Services	3.9	57	235	292	19.5%
Environmental Services	3.1	285	863	1,148	24.8%
Parks and Recreation	4.1	182	674	856	21.2%
Budget and Fiscal Services	3.2	92	276	368	25%
Planning and Permitting	4.8	55	288	343	16%
Total		671	2,336	3,007	22.3%

^{*} FTE counts rounded and will differ from Exhibit 5.1

We also calculated the percentage of total salaries paid to supervisors for each department. The results are shown in Exhibit 5.4.

Exhibit 5.4 Supervisor Salaries as a Percentage of Total Department Salaries

Department	Supervisor Salaries (\$)	Percent of Total Salaries (%)
Enterprise Services	\$3,006,180	27%
Environmental Services	\$14,525,899	30%
Parks and Recreation	\$8,641,721	27%
Budget and Fiscal Services	\$6,163,762	35%
Planning and Permitting	\$4,136,820	24%
Total	\$36,474,382	

More specifically, the city's Department of Planning and Permitting had a span of control of 4.8 FTE, excluding vacancies. Its adjusted span of control was the widest among the departments. The number of supervisors was 16 percent of the total staff, and salaries totaled 24 percent of the total salaries. The planning and permitting department's percentages were lower than the other departments sampled.

In contrast, the Department of Environmental Services and the Department of Budget and Fiscal Services had the narrowest adjusted spans of control (3.1 and 3.2 FTE). These departments had the highest percentage of supervisors (24.8 and 25 percent), and the highest percentage of supervisory salaries (30 and 35 percent) of total salaries.

While an optimal or ideal ratio of supervisors to non-supervisors, span of control, and layers of management do not exist, conditions that result in a wider span of control and fewer layers of management can reduce the number of supervisors and reduce supervisory salary expenses. We believe the city would benefit from a review of supervisory positions, particularly those with four or less direct reports, to determine if the span of control can be widened and layers of management reduced. As the nature of work changes, the number of middle level, vacant supervisory positions could be eliminated, reduced, or reclassified to non-supervisory positions.

Eliminating Long Term Supervisory Vacancies Could Reduce Budget Requirements

Some long term vacant positions are supervisory positions. For example the Department of Planning and Permitting reports that the Chief Planner position in the Land Use Permits Division has been vacant 5 years, since August 1, 2006; and the Chief of Building Safety position within the Building Division has been vacant for 12 years, since July 30, 1998. Although the department budget requirement for regular pay includes funds for both positions, they remain vacant. In some instances, positions may be filled by a lower category employee who serves in an acting capacity. If the lower category employee is successfully fulfilling the job requirements, the need to maintain the existing supervisory position may be questionable. By eliminating the vacant position or reclassifying the position to a lower category, the department could reduce the amount of its annual budget requirements.

Other long vacant positions continue to be included in budget requirements for regular pay. For instance, the Department of Environmental Services lists several positions which have been vacant for 10 to 16 years. The Department of Budget and Fiscal Services lists several positions that have been vacant for 10 or more years. These positions continue to be included as part of the total salary requirements in the regular pay of the administration's budget.

In our opinion, long term, vacant positions should not be included in budget requirements and should be eliminated. We recognize that continuing budget limitations exist and departments need the flexibility to utilize available funds to fill vacant positions according to departmental priorities. However, in our opinion, positions that remain vacant for extended periods of time, have low priorities for the departments, and are unlikely to be filled, should be abolished.

In the vacant position reports dated January 31, 2010, there is a column which asks departments to indicate whether a vacant position should be abolished. The responses for 100 percent of the vacant positions were that the positions should not be abolished. The unfunded vacant positions are usually reported as part of *vacancy cutbacks* or as salary savings. This is misleading as actual savings are not occurring.

Other Jurisdictions Report Savings

Increasing the spans of control could result in cost avoidances. A few governmental jurisdictions reported expanding the spans of control may have produced savings. For example:

- The city of Seattle reported several city departments saved approximately \$3.1 million by increasing the ratio of staff to supervisory personnel.
- The South Florida Water Management District reported in a follow-up to its original span of control study that the layers of management could be further reduced. Twelve supervisory positions were found that were virtually identical to the next level of subordinate supervisors. The elimination of the extra layer of management could potentially save \$1.1 million in annual costs.
- The city of Tacoma, Washington estimated the elimination or reclassification of 20 supervisory positions could result in up to \$2.25 million is savings.

