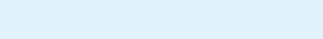
# Water Utility Compensation and Employee/Contractor Retention Survey Results 2018



### **EXTENSION**



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#### Introduction

The public water systems in Mississippi are estimated to serve almost 2.9 million people each year. Many individuals in the state are served by multiple public water systems (home, work, school, church, etc.). Water systems must be operated in a safe and effective manner, and the state of Mississippi has done an exceptional job doing so. The state's water supply primacy agency, the Mississippi State Department of Health Bureau of Public Water Supply (MSDH–BPWS), has developed unique and innovative programs that, in many cases, have led the nation. An example is the legislatively mandated Public Water System Board Management Training Program that is required for all water associations and municipalities with a population of 10,000 residents or fewer.

Eighty-eight percent of the over 1,100 public water systems in Mississippi are considered community water systems. For a water system to be considered a community water system, it must supply water to at least 15 service connections or 25 residents on an annual basis. Many of these systems were created in the 1960s to provide safe drinking water to rural areas through programs developed and implemented by the Farmers Home Administration (currently U.S. Department of Agriculture Rural Development). Today, many of these systems face substantial challenges, including an aging workforce and infrastructure, increased legal mandates and regulations, and suboptimal management practices. Of these challenges, one that needs prompt attention in today's operating environment is the management of a community water system's human capital.

Human capital is the water system's most valuable asset because it is the key factor in the water system's ability to deliver safe water to its customers. It is also one of the highest expenditures of the utility; in most local government organizations, employee salaries and fringe benefits comprise between 50 and 75 percent of the total operating budget, and water utilities do not deviate from this substantially (this does not include the capital costs of constructing treatment plants, installing distribution lines, etc.). The importance of investing in human capital is underscored by the changes occurring as the baby boomer generation leaves the workforce. The ability to attract and retain talented, highly competent employees in rapidly changing times will help to contain costly turnover and a loss of institutional knowledge. However, little effort has been devoted to understanding the compensation and benefits provided to employees and contractors of Mississippi's community water systems and how these vary across factors such as system size, treatment class, organization type, and geographic region.

To help community water utilities fill this knowledge gap, Mississippi State University Extension Service faculty surveyed the state's public water systems in 2004, 2012, and 2018 to gather information about the compensation and benefits provided to workers in Mississippi's community water systems. Our goal was to review the characteristics of various water utility positions (such as compensation, benefits, and years of service) and how these relate to the characteristics of a water utility (population served, complexity of water treatment, organizational structure and location). The information gathered also allowed us to contrast employee benefits provided by water utilities and to identify key factors that influence the years of service among personnel.

We hope that the findings from this study are of benefit to water system officials in developing fair and competitive pay and benefits structures designed to not only recruit, but also retain, quality employees who support and contribute to the organization's culture and goals.

Equitable compensation and benefits plans foster a high-quality work environment that supports the recruitment, training, motivation, and retention of a diverse group of quality employees. Job descriptions should be accurate and thoroughly describe the job being performed, and pay structures should reflect the responsibility and skills required for the position, as well as account for cost-of-living and superior-performance adjustments in compensation.

#### **Survey Design**

There are many factors that impact the comparability of public water systems, such as operating budgets, community and organizational priorities, level of outsourcing, geography, and departmental organization. Although every effort was made to standardize available data, not all services, functions, or positions could be included in this analysis or appear in a way that provides a straightforward comparison among peer cohorts. Job descriptions with similar or overlapping duties and responsibilities were consolidated for reporting purposes. It is important to note that all data collected for this study are self-reported and unaudited.

In order to accurately determine the average compensation levels by occupation, years of service, benefit packages available, etc., water systems were grouped into organizations based on the responsible official and mailing address. Most organizations were composed of only one system, but many organizations were composed of up to nine individual water systems. The logic used in this grouping is quite simple: an organization that is comprised of three water systems may only employ one certified waterworks operator. This organization would be unlikely to employ separate certified operators for each system and, thus, using a per-system basis, rather than a per-organization basis, could significantly skew the results. Throughout the remainder of this publication, the term organization will carry this meaning unless otherwise specified.

Surveys were sent to 843 organizations (representing 1,043 individual water systems). Efforts were made to exclude non-community systems, although this effort was not entirely successful. One hundred fifty-eight organizations completed and returned the survey instruments (a response rate of 18.7 percent). However, four surveys

were discarded because they were submitted by schools or federal programs. This resulted in 154 responses being included in the analysis (an effective response rate of 18.3 percent).

The 154 organizations responding to the survey represented 185 individual water systems as defined by the Mississippi State Department of Health–Bureau of Public Water Supply (MSDH–BPWS). One hundred thirty-three organizations were comprised of one system, 15 organizations were comprised of two systems, three organizations were comprised of three systems, two organizations were comprised of four systems, and one organization was comprised of five systems.

Each organization was asked to complete a single survey. Organizations were asked to respond to survey questions regarding number of employees/contractors, pay structure/scale, insurance and retirement benefits, vehicle and mileage reimbursement, and other fringe benefits that reflect the organization as a whole. Data concerning system size, treatment class, type of organization, and geographic location were verified using a master list of system information and characteristics provided by MSDH–BPWS.

#### **Water Organization Characteristics**

Water organizations in Mississippi can be classified differently depending on the size of the population they serve, the complexity of the water treatment process used by the organization in the individual systems, the type of management/governing board used by the organization, and the geographic location of the state in which they are located. There are undoubtedly other possible classifications, but these are the primary factors typically discussed when comparing contractor and employee compensation and years of service.

A key factor in classifying water organizations focuses on the size of the population served.<sup>1</sup> The smallest responding organization reported serving a population of 62 people, while the largest responding organization served a population of 29,172. Sixteen of the responses (10.4 percent) were from organizations considered to be very small, and 95 of the responding organizations (61.7 percent) were classified as small. Thirty-four of the responding organizations (22.1 percent) were classified as medium, and the remaining nine organizations (5.8 percent) were considered large. This classification of organizations rather than individual systems is not a common practice, but we considered it acceptable for the purpose of this publication because it provided a commonly understood delineation.

Since different water treatment techniques require different levels of expertise for the certified waterworks operator (and perhaps management and distribution personnel, as well), it is also advantageous to classify the organizations by treatment class.<sup>2</sup> One organization may contain multiple systems that fall into multiple treatment classes, so we classify the organization by the most complex treatment class used by the organization's systems. For example, an organization that consists of one Class B system and two Class C systems would be classified as a Class B organization.

Ninety-two of the responding organizations (59.7 percent) were classified as Class D treatment organizations, while 33 organizations (21.4 percent) were Class C, 21 organizations (13.6 percent) were Class B, 5 organizations (3.2 percent) were Class E, and 3 organizations (1.9 percent) were Class A. Furthermore, 10 organizations (6.5 percent) indicated that they purchase between 3 and 100 percent of the water sold. Of these 10 responses, five organizations were Class E organizations that purchase 100 percent of their water, while the remaining five purchased finished water from other organizations in addition to treating groundwater.

Regarding management type, 100 (64.9 percent) of the responding organizations were classified as water associations, while 48 (31.2 percent) were municipal water utilities. This compares favorably to the overall distribution of water organizations in the state, with around 55 percent being organized as associations and 32 percent being utilities governed by a municipality. The remaining six responses (3.9 percent) were classified as utilities, districts, or privately owned community organizations. **Figure 1** shows the percentage of organizations in each size category broken into the various treatment classes, while **Table 1** presents the same information in a numerical format.

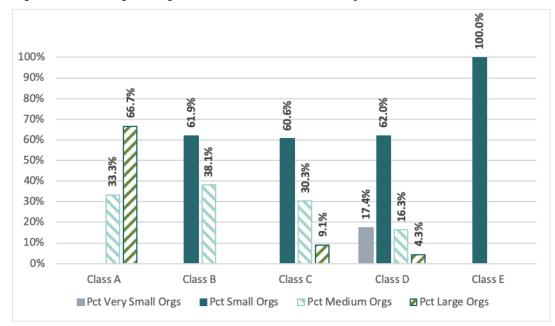
<sup>1</sup> Served population is calculated as 2.6 people per system connection. For the purposes of this publication, the following commonly accepted definitions are used to classify water organizations by size:

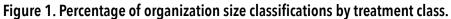
- Very Small serves a population of 500 fewer
- Small serves a population between 501 and 3,300, inclusive
- Medium serves a population between 3,301 and 10,000, inclusive
- Large serves a population of more than 10,000

<sup>2</sup> Treatment classes defined by the Mississippi State Department of Health – Bureau of Public Water Supply are as follows:

- Class A organizations having surface water treatment, lime softening, or coagulation and filtration for the removal of constituents other than iron or manganese.
- Class B organizations having two or more Class C treatment facilities, with iron or manganese removal facilities breaking pressure or requiring flocculation and/or sedimentation, a system using membrane filtration, or ion exchange treatment.
- $\bullet \ Class \ C \ \ organizations \ with \ aeration, \ pH \ adjustment, \ corrosion \ control, \ or \ closed \ pressure \ type \ facilities.$
- Class D organizations that provide no treatment to the water other than chlorination, fluoridation, or direct chemical feed.
- Class E organizations that purchase all finished water from other systems.

(Source: Recommended Minimum Performance Guidelines for Certified Waterworks Operators in the State of Mississippi, Mississippi Department of Health.)





#### Table 1. Number of responding organizations by organization size, treatment class, and organizational structure.

Organization	Organization					
Management	Treatment Class	Very Small	Small	Medium	Large	Total
	Α					
Ð	В					
Private	С					
<u>а</u>	D	1	1			2
	E					
	Α				1	1
t	В					
District	С					
	D	1		1	1	3
	E					
	Α				1	1
pal	В		4	2		6
Municipal	С		4	2	3	9
Ē	D	3	21	6	2	32
	E					
	Α			1		1
tion	В		9	6		15
Association	С		16	8		24
Ass	D	11	35	8	1	55
	E		5			5
	Total	16	97	34	9	154

Due to the place-based nature of water utilities and the influence that neighboring utilities exert on many functions of the water organization, particularly on pricing levels and structures, organizations were classified by the geographic region of the state in which they are located.<sup>3</sup>

The distribution of respondent organizations closely resembled the distribution of all organizations in the state by geographic region. There are two exceptions. First, the Delta region is home to 16.1 percent of the organizations in the state, but only 8.4 percent of the respondent organizations came from this region. Second, the Hills region is home to 23.6 percent of the state's organizations, but 30.5 percent of the respondents were in this region. **Table 2** presents the number and percentage of responding organizations and all organizations in the state by geographic region. The largest numbers of respondent organizations are located in the Hills region, while the lowest number of respondents are located in the Delta region, thus reflecting the differences in the respondent versus population distributions previously mentioned.

	Respondent (	Organizations	All Organizations			
Region	Number	Percentage				
Capital/River Region	29 18.8		148	17.6		
Coastal Region	27	17.5	162	79.2		
Delta Region	13	8.4	136	16.1		
Hills Region	47 30.5		199	23.6		
Pines Region	38	24.7	198	23.5		
Total	154	100.0	843	100.0		

#### Table 2. Number of organizations by organization region.

#### **Workforce and Organizational Structure**

One hundred twenty-six of the responding organizations (81.8 percent) provided the number of employees associated with their organization, while 73 organizations (47.4 percent) provided the number of contractors associated with their organization. **Table 3** shows the average number of employees for organizations that report employees and the average number of contractors for organizations that report using contractors, based

on organization size. While the number of employees for a large organization is expected to be higher than that of a smaller organization, it is worth noting that the reported number of workers in this study is high for large organizations due to one utility district in the Coastal region of the state reporting an atypically high number of employees and contractors. This may be due to an exceptionally large certificated area and the high number of connections this utility district serves. As might be expected, the average number of employees increases as the size of the organization increases (this trend is maintained even when the aforementioned utility district is excluded). It is important to remember that the size classification is based solely on the population served by the organization and does not account for infrastructure factors such as the miles of distribution line or the number of wells.

#### Table 3. Average number of employees and contractors by organization size.

Organization Size	Average Number of Employees	Average Number of Contractors	Average Number of Total Workers (both Employees and Contractors)		
Very Small	ry Small 2.6		4.8		
Small	4.0	2.1	6.1		
Medium	9.2	2.8	9.1		
Large	arge 34.1		65.3		

<sup>&</sup>lt;sup>3</sup> The **Capital/River Region** consists of the following counties: Adams, Amite, Claiborne, Copiah, Franklin, Hinds, Jefferson, Lawrence, Lincoln, Madison, Pike, Rankin, Simpson, Walthall, Warren, and Wilkinson.

The **Coastal Region** consists of the following counties: Covington, Forrest, George, Greene, Hancock, Harrison, Jackson, Jefferson Davis, Jones, Lamar, Marion, Pearl River, Perry, Stone, and Wayne.

The **Delta Region** consists of the following counties: Bolivar, Coahoma, Holmes, Humphreys, Issaquena, Leflore, Quitman, Sharkey, Sunflower, Tallahatchie, Tunica, Washington, and Yazoo.

The **Hills Region** consists of the following counties: Alcorn, Benton, Calhoun, DeSoto, Grenada, Itawamba, Lafayette, Lee, Marshall, Panola, Pontotoc, Prentiss, Tate, Tippah, Tishomingo, Union, Webster, and Yalobusha.

The **Pines Region** consists of the following counties: Attala, Carroll, Chickasaw, Choctaw, Clarke, Clay, Jasper, Kemper, Lauderdale, Leake, Lowndes, Monroe, Montgomery, Neshoba, Newton, Noxubee, Oktibbeha, Scott, Smith, and Winston.

**Table 4** shows the average number of employees and contractors based on organization treatment class. It is commonly accepted that the number of workers for a more complex treatment plant will be higher due to water

treatment costs and that organizations using more complex treatment methods usually have larger populations among which the treatment cost is allocated. However, it is important to note that, from the standpoint of this

Organization Treatment Class	Average Number of Employees	Average Number of Contractors	Average Number of Total Workers (both Employees and Contractors)
Class A	ass A 46.7		69.3
Class B	ass B 5.9		6.7
Class C	10.6	2.0	9.9
Class D	Class D 5.2		5.1

Table 4. Average number of employees and contractors by treatment class.

survey, the higher number of workers in the Class A category is due primarily to the high number of employees and contractors used by the previously mentioned utility district. Also, the higher number of employees found in the Class C category is due to one municipality reporting a larger than expected number of employees. It is possible that this municipality reported all city workers who have even a tangential relationship with the water utility.

**Table 5** shows the number of workers based on organization type. The most common types of organizational structures responding to the survey were municipalities, associations, utility districts, and private organizations. Utility districts reported having the most employees (an average of 33.8 employees per organization) and contractors (an average of 33.0 contractors per organization), but this was primarily due to the previously mentioned utility district. Municipal organizations re-

ported an average of 11.8 employees and 2.4 contractors; associations reported an average of 3.8 employees and 2.2 contractors; and private organizations reported an average of 2.0 employees and no contractors. Municipal organiza-

Finally, **Table 6** presents the average number of employees and contractors based on the region of Mississippi

 Table 5. Average number of employees and contractors by organization type.

Organization Classification	Average Number of Employees	Average Number of Contractors	Average Number of Total Workers (both Employees and Contractors)
Municipal	nicipal 11.8		9.1
Association	sociation 3.8		3.1
District	33.8	33.0	33.5
Private 2.0		$N/A^4$	2.0

tions owned by city governments generally offer additional services (wastewater, gas, electricity, etc.) and, therefore, may have more office staff, maintenance staff, a consulting engineer, or an attorney contributing to the average number of reported employees and contractors.

in which the organization is located. While there is some variation across regions, the previously mentioned utility

#### Table 6. Average number of employees and contractors by organization region.

Organization Region	Average Number of Employees	Average Number of Contractors	Average Number of Total Workers (both Employees and Contractors)
Capital/River Region	6.5	2.2	7.6
Coastal Region	astal Region 10.3		11.3
Delta Region	9.6	2.4	6.4
Hills Region	Region 7.2		7.2
Pines Region	6.1	1.8	5.7

district with the high number of workers is located in the Coastal region and the municipality with the relatively high number of workers is located in the Hills region. Also, the Coastal, Hills, and Capital/River regions each host three large organizations as classified by the size of the population served.

