



Control Number: 42867



Item Number: 56

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SOAH DOCKET NO. 473-14-5138
PUC DOCKET NO. 42857

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PETITION OF NORTH AUSTIN § BEFORE THE STATE OFFICE
UTILITY DISTRICT NO. 1, §
NORTHTOWN MUNICIPAL UTILITY §
DISTRICT, TRAVIS COUNTY WATER §
CONTROL AND IMPROVEMENT §
DISTRICT NO. 10 AND WELLS § OF
BRANCH MUNICIPAL UTILITY §
DISTRICT, FROM THE RATEMAKING §
ACTIONS OF THE CITY OF AUSTIN §
AND REQUEST FOR INTERIM RATES §
IN WILLIAMSON AND TRAVIS §
COUNTIES § ADMINISTRATIVE HEARINGS

SOAH DOCKET NO. 473-14-5138
PUC DOCKET NO. 42867

PETITION OF NORTH AUSTIN § BEFORE THE STATE OFFICE
MUNICIPAL UTILITY DISTRICT NO. §
1, NORTHTOWN MUNICIPAL §
UTILITY DISTRICT, AND WELLS §
BRANCH MUNICIPAL UTILITY §
DISTRICT FROM THE RATEMAKING § OF
ACTIONS OF THE CITY OF AUSTIN §
AND REQUEST FOR INTERIM RATES §
IN WILLIAMSON AND TRAVIS §
COUNTIES § ADMINISTRATIVE HEARINGS

CITY OF AUSTIN'S SEVENTH SUPPLEMENTAL RESPONSE
TO PETITIONERS' THIRD REQUEST FOR PRODUCTION OF DOCUMENTS

TO: Wells Branch MUD, Travis County WCID No. 10, Northtown MUD, and North Austin Utility District No. 1, through its attorneys of record, Randall Wilburn, Attorney at Law, 3000 South IH 35, Suite 150, Austin, Texas 78704; and John J. Carlton, The Carlton Law Firm, PLLC, 2705 Bee Cave Road, Suite 200, Austin, Texas 78746.

COMES NOW, the City of Austin, (herein sometimes referred to as "City," "Austin" or "Respondent"), in the above styled and docketed consolidated wholesale water and wholesale wastewater rate appeal proceeding and serves this, the City of Austin's Seventh Supplemental

Response to Petitioners' Third Request for Production of Documents in response to Petitioners' Third Request for Production of Documents, on all parties to this Proceeding.

I. RESPONSES TO REQUESTS FOR PRODUCTION SUBJECT TO RIGHT TO AMEND OR SUPPLEMENT

Each of these responses is submitted pursuant to applicable law and rules. Additionally, Austin reserves the right to amend or supplement this response in accordance with applicable rules.

II. RESPONSES TO REQUESTS FOR PRODUCTION

REQUEST FOR PRODUCTION NO. 3-11. Please provide the inventory of Water Transmission Mains from 2012 showing length of pipe by diameter.

SUPPLEMENTAL RESPONSE: See the attached GIS Water Mains Report, Austin RPD Resp. 7904-7906.

REQUEST FOR PRODUCTION NO. 3-12 Please provide the inventory of Water Distribution Mains from 2012 showing length of pipe by diameter.

SUPPLEMENTAL RESPONSE: See documents produced in response to Request for Production No. 3-11.

REQUEST FOR PRODUCTION NO. 3-56. Please provide any documents showing the same type of data as shown on Ms. Gross' Exhibit 8 for all of AWU's customers.

RESPONSE: See also, the attached City of Austin and Wholesale Participation Request, Austin RPD Resp. 7903.

REQUEST FOR PRODUCTION NO. 3-57. Please provide any documents showing the time period covered for the data presented in Ms. Gross' Exhibit 8.

RESPONSE: See documents produced in response to Request for Production No. 3-56. The time period is 1997 to present for wholesale customers.

REQUEST FOR PRODUCTION NO. 3-63. Please provide all documents supporting the statement made on page 21, lines 22-23 of Mr. Giardina's testimony that "...this range of cash funding is fairly typical in the local government utility industry."

RESPONSE: See Testimony of David A. Anders, Assistant Director, Finance and Business Services, City of Austin, Austin Water Utility Exhibit No. 7, PFT of David Anders 115-151 and Exhibit No. 11, PFT of David Anders 158-173.