Recommendation

5. The mayor and managing director should encourage the departments to optimize the spans of control within each department by reducing the number of supervisors, abolishing supervisory positions vacant five or more years, expanding the spans of control, and reducing the layers of management.

Chapter 6

Conclusion and Recommendations

Conclusion

Management analyses techniques such as the span of control and layers of management are tools that can assist agencies in assessing whether their organizational structure is conducive to effective and efficient operations. Modern management theory today advocates that wider spans of control and less layers of management generally reflect more effective management practices given the changing nature of today's workforce and the workforce's environment. While there is no optimal span of control or layers of management, a review of the purposes and characteristics of an agency's operations, its operating environment, and needed resources can assist in ensuring that cost-effective, efficient organizational structures are in place.

Our analyses of the five departments found that generally the spans of control were narrower and layers of management were greater than what others have reported. We believe that the opportunity exists to avoid costs related to salary and benefits through the evaluation and abolishing of unnecessary supervisory positions (particularly supervisory positions vacant five or more years); increasing the current span of control; and reducing the number of management layers that currently exists.

We also found that current budgetary practices relating to unfunded vacancies further narrow the departments' spans of control. Positions that have been vacant for extended periods of time continue to be included in budget requirements and the use of *vacancy cutbacks* do not accurately quantify departmental salary requirements. We believe that evaluating the continued need for these positions and the elimination of long vacant positions should be an integral part of each department's organizational assessment.

Recommendations

The mayor and managing director should:

1. Require each department director to conduct an assessment of the optimal spans of control for each city department and its departmental activities; develop plans to implement changes

- needed to achieve those spans of controls; and implement goals and actions necessary to expand the spans of control.
- 2. Direct each department director to assess the layers of management within their departments and implement reductions in the layers of management that will result in enhanced efficiency and effectiveness.
- 3. Require department directors to perform assessments of long term vacant positions to identify unneeded positions, determine if any positions can be abolished, and abolish long term vacant positions (particularly positions vacant five or more years) from authorized staffing (FTEs), budget calculations, and funding requests.
- 4. Require departments to comply with the intent and guidelines for the use of personal services contracts and minimize the use of personal service contracts to fill vacant positions.
- 5. Encourage the departments to optimize the spans of control within each department by reducing the number of supervisors, abolishing supervisory positions vacant five or more years, expanding the spans of control, and reducing the layers of management.

Management Response

The Managing Director's Office reports that it agrees with most of the recommendations of the audit, but found that the report contained misleading statements and errors which incorrectly characterize the city departments reviewed. Specifically the managing director reports that the administration:

- Generally agrees with recommendations one, two and five to require each department director to conduction an assessment of the spans of control and layers of management for each city department. The assessments should be completed prior to the next budget cycle.
- Is in agreement with the need to perform an assessment of long term vacant positions to identify and eliminate unneeded positions to achieve organizational reform, but contends that there are no potential cost savings to be realized.
- It disagrees and is disappointed that the audit recommends that departments comply with the intent and guidelines of the use of personal service contracts, noting that all personal services contracts comply with legal requirements.

As we note in our report, the results of the analysis are intended to encourage the city to evaluate its existing organizational structure and adopt spans of control and layers of management practices which are more consistent with existing management practices. Our report acknowledges that there is no single optimal span of control and never suggested such. We do find that, for the agencies reviewed, the spans of controls are generally narrower and the layers of management are greater than jurisdictions included in our research. We recommend that the agencies conduct their own detailed assessments to determine the optimal spans of control and layers of management that will result in more efficient, economical, and effective operations.

We acknowledge that a wide range of spans of controls and layers of management exist for all jurisdictions and their agencies. What is essential in the referenced span of control assessments from Portland, Oregon; Kansas City, Missouri; and San Mateo County, California (which includes the Marin County information) that are cited in the managing director's response is that all concluded that their existing spans of control are narrower and layers of management are greater than existing management practices.

We agree that elimination of long term vacant positions should be carefully evaluated. However, those evaluations should be performed and positions that are no longer necessary should be abolished. We note the administration's own budget documents state that salary requirements are based on authorized full time equivalent (FTE) positions, including all vacant positions. We reaffirm our position that failure to eliminate unnecessary long-term vacant positions could result in budget requests that are higher than actually needed.