<sup>4</sup>N/A indicates that no data were reported for the specific position and classification (i.e., no privately owned water organizations reported using contractors).

#### **Compensation and Years of Service Overview**

The following tables provide compensation and years of service (length of employment/association by employees/ contractors) with the organization by job classification and analysis factor. While a detailed analysis of each position by organization factor can be found in the appendices, there are several general analysis results:

- Employee wages tend to be higher than contractor compensation for all positions and organization factors.
- · Small and medium organizations have the longest average years of service for most positions in both the employee and contractor categories.
- Both employee wages and contractor compensation tend to increase for all positions as the size of the organization increases.
- Treatment Class E organizations tend to have the longest average years of service for both employees and contractors in all positions; however, the small

Very

Small

845

805

635

419

1,600

923

580

**General Manager** 

Billing Clerk

Meter Reader

Repair

Maintenance and

**Other Operators** 

Administrative Support

**Designated Operator** 

number of treatment Class E organizations preclude the establishment of a solid trend for these organizations. Treatment Class C organizations have the longest average years of service for both employees and contractors in the general manager, designated operator, billing clerk, and meter reader positions.

- In general, employee wages and contractor compensation tend to increase as treatment complexity increases.
- Associations tend to have the longest average years of service for both employees and contractors in all positions.
- Utility districts tend to have the highest level of monthly gross wages for employees, followed by municipalities and then associations. Municipalities tend to have the highest level of compensation for contractors, followed by associations. Private organizations did not disclose wage or compensation information, and utility districts have relatively few contractors in the analyzed positions.

Large

N/A

N/A

N/A

N/A

N/D

N/D

N/A

Small

1,336

1,617

1,700

1,981

923

788

1,100

Medium

N/D<sup>5</sup>

3,295

2,552

10,000

N/D

N/A

N/D

Table 7. Average monthly gross compensation (\$) for employees and contractors by organization size.         Employee			
	Employee	Contractor	

Small

2,221

2,190

1,660

1,581

2,180

1,930

2,101

Medium

4,022

4,030

2,431

2,376

2,382

3,044

3,138

Large

5,761

3,879

3,043

2,274

2,990

2,704

N/A

- For most positions, the Capital/River region has the longest average years of service for employees and contractors, followed by the Delta and Hills regions.
- The Coastal region tends to have the highest monthly gross wages for employees, while the Capital/ River region tends to have the highest level of compensation for contractors.



Verv

Small

413

895

350

509

345

N/A

N/A

<sup>5</sup>N/D means that the organization did not disclose information for the specific position and classification (e.g., general manager contractor compensation was not disclosed by any medium-size organization that reported using contractors).

		Empl	loyee		Contractor				
	Very Small         Small         Medium         Large         Very Small         Small         Medium							Large	
General Manager	10.4	18.5	18.3	6.9	16.0	16.9	N/D	N/A	
Designated Operator	17.3	15.8	19.3	12.7	9.8	12.5	15.5	N/A	
Billing Clerk	7.5	10.3	10.7	9.2	7.0	9.1	N/D	N/A	
Meter Reader	9.8	10.5	6.2	11.0	11.8	12.5	17.3	N/A	
Maintenance and Repair	15.0	9.2	7.6	7.6	6.2	15.9	22.0	N/D	
Other Operators	5.0	5.5	6.1	7.0	N/A	11.8	N/D	N/D	
Administrative Support	5.0	8.9	13.4	5.8	N/A	11.0	N/A	N/A	

#### Table 8. Average years of service for employees and contractors by organization size.

# Table 9. Average monthly gross compensation (\$) for employees and contractors by organization treatment class.

	Employee				Contractor					
		Tre	eatment Cla	ass		Treatment Class				
	Α	A B C D E				Α	В	С	D	E
General Manager	N/D	3,572	3,704	2,384	1,350	N/A	N/A	\$1,133	\$1,295	\$300
Designated Operator	N/D	3,063	3,225	2,397	2,945	\$6,884	\$1,667	\$1,480	\$1,503	\$533
Billing Clerk	N/D	1,896	2,048	1,771	1,707	N/D	N/D	\$1,350	\$1,616	\$450
Meter Reader	N/D	1,793	1,846	1,753	1,350	\$2,100	\$900	\$1,853	\$934	\$483
Maintenance and Repair	N/D	2,522	2,416	2,009	2,100	\$10,000	\$3,000	\$1,450	\$1,819	\$594
Other Operators	2,322	2,394	2,559	2,457	N/A	N/A	N/A	N/A	\$788	N/A
Administrative Support	3,407	2,559	2,192	2,451	N/A	N/A	N/A	N/A	\$1,100	N/A

#### Table 10. Average years of service for employees and contractors by organization treatment class.

			Employee					Contractor		
		Tre	eatment Cla	ass			Tre	atment Cla	ass	
	Α	В	С	D	E	Α	В	С	D	E
General Manager	12.5	15.6	22.4	14.7	22.0	N/A	N/A	14.3	13.0	50.0
Designated Operator	15.0	17.2	17.1	15.9	20.0	1.0	12.7	17.8	10.7	21.7
Billing Clerk	8.0	8.2	12.4	9.9	7.0	N/A	N/D	11.5	8.9	N/A
Meter Reader	3.0	6.9	8.5	10.8	22.0	25.0	23.5	13.8	12.1	10.0
Maintenance and Repair	20.0	6.9	6.6	10.1	9.0	30.0	23.0	20.0	11.2	21.3
Other Operators	8.0	4.6	9.2	6.5	N/A	N/A	N/A	N/A	11.8	N/A
Administrative Support	13.5	4.5	9.6	10.5	N/A	N/A	N/A	N/A	11.0	N/A

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	Private	District	Municipal	Association	Private	District	Municipal	Association
General Manager	N/D	5,000	3,415	2,491	N/A	N/A	N/A	1,131
Designated Operator	N/D	3,515	3,089	2,583	N/A	700	1,453	1,643
Billing Clerk	N/D	600	2,018	1,791	N/D	N/A	N/D	1,475
Meter Reader	N/D	400	2,102	1,551	N/D	N/A	1,094	1,078
Maintenance and Repair	N/D	2,253	2,374	2,165	N/A	N/D	3,125	1,744
Other Operators	N/D	2,557	2,508	2,427	N/A	N/A	550	1,025
Administrative Support	N/A	2,687	2,699	2,053	N/A	N/A	N/D	1,100

Table 11. Average monthly gross compensation (\$) for employees and contractors by organization type.

#### Table 12. Average years of service for employees and contractors by organization type.

		Emp	oloyee			Con	tractor	
	Private	District	Municipal	Association	Private	District	Municipal	Association
General Manager	N/D	7.0	14.5	18.8	N/D	N/A	N/A	16.7
Designated Operator	20.0	12.7	13.9	18.0	N/A	19.0	10.4	12.4
Billing Clerk	N/D	8.0	6.4	12.4	N/D	N/A	N/D	8.6
Meter Reader	N/D	5.5	9.2	10.3	N/A	N/A	12.0	13.3
Maintenance and Repair	N/D	11.0	9.7	7.3	N/A	N/D	11.0	15.1
Other Operators	N/A	8.5	7.3	6.2	N/A	N/A	10.5	13.0
Administrative Support	N/A	4.5	11.0	8.9	N/A	N/A	N/D	11.0

			Employee					Contractor		
	Capital/ River	Coastal	Delta	Hills	Pines	Capital/ River	Coastal	Delta	Hills	Pines
General Manager	2,616	3,413	2,345	2,586	3,274	1,350	650	475	800	1,388
Designated Operator	2,746	3,545	2,512	1,980	3,263	1,540	1,318	1,096	1,804	1,709
Billing Clerk	1,120	2,174	1,418	1,685	1,829	N/D	3,750	400	839	1,962
Meter Reader	1,796	1,676	1,451	1,748	2,046	1,931	1,007	750	1,051	743
Maintenance and Repair	2,203	2,117	1,986	2,362	2,386	967	500	263	2,446	2,363
Other Operators	2,405	2,556	1,962	2,292	2,752	N/D	N/A	N/A	783	800
Administrative Support	1,724	2,639	2,117	3,385	1,940	N/A	N/A	N/A	1,100	N/D

#### Table 13. Average monthly gross compensation (\$) for employees and contractors by organization region.

Table 14. Average years of service for employees and contractors by organization region.

			Employee					Contractor		
	Capital/ River	Coastal	Delta	Hills	Pines	Capital/ River	Coastal	Delta	Hills	Pines
General Manager	16.5	15.7	13.3	16.5	20.1	7.0	15.0	6.5	15.0	28.0
Designated Operator	21.0	13.8	20.3	17.2	18.8	10.4	5.7	7.3	15.7	14.0
Billing Clerk	14.7	6.1	6.4	11.5	8.4	N/D	3.0	3.0	11.1	11.0
Meter Reader	11.5	6.0	12.9	8.7	10.8	12.0	12.0	3.3	15.8	13.1
Maintenance and Repair	6.9	6.1	14.3	8.8	10.1	10.3	5.0	3.7	17.9	16.3
Other Operators	12.5	6.5	3.5	4.3	7.5	N/D	N/A	N/A	15.1	1.0
Administrative Support	9.9	9.3	7.6	10.5	11.8	N/A	N/A	N/A	11.0	N/D

#### **Employee/Contractor Retention**

Given the aging of the water utility workforce and the expense of training new workers, a primary issue for water utilities in today's environment concerns retaining both employee and contractor personnel. This is particularly true for skilled personnel such as certified waterworks operators and billing clerks. These concerns are growing as grant and debt capital becomes more difficult to obtain and an increased emphasis is placed on asset management by regulatory, lending, and technical assistance agencies. Given this environment, the utility would be well advised to understand the factors that are important in an employee's or contractor's decision to continue their service to the utility. To help water utilities understand the factors that are both important and unimportant in an employee's or contractor's decision to stay, statistical analysis (regression) was used to gain insight into the impact of various economic factors on the years of service for both employees and contractors for each position. Overviews of these analyses are provided below; more detail of the analysis methodologies and results is available upon request.

The goal of this analysis is to determine the extent various factors are related to employee/contractor length of service in each position. No economic reasoning would indicate that the size of the population served, the treatment method, or the geographic region in which the utility is located should have a significant effect on the years of service of an employee. The statistical analysis of these factors confirmed this belief. Therefore, we will determine the degree to which more economically based factors explain the length of service for both employees and contractors. For employees, reported monthly gross wages/ salaries and primary benefits (health insurance, a retirement plan, and/or disability insurance) and/or secondary benefits (organization-provided vehicle, reimbursement of mileage, uniforms, and/or cost of continuing education units covered by the organization) will be used to explain the years of service for each position. Monthly contractor compensation will be used to determine the extent to which the length of contractor service to an organization can be explained.

#### **General Manager**

Neither compensation nor the presence of benefits appear to significantly affect the general manager's decision to serve a utility. For employee general managers, all variables used in the analysis (monthly gross wage/salary, primary benefits, and secondary benefits) were not significant with regard to the years of service. Furthermore, these factors only explain 2 percent of the employee general manager's years of service. For contractor general managers, compensation is also not significant in the decision to serve the utility and only explains just over 5 percent of the contractor general manager's decision. As with all positions in this analysis, this suggests that other factors influence a general manager's decision to remain with a utility. These factors could include quality working conditions, a dedicated staff, an effective governing board, and a strong desire on the part of the general manager and the organization's staff to serve the utility's customers as effectively as possible. These are factors that governing boards should consider when considering policies that could affect the general manager's years of service with the organization.

#### **Designated Operator**

Employee designated operators do seem to value the level of monthly gross wages/salaries and the presence of at least one primary benefit, but the presence of secondary benefits was found to be statistically insignificant to the years of service. The analysis explained almost 15 percent of the employee designated operator's decision regarding the length of service to the system. However, an unexpected result was the indication that the presence of primary benefits resulted in fewer years of service to the system. This could be due to the perception that primary benefits reduced the level of the monthly gross wage/salary paid to the employee designated operator.

Contractor designated operators do not seem to consider their level of compensation as a significant factor in their decision to serve the utility. This factor only explained 3 percent of the contractor's decision, and the level of compensation was statistically insignificant. However, many contractor designated operators serve multiple systems that may serve a small population of customers, and these systems may not have the resources to provide a high level of compensation to the designated operator. In these cases, having multiple systems in the operator's portfolio may generate additional needed wages; and having governing boards that are appreciative of the operator's efforts could be sufficient for the contractor to extend their years of service.

#### Other Positions: Billing Clerk, Meter Reader, Maintenance and Repair, Other Operator, and Administrative Support

The effort to explain the years of service by any of the other positions examined in this publication, either employees or contractors, closely resembles that of general managers. None of the employee-focused factors were found to be statistically significant in the analysis, and the ability of these factors to explain the length of service by any of the positions was extremely low, ranging from less than 1 percent for billing clerks to just over 24 percent for administrative support employees. The exception is in the maintenance and repair personnel position. Monthly gross wages/salaries were found to significantly influence the years of service that maintenance and repair employees served the organization, but only 7.6 percent of the length of service by these employees to the organization was explained by our analysis.

Similar situations were found when examining the length of service for contractors. In most cases, the level of monthly compensation for each position was not statistically significant in explaining the years of service for contractors in the specific position; the ability of the analysis to explain the length of service ranged from 3 percent for meter readers to just under 5 percent for other operators. Again, the exception is the contractor maintenance and repair position. The monthly compensation for this position was significant in influencing the years of service for these contractors, and the analysis was able to explain 13 percent of the variation in the years of service.

The weakness of compensatory factors to explain the length of service for both employees and contractors leads to the belief that there are other human factors that influence an employee's or contractor's desire to serve the organization. In a 2014 blog post for Forbes magazine, Jacob Morgan<sup>6</sup> wrote that the Boston Consulting Group conducted a worldwide survey of over 200,000 people. This effort determined that the top 10 factors for employee satisfaction, in order of importance, are:

- 1. Appreciation of the employee's work
- 2. Good relationships with colleagues
- 3. Good work-life balance
- 4. Good relationships with superiors
- 5. The company's financial stability
- 6. Learning and career development
- 7. Job security
- 8. Attractive fixed salaries
- 9. Interesting job content
- 10. Company values

While this survey solely targeted employees, it is reasonable to expect that the same values are held by contractors in the water utility sector.

What is most interesting is that compensation is ranked number 8 on the list and benefits are not mentioned at all. In other words, a company can't expect a worker, either an employee or a contractor, to do a good job and stay with the company just because they get a nice paycheck; they also must believe that they are valued by and contributing to the organization.

The takeaway lesson for governing boards and organization management is that employees and contractors must feel valuable to the organization's mission of providing clean and safe water to customers.



<sup>&</sup>lt;sup>6</sup> Morgan, Jacob. "The Top 10 Factors For On-The-Job Employee Happiness."

https://www.forbes.com/sites/jacobmorgan/2014/12/15/the-top-10-factors-for-on-the-job-employee-happiness/#3f50b4255afa. December 15, 2014.

#### **Appendix I. General Manager**

Seventy-six of the responding organizations (49.4 percent) reported having a person in the role of general manager. Sixty-four of these organizations (84.2 percent of the organizations that reported using the role of general manager) reported using an employee as the organization's general manager, and 12 of these organizations (15.8 percent of the organizations that reported using the role of general manager) reported using a contractor as the organization's general manager. Table A-I-1 presents the percentage and number of responding organizations that reported having an explicit role of general manager. The percentages are based on the number of organizations responding in each specific size category (for example, six of the 16 very small organizations responding to the survey used an employee in the role of general manager; this means that 37.5 percent of the very small organizations used an employee in this role). It is interesting to note that the percentage of organizations that reported having an employee general manager increased as the size of the organization increased, but the opposite is true for contractor general managers.