See also, attached Fitch Ratings 2014 Water and Sewer Medians, Austin RPD Resp. 7887-7902.

REQUEST FOR PRODUCTION NO. 3-82. Please provide the Inventory of Wastewater Interceptors and Collection Lines (by size) used in the City's FY2013 Cost of Service analysis.

SUPPLEMENTAL RESPONSE: See the attached GIS Wastewater Mains Report, Austin RPD Resp. 7907-7910.

REQUEST FOR PRODUCTION NO. 3-99. Please provide the source documentation for each allocation percentage and basis for allocation for the data shown on page "PFT of Greg Meszaros-6104" (Table 68 of Wastewater COS FY 2013 Tables) on Exhibit 21 of the prefiled testimony of Greg Meszaros.

Responsive documents have been previously provided or referenced, including:

- *Financing and Charges for Wastewater Systems WEF MOP 27; WEF Manual of Practice 27*, Water Environment Federation, 2004.
- *Principles of Water Rates, Fees, and Charges; Manual of Water Supply Practices—M1*, Sixth Edition, American Water Works Association, 2012.
- 2008 Cost of Service Rate Study (Austin Meszaros Exhibit No. 17);
- 2013 Wastewater Cost of Service, (Austin Meszaros Exhibit No. 21);
- AWU Combined Operating Budget Fund Summary for FY 2013 (Austin Anders Exhibit No. 4); and
- Documents produced in response to Petitioners Third Request for Production of Documents, especially Response to RPD 3-91 (FY 2013 Proposed WW O&M Costs, shown on Austin RPD Resp. 5379-5481), which provided detailed budget line item documentation for wastewater.

REQUEST FOR PRODUCTION NO. 3-100. Please provide the source documentation for each allocation percentage and basis for allocation for the data shown on page "PFT of Greg Meszaros-6106" (Table 70 of Wastewater COS FY 2013 Tables) on Exhibit 21 of the prefiled testimony of Greg Meszaros.

Responsive documents have been previously provided or referenced, including:

- *Financing and Charges for Wastewater Systems WEF MOP 27; WEF Manual of Practice 27*, Water Environment Federation, 2004.

- *Principles of Water Rates, Fees, and Charges; Manual of Water Supply Practices—M1*, Sixth Edition, American Water Works Association, 2012.
- 2008 Cost of Service Rate Study (Austin Meszaros Exhibit No. 17);
- 2013 Wastewater Cost of Service, (Austin Meszaros Exhibit No. 21);
- AWU Combined Operating Budget Fund Summary for FY 2013 (Austin Anders Exhibit No. 4); and
- Documents produced in response to Petitioners Third Request for Production of Documents, especially Response to RPD 3-91 (FY 2013 Proposed WW O&M Costs, shown on Austin RPD Resp. 5379-5481), which provided detailed budget line item documentation for wastewater.

REQUEST FOR PRODUCTION NO. 3-101. Please provide the source documentation for each allocation percentage and basis for allocation for the data shown on page “PFT of Greg Meszaros-6119” (Table 83 of Wastewater COS FY 2013 Tables) on Exhibit 21 of the prefiled testimony of Greg Meszaros.

Responsive documents have been previously provided or referenced, including:

- *Financing and Charges for Wastewater Systems WEF MOP 27; WEF Manual of Practice 27*, Water Environment Federation, 2004.
- *Principles of Water Rates, Fees, and Charges; Manual of Water Supply Practices—M1*, Sixth Edition, American Water Works Association, 2012.
- 2008 Cost of Service Rate Study (Austin Meszaros Exhibit No. 17);
- 2013 Wastewater Cost of Service, (Austin Meszaros Exhibit No. 21);
- AWU Combined Operating Budget Fund Summary for FY 2013 (Austin Anders Exhibit No. 4); and
- Documents produced in response to Petitioners Third Request for Production of Documents, especially Response to RPD 3-91 (FY 2013 Proposed WW O&M Costs, shown on Austin RPD Resp. 5379-5481), which provided detailed budget line item documentation for wastewater.

REQUEST FOR PRODUCTION NO. 3-108. Please provide the source documentation for each allocation factor shown on page “PFT of Greg Meszaros-6370” (Table 198 of Wastewater COS FY 2013 Tables) on Exhibit 21 of the prefiled testimony of Greg Meszaros.