Finally, with respect to personal services contracts, the managing director's response correctly notes that there is no restriction on consecutive personal services contracts issued to the same person for the same position (i.e. the contracts are for one year or less and are duly certified). Our concern is that the use of personal services contracts should not be used as a substitute for normal civil service procedures. Our examination of previous administration practices indicates that some of these personal services contracts appear to be used to fill long-term, vacant FTE positions. We question whether such use meets the intent of the personal services contracts requirements. We also question the validity of claimed vacancy cutback savings for unfilled FTE positions which are being filled, even temporarily, through personal services contracts.

A copy of the Managing Director's response is provided on page 45.

OFFICE OF THE MAYOR CITY AND COUNTY OF HONOLULU

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PETER B. CARLISLE MAYOR



DOUGLAS S. CHIN MANAGING DIRECTOR

CHRYSTN K. A. EADS DEPUTY MANAGING DIRECTOR

January 20, 2012

12 JAN 20 P3:17

Mr. Edwin S. W. Young, City Auditor Office of the City Auditor City and County of Honolulu 1001 Kamokila Boulevard, Suite 216 Kapolei, Hawai'i 96707

C & C OF HONOLULU CITY AUDITOR

Dear Mr. Young:

Thank you for the opportunity to comment on your Span of Control of Selected Departments draft audit report ('Report') dated December 2011. We appreciate the effort you made to discuss your findings with us and to address some of the issues we raised prior to issuing this draft.

Unfortunately, while we agree with most of the recommendations presented, the Report contains numerous misleading statements and factual errors which you did not address, despite our input. Knowing that readers may use this to judge the efficiency of the City and County of Honolulu (or 'city') the Report presents an indefensible account of the state of the selected city departments and we must take issue with it. Some more significant shortcomings are:

- The report arbitrarily suggests a single span of control number (6.0) as a benchmark² or
 "reference point" against which the five selected Honolulu departments are measured –
 and by inference, every other city agency should be measured with no objective data to
 support this particular number's relevance to each agency.
- Experts universally agree that there is no single benchmark number for optimal span of control, a point cities such as Kansas City and Portland explicitly endorse and this Report at times acknowledges:
 - "The appropriate span of control and number of management layers for an organization depend on several factors including mission, complexity of work, and organization size. A single span of control or a set number of management layers cannot usefully be set across all departments."

¹ Specifically, "judgmentally selected 5 of the 21 city departments: the departments of budget and fiscal services, enterprise services, environmental services, planning and permitting, and parks and recreation." Report, page 2 (colon added, parentheses removed).

² Report, page 9, footnote 5.

³ Performance Audit Span of Control" dated April 2002, City Auditor's Office, City of Kansas City, Missouri, page 9 (emphasis added) ('2002 Kansas City SOC Audit'). This report is available on the Internet at http://www.afscmestaff.org/2010legagenda-kc.pdf.

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- "We found a general consensus in the recent literature that <u>span of control</u> <u>analysis cannot be applied in a purely mechanical way...</u> The appropriate span of control <u>varies among organizations and even among departments and functions</u> within a single organization." ⁴
- "Contemporary management theory no longer contends that there is a single optimal span of control for an organization..."
- "No optimal span of control exists..."⁶
- After acknowledging that it has failed to identify the appropriate span of control number for each Honolulu department,⁷ the Report leaves a negative impression suggesting, again without factual support, that some are not at optimal levels.
 - To illustrate, Exhibit 2.3 purportedly compares Honolulu to other organizations and ranks its span of control low by comparison. In order to be meaningful, Exhibit 2.3 should contain spans of control for the same departments in each of the jurisdictions. Comparing Honolulu's individual departments to similar individual departments from other jurisdictions shows Honolulu's numbers are not out of line, in fact they are generally higher (i.e., Honolulu exercises a wider span of control).

	San Mateo ⁹	Honolulu ¹⁰	Denver ¹¹	Marin 12
Environmental Services	4.3	4.0	5.3	3.2
Planning & Permitting	2.8	6.2	4.7	4.7
Budget & Fiscal Services	2.5	4.0	3.8	5.0
Parks & Recreation	4.7	4.7	4.0	2.1
Average of similar depts:	3.6	4.7	4.4	3.7

⁴ Office of the City Auditor, Portland, Oregon, 'Span of Control: Although numbers are reported, bureaus lack organizational structure goals,' August 2011 (emphasis added) ('2011 Portland OR SOC Audit'). See page 1: "Span of control best practices provide guidelines on which organizational factors to consider when determining an ideal span of control. These factors include job complexity and similarity, geographic proximity of employees, the amount of coordination required to complete tasks, employee abilities and empowerment, and the ability and skill level of management..." This report is available on the Internet at http://www.portlandonline.com/auditor/index.cfm?a=360721&c=53775.