**Table A-I-1** also provides the average years of service for a general manager in the various organization size classifications. For organizations using employees in the general manager role, the longest average tenure (years of service) was found in the small and medium classes (while there are no medium and large organizations that use a contractor in the general manager position, the same average tenure pattern held in that the average tenure for small organizations was longer that the average tenure for very small organizations). The shortest average tenure was found for large organizations; we suspect this is due to the larger number of employees typically found in these organizations and the fact that more experience with a water utility is typically required by governing bodies for an employee who fills this role. Requiring more experience to assume the role of general manager typically indicates a shorter working time until retirement in this position.

Reported data for contractors serving in the role of general manager were limited to the very small and small organizations. The average years of service for this position in these organization sizes was virtually the same.

	Organizations with Gene	eral Manager – Employee	Organizations with General Manager - Contractor			
Organization Size	Percentage/ Number	Average Tenure	Percentage/ Number	Average Tenure		
Very Small	37.5% 6 of 16 orgs	10.4 years	12.5% 2 of 16 orgs	16.0 years		
Small	47.4% 45 of 95 orgs	18.5 years	9.5% 9 of 95 orgs	16.9 years		
Medium	76.5% 26 of 34 orgs	18.3 years	2.9% 1 of 34 orgs	N/D		
Large	88.9% 8 of 9 orgs	6.9 years	0.0% 0 of 9 orgs	N/A		

Table A-I-1. Percentage/number of organizations reporting a general manager and average years of service for this position by organization size.

**Table A-I-2** presents the average gross monthly wages (employees) and monthly compensation (contractors) for general manager positions as well as the number of organizations providing any benefits to employees in this position by organization size. The average monthly gross wages/salaries for employee general managers and the average monthly compensation for contractor general managers tended to increase as the size of the organization increased, with large organizations having the highest average monthly gross wages/salaries and small organizations having the highest contractor compensation for organizations that reported contractor compensation data.

Regarding the number of organizations with primary or secondary benefit<sup>7</sup> packages, an organization that provided at least one primary benefit typically provided at least one secondary benefit (this is true for all job classifications). The percentages of organizations providing benefits to employees serving in the role of general manager for each organization size category were as follows:

- Very Small 6 of 16 organizations (37.5 percent)
- Small 45 of 95 organizations (47.4 percent)
- Medium 26 of 34 organizations (76.5 percent)
- Large 8 of 9 organizations (88.9 percent)

<sup>7</sup>**Primary benefits** are defined as health insurance, retirement plan(s), and/or disability insurance. An organization was categorized as providing primary benefits to a particular employee job classification (e.g., general manager) if it provided at least one of these benefits to the employee. **Secondary benefits** are defined as provision of a company-owned vehicle, mileage reimbursement for a personally owned vehicle, uniforms, and/or covering the cost(s) required for continuing education unit (CEU) hours. An organization was categorized as providing secondary benefits to a particular employee job classification (e.g., general manager) if it provided at least one of these benefits to the employee. Contractors do not typically receive these types of benefits from the organization due to their status as independent businesses.

	Organizations with Ge	neral Manager – Employee	Organizations with General Manager – Contractor
Organization Size	Average Monthly Gross	Organizations with Primary/	Average Monthly
	Wages/Salaries	Secondary Benefits	Compensation
Very Small	Average – \$845	Orgs reporting – 6 orgs	Average – \$413
	Minimum – \$365	Primary – 0 orgs	Minimum – \$350
	Maximum – \$1,500	Secondary – 3 orgs	Maximum – \$475
Small	Average – \$2,221	Orgs reporting – 45 orgs	Average – \$1,336
	Minimum – \$10	Primary – 18 orgs	Minimum – \$300
	Maximum – \$5,216	Secondary – 39 orgs	Maximum – \$3,000
Medium	Average – \$4,022 Minimum – \$250 Maximum – \$8,409	Orgs reporting – 26 orgs Primary – 24 orgs Secondary – 24 orgs	N/D
Large	Average – \$5,761 Minimum – \$4,000 Maximum – \$8,500	Orgs reporting – 8 orgs Primary – 8 orgs Secondary – 8 orgs	N/A

## Table A-I-2. Average monthly gross compensation for general managers and benefits packages for employee general managers by organization size.

The same type of analysis can be applied to treatment classes. **Table A-I-3** presents the percentage and number of organizations with a general manager and the average years of service by treatment class. While the average tenure for Class E organizations was among the longest of all treatment classifications, it should be noted that only two Class E organizations reported having the explicit role of general manager.

Class A organizations reported the shortest average years of service for employee general managers. It is

assumed that this is due to the large populations that Class A organizations typically serve and that people hired in this position are required to have a substantial amount of supervisory or management experience. This would likely reduce the length of service in the position. This may hold true as well for Class B organizations. Class C and Class E organizations reported the longest average tenures for employee general managers.

Table A-I-3. Percentage/number of organizations reporting a general manager position and average years	
of service by organization treatment class.	

	Organizations with Gen	eral Manager – Employee	Organizations with Gen	eral Manager – Contractor
Organization Treatment Class	Percentage/ Number	Average Tenure	Percentage/ Number	Average Tenure
Class A	66.7% 2 of 3 orgs	12.5 years	0.0% 0 of 3 orgs	N/A
Class B	57.1% 12 of 21 orgs	15.6 years	0.0% 0 of 21 orgs	N/A
Class C	66.7% 22 of 33 orgs	22.4 years	9.1% 3 of 33 orgs	14.3 years
Class D	52.2% 48 of 92 orgs	14.7 years	8.7% 8 of 92 orgs	13.0 years
Class E	20.0% 1 of 5 orgs	22.0 years	20.0% 1 of 5 orgs	50.0 years

<sup>7</sup>**Primary benefits** are defined as health insurance, retirement plan(s), and/or disability insurance. An organization was categorized as providing primary benefits to a particular employee job classification (e.g., general manager) if it provided at least one of these benefits to the employee. **Secondary benefits** are defined as provision of a company-owned vehicle, mileage reimbursement for a personally owned vehicle, uniforms, and/or covering the cost(s) required for continuing education unit (CEU) hours. An organization was categorized as providing secondary benefits to a particular employee job classification (e.g., general manager) if it provided at least one of these benefits to the employee. Contractors do not typically receive these types of benefits from the organization due to their status as independent businesses.

**Table A-I-4** presents the average monthly compensation for general managers by treatment class. The average monthly gross wages/salaries for employee general managers and the average monthly compensation for contractor general managers tended to increase as the treatment methods became more complex.

**Table A-I-4** also presents the number of organizations that provided at least one primary and/or secondary benefit for employees in this position by treatment class. It is interesting to note that, except for Class E organizations, at least half of the organizations in each treatment class that provided benefits to general manager employees provided primary benefits to those employees. The percentages of organizations providing any benefits to employees serving in the role of general manager for each treatment class were as follows:

- Class A 2 of 3 organizations (66.7 percent)
- Class B 12 of 21 organizations (57.1 percent)
- Class C 22 of 33 organizations (66.7 percent)
- Class D 48 of 92 organizations (52.2 percent)
- Class E 1 of 5 organizations (20.0 percent)

Table A-I-4. Average monthly gross compensation for general managers and benefits packages for
employee general managers by organization treatment class.

	Organizations with Gene	eral Manager – Employee	Organizations with General Manager – Contractor
Organization Treatment Class	Average Monthly Gross Wages/Salaries	Organizations with Primary/Secondary Benefits	Average Monthly Compensation
Class A	N/D	Orgs reporting – 2 orgs Primary – 2 orgs Secondary – 2 orgs	N/A
Class B	Average – \$3,572 Minimum – \$246 Maximum – \$8,409	Orgs reporting – 12 orgs Primary – 8 orgs Secondary – 11 orgs	N/A
Class C	Average – \$3,704 Minimum – \$200 Maximum – \$8,500	Orgs reporting – 22 orgs Primary – 16 orgs Secondary – 19 orgs	Average – \$1,133 Minimum – \$700 Maximum – \$1,900
Class D	Average – \$2,384 Minimum – \$10 Maximum – \$5,216	Orgs reporting – 48 orgs Primary – 24 orgs Secondary – 41 orgs	Average – \$1,295 Minimum – \$350 Maximum – \$3,000
Class E	Average – \$1,350 Minimum – \$1,350 Maximum – \$1,350	Orgs reporting – 1 orgs Primary – 0 orgs Secondary – 1 orgs	Average – \$300 Minimum – \$300 Maximum – \$300

**Table A-I-5** presents the percentage and number of organizations with a general manager and the average years of service by organization type. This analysis reveals some interesting results. First, neither districts nor municipalities reported using a contractor in the general manager role. Second, organizations operating as water associations had the longest average tenure of employee general managers, thus raising the possibility that the benefits offered by municipalities (these benefits tend to be more substantial than benefits offered by associations) are not the main factor that enables an organization to retain employees.

Table A-I-5. Percentage/number of organizations reporting a general manager and average years of service for this position by organizational type.

	Organizations with Gene	Organizations with General Manager – Employee		ral Manager – Contractor
Organization Type	Percentage/Number	Average Tenure	Percentage/Number	Average Tenure
Private	50.0% 0 of 2 orgs	N/A	0.0% 0 of 2 orgs	N/A
District	75.0% 3 of 4 orgs	7.0 years	0.0% 0 of 4 orgs	N/A
Municipal	66.7% 32 of 48 orgs	14.5 years	2.1% 1 of 48 orgs	N/D
Association	50.0% 50 of 100 orgs	18.8 years	11.0% 11 of 100 orgs	16.7 years

**Table A-I-6** presents the average monthly compensation for general manager positions as well as the number of organizations providing any benefits to employees in this position by organization type. The average monthly gross wages/salaries for employee general managers were the highest for utility districts and were followed by municipalities and then by associations. Associations were the only organization type that reported using contractors in the general manager role. Not surprisingly, a higher percentage of municipalities reported providing benefits to their general manager employees than did associations (66.7 percent versus 50.0 percent). This is presumably due to many municipalities across the state participating in state employee benefit programs for all employees of the municipality. The percentage of organizations by organization type providing benefits to general manager employees was as follows:

- Private 0 of 2 organizations (0.0 percent)
- District 3 of 4 organizations (75.0 percent)
- Municipal 32 of 48 organizations (66.7 percent)
- Association 50 of 100 organizations (50.0 percent)

#### Table A-I-6. Average monthly gross compensation for general managers and benefits packages for employee general managers by organization type.

	Organizations with Gene	eral Manager – Employee	Organizations with General Manager - Contractor
Organization Classification	Average Monthly Gross Wages/Salaries	Organizations with Primary/Secondary Benefits	Average Monthly Compensation
Private	N/D	Orgs reporting – 0 orgs Primary – 0 orgs Secondary – 0 orgs	N/A
District	Average – \$5,000 Minimum – \$5,000 Maximum – \$5,000	Orgs reporting – 3 orgs Primary – 3 orgs Secondary – 3 orgs	N/A
Municipal	Average – \$3,415 Minimum – \$365 Maximum – \$8,500	Orgs reporting – 32 orgs Primary – 27 orgs Secondary – 29 orgs	N/A
Association	Average – \$2,491 Minimum – \$10 Maximum – \$5,771	Orgs reporting – 50 orgs Primary – 20 orgs Secondary – 42 orgs	Average – \$1,131 Minimum – \$300 Maximum – \$3,000

**Table A-I-7** presents the percentage and number of organizations with a general manager and the average years of service by region of the state. The Pines region had the longest years of service for both employee and contractor general managers, although it ranked third in the percentage of organizations that had an employee acting as a general manager and second in the percentage of organizations that had a contractor acting as a general manager.

Table A-I-7. Percentage/number of organizations reporting a general manager and average years of service for this position by organization region.

	Organizations with Gen	eral Manager – Employee	Organizations with General Manager - Con	
Organization Region	Percentage/ Number	Average Tenure	Percentage/ Number	Average Tenure
Capital/River	65.5% 19 of 29 orgs	16.5 years	10.3% 3 of 29 orgs	7.0 years
Coastal	74.1% 20 of 27 orgs	15.7 years	3.7% 1 of 27 orgs	15.0 years
Delta	46.1% 6 of 13 orgs	13.3 years	15.4% 2 of 13 orgs	6.5 years
Hills	48.9% 23 of 47 orgs	16.5 years	4.3% 2 of 47 orgs	15.0 years
Pines	44.7% 17 of 38 orgs	20.1 years	10.5% 4 of 38 orgs	28.0 years

**Table A-I-8** presents the average level of monthly compensation for general manager positions as well as the number of organizations providing any benefits to employees in this position by geographic region. The average monthly gross wages/salaries for employee general managers was highest for the Coastal and Pines regions, while the average monthly compensation for contractor general managers was highest for the Pines and Capital/ River regions. While the number of organizations within specific regions that reported using a general manager varied widely, approximately half or more organizations that reported having an employee general manager provided at least one primary benefit to that employee, and higher proportions reported providing secondary benefits. The percentage of organizations providing benefits to the general manager employees for each region were as follows:

- Capital/River Region 19 of 29 organizations (65.5 percent)
- Coastal Region 20 of 27 organizations (74.1 percent)
- Delta Region 6 of 14 organizations (42.9 percent)
- Hills Region 23 of 47 organizations (48.9 percent)
- Pines Region 17 of 37 organizations (45.9 percent)

Table A-I-8. Average gross monthly compensation for general managers and benefits packages for
employee general managers by region.

	Organizations with General Manager - Employee		Organizations with General Manager – Contractor
Organization Region	Average Monthly Gross Wages/Salaries	Organizations with Primary/Secondary Benefits	Average Monthly Compensation
Capital/River	Average – \$2,616	Orgs reporting – 19 orgs	Average – \$1,350
	Minimum – \$246	Primary – 9 orgs	Minimum – \$700
	Maximum – \$5,376	Secondary – 16 orgs	Maximum – \$2,000
Coastal	Average – \$3,413	Orgs reporting – 20 orgs	Average – \$650
	Minimum – \$365	Primary – 15 orgs	Minimum – \$650
	Maximum – \$5,216	Secondary – 18 orgs	Maximum – \$650
Delta	Average – \$2,345	Orgs reporting – 6 orgs	Average – \$475
	Minimum – \$1,108	Primary – 3 orgs	Minimum – \$475
	Maximum – \$3,417	Secondary – 5 orgs	Maximum – \$475
Hills	Average – \$2,586	Orgs reporting – 23 orgs	Average – \$800
	Minimum – \$10	Primary – 12 orgs	Minimum – \$800
	Maximum – \$8,500	Secondary – 21 orgs	Maximum – \$800
Pines	Average – \$3,274	Orgs reporting – 17 orgs	Average – \$1,388
	Minimum – \$450	Primary – 11 orgs	Minimum – \$300
	Maximum – \$8,409	Secondary – 14 orgs	Maximum – \$3,000

#### **Appendix II - Designated Operator**

One hundred thirty-seven of the responding organizations (89 percent) reported having a person in the role of designated operator. Ninety-four organizations (68.6 percent of the organizations that reported using the role of designated operator) reported hiring a designated operator as an employee, while 43 organizations (31.4 percent of the organizations that reported using the role of designated operator) reported using a contractor as the designated operator) reported using a contractor as the designated operator. **Table A-II-1** presents the percentages and numbers of responding organizations that reported having a designated operator at the time of the survey. While state regulations require all water systems (systems are the building blocks of the organization definition used in this study) to have a designated operator, it is interesting to note that the percentage of organizations that reported having a designated operator increased as the size of the organization increased.

**Table A-II-1** also provides the average years of service for a designated operator in the various organization size classifications. Medium organizations had the longest average tenure for both employee and contractor designated operators. Large organizations had the shortest average tenure for employee designated operators, and very small organizations had the shortest average tenure for organizations using contractors in this role. However, virtually all size classes had an average tenure for designated operators of over 10 years. This suggests that, at least at the present time, the workforce that comprises this critical position is very stable. This finding held in the other sections of the analysis, as well.