Responsive documents have been previously provided or referenced, including:

- *Financing and Charges for Wastewater Systems WEF MOP 27; WEF Manual of Practice 27*, Water Environment Federation, 2004.
- *Principles of Water Rates, Fees, and Charges; Manual of Water Supply Practices—M1*, Sixth Edition, American Water Works Association, 2012.

- 2008 Cost of Service Rate Study (Austin Meszaros Exhibit No. 17);
- 2013 Wastewater Cost of Service, (Austin Meszaros Exhibit No. 21);
- AWU Combined Operating Budget Fund Summary for FY 2013 (Austin Anders Exhibit No. 4); and
- Documents produced in response to Petitioners Third Request for Production of Documents, especially Response to RPD 3-91 (FY 2013 Proposed WW O&M Costs, shown on Austin RPD Resp. 5379-5481), which provided detailed budget line item documentation for wastewater.

REQUEST FOR PRODUCTION NO. 3-109. Please provide the source documentation for the collection main and interceptor data shown on page “PFT of Greg Meszaros-6375” (Table 203 of Wastewater COS FY 2013 Tables) on Exhibit 21 of the prefiled testimony of Greg Meszaros.

RESPONSE: See documents produced in response to Request for Production No. 3-82.

REQUEST FOR PRODUCTION NO. 3-110. Please provide the source documentation for each allocation factor shown on page “PFT of Greg Meszaros-6377” (Table 205 of Wastewater COS FY 2013 Tables) on Exhibit 21 of the prefiled testimony of Greg Meszaros.

Responsive documents have been previously provided or referenced, including:

- *Financing and Charges for Wastewater Systems WEF MOP 27; WEF Manual of Practice 27*, Water Environment Federation, 2004.
- *Principles of Water Rates, Fees, and Charges; Manual of Water Supply Practices—M1*, Sixth Edition, American Water Works Association, 2012.
- 2008 Cost of Service Rate Study (Austin Meszaros Exhibit No. 17);
- 2013 Wastewater Cost of Service, (Austin Meszaros Exhibit No. 21);
- AWU Combined Operating Budget Fund Summary for FY 2013 (Austin Anders Exhibit No. 4); and
- Documents produced in response to Petitioners Third Request for Production of Documents, especially Response to RPD 3-91 (FY 2013 Proposed WW O&M Costs, shown on Austin RPD Resp. 5379-5481), which provided detailed budget line item documentation for wastewater.

REQUEST FOR PRODUCTION NO. 3-111. Please provide the source documentation for each allocation factor shown on page “PFT of Greg Meszaros-6379” (Table 207 of Wastewater COS FY 2013 Tables) on Exhibit 21 of the prefiled testimony of Greg Meszaros.

Responsive documents have been previously provided or referenced, including:

- *Financing and Charges for Wastewater Systems WEF MOP 27; WEF Manual of Practice 27*, Water Environment Federation, 2004.
- *Principles of Water Rates, Fees, and Charges; Manual of Water Supply Practices—M1*, Sixth Edition, American Water Works Association, 2012.
- 2008 Cost of Service Rate Study (Austin Meszaros Exhibit No. 17);
- 2013 Wastewater Cost of Service, (Austin Meszaros Exhibit No. 21);
- AWU Combined Operating Budget Fund Summary for FY 2013 (Austin Anders Exhibit No. 4); and
- Documents produced in response to Petitioners Third Request for Production of Documents, especially Response to RPD 3-91 (FY 2013 Proposed WW O&M Costs, shown on Austin RPD Resp. 5379-5481), which provided detailed budget line item documentation for wastewater.

REQUEST FOR PRODUCTION NO. 3-112. Please provide the source documentation for each allocation factor shown on page “PFT of Greg Meszaros-6392” (Table 220 of Wastewater COS FY 2013 Tables) on Exhibit 21 of the prefiled testimony of Greg Meszaros.

Responsive documents have been previously provided or referenced, including:

- *Financing and Charges for Wastewater Systems WEF MOP 27; WEF Manual of Practice 27*, Water Environment Federation, 2004.
- *Principles of Water Rates, Fees, and Charges; Manual of Water Supply Practices—M1*, Sixth Edition, American Water Works Association, 2012.
- 2008 Cost of Service Rate Study (Austin Meszaros Exhibit No. 17);
- 2013 Wastewater Cost of Service, (Austin Meszaros Exhibit No. 21);
- AWU Combined Operating Budget Fund Summary for FY 2013 (Austin Anders Exhibit No. 4); and
- Documents produced in response to Petitioners Third Request for Production of Documents, especially Response to RPD 3-91 (FY 2013 Proposed WW O&M Costs, shown on Austin RPD Resp. 5379-5481), which provided detailed budget line item documentation for wastewater.