⁵ Report, page 13.

⁶ Report, page 12.

Report, page 2: "We did not perform an analysis of each department's operations to determine the appropriate span of control."

⁸ By using this graph, we do not mean to imply this comparison is any less biased than the rest of the comparisons used in the Report since we do not know whether the organization and function of the jurisdiction's departments are comparable to Honolulu or whether any of the jurisdictions are at optimal spans of control.

⁹ San Mateo County's 'Recommended Budget Supplemental Item - Interim Span of Control Report, June 18, 2010' ('2010 San Mateo County Interim SOC Report'), Page 10.

¹⁰ Report, page 7.

¹¹ 1994 Portland OR SOC Audit, Appendix 7.

^{12 2010} San Mateo County Interim SOC Report, page 10.

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- Nothing in the Report establishes the other cities, counties, or states (let alone the entire federal government) in Exhibit 2.3 as valid comparables to the five Honolulu departments. As examples:
 - Some of the figures represent 25 percent of the entire jurisdiction (Honolulu), some 42 percent (Portland), some 100 percent (San Mateo County), and some an unknown percentage, but less than all (Kansas City).¹³
 - Some of the figures represent average figures and some represent median figures.¹⁴
 - Some of the jurisdictions included all full-time equivalent employees (FTEs) in their counts, others 'sometimes' counted part-time and seasonal workers, ¹⁵ and Honolulu's figures left out personal service contract employees (which we believe should have been included). ¹⁶
 - The details behind the figures, i.e., job complexity and similarity, geographic
 proximity of employees, the amount of coordination required to complete tasks,
 employee abilities and empowerment, and the ability and skill level of
 management, are not reported.¹⁷
 - The Report classifies some positions in the five Honolulu departments as 'supervisory' that are neither supervisory nor an additional layer of management.¹⁸
- 'Judgmentally selecting' five Honolulu departments and comparing those in Exhibit 2.3 to incomparable jurisdictions skews the results.
 - For example, the Honolulu managing director has 21 department directors, six executive directors, and four senior staff reporting directly to him. Had this department been 'judgmentally selected,' the MD's span of control of 31 when averaged with the five selected departments would increase Honolulu's average up to 9.2, or the third highest of all jurisdictions listed in Exhibit 2.3. The average number increases or decreases as other agencies are arbitrarily selected.

¹³ For example, Honolulu includes 5 of 21 departments; 2002 Kansas City SOC Audit, page 1, does not include police, fire, city clerk's office and several divisions of parks and recreation; 1994 Portland OR SOC Audit, page I-3, includes 42 percent of FTEs; 2010 San Mateo County Interim SOC Report, page 3, includes 100% of the county's departments.

¹⁴ For example, 2002 Kansas City SOC Audit, page 9, Exhibit 1: Kansas City's figure is the <u>median</u> for all departments; San Mateo's figure is the <u>average</u> for all departments, 2010 San Mateo County Interim SOC Report, page 4, Table 1. This report is available on the Internet at https://www.co.sanmateo.ca.us/.../SMC%20Budget%20Central/spanofcontrol-interimreport-061810.pdf.

^{15 2002} Kansas City SOC Audit, page 10.

¹⁶ See, 2011 Portland OR SOC Audit, page 2: "When calculating span of control it is important to define managers and supervisors, to determine whether temporary employees are included, and whether full-time equivalent (FTE) or the number of employees are counted." (Emphasis added.)

¹⁷ See, 2011 Portland OR SOC Audit; see also, Exhibit A, attached.

¹⁸ For example, we take issue with the director and deputy director of each department and the division director and deputy director of each division being separate layers of management; and, in the example used in the Report on page 3, footnote 3, the driver of a three-person refuse truck is not a 'supervisor' within the relevant meaning for span of control analysis.