Table A-II-1. Percentage/number of organizations reporting a designated operator by organization
size and average years of service for this position.

	Organizations with Designated Operator - Employee		Organizations with Designated Operator - Contractor	
Size Classification	Percentage/Number	Average Tenure	Percentage/Number	Average Tenure
Very Small	25.0% 4 of 16 orgs	17.3 years	56.3% 9 of 16 orgs	9.8 years
Small	57.9% 55 of 95 orgs	15.8 years	30.5% 29 of 95 orgs	12.5 years
Medium	76.5% 26 of 34 orgs	19.3 years	14.7% 5 of 34 orgs	15.5 years
Large	100.0% 9 of 9 orgs	12.7 years	0.0% 0 of 9 orgs	N/A

**Table A-II-2** presents the average level of monthly gross wages (employees) or compensation (contractors) for designated operators as well as the number of organizations providing any benefits to employees in this position by organization size. The average monthly gross wages/ salaries for employee designated operators and the average monthly compensation for contractor designated operators tended to increase as the size of the organization increased, although the average level of monthly gross salaries/wages for large organizations was slightly below that of the average for medium organizations. The percentage of organizations providing benefits to employees serving in the role of designated operator was as follows for each organization size category:

- Very Small 4 of 16 organizations (25.0 percent)
- Small 55 of 95 organizations (57.9 percent)
- Medium 26 of 34 organizations (76.5 percent)
- Large 9 of 9 organizations (100.0 percent)

	Organizations with Desig	gnated Operator – Employee	Organizations with Designated Operator – Contractor
Size Classifica-	Average Monthly Gross	Organizations with Prima-	Average Monthly
tion	Wages/Salaries	ry/Secondary Benefits	Compensation
Very Small	Average – \$805	Orgs reporting – 4 orgs	Average – \$895
	Minimum – \$425	Primary – 0 orgs	Minimum – \$225
	Maximum – \$1,500	Secondary – 1 org	Maximum – \$1,800
Small	Average – \$2,190	Orgs reporting – 55 orgs	Average – \$1,617
	Minimum – \$200	Primary – 26 orgs	Minimum – \$200
	Maximum – \$5,216	Secondary – 48 orgs	Maximum – \$6,499
Medium	Average – \$4,030	Orgs reporting – 26 orgs	Average – \$3,295
	Minimum – \$2,256	Primary – 26 orgs	Minimum – \$1,200
	Maximum – \$7,000	Secondary – 26 orgs	Maximum – \$6,884
Large	Average – \$3,879 Minimum – \$3,000 Maximum – \$6,500	Orgs reporting – 9 orgs Primary – 9 orgs Secondary – 9 orgs	N/A

### Table A-II-2. Average monthly gross compensation for designated operators and benefits packages for employee designated operators by organization size.

**Table A-II-3** presents the percentage and number of organizations with a designated operator and the average years of service by treatment class. With the exception of organizations using Class A and Class D treatment techniques, the average years of service declined for both designated operator employees and contractors as the treatment technique became less complex. One possible explanation for the lower average years of service for Class D designated operators could be the number of organizations in this treatment class. Since there are many more Class D water organizations than any other treatment

type, it is likely that there is much more mobility of skilled workers in this classification than in any other. Only three Class A organizations responded to the survey; this small sample precluded the establishment of any solid trend. Another interesting result of this analysis focuses on the years of service of the designated operators for Class E organizations. These organizations had the longest average years of service for both employee and contractor designated operators.

#### Table A-II-3. Percentage/number of organizations reporting a designated operator and average years of service for this position by organization treatment class.

		with Designated - Employee	Organizations with Designated Operator – Contractor		
Organization Treatment Class	Percentage/ Number	Average Tenure	Percentage/ Number	Average Tenure	
Class A	66.7% 2 of 3 orgs	15.0 years	33.3% 1 of 3 orgs	1.0 years	
Class B	71.4% 15 of 21 orgs	17.2 years	19.0% 4 of 21 orgs	12.7 years	
Class C	78.8% 26 of 33 orgs	17.1 years	18.2% 6 of 33 orgs	17.8 years	
Class D	53.3% 49 of 92 orgs	15.9 years	31.5% 29 of 92 orgs	10.7 years	
Class E	40.0% 2 of 5 orgs	20.0 years	60.0% 3 of 5 orgs	21.7 years	

**Table A-II-4** presents the average level of monthly gross wages (employees) and compensation (contractors) for designated operator positions, as well as the number of organizations providing any benefits for employees in this position by treatment class. As might be expected, the average monthly gross wages/salaries for employee designated operators and the average monthly compensation for contractor designated operators tended to increase as the treatment complexity increased. The percentage of organizations providing any benefits to employee designated operators was as follows for each treatment class:

- Class A 2 of 3 organizations (66.7 percent)
- Class B 15 of 21 organizations (71.4 percent)
- Class C 26 of 33 organizations (78.8 percent)
- Class D 49 of 92 organizations (53.3 percent)
- Class E 2 of 5 organizations (40.0 percent)

	Organizations with Desi	Organizations with Designated Operator – Contractor	
Organization Treatment Class			Average Monthly Compensation
Class A	N/D	Orgs reporting – 2 orgs Primary – 2 orgs Secondary – 2 orgs	Average – \$6,884 Minimum – \$6,884 Maximum – \$6,884
Class B	Average – \$3,063	Orgs reporting – 15 orgs	Average – \$1,667
	Minimum – \$700	Primary – 11 orgs	Minimum – \$1,100
	Maximum – \$5,452	Secondary – 14 orgs	Maximum – \$2,600
Class C	Average – \$3,225	Orgs reporting – 26 orgs	Average – \$1,480
	Minimum – \$200	Primary – 18 orgs	Minimum – \$900
	Maximum – \$7,000	Secondary – 22 orgs	Maximum – \$1,900
Class D	Average – \$2,397	Orgs reporting – 49 orgs	Average – \$1,503
	Minimum – \$300	Primary – 29 orgs	Minimum – \$225
	Maximum – \$5,216	Secondary – 44 orgs	Maximum – \$6,499
Class E	Average – \$2,945	Orgs reporting – 2 orgs	Average – \$533
	Minimum – \$1,350	Primary – 1 orgs	Minimum – \$200
	Maximum – \$4,540	Secondary – 2 orgs	Maximum – \$900

#### Table A-II-4. Average monthly gross compensation for designated operators and benefits packages for employee designated operators by organization treatment class.

**Table A-II-5** presents the percentage and number of organizations with a designated operator and the average years of service by organization type. Of the non-private organization types, associations had the longest tenure for employee designated operators, followed by municipali-

ties and then utility districts. However, the one contractor designated operator used by a utility district had a longer tenure than the average tenure length for contractor designated operators used by either municipalities or associations.

#### Table A-II-5. Percentage/number of organizations reporting a designated operator and average years of service for this position by organization type.

	Organizations with Designated Operator - Employee		Organizations with Designated Operator – Contractor	
Organization Type	Percentage/Number	Average Tenure	Percentage/Number	Average Tenure
Private	50.0% 1 of 2 orgs	20.0 years	0.0% 0 of 2 orgs	N/A
District	75.0% 3 of 4 orgs	12.7 years	25.0% 1 of 4 orgs	19.0 years
Municipal	66.7% 32 of 48 orgs	13.9 years	18.8% 9 of 48 orgs	10.4 years
Association	58.0% 58 of 100 orgs	18.0 years	33.0% 33 of 100 orgs	12.4 years

**Table A-II-6** presents the average monthly gross wages (employees) and compensation (contractors) for designated operator positions as well as the number of organizations providing any benefits to employees in this position by organization type. The average monthly gross wages/ salaries for employee designated operators was highest for districts with employee designated operators followed by municipalities and then associations. However, this order was reversed when contractor designated operators were examined. Associations provided the highest compensation

levels and were followed by municipalities and then utility districts (although only one utility district reported using a contractor in this position). The percentage of organizations providing benefits to designated operator employees was as follows by organization type:

- Private 1 of 2 organizations (50.0 percent)
- District 3 of 4 organizations (75.0 percent)
- Municipal 32 of 48 organizations (66.7 percent)
- Association 58 of 100 organizations (58.0 percent)

	Organization Operato	Organizations with Designated Operator – Contractor	
Organization Type	Average Monthly Gross	Organizations with Primary/	Average Monthly
	Wages/Salaries	Secondary Benefits	Compensation
Private	N/D	Orgs reporting – 1 orgs Primary – 0 orgs Secondary – 0 orgs	N/A
District	Average – \$3,515	Orgs reporting – 3 orgs	Average – \$700
	Minimum – \$3,515	Primary – 3 orgs	Minimum – \$700
	Maximum – \$3,515	Secondary – 3 orgs	Maximum – \$700
Municipal	Average – \$3,089	Orgs reporting– 32 orgs	Average – \$1,453
	Minimum – \$700	Primary – 30 orgs	Minimum – \$225
	Maximum – \$6,000	Secondary – 30 orgs	Maximum – \$4,000
Association	Average – \$2,583	Orgs reporting – 58 orgs	Average – \$1,643
	Minimum – \$200	Primary – 28 orgs	Minimum – \$200
	Maximum – \$7,000	Secondary – 51 orgs	Maximum – \$6,884

### Table A-II-6. Average monthly gross compensation for designated operators and benefits packages for employee designated operators by organization type.

**Table A-II-7** presents the percentage and number of organizations with a designated operator and the average years of service by geographic region. The Capital/River and Delta regions had the longest average tenure

for employee designated operators, while the Hills and Pines regions had the longest average tenure for contractor designated operators.

#### Table A-II-7. Percentage/number of organizations reporting a designated operator and average years of service for this position by geographic region.

	Organizations with Designated Operator – Employee		Organizations with Designated Operator – Contractor	
Organization Region	Percentage/ Number Average Tenure		Percentage/ Number	Average Tenure
Capital/River	72.4% 21 of 29 orgs	21.0 years	20.7% 6 of 29 orgs	10.4 years
Coastal	77.8% 21 of 27 orgs	13.8 years	14.8% 4 of 27 orgs	5.7 years
Delta	23.1% 3 of 13 orgs	20.3 years	53.8% 7 of 13 orgs	7.3 years
Hills	57.4% 27 of 47 orgs	17.2 years	31.9% 15 of 47 orgs	15.7 years
Pines	57.9% 22 of 38 orgs	18.8 years	28.9% 11 of 38 orgs	14.0 years

**Table A-II-8** presents the average level of monthly gross wages (employees) and compensation (contractors) for designated operator positions as well as the number of organizations providing any benefits to employees for the various geographic regions of the state. The average monthly gross wages/salaries for employee designated operators was highest for the Coastal and Pines regions, while the average monthly compensation for contractor designated operators was highest for the Hills and Pines regions. The percentage of organizations providing benefits to employee designated operators was as follows by geographic region:

- Capital/River Region 21 of 29 organizations (72.4 percent)
- Coastal Region 21 of 27 organizations (77.8 percent)
- Delta Region 3 of 14 organizations (21.4 percent)
- Hills Region 27 of 47 organizations (57.4 percent)
- Pines Region 22 of 37 organizations (59.5 percent)

		vith Designated Employee	Organizations with Designated Operator – Contractor	
Organization Region	Average Monthly Gross Wages/Salaries Organizations with Primary/Secondary Benefits		Average Monthly Compensation	
Capital/River	Average – \$2,746	Orgs reporting – 21 orgs	Average – \$1,540	
	Minimum – \$800	Primary – 12 orgs	Minimum – \$700	
	Maximum – \$4,988	Secondary – 18 orgs	Maximum – \$4,000	
Coastal	Average – \$3,545	Orgs reporting – 21 orgs	Average – \$1,318	
	Minimum – \$650	Primary – 16 orgs	Minimum – \$1,000	
	Maximum – \$5,216	Secondary – 29 orgs	Maximum – \$1,555	
Delta	Average – \$2,512	Orgs reporting – 3 orgs	verage – \$1,163	
	Minimum – \$1,500	Primary – 1 orgs	Minimum – \$225	
	Maximum – \$4,000	Secondary – 3 orgs	Maximum – \$2,600	
Hills	Average – \$1,980	Orgs reporting – 27 orgs	Average – \$1,804	
	Minimum – \$200	Primary – 15 orgs	Minimum – \$400	
	Maximum – \$7,000	Secondary – 23 orgs	Maximum – \$6,884	
Pines	Average – \$3,263	Orgs reporting – 22 orgs	Average – \$1,608	
	Minimum – \$1,100	Primary – 17 orgs	Minimum – \$200	
	Maximum – \$5,771	Secondary – 21 orgs	Maximum – \$4,100	

# Table A-II-8. Average monthly gross compensation for designated operators and benefits packages for employee designated operators by geographic region.

#### **Appendix III - Billing Clerk**

One hundred twenty-five (81.2 percent) of the responding organizations reported having at least one person in the role of billing clerk. One hundred nine organizations (87.2 percent of the organizations that reported using the role of billing clerk) reported hiring an employee in the role of billing clerk, while 16 organizations (12.8 percent of the organizations that reported using the role of billing clerk) reported using a contractor as the billing clerk. **Table A-III-1** presents the percentage and number of responding organizations that reported having an explicit role of billing clerk. The percentage of organizations that reported having a billing clerk increased as the size of the organization increased.

**Table A-III-1** also provides the average years of service for the billing clerk position for the various organization sizes. Medium organizations had the longest average tenure for employee billing clerks, and small organizations had the longest average tenure for contractor billing clerks. Very small organizations had the shortest average tenure for both employee and contractor billing clerks.

Table A-III-1. Percentage/number of organizations reporting a billing clerk and average years of
service for this position by organization size.

	Organizations with Bil	ling Clerk – Employee	Organizations with Billing Clerk - Contracto	
Organization Size	Percentage/Number	Average Tenure	Percentage/Number Average Te	
Very Small	25.0% 4 of 16 orgs	7.5 years	18.8% 3 of 16 orgs	7.0 years
Small	62.1% 59 of 95 orgs	10.3 years	10.5% 10 of 95 orgs	9.1 years
Medium	70.6% 24 of 34 orgs	10.7 years	0.0% 0 of 34 orgs	N/A
Large	66.7% 6 of 9 orgs	9.2 years	0.0% 0 of 9 orgs	N/A

**Table A-III-2** presents the average level of monthly gross wages (employees) and compensation (contractors) for billing clerk positions as well as the number of organizations providing any benefits to employees in this position by organization size. The average monthly gross wages/salaries for employee billing clerks and the average monthly compensation for contractor billing clerks tended to increase as the size of the organization increased. The

percentage of organization size classifications providing benefits to their employee billing clerks was as follows:

- Very Small 4 of 16 organizations (25.0 percent)
- Small 59 of 95 organizations (62.1 percent)
- Medium 24 of 34 organizations (70.6 percent)
- Large 6 of 9 organizations (66.7 percent)

	Organizations with I	Organizations with Billing Clerk – Contractor	
Organization Size	Average MonthlyOrganizations with Prima- ry/Secondary Benefits		Average Monthly Compensation
Very Small	Average – \$635 Minimum – \$250 Maximum – \$1,440	Orgs reporting – 4 orgs Primary – 2 orgs Secondary – 1 orgs	Average – \$350 Minimum – \$300 Maximum – \$400
Small	Average - \$1,660Orgs reporting - 59 orgsMinimum - \$10Primary - 22 orgsMaximum - \$4,500Secondary - 31 orgs		Average – \$1,700 Minimum – \$450 Maximum – \$6,600
Medium	Average – \$2,431 Minimum – \$80 Maximum – \$3,784	Orgs reporting – 24 orgs Primary – 21 orgs Secondary – 15 orgs	N/D
Large	Average – \$2,955 Minimum – \$1,993 Maximum – \$3,500	Orgs reporting – 6 orgs Primary – 6 orgs Secondary – 6 orgs	N/A

Table A-III-2. Average monthly gross compensation for billing clerk and benefits packages for employee billing clerks by organization size.