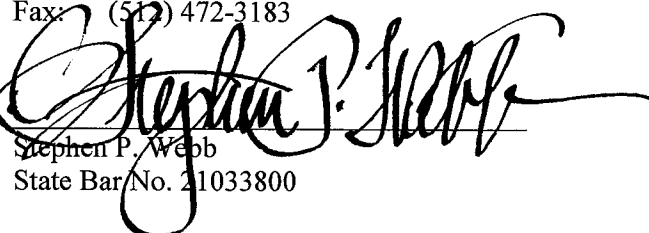
Respectfully submitted,

KAREN KENNARD,
City Attorney

D. CLARK CORNWELL
Assistant City Attorney

WEBB & WEBB
712 Southwest Tower
211 East Seventh Street
Austin, Texas 78767
Tel: (512) 472-9990
Fax: (512) 472-3183

By:

A large, stylized handwritten signature in black ink, which appears to read "Stephen P. Webb". The signature is written over a horizontal line.

Stephen P. Webb
State Bar No. 21033800

Gwendolyn Hill Webb
State Bar No. 21026300

ATTORNEYS FOR CITY OF AUSTIN

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing document has been served via hand delivery, facsimile, electronic mail, overnight mail, US mail and/or Certified Mail Return Receipt Requested on all parties whose names appear on the mailing list below on this 26th day of September, 2014.

FOR THE PUBLIC UTILITY COMMISSION:

1701 N. Congress Avenue, 7th Floor
PO Box 13326
Austin, Texas 78711-3326
Via Electronic Upload & Hand Delivery

FOR THE SOAH DOCKET CLERK:

Ms. Monica Luna, Docketing Clerk
State Office of Administrative Hearings
300 W. 15th Street, Suite 504
Austin, Texas 78701
Phone: 512-475-4993
Fax: 512-322-2061
Via Electronic Upload
(Without Attachments)

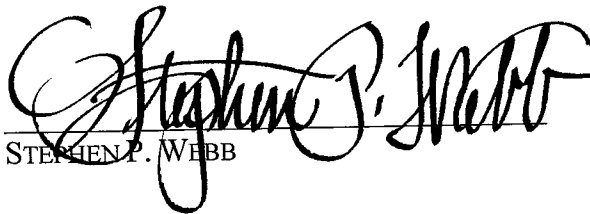
FOR PETITIONERS:

Mr. Randall B. Wilburn, Attorney at Law
3000 South IH 35, Suite 150
Austin, Texas 78704
Phone: 512-535-1661
Fax: 512-535-1678
rbw@randallwilburnlaw.com

Mr. John Carlton, Attorney at Law
The Carlton Law Firm, PLLC
2705 Bee Cave Road, Suite 200
Austin, Texas 78746
Phone: 512-614-0901
Fax: 512-900-2855
john@carltonlawaustin.com

FOR THE PUC STAFF:

Mr. Hollis Henley, Attorney-Legal Division
Public Utility Commission of Texas
1701 N. Congress Avenue
PO Box 13326
Austin, Texas 78711-3326
Phone: 512-936-7230
Fax: 512-936-7268
Hollis.henley@puc.texas.gov