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Mindful that all of the Auditor's recommendations begin with the unsubstantiated assumption that the spans of control and layers of management of the selected departments are not at optimal levels, the administration's responses to the recommendations are as follows:

- The mayor and managing director should require each department director to conduct an assessment of the optimal spans of control for each city department and its departmental activities; develop plans to implement changes needed to achieve those spans of controls; and implement goals and actions necessary to expand the spans of control.
- The mayor and managing director should direct each department director to assess the layers of management within their departments and implement reductions in the layers of management that will result in enhanced efficiency and effectiveness.

We agree with these recommendations.

It is important to note that due to hiring restrictions, all requests for new hires currently require justification by the department director, require a finding of necessity – an 'informal' form of span of control and layers of management analyses – by budget and fiscal services budget analysts, and require authorization by the director of budget and fiscal services and the managing director. In addition, while not formally referred to as such, during the annual budget process directors assess the optimal hiring requirements for their individual departments – in light of the hiring restriction, the collective bargaining process, the unique needs of each department, and the Mayor's fiscal policies.

We believe that formal spans of control and layers of management assessments are useful management tools and should be periodically performed. Adjustments to optimize span of control or layers of management are the product of periodic assessments. We anticipate completing an assessment prior to the next budget cycle.

 The mayor and managing director should require department directors to perform assessments of long term vacant positions to identify unneeded positions, determine if any positions can be abolished, and abolish long term vacant positions (particularly positions vacant five or more years) from authorized staffing (FTEs), budget calculations, and funding requests.

We agree positions no longer necessary to perform essential city functions should be abolished. Such a decision, however, should be evaluated carefully. The fact that a position remains vacant for an extended period may or may not indicate it is no longer necessary to the city; it does not automatically indicate that the city should eliminate it. While hiring restrictions – which by definition encourages vacancies and decreases an agency's span of control – have been in place since fiscal year 2008 the resulting employee count on any day does not necessarily indicate the *optimum* number of positions needed to perform the services the city

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¹⁹ Using the criteria contained in the 2011 Portland OR SOC Audit (see <u>Exhibit A</u>) as well as definitions of relevant terms (for example, see <u>Exhibit B</u> from 2002 Kansas City SOC Audit, page 5) will ensure all departments are reporting comparable information.

Mr. Edwin S. W. Young, City Auditor January 17, 2012 Page 5 of 7

has historically provided its citizens. It more accurately represents the number of positions that the city can afford during a budget cycle.

Filling funded vacant positions is a critical management tool allowing for maximum efficiency in a changing arena. If the city abolished vacant positions, many of which are difficult to fill, it would be unable to timely respond to changing circumstances or availability of hard-to-find hires.

Some functions such as road, sewer and waterworks maintenance have until recently suffered from a long-standing lack of funding and the time to pay the piper has arrived. In these areas, which account for many vacancies, these positions must remain available to eventually bring the infrastructure up to standard and comply with legal mandates.²⁰

Finally, your assertion, as no less than the city's auditor, that "[b]y eliminating vacancies that have not been filled for five or more years, the administration could reduce salary requirements and budget deficits related to the vacancies by over \$5 million [.]" (Report, page 32), is inaccurate and misleads anyone who reads this. The statement is false and unacceptable. There is no potential savings, as the same amount is included as a 'vacancy cutback amount' that reduces the salary cost impact to zero. Your recommendation contains some merit to the extent it may lead to organizational reform, but it will not save money that the administration and city council has not saved and is not already saving right now.

 The mayor and managing director should require departments to comply with the intent and guidelines for the use of personal service contracts and minimize the use of personal service contracts to fill vacant positions.

We disagree and are disappointed with the Report's accusation, repeated from 2006,²¹ that "... the city's executive departments and agencies routinely maintain long-term personal services contracts commonly exceeding one year of employment *in violation of the city charter*" (page 33, footnote 8); and, "[i]n some cases, the same person was repeatedly hired under personal services contracts for the same position. This practice *may have violated city charter* and state laws which limit personal service contracts to services of a temporary nature that do not exceed one year" (page 33-34).

The administration sought and received an opinion from the corporation counsel – an action available to you but which you apparently did not do – on: "Whether either HRS \S 46-33 or RCH \S 6-1103 prohibits the City from entering into consecutive personal service contracts to the same individual for the same position?" The answer was, "No. Since each personal service contract must be reviewed and meet the specific requirements of the Charter, ²² there appears to

²⁰ For example, the department of environmental services is under a federal global consent decree involving the City's wastewater system that requires it maintain staff at certain levels. See, <u>United States v. CCH</u>, Civ. No. 94-00765 DAE, Consent Decree, paragraph 26 (see page 50 of 99): "Staffing Commitments. a. No later than six months after the Effective Date of this Consent Decree, CCH shall achieve full staffing ... for currently funded positions ... CCH shall attain and maintain at least 90 percent of the staffing levels required ... on an annual basis..." The global consent decree is available at http://www1.honolulu.gov/env/wwm/2010gcd.htm.