**Table A-III-3** presents the percentage and number of organizations reporting the position of billing clerk and the average years of service for employees and contractors by treatment class. Interestingly, Class C organizations not

only had the longest average tenure for billing clerks for both employees and contractors, but this treatment class also had the largest percentage of organizations that use the specific role of billing clerk.

	Organizations with Bil	Organizations with Billing Clerk – Employee		Organizations with Billing Clerk - Contractor	
Treatment Class	Percentage/Number	Average Tenure	Percentage/Number	Average Tenure	
Class A	66.7% 2 of 3 orgs	8.0 years	0.0% 0 of 3 orgs	N/A	
Class B	57.1% 12 of 21 orgs	8.2 years	0.0% 0 of 21 orgs	N/A	
Class C	69.7% 23 of 33 orgs	12.4 years	6.1% 2 of 33 orgs	11.5 years	
Class D	58.7% 54 of 92 orgs	9.9 years	10.9% 10 of 92 orgs	8.9 years	
Class E	40.0% 2 of 5 orgs	7.0 years	20.0% 1 of 5 orgs	N/D	

Table A-III-3. Percentage/number of organizations reporting a billing clerk and average years of	
service for this position by treatment class.	

**Table A-III-4** presents the average level of monthly gross wages (employees) and compensation (contractors) for billing clerk positions as well as the number of organizations providing any benefits for employees in this position by treatment class. The average monthly compensation for contractor billing clerks tended to increase as the treatment complexity increased. However, Class C organizations had the highest reported average wages/salaries for employee billing clerks, followed by Class B organizations, Class D organizations, and, finally, Class E organizations. The percentage of organizations providing any benefits to employee billing clerks was as follows by organization treatment class:

- Class A-2 of 3 organizations (66.7 percent)
- Class B 12 of 21 organizations (57.1 percent)
- Class C 23 of 33 organizations (69.7 percent)
- Class D 54 of 92 organizations (58.7 percent)
- Class E 2 of 5 organizations (40.0 percent)

	Organizations with B	Organizations with Billing Clerks - Contractor		
Treatment Class	Average Monthly Gross Organizations with Prima- Wages/Salaries ry/Secondary Benefits		Average Monthly Compensation	
Class A	Orgs reporting – 2 orgs N/D Primary – 2 orgs Secondary – 2 orgs		N/D	
Class B	Average - \$1,896Orgs reporting - 12 orgsMinimum - \$10Primary - 5 orgsMaximum - \$4,500Secondary - 10 orgs		N/D	
Class C	Average – \$2,084 Minimum – \$80 Maximum – \$3,784	Orgs reporting – 23 orgs Primary – 14 orgs Secondary – 11 orgs	Average – \$1,350 Minimum – \$800 Maximum – \$1,900	
Class D	Average – \$1,771 Minimum – \$10 Maximum – \$3,500	Orgs reporting – 54 orgs Primary – 29 orgs Secondary – 28 orgs	Average – \$1,616 Minimum – \$300 Maximum – \$6,600	
Class E	Average – \$1,707 Minimum – \$1,014 Maximum – \$2,400	Orgs reporting – 2 orgs Primary – 1 orgs Secondary – 2 orgs	Average – \$450 Minimum – \$450 Maximum – \$450	

Table A-III-4. Average monthly gross compensation for billing clerks and benefits packages for employee designated operators by treatment class.

**Table A-III-5** presents the percentage and number of organizations with a billing clerk and the average years of service classified by organization type. A larger percentage of municipalities used the position of billing clerk than any other organization type, but associations had the

longest average tenure for employee billing clerks. Furthermore, the average tenure for contractor billing clerks used by associations was longer than the average tenure of employee billing clerks for either utility districts or municipalities.

	Organizations with Billing Clerks - Employee		Organizations with Billing Clerks – Contractor		
Organization Type	Percentage/Number	Average Tenure	Percentage/Number	Average Tenure	
Private	0.0% 0 of 2 organizations	N/A	0.0% 0 of 2 organizations	N/A	
District	50.0% 2 of 4 organizations	8.0 years	0.0% 0 of 4 organizations	N/A	
Municipal	75.0% 36 of 48 organizations	6.4 years	0.0% 0 of 48 organizations	N/A	
Association	54.0% 54 of 100 organizations	12.4 years	13.0% 13 of 100 organizations	8.6 years	

## Table A-III-5. Percentage/number of organizations reporting a billing clerk and average years of service for this position by organization type.

**Table A-III-6** presents the average monthly gross wages (employees) and compensation (contractors) for the position of billing clerk as well as the number of organizations providing any benefits to employees in this position by organization type. The average monthly gross wages/ salaries for employee billing clerks was highest for municipalities followed by associations, although associations reported the highest level of wages/salaries for the position (only one utility district reported the level of wages for its employee billing clerk). No private organizations reported

using the billing clerk position. The average monthly compensation for contractor billing clerks tended to increase as the size of the organization increased. The percentage of organizations providing any benefits to employee billing clerks was as follows by treatment classifications:

- Private 0 of 2 organizations (0.0 percent)
- District 2 of 4 organizations (50.0 percent)
- Municipal 36 of 48 organizations (75.0 percent)
- Association 55 of 100 organizations (55.0 percent)

### Table A-III-6. Average monthly gross compensation for billing clerks and benefits packages for employee billing clerks by organization type.

	Organizations with	Organizations with Billing Clerks – Contractor		
Organization Type	Average Monthly Gross Wages/Salaries Secondary Benefits		Average Monthly Compensation	
Private	N/A	Orgs reporting – 0 orgs Primary – 0 orgs Secondary – 0 orgs	N/A	
District	Average – \$600 Minimum – \$600 Maximum – \$600	Orgs reporting – 2 orgs Primary – 2 orgs Secondary – 1 orgs	N/A	
Municipal	Average – \$2,018 Minimum – \$10 Maximum – \$3,500	Orgs reporting – 36 orgs Primary – 30 orgs Secondary – 20 orgs	N/A	
Association	Average – \$1,791 Minimum – \$10 Maximum – \$4,500	Orgs reporting – 55 orgs Primary – 19 orgs Secondary – 32 orgs	Average – \$1,475 Minimum – \$300 Maximum – \$6,600	

**Table A-III-7** presents the percentage and number of organizations reporting the billing clerk position and the average years of service for this position by geographic region. The Capital/River region reported the highest percentage of employee billing clerks as well as the longest average tenure for this position compared to all geograph-

ic regions. Relatively few organizations reported using a contractor billing clerk, but the highest percentage of organizations using a contractor billing clerk was found in the Delta region, and the longest average tenure for contractor billing clerks was found in the Hills and Pines regions.

Table A-III-7. Percentage/number of organizations reporting a billing clerk and average years of service for this position by geographic region.
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Organizations with Billing Clerks - Employee		Organizations with Billing Clerks - Contracto		
Organization Region	Percentage/ Number	Average Tenure	Percentage/ Number	Average Tenure
Capital/River	72.4% 21 of 29 orgs	14.7 years	0% 0 of 29 orgs	N/A
Coastal	63.0% 17 of 27 orgs	6.1 years	7.4% 2 of 27 orgs	3.0 years
Delta	46.2% 6 of 13 orgs	6.4 years	15.4% 2 of 13 orgs	3.0 years
Hills	57.4% 27 of 47 orgs	11.5 years	14.9% 7 of 47 orgs	11.1 years
Pines	57.9% 22 of 38 orgs	8.4 years	5.3% 2 of 38 orgs	11.0 years

**Table A-III-8** presents the average monthly gross wages (employees) and compensation (contractors) for billing clerk positions as well as the number of organizations offering any benefits to employees in this position by geographic region. The average monthly gross wages/salaries for employee billing clerks was highest for the Coastal region, followed by the Pines, Hills, Delta, and Capital/River regions. The same pattern holds for the organizations with primary and secondary benefits, and the average monthly compensation for contractor billing clerks tended

to increase as the size of the organization increased. The percentage of organizations providing benefits to employee billing clerks was as follows by geographic region:

- Capital/River Region 21 of 29 organizations (72.4 percent)
- Coastal Region 17 of 27 organizations (63.0 percent)
- Delta Region 7 of 14 organizations (50.0 percent)
- Hills Region 15 of 47 organizations (31.9 percent)
- Pines Region 21 of 37 organizations (56.8 percent)

#### Table A-III-8. Average monthly gross compensation for billing clerks and benefits packages for employee designated operators by geographic region.

	Organizations with Bil	Organizations with Billing Clerks – Contractor		
Organization Region	Average Monthly Gross Wages/Salaries Organizations with Primary/Secondary Benefits		Average Monthly Compensation	
Capital/River	Average – \$1,120 Minimum – \$80 Maximum – \$3,784	Orgs reporting – 21 orgs Primary – 10 orgs Secondary – 14 orgs	N/A	
Coastal	Average – \$2,174	Orgs reporting – 17 orgs	Average – \$3,750	
	Minimum – \$250	Primary – 11 orgs	Minimum – \$900	
	Maximum – \$3,611	Secondary – 12 orgs	Maximum – \$6,600	
Delta	Average – \$1,554	Orgs reporting – 7 orgs	Average – \$400	
	Minimum – \$10	Primary – 3 orgs	Minimum – \$400	
	Maximum – \$2,580	Secondary – 2 orgs	Maximum – \$400	
Hills	Average – \$1,685	Orgs reporting – 27 orgs	Average – \$839	
	Minimum – \$10	Primary – 15 orgs	Minimum – \$300	
	Maximum – \$4,500	Secondary – 15 orgs	Maximum – \$1,800	
Pines	Average – \$1,753	Orgs reporting – 21 orgs	Average – \$1,962	
	Minimum – \$475	Primary – 12 orgs	Minimum – \$1,900	
	Maximum – \$3,000	Secondary – 10 orgs	Maximum – \$2,025	

#### **Appendix IV - Meter Reader**

One hundred five (68.2 percent) of the responding organizations reported having at least one person in the role of meter reader. Sixty-eight organizations (64.8 percent of the organizations that reported using the role of meter reader) reported hiring a meter reader as an employee, while 36 organizations (35.2 percent of the organizations that reported using the role of meter reader) reported using a contractor in this position. **Table A-IV-1** presents the percentage and number of responding organizations that reported having a meter reader as well as the average gross monthly wages (employees) or compensation (contractors) classified in this position by organization size. The percentage of organizations that reported using the meter reader position increased as the size of the organization increased.

**Table A-IV-1** also provides the average years of service for the meter reader position by organization size. Large organizations had the longest average tenure for employee meter readers, followed by small organizations, very small organizations, and medium organizations. This is a different pattern than is found for contractor meter readers. Large organizations reported that they did not use contract meter readers, and the medium organizations had the longest average tenure for this position by a wide margin.

### Table A-IV-1. Percentage/number of organizations reporting a meter reader and average years of service for this position by organization size.

	Organizations with Meter Reader - Employee		Organizations with Meter Reader – Contractor	
Organization Size	Percentage/Number	Average Tenure	Percentage/Number	Average Tenure
Very Small	31.3% 5 of 16 orgs	9.8 years	37.5% 6 of 16 orgs	11.8 years
Small	44.2% 42 of 95 orgs	10.5 years	28.4% 27 of 95 orgs	12.5 years
Medium	41.2% 14 of 34 orgs	6.2 years	20.6% 7 of 34 orgs	17.3 years
Large	88.9% 8 of 9 orgs	11.0 years	0.0% 0 of 9 orgs	N/A

**Table A-IV-2** presents the average monthly gross wages (employees) and compensation (contractors) for meter reader positions as well as the number of organizations that offer any benefits to employees in this position by organization size. The average monthly gross wages/salaries for employee meter readers and the average monthly compensation for contractor meter readers tended to increase as the size of the organization increased. Also, with the exception of a slight decrease in the proportion of medium organizations that offered benefits to employ-

ee meter readers, the proportion of organizations that provided benefits to employee meter readers increased as organization size classification increased. The percentage of organizations providing benefits to their employee meter readers was as follows by organization size:

- Very Small 5 of 16 organizations (31.3 percent)
- Small 42 of 95 organizations (44.2 percent)
- Medium 14 of 34 organizations (41.2 percent)
- Large 8 of 9 organizations (88.9 percent)

	Organizations with	Organizations with Meter Reader – Contractor		
Organization	Average Monthly	Organizations with Primary/	Average Monthly	
Size	Gross Wages/Salaries	Secondary Benefits	Compensation	
Very Small	Average – \$419	Orgs reporting – 5 orgs	Average – \$509	
	Minimum – \$110	Primary – 1 orgs	Minimum – \$50	
	Maximum – \$800	Secondary – 3 orgs	Maximum – \$1,800	
Small	Average – \$1,581	Orgs reporting – 42 orgs	Average – \$923	
	Minimum – \$275	Primary – 18 orgs	Minimum – \$15	
	Maximum – \$5,000	Secondary – 35 orgs	Maximum – \$2,600	
Medium	Average - \$2,376	Orgs reporting – 14 orgs	Average – \$2,552	
	Minimum - \$650	Primary – 13 orgs	Minimum – \$1,554	
	Maximum - \$3,600	Secondary – 14 orgs	Maximum – \$3,600	
Large	Average – \$3,043 Minimum – \$2,052 Maximum – \$4,000	Orgs reporting – 8 orgs Primary – 8 orgs Secondary – 8 orgs	N/A	

### Table A-IV-2. Average monthly gross compensation for meter readers and benefits packages for employee designated operators by organization size.

**Table A-IV-3** presents the percentage and number of organizations with a meter reader and the average years of service by treatment class. It is interesting to note that the average tenure for employee meter readers declined as

the treatment complexity increased, but the average tenure for contract meter readers increased as the treatment complexity increased.

### Table A-IV-3. Percentage/number of organizations reporting a meter reader and average years of service for this position by treatment class.

Treatment Class	Organizations with Meter Reader - Employee		Organizations with Meter Reader - Contractor	
	Percentage/Number	Average Tenure	Percentage/Number	Average Tenure
Class A	66.7% 2 of 3 orgs	3.0 years	33.3% 1 of 3 orgs	25.0 years
Class B	47.6% 10 of 21 orgs	6.9 years	9.5% 2 of 21 orgs	23.5 years
Class C	54.5% 18 of 33 orgs	8.5 years	24.2% 8 of 33 orgs	13.8 years
Class D	41.3% 38 of 92 orgs	10.8 years	28.3% 26 of 92 orgs	12.1 years
Class E	20.0% 1 of 5 orgs	22.0 years	60.0% 3 of 5 orgs	10.0 years

**Table A-IV-4** presents the average monthly compensation for meter reader positions as well as the number of organizations providing any benefits to this position by treatment class. The average monthly gross wages/salaries for employee meter readers and the monthly compensation for contract meter readers generally tended to increase as treatment complexity increased. The exceptions to these trends are found in Class B organizations. Of the organizations that disclosed wage/salary information for employee meter reader positions, Class C organizations provided the highest level of wages/salaries. Furthermore, Class C organizations provided higher compensation packages than did Class B, Class D, and Class E organizations (the exception to this trend was the Class A organization that used contractor meter readers). The percentage of organizations providing benefits to employee meter readers was as follows by treatment class:

- Class A 2 of 3 organizations (66.7 percent)
- Class B 10 of 21 organizations (47.6 percent)
- Class C 18 of 33 organizations (54.5 percent)
- Class D 38 of 92 organizations (41.3 percent)
- Class E 1 of 5 organizations (20.0 percent)

Table A-IV-4. Average monthly	y gross compensation for meter readers and benefits packages for employee
meter readers by	/ treatment class.