STEPHEN P. WEBB

Response to Request No. 3-11

Distribution

<u>Record Count</u>	<u>Diameter</u>	<u>Owner</u>	<u>Operational Status</u>	<u>Feet</u>	<u>Miles</u>
94	0.00	CITY	AB	2,310	0.44
20,645	0.00	CITY	IS	580,683	109.98
2	0.00	CITY	OUT	46	0.01
414	0.00	CITY	PRAB	12,600	2.39
229	0.00	CITY	PROP	5,180	0.98
7	0.75	CITY	AB	3,281	0.62
43	0.75	CITY	IS	2,218	0.42
3	0.75	CITY	PRAB	281	0.05
44	1.00	CITY	AB	9,364	1.77
564	1.00	CITY	IS	34,610	6.55
12	1.00	CITY	PRAB	687	0.13
35	1.00	CITY	PROP	1,655	0.31
29	1.25	CITY	AB	6,870	1.30
41	1.25	CITY	IS	3,191	0.60
4	1.25	CITY	PRAB	284	0.05
24	1.50	CITY	AB	5,446	1.03
77	1.50	CITY	IS	5,989	1.13
6	1.50	CITY	PRAB	1,352	0.26
24	1.50	CITY	PROP	249	0.05
1,058	2.00	CITY	AB	331,952	62.87
4,513	2.00	CITY	IS	334,700	63.39
6	2.00	CITY	OUT	408	0.08
219	2.00	CITY	PRAB	21,660	4.10
163	2.00	CITY	PROP	6,035	1.14
235	2.25	CITY	AB	159,456	30.20
723	2.25	CITY	IS	118,663	22.47
53	2.25	CITY	PRAB	12,103	2.29
2	2.25	CITY	PROP	31	0.01
2	2.50	CITY	AB	107	0.02
68	2.50	CITY	IS	18,023	3.41
1	2.50	CITY	PROP	12	0.00
4	3.00	CITY	AB	1,132	0.21
275	3.00	CITY	IS	12,727	2.41
6	3.00	CITY	PRAB	162	0.03
22	3.00	CITY	PROP	592	0.11
303	4.00	CITY	AB	46,185	8.75
7,281	4.00	CITY	IS	391,185	74.09
354	4.00	CITY	PRAB	27,695	5.25
416	4.00	CITY	PROP	11,360	2.15
11	5.00	CITY	IS	452	0.09
1	5.25	CITY	IS	15	0.00
2,785	6.00	CITY	AB	704,431	133.41
56,623	6.00	CITY	IS	5,414,953	1,025.56
1	6.00	CITY	OUT	169	0.03
1,854	6.00	CITY	PRAB	194,494	36.84
4,129	6.00	CITY	PROP	93,282	17.67
1,059	8.00	CITY	AB	271,441	51.41
39,800	8.00	CITY	IS	5,719,458	1,083.23
677	8.00	CITY	PRAB	67,608	12.80
2,818	8.00	CITY	PROP	264,469	50.09
20	10.00	CITY	AB	6,556	1.24
340	10.00	CITY	IS	22,671	4.29
8	10.00	CITY	PRAB	201	0.04

15	10.00	CITY	PROP	158	0.03
757	12.00	CITY	AB	211,503	40.06
21,826	12.00	CITY	IS	2,982,940	564.95
355	12.00	CITY	PRAB	31,092	5.89
1,932	12.00	CITY	PROP	164,681	31.19
65	14.00	CITY	AB	48,379	9.16
238	14.00	CITY	IS	43,819	8.30
21	14.00	CITY	PRAB	731	0.14
10	14.00	CITY	PROP	73	0.01
122	16.00	CITY	AB	36,856	6.98
7,026	16.00	CITY	IS	1,181,903	223.85
3	16.00	CITY	OUT	655	0.12
70	16.00	CITY	PRAB	7,330	1.39
789	16.00	CITY	PROP	111,067	21.04
1	18.00	CITY	AB	174	0.03
11	18.00	CITY	IS	280	0.05
36	20.00	CITY	AB	9,402	1.78
632	20.00	CITY	IS	124,700	23.62
52	20.00	CITY	PRAB	4,299	0.81
34	20.00	CITY	PROP	7,315	1.39
3	21.00	CITY	AB	1,629	0.31
17	21.00	CITY	IS	10,908	2.07
182,142				19,910,575	3,771