²¹ See, Auditor's Report No. 06-02, Audit of the City's Personal Service Contract Practices.

²² RCH § 6-1103(f) requires certification by the director that the service is "unique, is essential to the public interest and that because of circumstances surrounding fulfillment, personnel to perform such service cannot be obtained through normal civil service recruitment procedures;" and RCH § 6-1103(g) requires certification by the director of

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be no restriction on consecutive personal service contracts issued to the same person for the same position... RCH § 6-1103 does not preclude the director of human resources from approving a new and separate consecutive hire for the same individual. The director is required to review each new and separate [contract] independently to determine whether normal civil service recruitment procedures are practicable." (Footnote added.)

City employees are required to uphold the city charter and applicable state and federal laws. Your recommendation, besides having no relationship to the subject matter of the audit, is unnecessary. Early in 2011, in response to auditor's report number 06-02, 'Audit of the City's Personal Service Contract Practices,' the new administration internally reviewed all existing personal service contracts. Each personal service contract was for one year or less and was duly certified as required by the charter and the statute (see footnote 21).

Like funded vacant positions, personal service contracts, as provided for under the law, have long played an essential part in management's ability to fill unique positions, obtain personnel that cannot be obtained through normal civil service recruitment procedures, and respond in a timely manner to changing circumstances.

5. The mayor and managing director should encourage the departments to optimize the spans of control within each department by reducing the number of supervisors, abolishing the supervisory positions vacant five or more years, expanding the spans of control, and reducing the layers of management.

The parts of the whole of this recommendation have been addressed above.

As we stated, we take exception to the tone of the Report and to many of the erroneous assumptions, the skewed comparables, and the unfounded allegations of illegal contracts contained therein. We do embrace the utility and cost-reduction possibilities of manpower efficiency and will approach spans of control and layers of management analyses with open minds.

We are constantly seeking to improve and are committed to providing exceptional, fiscally responsible service to the people of the City and County of Honolulu. To that end, we trust we are all on the same page and thank you for your efforts towards this goal.

Very truly yours,

Douglas S. Chin

Attachments

human resources that "the service is of a temporary nature and that recruitment through normal civil service recruitment procedures is not practicable." See, http://www1.honolulu.gov/refs/rch/rc061103.pdf. Comparable provisions are contained in HRS § 46-33(7) and (8); see, http://www.capitol.hawaii.gov/hrscurrent/Vol02_Ch0046-0115/HRS0046/HRS_0046-0033.htm.

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cc: Michael Hansen, Director, Department of Budget and Fiscal Services
George Keoki Miyamoto, Director, Department of Enterprise Services
Timothy E. Steinberger, Director, Department of Environmental Services
Gary B. Cabato, Director, Department of Parks and Recreation
David K. Tanoue, Director, Department of Planning and Permitting
Noel Ono, Director, Department of Human Resources

Span of Control

Figure 1 Factors to help determine appropriate spans of control



Source: 1994 City of Portland Span of Control study

EXHIBIT A

Definition of Terms

Employees: full-time, part-time, seasonal and contract employees that were in the department on October 19, 2001. This number includes all supervisors and subordinate employees.

Supervisors: employees who write and are the primary signers of their subordinate employees' performance evaluations. The assumption is that primary signers are likely responsible for hiring, disciplining, and directing work in addition to evaluating. All supervisors in a department on October 19, 2001 were included in this number.

Direct reports or subordinates: employees whose performance evaluation is signed by the same supervisor.

Vacant positions: positions that were not filled by a permanent or contract worker on October 19, 2001. We counted positions filled by temporary workers as vacant.

Contract workers: employees hired through personal service contracts with the city. In some instances departments identified workers with professional service contracts as contract workers.

Non-supervisors: employees that were not primary signers of any employee performance evaluations. We calculated the total number of non-supervisors by subtracting supervisors from the total number of employees.