	Organizations with M	Aeter Reader – Employee	Organizations with Meter Reader - Contractor
Treatment Class	Average Monthly Gross Wages/Salaries	Organizations with Primary/ Secondary Benefits	Average Monthly Compensation
Class A	N/D	Orgs reporting – 2 orgs Primary – 2 orgs Secondary – 2 orgs	Average – \$2,100 Minimum – \$2,100 Maximum – \$2,100
Class B	Average – \$1,793	Orgs reporting – 10 orgs	Average – \$900
	Minimum – \$400	Primary – 6 orgs	Minimum – \$900
	Maximum – \$3,600	Secondary – 9 orgs	Maximum – \$900
Class C	Average – \$1,846	Orgs reporting – 18 orgs	Average – \$1,853
	Minimum – \$275	Primary – 12 orgs	Minimum – \$696
	Maximum – \$4,000	Secondary – 15 orgs	Maximum – \$3,406
Class D	Average – \$1,753	Orgs reporting – 38 orgs	Average – \$934
	Minimum – \$110	Primary – 20 orgs	Minimum – \$15
	Maximum – \$5,000	Secondary – 33 orgs	Maximum – \$3,600
Class E	Average – \$1,350	Orgs reporting – 1 orgs	Average – \$483
	Minimum – \$1,350	Primary – 0 orgs	Minimum – \$400
	Maximum – \$1,350	Secondary – 1 orgs	Maximum – \$600

**Table A-IV-5** presents the percentage and number of organizations with a meter reader and the average years of service by organization type. It's interesting to note that for both employee and contract meter readers, associations had the longest average tenures, followed by municipalities

and utility districts. The largest percentage of organizations that employ the specific position of meter reader was found in municipalities and associations, which are virtually tied at 72.9 percent and 72.0 percent, respectively.

Table A-IV-5. Percentage/number of organizations reporting a meter reader and average years of	
service for this position by organization type.	

	Organizations with Meter Reader - Employee		Organizations with Meter Reader - Contractor	
Organization Type	Percentage/Number	Average Tenure	Percentage/Number	Average Tenure
Private	0.0% 0 of 2 organizations	N/A	0.0% 0 of 2 organizations	N/A
District	50.0% 2 of 4 organizations	5.5 years	0.0% 0 of 4 organizations	N/A
Municipal	60.4% 29 of 48 orgs	9.2 years	12.5% 6 of 48 orgs	12.0 years
Association	38.0% 38 of 100 orgs	10.3 years	34.0% 34 of 100 orgs	13.3 years

**Table A-IV-6** presents the average monthly gross wages (employees) and compensation (contractors) for meter reader positions as well as the number of organizations providing any benefits to employees in this position by organization type. The average monthly gross wages/salaries for employee meter readers was highest for municipalities, followed by associations and then utility districts. While the average monthly compensation for contractor meter readers was slightly higher for municipalities than for associations, these averages are statistically insignificant from each other. Associations reported a higher maximum

monthly employee wage/salary and contractor compensation than did municipalities, but associations also had the lowest employee wage/salary and contractor compensation for this position. The percentage of organizations providing benefits to their employee meter readers was as follows by organization type:

- Private 0 of 2 organizations (0.0 percent)
- Districts 2 of 4 organizations (50.0 percent)
- Municipal 29 of 48 organizations (60.4 percent)
- Associations 38 of 100 organizations (38.0 percent)

Table A-IV-6. Average monthly gross compensation for meter readers and benefits packages for
employee meter readers by organization type.

	Organizations with Meter Reader - Employee		Organizations with Meter Reader - Contractor Average Monthly Compensation	
Organization Type	Average Monthly Gross Organizations with Prin Wages/Salaries Secondary Benefits			
Private	N/A	Orgs reporting –0 orgs Primary – 0 orgs Secondary – 0 orgs	N/A	
District	Average – \$400 Minimum – \$400 Maximum – \$400	Orgs reporting – 2 orgs Primary – 2 orgs Secondary – 1 orgs	N/A	
Municipal	Average – \$2,102 Minimum – \$365 Maximum – \$4,000	Orgs reporting – 29 orgs Primary – 26 orgs Secondary – 29 orgs	Average – \$1,094 Minimum – \$15 Maximum – \$2,280	
Association	Average – \$1,551 Minimum – \$110 Maximum – \$5,000	Orgs reporting – 38 orgs Primary – 12 orgs Secondary – 30 orgs	Average – \$1,078 Minimum – \$50 Maximum – \$3,600	

**Table A-IV-7** presents the percentage and number of organizations with a meter reader and the average years of service by geographic region. While the Hills region had the largest percentage of organizations that use the position of meter reader, this region had the second lowest average years of service for employee meter readers and

the highest average years of service for contractor meter readers. The Hills region and the Capital/River region statistically had the same percentage of organizations that use employee meter readers. It is interesting to note that the percentage of organizations using meter readers was among the highest for any job classification.

Table A-IV-7. Percentage/number of organizations reporting a meter reader and average
years of service for this position by organization type.

	Organizations with Meter Reader - Employee		Organizations with Meter Reader - Contractor	
Organization Region	Percentage/ Number	Average Tenure	Percentage/ Number	Average Tenure
Capital/River	48.3% 14 of 29 orgs	11.5 years	24.1% 7 of 29 orgs	12.0 years
Coastal	44.4% 12 of 27 orgs	6.0 years	11.1% 3 of 27 orgs	12.0 years
Delta	46.2% 6 of 13 orgs	12.9 years	23.1% 3 of 13 orgs	3.3 years
Hills	46.8% 22 of 47 orgs	8.7 years	31.9% 15 of 47 orgs	15.8 years
Pines	39.5% 15 of 38 orgs	10.8 years	31.6% 12 of 38 orgs	13.1 years

**Table A-IV-8** presents the average monthly compensation for meter reader positions as well as the number of organizations providing any benefits to employees in this position by geographic region. The average monthly gross wages/ salaries for employee meter readers varied greatly among regions, ranging from a high in the Pines region to a low in the Delta region. The pattern for contractor meter readers was quite different; the Pines region had the lowest compensation for contractor meter readers and the Capital/ River region had the highest. The percentage of organizations providing benefits to employee meter readers was as follows by geographic region:

- Capital/River Region 14 of 29 organizations (48.3 percent)
- Coastal Region 12 of 27 organizations (44.4 percent)
- Delta Region 7 of 14 organizations (50.0 percent)
- Hills Region 22 of 47 organizations (46.8 percent)
- Pines Region 14 of 37 organizations (37.8 percent)

Table A-IV-8. Average gross monthly compensation for billing clerks and benefits packages
for employee meter readers by organization type.

	Organizations with Me	ter Reader - Employee	Organizations with Meter Reader - Contractor	
Organization Region	Average Monthly Gross Wages/Salaries Organizations with Primary/Secondary Benefits		Average Monthly Compensation	
Capital/River	Average – \$1,796	Orgs reporting –14 orgs	Average – \$1,931	
	Minimum – \$450	Primary – 9 orgs	Minimum – \$270	
	Maximum – \$3,417	Secondary – 14 orgs	Maximum – \$3,600	
Coastal	Average – \$1,662	Orgs reporting – 12 orgs	Average – \$1,077	
	Minimum – \$300	Primary – 8 orgs	Minimum – \$600	
	Maximum – \$2,926	Secondary – 10 orgs	Maximum – \$1,554	
Delta	Average – \$1,451	Orgs reporting – 7 orgs	Average – \$750	
	Minimum – \$400	Primary – 4 orgs	Minimum – \$50	
	Maximum – \$2,150	Secondary – 6 orgs	Maximum – \$1,800	
Hills	Average – \$1,748	Orgs reporting – 22 orgs	Average – \$1,051	
	Minimum – \$110	Primary – 11 orgs	Minimum – \$300	
	Maximum – \$5,000	Secondary – 18 orgs	Maximum – \$2,600	
Pines	Average – \$1,919	Orgs reporting – 14 orgs	Average – \$743	
	Minimum – \$438	Primary – 8 orgs	Minimum – \$15	
	Maximum – \$3,600	Secondary – 12 orgs	Maximum – \$2,280	

#### Appendix V - Maintenance and Repair

One hundred five (68.2 percent) of the responding organizations reported having at least one person in the role of maintenance and repair. Seventy-four organizations (70.5 percent of the organizations that reported using the role of maintenance and repair personnel) reported hiring a maintenance and repair person as an employee, while 29 organizations (29.5 percent of the organizations that reported using the role of maintenance and repair personnel) reported using a contractor in this position. Table A-V-1 presents the percentage and number of responding organizations that reported having a maintenance and repair person at the time of the survey as well as the average monthly gross wages (employees) or compensation (contractors) classified in this position by organization size. The percentage of organizations that reported having a maintenance and repair person at the time of completing the survey increased as the size of the organization increased.

**Table A-V-1** also provides the average years of service for the maintenance and repair position in the various organization size classifications. Very small organizations had the longest average tenure for employee maintenance and repair personnel, followed by small organizations, and, finally, medium and large organizations. This is a different pattern than is found for contractor maintenance and repair personnel. Large organizations reported that they did not use contract maintenance and repair personnel, and the medium organizations had the longest average tenure for this type of organization by a wide margin.

	Organizations with Maintenance and Repair Personnel – Employee		Organizations with Maintenance and Repair Personnel – Contractor	
Organization Size	Percentage/Number	Average Tenure	Percentage/Number	Average Tenure
Very Small	6.3% 1 of 16 orgs	15.0 years	37.5% 6 of 16 orgs	6.2 years
Small	30.5% 29 of 95 orgs	9.2 years	23.2% 22 of 95 orgs	15.9 years
Medium	70.6% 24 of 34 orgs	7.6 years	8.8% 3 of 34 orgs	22.0 years
Large	66.7% 6 of 9 orgs	7.6 years	0.0% 0 of 9 orgs	N/A

Table A-V-1. Percentage/number of organizations reporting maintenance and repair personnel and average years of service for this position by organization size.

**Table A-V-2** presents the average monthly gross wages (employees) or compensation (contractors) for maintenance and repair personnel positions as well as the number of organizations providing any benefits for employees in this position by organization size. The average monthly gross wages/salaries for maintenance and repair personnel and the average monthly compensation for contractor maintenance and repair personnel tended to increase as

the size of the organization increased. The percentage of organizations providing benefits to maintenance and repair employees was as follows by organization size:

- Very Small 1 of 16 organizations (6.3 percent)
- Small 29 of 95 organizations (30.5 percent)
- Medium 24 of 34 organizations (70.6 percent)
- Large 6 of 9 organizations (66.7 percent)

Table A-V-2. Average monthly gross compensation for maintenance and repair personnel
and benefits packages for employee maintenance and repair personnel by
organization size.

	Organizations with Maintenance and Repair Personnel – Employee		Organizations with Maintenance and Repair Personnel – Contractor
Organization	Average Monthly	Organizations with Primary/	Average Monthly
Size	Gross Wages/Salaries	Secondary Benefits	Compensation
Very Small	Average – \$1,600	Orgs reporting – 1 orgs	Average – \$345
	Minimum – \$1,600	Primary – 0 orgs	Minimum – \$50
	Maximum – \$1,600	Secondary – 1 orgs	Maximum – \$500
Small	Average – \$2,180	Orgs reporting – 29 orgs	Average – \$1,981
	Minimum – \$50	Primary – 17 orgs	Minimum – \$200
	Maximum – \$4,500	Secondary – 26 orgs	Maximum – \$8,500
Medium	Average – \$2,382	Orgs reporting – 24 orgs	Average – \$10,000
	Minimum – \$18	Primary – 21 orgs	Minimum – \$10,000
	Maximum – \$3,383	Secondary – 23 orgs	Maximum – \$10,000
Large	Average - \$2,274 Minimum - \$1,820 Maximum - \$2,773	Orgs reporting – 6 orgs Primary – 6 orgs Secondary – 6 orgs	N/A

**Table A-V-3** presents the percentage and number of organizations with maintenance and repair personnel and the average years of service by treatment class. It is interesting to note that Class A organizations had the longest average years of service for either employee or contractor

maintenance and repair personnel and that, in all treatment classes, contractors had longer average tenures than did employees. Also, with the exception of Class E organizations, the average years of service for contractors tended to increase as treatment complexity increased.

Table A-V-3. Percentage/number of organizations reporting maintenance and repair personnel and average years of service for this position by treatment class.

		Organizations with Maintenance and Repair Personnel – Employee		Maintenance and el – Contractor
Treatment Class	Percentage/Number	Average Tenure	Percentage/Number	Average Tenure
Class A	66.7% 2 of 3 orgs	20.0 years	33.3% 1 of 3 orgs	30.0 years
Class B	66.7% 12 of 21 orgs	6.9 years	9.5% 2 of 21 orgs	23.0 years
Class C	57.1% 18 of 33 orgs	6.6 years	9.1% 3 of 33 orgs	20.0 years
Class D	29.3% 27 of 92 orgs	10.1 years	22.8% 21 of 92 orgs	11.2 years
Class E	20.0% 1 of 5 orgs	9.0 years	80.0% 4 of 5 orgs	21.3 years

**Table A-V-4** presents the average monthly compensation for maintenance and repair positions as well as the number of organizations that provide any benefits to employees in this position by treatment class. The average monthly gross wages/salaries for employee maintenance and repair personnel and the average monthly compensation for contractor maintenance and repair personnel tended to increase as the organization's treatment complexity increased. Most of the organizations that reported providing benefits to their employees provided primary benefits (the exception to this is the Class B treatment class). The lone Class E organization that reported providing benefits to its maintenance and repair employees did not report any benefits in the categories on the survey instrument. This suggests that they provided other benefits that were not included on the survey instrument. The percentage of organizations providing benefits to their employees was as follows by treatment class:

- Class A 2 of 3 organizations (66.7 percent)
- + Class B 12 of 21 organizations (57.1 percent)
- Class C 18 of 33 organizations (54.5 percent)
- Class D 27 of 92 organizations (29.3 percent)
- Class E 1 of 5 organizations (20.0 percent)

Treatment Class		ith Maintenance and nnel – Employee	Organizations with Maintenance ar Repair Personnel – Contractor	
	Average Monthly Gross Wages/Salaries	Organizations with Primary/ Secondary Benefits	Average Monthly Compensation	
Class A	N/D	Orgs reporting – 2 orgs Primary – 2 orgs Secondary – 2 orgs	Average – \$10,000 Minimum – \$10,000 Maximum – \$10,000	
Class B	Average – \$2,522	Orgs reporting – 12 orgs	Average – \$3,000	
	Minimum – \$500	Primary – 5 orgs	Minimum – \$3,000	
	Maximum – \$4,500	Secondary – 6 orgs	Maximum – \$3,000	
Class C	Average – \$2,416	Orgs reporting – 18 orgs	Average – \$1,450	
	Minimum – \$1,000	Primary – 10 orgs	Minimum – \$1,000	
	Maximum – \$3,270	Secondary – 12 orgs	Maximum – \$1,900	
Class D	Average – \$2,009	Orgs reporting – 27 orgs	Average – \$1,819	
	Minimum – \$18	Primary – 13 orgs	Minimum – \$50	
	Maximum – \$3,730	Secondary – 19 orgs	Maximum – \$8,500	
Class E	Average – \$2,100	Orgs reporting – 1 orgs	Average – \$594	
	Minimum – \$2,100	Primary – 0 orgs	Minimum – \$200	
	Maximum – \$2,100	Secondary – 0 orgs	Maximum – \$900	

#### Table A-V-4. Average monthly gross compensation for maintenance and repair personnel and benefits packages for employee maintenance and repair personnel by treatment class.

**Table A-V-5** presents the percentage and number of organizations with maintenance and repair personnel and the average years of service by organization type. Utility districts had the highest average years of service for employee maintenance and repair personnel than either municipalities or associations; this could be due to utili-

ty districts being typically larger organizations that can offer higher wages and benefits than either associations or municipalities. Associations had the highest average years of service for maintenance and repair contractors as well as the highest percentage of organizations that use contractors in this role.

 
 Table A-IV-5. Percentage/number of organizations reporting a meter reader and average years of service for this position by organization type.