Transmission					
Record Count	Diameter	Owner	Operational Status	Feet	Miles
108	24.00	CITY	AB	32,170	6.09
3,712	24.00	CITY	IS	855,330	161.99
62	24.00	CITY	PRAB	10,810	2.05
324	24.00	CITY	PROP	69,863	13.23
23	30.00	CITY	AB	10,977	2.08
470	30.00	CITY	IS	153,966	29.16
3	30.00	CITY	OUT	852	0.16
2	30.00	CITY	PRAB	409	0.08
15	30.00	CITY	PROP	524	0.10
27	36.00	CITY	AB	8,333	1.58
739	36.00	CITY	IS	285,183	54.01
4	36.00	CITY	PRAB	767	0.15
56	36.00	CITY	PROP	16,664	3.16
18	42.00	CITY	AB	5,248	0.99
293	42.00	CITY	IS	90,949	17.23
27	42.00	CITY	PROP	15,743	2.98
1	45.00	CITY	IS	13	0.00
41	48.00	CITY	AB	27,134	5.14
891	48.00	CITY	IS	498,848	94.48
1	48.00	CITY	OUT	303	0.06
40	48.00	CITY	PROP	14,307	2.71
1	54.00	CITY	AB	212	0.04
106	54.00	CITY	IS	53,080	10.05
38	54.00	CITY	PROP	17,858	3.38
27	60.00	CITY	IS	13,080	2.48
7	66.00	CITY	AB	1,674	0.32
99	66.00	CITY	IS	63,004	11.93
2	66.00	CITY	PRAB	567	0.11
8	66.00	CITY	PROP	865	0.16
1	72.00	CITY	AB	476	0.09
28	72.00	CITY	IS	24,222	4.59
6	84.00	CITY	PROP	34,552	6.54
3	108.00	CITY	PROP	4,563	0.86
7,183				2,312,548	438

Response to Request No. 3-56

Program	COA	SUN	AE	ANDML	ATI	LCM	NAM1	NTM	RIV	RM	SHW	SPM	UNS	VSL	WC10	WELSB	WH	Grand Total
3C BUSINESS CHALLENGE	20																	20
BUCKS FOR BUSINESS	1																	1
CAR WASH EVALUATION	304																	304
COMMERCIAL AUDIT REBATE	20																	20
COMMERCIAL FACILITY IRRIGATION ASSESSMENT PROGRAM	188																	188
COMMERCIAL KITCHEN REBATE	1																	1
COMMERCIAL SPECIAL PROCESS REBATE	42																	42
COMMERCIAL WASHER REBATE	24																	24
DENTAL VACUUM PUMP REBATE	2																	2
DROUGHT SURVIVAL TOOLS	352						6	3	1	1	3				1	2		369
ET WATER BUDGETING	4							1							1			4
FREE TOILET - COMMERCIAL	200														1			203
FREE TOILET - MULTIFAMILY	117														1			118
FREE TOILET PROGRAM	21,775	1		20		43	155	21		14	75	1	1		35	164		22,305
HOT WATER ON DEMAND	19					1												21
IRRIGATION AUDIT	1,572					2	1			1	1	1			2			1,581
IRRIGATION AUDIT - COMMERCIAL/MF	305																	307
IRRIGATION AUDIT - RESIDENTIAL	4,868					25	5			5	6				3			4,921
IRRIGATION REBATE-SF	165					1												167
LAWN REMODEL	849																	849
LEGACY FREE TOILET MULTIFAMILY PROGRAM	34																	34
LEGACY FREE TOILETS	28,998																	28,998
LEGACY HOTLINE PROGRAM	1																	1
LEGACY IRRIGATION PROGRAM	114																	114
LEGACY TOILET REBATE DATA, MULTI-FAMILY	20																	20
LEGACY TOILET REBATE DATA, SINGLE-FAMILY	535																	535
LEGACY WASHER DATA	477										1							479
LEGACY WATERWISE LANDSCAPE REBATE	2																	2
LEGACY WHEN IT RAINS IT STORES	1																	1
MATERIAL DISTRIBUTION	9												3,904					3,905
POOL COVER REBATE	23																	24
PRESSURE REGULATING VALVE REBATE	282																	284
RAINBARREL REBATE	754					1									1			786
RAINWATER HARVESTING	79					1									1			81
RAINWATER HARVESTING COMM	14																	15
RAINWATER HARVESTING MF	5																	5
RAINWATER HARVESTING SF	1,220	2				6	7	1		3	8		3	1	8	13		1,272
TOILET REBATE - COMMERCIAL	91														2			97
TOILET REBATE - MULTIFAMILY	95																	97
TOILET REBATE PROGRAM	10,146	8		29		72	69	4	1	33	73	1	1		75	82		10,594
WASHWISE WASHER REBATE	28,706	26	1	48		143	126	23	7	63	147	6	19		236	167	1	29,719
WATER WASTE	5,622																	5,622
WATER WASTE HOTLINE	648														1			649
WATERING TIMER	14																	14
WATERING VARIANCE	600																	600
WATERWISE HOTEL PARTNER	1																	1
WATERWISE LANDSCAPE REBATE	334																	341
WHEN IT RAINS IT STORES	4,468	4		18		9	8	5	1	4	15	3			33	24		4,592
SUM	114,121	42	1	115	1	310	381	60	9	131	343	10	3,933	2	405	476	1	120,341