Span of control: the number of employees reporting to a supervisor. Depending on the number of direct reports per supervisor, span of control is said to be wide (many direct reports) or narrow (few direct reports).

Average span of control: the number of employees minus one (highest ranked supervisor who is a subordinate to no one in the department) divided by the total number of supervisors. In this measure all supervisors except the department head are counted as both a supervisor and a subordinate.

Ratio of supervisors to non-supervisors: the number of non-supervisors divided by the number of supervisors. In this measure supervisors are not also counted as subordinates. This is a rough measure of span of control.

Management layers: the reporting levels in an organization with the exception of the bottom layer of non-supervisory line workers. The layers are counted from the lowest level supervisor up to the most senior supervisor. The maximum number of management layers refers to the most management layers identified in a department, although the number of layers may differ among divisions within a department.

EXHIBIT B

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Appendix 1

Summary Organization Charts by Department

The following organizational charts present an overview of the structure for each department reviewed in this audit. The charts were developed by our office based upon information provided and subsequently verified as correct as of January 31, 2010 by the city administration and individual departments.

Exhibit A1.1

Department of Enterprise Services

Organization Chart

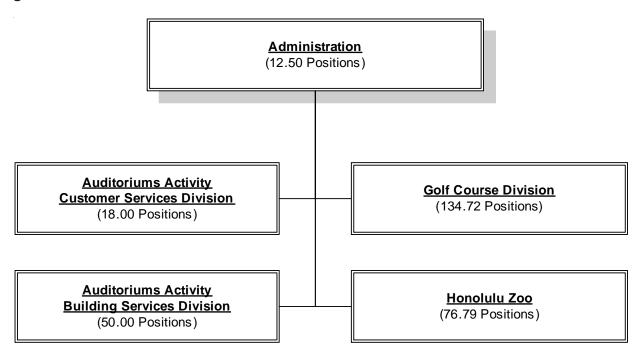


Exhibit A1.2
Department of Environmental Services
Organization Chart

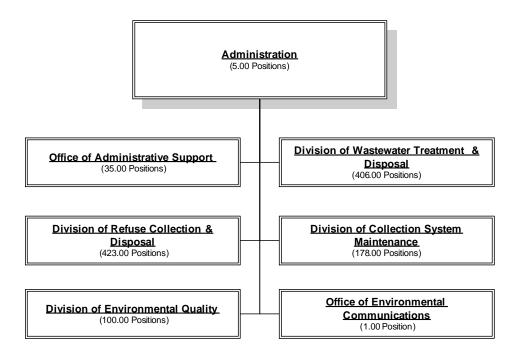


Exhibit A1.3

Department of Parks and Recreation

Organization Chart

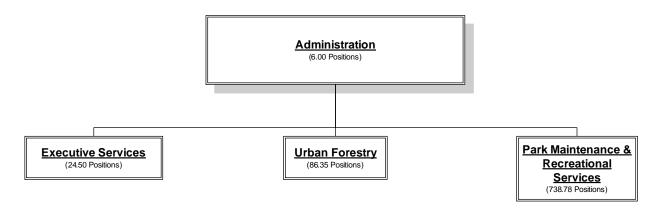


Exhibit A1.4
Department of Budget and Fiscal Services
Organization Chart

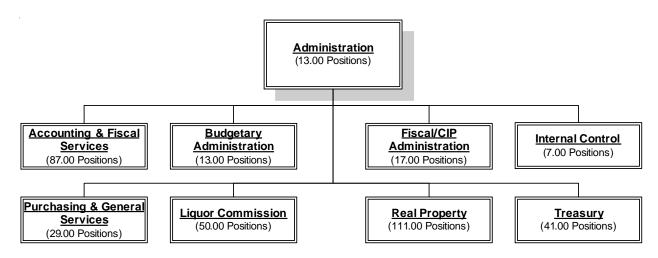
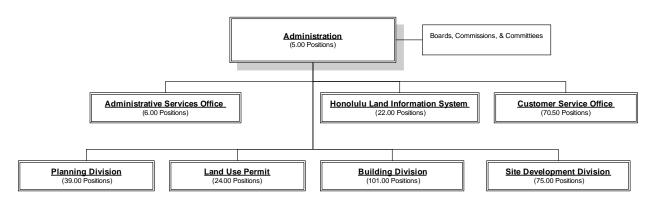


Exhibit A1.5
Department of Planning and Permitting
Organization Chart



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