	Organizations with Me	Organizations with Meter Reader - Employee		ter Reader – Contractor
Organization Type	Percentage/Number	Average Tenure	Percentage/Number	Average Tenure
Private	0.0% 0 of 2 organizations	N/A	0.0% 0 of 2 organizations	N/A
District	50.0% 2 of 4 organizations	11.0 years	0.0% 0 of 4 organizations	N/A
Municipal	54.2% 26 of 48 orgs	9.7 years	8.3% 4 of 48 orgs	11.0 years
Association	32.0% 32 of 100 orgs	7.3 years	27.0% 27 of 100 orgs	15.1 years

**Table A-V-6** presents the average monthly gross wages (employees) and compensation (contractors) for maintenance and repair positions as well as the number of organizations offering any benefits to employees in this position by organization type. The average monthly wages and salaries for employee maintenance and repair personnel were very similar for municipalities, utility districts, and associations. However, the average monthly compensation for contractors was almost twice as high for municipali-

ties as for associations. The percentage of organizations providing benefits to employee maintenance and repair personnel was as follows by organization type:

- Private 0 of 2 organizations (0.0 percent)
- District 2 of 4 organizations (50.0 percent)
- Municipal 26 of 48 organizations (54.2 percent)
- Association 32 of 100 organizations (32.0 percent)

		ith Maintenance and nnel - Employee	Organizations with Maintenance and Repair Personnel – Contractor
Organization Type	Average Monthly Gross Wages/Salaries	Organizations with Primary/ Secondary Benefits	Average Monthly Compensation
Private	N/A	Orgs reporting –0 orgs Primary – 0 orgs Secondary – 0 orgs	N/A
District	Average – \$2,253 Minimum – \$2,253 Maximum – \$2,253	Orgs reporting – 2 orgs Primary – 2 orgs Secondary – 2 orgs	N/A
Municipal	Average – \$2,374 Minimum – \$1,344 Maximum – \$3,730	Orgs reporting – 26 orgs Primary – 24 orgs Secondary – 26 orgs	Average – \$3,125 Minimum – \$500 Maximum – \$8,500
Association	Average – \$2,165 Minimum – \$18 Maximum – \$4,500	Orgs reporting – 32 orgs Primary – 18 orgs Secondary – 28 orgs	Average – \$1,744 Minimum – \$50 Maximum – \$10,000

### Table A-V-6. Average monthly gross compensation for maintenance and repair personnel and benefits packages for employee maintenance and repair personnel by organization type.

**Table A-V-7** presents the percentage and number of organizations with repair/maintenance personnel and the average years of service by geographic region. The Delta region had the longest average years of service for employee maintenance and repair personnel and the shortest for contractors, while the Hills region had the longest

average years of service for contractors in this position. The Coastal region had the highest percentage of organizations employing maintenance and repair personnel, and the Hillis region had the highest percentage of organizations using contractor maintenance and repair personnel.

		n Maintenance and nel – Employee	Organizations with Maintenance and Repair Personnel – Contractor		
Organization Region	Percentage/ Number	Average Tenure	Percentage/ Number	Average Tenure	
Capital/River	44.8% 13 of 29 orgs	6.9 years	13.8% 4 of 29 orgs	10.3 years	
Coastal	48.1% 13 of 27 orgs	6.1 years	7.4% 2 of 27 orgs	5.0 years	
Delta	28.6% 4 of 14 orgs	14.3 years	21.4% 3 of 14 orgs	3.7 years	
Hills	29.8% 14 of 47 orgs	8.8 years	27.7% 13 of 47 orgs	17.9 years	
Pines	43.2% 16 of 37 orgs	10.1 years	24.3% 9 of 37 orgs	16.3 years	

### Table A-V-7. Percentage/number of organizations reporting maintenance and repair personnel and average years of service for this position by geographic region.

**Table A-V-8** presents the average monthly compensation for maintenance and repair positions in the various geographic regions of the state as well as the number of organizations providing any benefits to employees in this position by geographic region. The average monthly gross wages/salaries for employee maintenance and repair personnel and the average monthly compensation for maintenance and repair contractors were highest for the Hills and Pines regions and lowest for the Delta region. The percentage of organizations providing benefits to employee maintenance and repair personnel was as follows by geographic region:

- Capital/River Region 13 of 29 organizations (44.8 percent)
- Coastal Region 13 of 27 organizations (48.1 percent)
- Delta Region 4 of 14 organizations (28.6 percent)
- Hills Region 14 of 47 organizations (29.8 percent)
- Pines Region 16 of 37 organizations (43.2 percent)

## Table A-V-8. Average monthly gross compensation for maintenance and repair personnel and benefits packages for employee maintenance and repair personnel by geographic region.

	Organizations with Maintenance and Repair Personnel – Employee		Organizations with Maintenance and Repair Personnel – Contractor	
Organization	Average Monthly Gross	Organizations with	Average Monthly	
Region	Wages/Salaries	Primary/Secondary Benefits	Compensation	
Capital/River	Average – \$2,203	Orgs reporting – 13 orgs	Average – \$967	
	Minimum – \$1,000	Primary – 10 orgs	Minimum – \$200	
	Maximum – \$2,800	Secondary – 13 orgs	Maximum – \$2,500	
Coastal	Average – \$2,117	Orgs reporting – 13 orgs	Average – \$500	
	Minimum – \$18	Primary – 10 orgs	Minimum – \$500	
	Maximum – \$3,730	Secondary – 12 orgs	Maximum – \$500	
Delta	Average – \$1,986	Orgs reporting – 4 orgs	Average – \$263	
	Minimum – \$1,344	Primary – 2 orgs	Minimum – \$50	
	Maximum – \$3,000	Secondary – 4 orgs	Maximum – \$475	
Hills	Average – \$2,362	Orgs reporting – 14 orgs	Average – \$2,446	
	Minimum – \$50	Primary – 11 orgs	Minimum – \$300	
	Maximum – \$4,500	Secondary – 13 orgs	Maximum – \$10,000	
Pines	Average – \$2,386	Orgs reporting – 16 orgs	Average – \$2,363	
	Minimum – \$500	Primary – 11 orgs	Minimum – \$500	
	Maximum – \$3,383	Secondary – 14 orgs	Maximum – \$8,500	

#### **Appendix VI - Other Operators**

Forty-eight (31.2 percent) of the responding organizations reported using an operator other than the designated operator. Forty-three organizations (89.6 percent of the organizations that reported using the role of "other operator") reported hiring an other operator as an employee, while five organizations (10.4 percent of the organizations that reported using the role of other operator) reported using a contractor in this position. **Table A-VI-1** presents the percentage and number of responding organizations that reported having an other operator position at the time of the survey as well as the average gross monthly wages (employees) or compensation (contractors) classified in this position by organization size. The percentage of organizations that reported having an employee other operator at the time of completing the survey increased as the size of the organization increased. A solid trend for contractors cannot be established due to the small number of organizations using contractors in this position.

**Table A-VI-1** also provides the average years of service for the other operator position in the various organization size classifications. The average years of service for other operators increased as organization size increased. While only 4.2 percent of the small organizations used a contractor in this position, the average years of service was 11.8 years, significantly longer than any employee years of service.

Table A-VI-1. Percentage/number of organizations reporting other operators and average years of
service for this position by organization size.

	Organizations with Othe	er Operators – Employee	Organizations with Other Operators - Contra	
Organization Size	Percentage/Number	Average Tenure	Percentage/Number	Average Tenure
Very Small	6.3% 1 of 16 orgs	5.0 years	0.0% 0 of 16 orgs	N/A
Small	18.9% 18 of 95 orgs	5.5 years	4.2% 4 of 95 orgs	11.8 years
Medium	47.1% 16 of 34 orgs	6.1 years	1.4% 1 of 34 orgs	N/D
Large	88.9% 8 of 9 orgs	7.0 years	0.0% 0 of 9 orgs	N/A

**Table A-VI-2** presents the average monthly compensation for other operator positions in the various organization size classes as well as the benefits packages for employees in this position. The average monthly gross wages/ salaries for employee other operators tended to increase as the size of the organization increased. This could suggest that other operators in the medium and large organizations are viewed as more integral components of the organization, while other operators in the very small and small systems are viewed more as support personnel to the designated operator. Also, a large majority of the organizations in every size classification that used employee other operators offered at least one primary benefit to those employees. The percentage of organizations providing benefits to employee other operators was as follows by size classification:

- Very Small 4 of 16 organizations (25.0 percent)
- Small 55 of 95 organizations (57.9 percent)
- Medium 26 of 34 organizations (76.5 percent)
- Large 9 of 9 organizations (100.0 percent)

## Table A-VI-2. Average monthly gross compensation for other operators and benefits packages for employee other operators by organization size.

	Organizations with C	Other Operators - Employee	Organizations with Other Operators - Contractor
Organization Size	Average Monthly Gross Wages/Salaries	Organizations with Primary/ Secondary Benefits	Average Monthly Compensation
Very Small	Average – \$923 Minimum – \$923 Maximum – \$923	Orgs reporting – 1 orgs Primary – 0 orgs Secondary – 1 orgs	N/A
Small	Average – \$1,930 Minimum – \$15 Maximum – \$5,000	Orgs reporting – 18 orgs Primary – 10 orgs Secondary – 17 orgs	Average – \$788 Minimum – \$300 Maximum – \$1,600
Medium	Average - \$3,044 Minimum - \$911 Maximum - \$4,438	Orgs reporting – 16 orgs Primary – 15 orgs Secondary – 15 orgs	N/D
Large	Average - \$2,990 Minimum - \$2,340 Maximum - \$4,000	Orgs reporting – 8 orgs Primary – 8 orgs Secondary – 8 orgs	N/A

**Table A-VI-3** presents the percentage and number of organizations with other operator positions and the average years of service by treatment class. While the percentage of organizations using an employee other operator increased as the treatment complexity increased, it is interesting to note that Class C organizations had the longest average years of service, followed by Class A organizations. All organizations using a contractor in the other operator position were Class D organizations (four of these were small organizations and one was a medium organization), but the medium organization declined to report the years of service for the contract other operator position. Therefore, the average years of service found for the five Class D organizations was the same as the average years of service for the small organizations seen in **Table A-VI-3**.

Table A-VI-3. Percentage/number of organizations reporting other operators and average years of
service for this position by treatment class.

Treatment Class	Organizations with Othe	nizations with Other Operators - Employee		operators - Contracto
	Percentage/Number	Average Tenure	Percentage/Number	Average Tenure
Class A	100.0% 3 of 3 orgs	8.0 years	0.0% 0 of 3 orgs	N/A
Class B	42.9% 9 of 21 orgs	4.6 years	0.0% 0 of 21 orgs	N/A
Class C	30.3% 10 of 33 orgs	9.2 years	0.0% 0 of 33 orgs	N/A
Class D	22.8% 21 of 92 orgs	6.5 years	5.4% 5 of 92 orgs	11.8 years
Class E	0.0% 0 of 5 orgs	N/A	0.0% 0 of 5 orgs	N/A

**Table A-VI-4** presents the average level of monthly compensation for other operator positions in the various treatment classes as well as the number of organizations providing any benefits to employees in this position by treatment class. The average monthly gross wages/salaries for employee other operators and the average monthly compensation for contractor other operators tended to increase as treatment complexity decreased. For those organizations that did offer benefits, a large majority of organizations in each treatment class offered primary benefits. The percentages of organizations by treatment class providing benefits to employee other operators were as follows:

- Class A 2 of 3 organizations (66.7 percent)
- Class B 9 of 21 organizations (42.9 percent)
- Class C 10 of 33 organizations (30.3 percent)
- Class D 21 of 92 organizations (22.8 percent)
- Class E 0 of 5 organizations (0.0 percent

Table A-VI-4. Average monthly gross compensation for other operators and benefits packages for	
employee other operators by treatment class.	

	Organizations with Other Operators – Employee		Organizations with Other Operators – Contractor
Treatment Class	Average Monthly Gross Wages/Salaries	Organizations with Primary/ Secondary Benefits	Average Monthly Compensation
Class A	Average – \$2,322 <sup>®</sup> Minimum – \$2,322 Maximum – \$2,322	Orgs reporting – 3 orgs Primary – 2 orgs Secondary – 2 orgs	N/A
Class B	Average – \$2,394 Minimum – \$690 Maximum – \$4,438	Orgs reporting – 9 orgs Primary – 7 orgs Secondary – 8 orgs	N/A
Class C	Average – \$2,559 Minimum – \$15 Maximum – \$4,015	Orgs reporting – 10 orgs Primary – 8 orgs Secondary – 10 orgs	N/A
Class D	Average – \$2,457 Minimum – \$375 Maximum – \$5,000	Orgs reporting – 21 orgs Primary – 16 orgs Secondary – 21 orgs	Average – \$788 Minimum – \$300 Maximum – \$1,600
Class E	N/A	Orgs reporting – 0 orgs Primary – 0 orgs Secondary – 0 orgs	N/A

**Table A-VI-5** presents the percentage and number of organizations with other operators and the average years of service by organization type. More municipalities used employee other operators than any other organization type, but the largest percentage of organization types that employed this type of person was utility districts (note that only four utility districts responded to the survey). Utility districts had the longest average years of service

for employees in the other operator position, followed by municipalities and associations. However, associations had the longest average years of service for contractor other operators, but there were only three municipalities and two associations that reported using contractors in this position. Therefore, a solid baseline trend cannot be established for this position.

Table A-VI-5. Percentage/number of organizations reporting other operators and average years of service for this position by organization type.

Organization Type	Organizations with Othe	r Operators – Employee	Organizations with Other Operators - Contract	
	Percentage/Number	Average Tenure	Percentage/Number	Average Tenure
Private	0.0% 0 of 2 organizations	N/A	0.0% 0 of 2 organizations	N/A
District	50.0% 2 of 4 organizations	8.5 years	0.0% 0 of 4 organizations	N/A
Municipal	41.7% 20 of 48 orgs	7.3 years	6.3% 3 of 48 orgs	10.5 years
Association	21.0% 21 of 100 orgs	6.2 years	2.0% 2 of 100 orgs	13.0 years

<sup>8</sup>While three Class A organizations reported having employees in the other operator role, only one of these organizations reported a salary for this position.

Table **A-VI-6** presents the average monthly compensation for other operator positions in the various organizational types as well as the number of organizations providing any benefits to employees in this position by organization type. The average monthly gross wages/salaries for employee other operator positions was highest for utility districts, closely followed by municipalities. While there were few municipalities and associations that reported using contractors for this position, the compensation for contractors was much less than the wages and salaries reported for employees in this position (possibly due to the multiple roles that an employee in the other operator position might have for a utility district or municipality). The average monthly compensation for contract other operators was much higher for associations than for municipalities. The percentage of organizations providing benefits to their employees was as follows by organization type:

- Private 0 of 2 organizations (0.0 percent)
- District 2 of 4 organizations (50.0 percent)
- Municipal 20 of 48 organizations (41.7 percent)
- Association 48 of 100 organizations (48.0 percent

Table A-VI-6. Average monthly gross compensation for other operators and benefits packages for
employee other operators by organization type.

	Organizations with Other Operators - Employee		Organizations with Other Operators - Contractor
Organization Type	Average Monthly Gross Wages/Salaries	Organizations with Primary/ Secondary Benefits	Average Monthly Compensation
Private	N/D	Orgs reporting – 0 orgs Primary – 0 orgs Secondary – 0 orgs	N/A
District	Average – \$2,557 Minimum – \$2,557 Maximum – \$2,557	Orgs reporting – 2 orgs Primary – 2 orgs Secondary – 2 orgs	N/A
Municipal	Average – \$2,508 Minimum – \$700 Maximum – \$4,438	Orgs reporting – 20 orgs Primary – 19 orgs Secondary – 19 orgs	Average – \$550 Minimum – \$300 Maximum – \$800
Association	Average – \$2,427 Minimum – \$15 Maximum – \$5,000	Orgs reporting – 21 orgs Primary – 12 orgs Secondary – 20 orgs	Average – \$1,025 Minimum – \$450 Maximum – \$1,600

**Table A-VI-7** presents the percentage and number of organizations with other operator positions and the average years of service by geographic region. The largest percentage of organizations using employees in the other operator position was found in the Coastal region, followed by the Hills and Pines regions. The longest average years of service for employees in the other operator position was found in the Capital/River region with the Coastal region running a distant second. Three organizations in the Hills region reported using contractors in the other operator position; these organizations enjoyed an average of 15.1 years of service, much longer than any other region or personnel classification for the other operator position.