Response to Request No. 3-63

2014 Water and Sewer Medians

Special Report

Sector Strength Continues

The 2014 medians continue Fitch Ratings' effort to provide transparency to market participants by giving a clear understanding of certain statistical ratios used in its review of sector revenue bond credits and quantitative results, particularly as they pertain to retail systems. For the most part, the key findings for 2014 continue trends Fitch has observed over the past several years and that contribute to key issues discussed in Fitch Research titled "2014 Outlook: Water and Sewer Sector," dated Dec. 12, 2013, available on Fitch's website at www.fitchratings.com.

The medians continue to point to ongoing capital and debt pressures, but also spotlight the sector's overall financial strength. With the latest round of medians, financial results continued to post incremental gains while there was a corresponding decrease in debt ratios.

Related Research

2014 Outlook: Water and Sewer Sector
(December 2013)

Analysts

Doug Scott
+1 512 215-3725
douglas.scott@fitchratings.com

Kathy Masterson
+1 512 215-3730
kathy.masterson@fitchratings.com

Adrienne Booker
+1 312 368-5471
adrienne.booker@fitchratings.com

Gabriela Gutierrez, CPA
+1 512 215-3731
gabriela.gutierrez@fitchratings.com

Andrew DeStefano
+1 212 908-0284
andrew.destefano@fitchratings.com

Shannon Groff
+1 415 732-5628
shannon.groff@fitchratings.com

Julie Seebach
+1 512 215-3740
julie.seebach@fitchratings.com

Major Parkhurst
+1 512 215-3724
major.parkhurst@fitchratings.com

Andrew Ward
+1 415 732-5617
andrew.ward@fitchratings.com

Teri Wenck, CPA
+1 512 215-3742
teri.wenck@fitchratings.com

Eva Rippeteau
+1 212 908-9105
eva.rippeteau@fitchratings.com

Christopher Hessler
+1 212 908-0773
christopher.hessler@fitchratings.com

Key Findings

National Medians

Solid Revenue Performance: Despite flat water usage and near-flat wastewater flows during the median period, revenues continued to increase a healthy 6% on rising user charges.

Controlled Expenditures: Operating expense growth remained controlled but crept up 2% with the 2014 medians from 1% the year prior. Debt service carrying costs relative to gross revenues remained flat from the prior year.

Improved Coverage: Debt service coverage (DSC) remained strong on both a senior lien and all-in basis (2.4x and 2.0x, respectively) and even rose slightly, marking the second consecutive year of modest improvement.

Cash Flows Up but Insufficient: Surplus cash flows, like DSC, continued to show some improvement. But at 91%, excess revenues remained insufficient to fully cover annual depreciation expense (i.e. renewal and replacement [R&R]) on a pay-as-you-go basis.

Liquidity a Highlight: Despite continued subpar cash flows, liquidity levels remained significant and even increased overall as DSC rose, capital spending relative to depreciation decreased, and surplus balances hit the bottom line.

Planned Capital Spending Down: Planned annual capital spending per customer fell 10% from the 2013 medians. The drop raises concerns about an expected increase in deferred maintenance in the coming years. However, recent spending was sufficient to maintain the age of facilities at 13 years.

Lower Debt Profile: Debt ratios fell modestly from the prior year medians as new issuances lagged principal being amortized. Nevertheless, debt ratios are forecasted to return to their upward trajectory over the upcoming five-year period even with expectations of decreased spending and declines in borrowable capital sources.

Regional Medians

Far West: The Far West's financial performance continued to exceed the national medians from a DSC, liquidity, and cash flow perspective, although the margin by which the region surpassed the national level diminished with the current medians. Positively, current, and projected regional debt ratios are down considerably from last year's medians and now are lower or more in line with the national medians.

Midwest: The Midwest saw virtually flat operating performance between the 2013 and 2014 medians. Total DSC was unchanged, liquidity levels were mixed, and free cash was only 1% lower. Current debt levels within the region remain the lowest of any other region. However, over the next five years the region's debt profile is expected to balloon and be higher than any other region. The rising debt expectation is driven at least in part to fund R&R to address the region's aged infrastructure, which at 17 years is older than any other region.