Table A-VI-7. Percentage/number of organizations reporting other operators and average years of service for this position by organization type.

Organizations with Other Operators – Employee			Organizations with Othe	er Operators – Contractor
Organization Region	Percentage/ Number	Average Tenure	Percentage/ Number	Average Tenure
Capital/River	20.7% 6 of 29 orgs	12.5 years	3.4% 1 of 29 orgs	N/D
Coastal	37.0% 10 of 27 orgs	6.5 years	0.0% 0 of 27 orgs	N/A
Delta	14.3% 2 of 14 orgs	3.5 years	0.0% 0 of 14 orgs	N/A
Hills	29.8% 14 of 47 orgs	4.3 years	6.4% 3 of 47 orgs	15.1 years
Pines	29.7% 11 of 37 orgs	7.5 years	2.7% 1 of 37 orgs	1.0 years

**Table A-VI-8** presents the average monthly gross wages (employees) and compensation (contractors) for other operator positions in the various geographic regions as well as the number of organizations providing any benefits to employees in this position by geographic region. The average monthly gross wages/salaries for employees in the other operator position was highest for the Pines region, followed by the Coastal and Capital/River regions. All organizations that reported using employee other operations, with the exception of the Delta region, provided primary benefits to two-thirds or more of the employees in this position. The percentage of organizations that provided benefits to employee other operators was as follows by geographic region:

- Capital/River Region 6 of 29 organizations (20.7 percent)
- Coastal Region 10 of 27 organizations (37.0 percent)
- Delta Region 2 of 14 organizations (14.3 percent)
- Hills Region 14 of 47 organizations (29.8 percent)
- Pines Region 11 of 37 organizations (29.7 percent)

		n Maintenance and nel – Employee	Organizations with Maintenance and Repair Personnel - Contractor
Organization Region	Average Monthly Gross Wages/Salaries	Organizations with Primary/Secondary Benefits	Average Monthly Compensation
Capital/River	Average – \$2,405 Minimum – \$690 Maximum – \$3,956	Orgs reporting – 6 orgs Primary – 4 orgs Secondary – 6 orgs	N/D
Coastal	Average – \$2,556 Minimum – \$15 Maximum – \$4,050	Orgs reporting – 10 orgs Primary – 8 orgs Secondary – 10 orgs	N/A
Delta	Average – \$1,962 Minimum – \$923 Maximum – \$3,000	Orgs reporting – 2 orgs Primary – 1 orgs Secondary – 2 orgs	N/A
Hills	Average – \$2,292 Minimum – \$100 Maximum – \$5,000	Orgs reporting – 14 orgs Primary – 10 orgs Secondary – 12 orgs	Average – \$783 Minimum – \$300 Maximum – \$1,600
Pines	Average – \$2,752 Minimum – \$911 Maximum – \$4,438	Orgs reporting – 11 orgs Primary – 10 orgs Secondary – 11 orgs	Average – \$800 Minimum – \$800 Maximum – \$800

# Table A-VI-8. Average monthly gross compensation for other operators and benefits packages for employee other operators by geographic region.

#### **Appendix VII - Administrative Support**

Thirty-seven (24 percent) of the responding organizations reported using administrative support positions other than the billing clerk position. Thirty-four organizations (91.9 percent of the organizations that reported using the role of administrative support) reported using administrative support personnel as employees, while three organizations (8.1 percent of the organizations that reported using the role of administrative support) reported using a contractor in this position. Table A-VII-1 presents the percentage and number of responding organizations that reported having administrative support personnel at the time of the survey as well as the average gross monthly wages (employees) or compensation (contractors) classified in this position by organization size. The percentage of organizations that reported having employee administrative support personnel at the time of completing the survey increased

as the size of the organization increased. The only size classification that reported hiring contract administrative support personnel was the small class. With only three organizations reporting having contractors in this position, it is not possible to establish a solid trend for contractors in this position.

**Table A-VII-1** also provides the average years of service for the administrative support position for the various organization sizes. The average years of service for employees in this position increased as organization size increased from the very small classification to the medium classification. However, large organizations had the second lowest average years of service of any of the size classifications. While only three small organizations reported using contract administrative support personnel, which precludes establishing a solid trend, the three organizations in this category enjoyed an average years of service of 11 years.

	Organizations with Adr Emplo		Organizations with Administrative Support Contractor	
Organization Size	Percentage/Number	Average Tenure	Percentage/Number	Average Tenure
Very Small	6.3% 1 of 16 orgs	5.0 years	0.0% 0 of 16 orgs	N/A
Small	18.9% 18 of 95 orgs	8.9 years	3.2% 3 of 95 orgs	11.0 years
Medium	29.4% 10 of 34 orgs	13.4 years	0.0% 0 of 34 orgs	N/D
Large	55.6% 5 of 9 orgs	5.8 years	0.0% 0 of 9 orgs	N/A

Table A-VII-1. Percentage/number of organizations reporting administrative support positions and average years of service for this position by organization size.

**Table A-VII-2** presents the average monthly gross wages (employees) and compensation (contractors) for administrative support positions as well as the number of organizations that provide any benefits to employees in this position by organization size. The average monthly gross wages/salaries for employee administrative support personnel and the average monthly compensation for contractor administrative support personnel tended to increase as the size of the organization increased. The percentage of organizations that provided any benefits to administrative

support employees was as follows by organization size:

- Very Small 1 of 16 organizations with an administrative support employee (6.3 percent)
- Small 18 of 95 organizations with an administrative support employee (18.9 percent)
- Medium 10 of 34 organizations with an administrative support employee (29.4 percent)
- Large 5 of 9 organizations with an administrative support employee (55.6 percent)

## Table A-VII-2. Average monthly gross compensation for administrative support positions and benefits packages for employee administrative support positions by organization size.

	Organizations with Administrative Support – Employee		Organizations with Administrative Support – Contractor
Organization Size	Average Monthly Gross Wages/Salaries	Organizations with Primary/ Secondary Benefits	Average Monthly Compensation
Very Small	Average – \$580 Minimum – \$580 Maximum – \$580	Orgs reporting – 1 orgs Primary – 0 orgs Secondary – 0 orgs	N/A
Small	Average – \$2,101 Minimum – \$12 Maximum – \$4,945	Orgs reporting – 18 orgs Primary – 9 orgs Secondary – 9 orgs	Average – \$1,100 Minimum – \$1,100 Maximum – \$1,100
Medium	Average - \$3,138 Minimum - \$2,500 Maximum - \$3,900	Orgs reporting – 10 orgs Primary – 10 orgs Secondary – 7 orgs	N/A
Large	Average – \$2,704 Minimum – \$2,667 Maximum – \$2,741	Orgs reporting – 5 orgs Primary – 5 orgs Secondary – 5 orgs	N/A

**Table A-VII-3** presents the percentage and number of organizations with administrative support personnel and the average years of service by treatment class. All Class A organizations and no Class E organizations reported using

administrative support employees. Class A organizations reported the longest average years of service for employees in this position, followed by Class D, Class C, and, finally, Class B organizations.

Table A-VII-3. Percentage/number of organizations reporting administrative support positions and average years of service for this position by treatment class.

	Organizations with Administrative Support – Employee		Organizations with Administrative Support - Contractor	
Treatment Class	Percentage/Number	Average Tenure	Percentage/Number	Average Tenure
Class A	100.0% 3 of 3 orgs	13.5 years	0.0% 0 of 3 orgs	N/A
Class B	19.0% 4 of 21 orgs	4.5 years	0.0% 0 of 21 orgs	N/A
Class C	27.3% 9 of 33 orgs	9.6 years	0.0% 0 of 33 orgs	N/A
Class D	19.6% 18 of 92 orgs	10.5 years	3.3% 3 of 92 orgs	11.0 years
Class E	0.0% 0 of 5 orgs	N/A	0.0% 0 of 5 orgs	N/A

**Table A-VII-4** presents the average monthly compensation for administrative support positions as well as the number of organizations providing any benefits to employees in this position by treatment class. The average monthly gross wages/salaries for employee administrative support positions tended to increase as the organization's treatment complexity increased, with the exception of a slight decrease in the average gross wages/salaries for Class C organizations. At least half of the Class A, Class B, and Class C organizations providing benefits to administrative support employees provided primary benefits. The percentage of organizations providing benefits to administrative support employees was as follows by treatment class:

- Class A-2 of 3 organizations (66.7 percent)
- Class B 12 of 21 organizations (57.1 percent)
- Class C 22 of 33 organizations (66.7 percent)
- Class D 48 of 92 organizations (52.2 percent)
- Class E 1 of 5 organizations (20.0 percent)

Table A-VII-4. Average gross monthly compensation for administrative support positions and benefits packages for employee administrative support positions by treatment class.

	Organizations with Administrative Support – Employee		Organizations with Administrative Suppor Contractor	
Treatment Class	Average Monthly Gross Wages/Salaries	Organizations with Primary/ Secondary Benefits	Average Monthly Compensation	
Class A	Average – \$3,407 Minimum – \$3,407 Maximum – \$3,407	Orgs reporting – 3 orgs Primary – 3 orgs Secondary – 3 orgs	N/A	
Class B	Average – \$2,559 Minimum – \$200 Maximum – \$4,500	Orgs reporting – 4 orgs Primary – 2 orgs Secondary – 4 orgs	N/A	
Class C	Average – \$2,192 Minimum – \$12 Maximum – \$3,440	Orgs reporting – 9 orgs Primary – 5 orgs Secondary – 12 orgs	N/A	
Class D	Average – \$2,451 Minimum – \$580 Maximum – \$4,945	Orgs reporting – 18 orgs Primary – 5 orgs Secondary – 19 orgs	Average – \$1,100 Minimum – \$1,100 Maximum – \$1,100	
Class E	N/A	Orgs reporting – 0 orgs Primary – 0 orgs Secondary – 0 orgs	N/A	

**Table A-VII-5** presents the percentage and number of organizations with administrative support personnel and the average years of service by organization type. Utility districts and municipalities had the highest percentages of organizations that use administrative support personnel other than the billing clerk position; this is not surprising

given the fact that these are often larger organizations where many employees fill multiple roles. Municipalities also had the longest average years of service for employees in this position, followed by associations and utility districts.

Table A-VII-5. Percentage/number of organizations reporting administrative support positions and average years of service for this position by organization type.

	Organizations with Othe	er Operators – Employee	Organizations with Other Operators – Contract	
Organization Type	Percentage/Number	Average Tenure	Percentage/Number	<b>Average Tenure</b>
Private	0.0% 0 of 2 organizations	N/A	0.0% 0 of 2 organizations	N/A
District	50.0% 2 of 4 organizations	4.5 years	0.0% 0 of 4 organizations	N/A
Municipal	37.5% 18 of 48 orgs	11.0 years	2.1% 1 of 48 orgs	N/D
Association	14.0% 14 of 100 orgs	8.9 years	2.0% 2 of 100 orgs	11.0 years

**Table A-VII-6** presents the average level of monthly compensation for administrative support positions as well as the number of organizations providing any benefits to employees in this position by organization type. The average monthly gross wages/salaries for administrative support employees were highest for administrative support employees employed by municipalities, followed very closely by utility districts, with associations a distant third. Only one association reported the monthly compensation for administrative support contractors. The percentage of organizations providing benefits to administrative support employees was as follows by organization type:

- Private 0 of 2 organizations (0.0 percent)
- District 2 of 4 organizations (50.0 percent)
- Municipal 18 of 48 organizations (37.5 percent)
- Association 14 of 100 organizations (14.0 percent)

	Organizations with Administrative Support – Employee		Organizations with Administrative Support - Contractor Average Monthly Compensation	
Organization Type	ganization Type Average Monthly Gross Organizations with Primary/ Wages/Salaries Secondary Benefits			
Private	N/A	Orgs reporting – 0 orgs Primary – 0 orgs Secondary – 0 orgs	N/A	
District	Average – \$2,687 Minimum – \$2,687 Maximum – \$2,687	Orgs reporting – 2 orgs Primary – 2 orgs Secondary – 2 orgs	N/A	
Municipal	Average – \$2,699 Minimum – \$580 Maximum – \$4,945	Orgs reporting – 18 orgs Primary – 16 orgs Secondary – 10 orgs	N/D	
Association	Average – \$2,053 Minimum – \$12 Maximum – \$4,500	Orgs reporting – 14 orgs Primary – 6 orgs Secondary – 9 orgs	Average – \$1,100 Minimum – \$1,100 Maximum – \$1,100	

#### Table A-VII-6. Average monthly gross compensation for administrative support positions and benefits packages for employee administrative support positions by organization type.

**Table A-VII-7** presents the percentage and number of organizations with administrative support personnel and the average years of service by geographic region. The Delta region had the highest percentage of organizations that use employee administrative support personnel, and the Pines region had the longest average years of service

for this position. Two of the three organizations that used contract administrative support personnel were located in the Hills region; the average years of service enjoyed by these organizations ranked second among all regional classifications.

Table A-VII-7. Percentage/number of organizations reporting administrative support positions and average years of service for this position by geographic region.

	Organizations with Administrative Support – Employee		Organizations with Administrative Support – Contractor	
Organization Region	Percentage/ Number	Average Tenure	Percentage/ Number	Average Tenure
Capital/River	24.1% 7 of 29 orgs	9.9 years	0.0% 0 of 29 orgs	N/A
Coastal	33.3% 9 of 27 orgs	9.3 years	0.0% 0 of 27 orgs	N/A
Delta	35.7% 5 of 14 orgs	7.6 years	0.0% 0 of 14 orgs	N/A
Hills	17.0% 8 of 47 orgs	10.5 years	4.3% 2 of 47 orgs	11.0 years
Pines	13.5% 5 of 37 orgs	11.8 years	2.7% 1 of 37 orgs	N/D

**Table A-VII-8** presents the average monthly gross wages (employees) and compensation (contractors) for administrative support positions as well as the number of organizations providing any benefits to employees in this position by geographic region. The average monthly gross wages/ salaries for administrative support employees was highest in the Hills region, followed by the Coastal, Delta, Pines, and Capital/River regions. The majority of organizations providing benefits in each geographic region provided at least one primary benefit to employee administrative support personnel. As demonstrated in the other organization classification presentations, one organization that used contract administrative support personnel provided compensation information; this organization is located in the Hills region. The percentage of organizations providing benefits to administrative support employees was as follows by geographic region:

- Capital/River Region 7 of 29 organizations (24.1 percent)
- Coastal Region 9 of 27 organizations (33.3 percent)
- Delta Region 5 of 14 organizations (35.7 percent)
- Hills Region 8 of 47 organizations (17.0 percent)
- Pines Region 5 of 37 organizations (13.5 percent)

#### Table A-VII-8. Average monthly gross compensation for administrative support positions and benefits packages for employee administrative support positions by geographic region.

	Organizations with Em	Organizations with Administrative Support - Contractor Average Monthly ts Compensation	
Organization Region	Average Monthly GrossOrganizations withWages/SalariesPrimary/Secondary Bene		
Capital/River	Average – \$1,724 Minimum – \$12 Maximum – \$3,000	Orgs reporting – 7 orgs Primary – 4 orgs Secondary – 4 orgs	N/A
Coastal	Average – \$2,639 Minimum – \$1,000 Maximum – \$4,945	Orgs reporting – 9 orgs Primary – 7 orgs Secondary – 7 orgs	N/A
Delta	Average – \$2,117 Minimum – \$580 Maximum – \$3,334	Orgs reporting – 5 orgs Primary – 3 orgs Secondary – 2 orgs	N/A
Hills	Average – \$3,385 Minimum – \$2,200 Maximum – \$4,500	Orgs reporting – 8 orgs Primary – 7 orgs Secondary – 6 orgs	Average – \$1,100 Minimum – \$1,100 Maximum – \$1,100
Pines	Average – \$1,940 Minimum – \$600 Maximum – \$3,709	Orgs reporting – 5 orgs Primary – 3 orgs Secondary – 2 orgs	N/D



#### **EXTENSION**

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