Northeast: The Northeast posted sound financial gains for the year but remain below national medians in almost all areas. The Northeast continued to have the greatest leverage relative to other regions, but debt levels are expected to moderate over the next five years and be more in line with national norms despite the dismal amortization rate of existing debt (just 57% of principal is retired in 20 years).

Southeast: Southeast financial results were in line or better than the national medians at almost every level, with liquidity benefiting the most from the favorable results for the year: days cash was up 15% from the prior year (to 479 days) while days of working capital was up 46% (to 521 days). With the improved financial margins there was less reliance on borrowable resources, allowing current debt ratios to improve slightly from the 2013 medians. Also, over the next few years, projected debt ratios are expected to fall slightly as well, given planned capital spending with the 2014 medians was relatively flat from the prior year.

Southwest: The Southwest continued to produce financial and debt profiles in the midrange of all the regions. For the year, total DSC was unchanged, but as operating expenses were cut for the year, free cash jumped 23% from last year's medians — the second highest jump in free cash behind the Southeast region's 24% increase. Unfavorably, the region saw the largest growth in debt levels for the year of any region, which may be expected to erode financial performance somewhat in the coming years. However, the region continued to project falling debt ratios over the five-year horizon and the fastest payout rate, which should allow for a quick improvement to the region's debt profile over the next few years.

Medians Relative to System Size

Large Systems: Large systems (defined as utilities serving 500,000 or more persons) continued in general to have the greatest amount of debt and produce the lowest financial margins. With the 2014 medians, debt levels for large systems were virtually unchanged from the prior year (net issuance equaled the amount of principal being amortized), but DSC was down on rising operating expenditures. Nevertheless, as utilities scaled back on spending liquidity levels posted solid gains for the year.

Midsize Systems: Midsize systems (defined as utilities serving between 100,000 and 499,999 persons) continue to generate stronger financial performance than other utilities on balance while having the lowest debt burden and some of the lowest rates. For the 2014 medians, midsize utilities adopted rate adjustments to offset additional fixed costs from new debt issuances to the extent that DSC actually improved somewhat from the prior year. Surplus

Related Criteria

Revenue-Supported Rating Criteria (June 2013)

U.S. Water and Sewer Revenue Bond Rating Criteria (July 2013)

revenues exceeded the depreciation expense for the 2014 medians, but these monies were diverted to capital spending keeping liquidity balances relatively unchanged.

Small Systems: Small systems (defined as utilities serving less than 100,000 persons) continued to produce financial and debt metrics in the midrange relative to other utilities. But for the 2014 medians, these systems saw a 9% drop in total DSC to 2.1x even as the national median improved slightly. Positively, reserve levels and surplus revenues improved over the prior year, affording some additional financial flexibility. Also favorably, debt levels dropped from the 2013 medians on reduced issuances and outyear estimates anticipate continued reductions in outstanding debt. While the drop in debt is a credit positive, it comes at the expense of planned capital outlays that could ultimately lead to rising deferred maintenance and aging facilities.

Limitations of Medians Analysis in the Rating Process

While the medians serve as a useful tool for market participants by allowing for broad assessments and comparisons of credit quality, Fitch maintains that the data complement the rating process rather than act as a substitute. Thus, when evaluating the medians in relation to the rating process, certain distinctions between them should be noted, as follows:

Point in Time: Medians largely provide a point-in-time snapshot of the rating category, region, class size, or sector as a whole, whereas the rating process focuses more on trends at the issuer and specific rating level.

Exclusion of Rating Factors: Only a portion of the factors covered in Fitch's rating process are reflected in the medians — in particular, qualitative aspects such as management, policies, and legal provisions are excluded, although other quantitative ratios are also omitted.

Individual Credit Characteristics Excluded: The medians present a composite of the range of credits and do not delineate offsetting strengths or weaknesses at the individual credit level that may affect a rating.

Methodology and Data

Fitch first published its water and sewer medians in 2004 to provide issuers, consultants, analysts, investors, and others with a quantitative framework of ratios used in Fitch's water and sewer rating process. To this end, Fitch historically has grouped the medians according to their respective area within the criteria review process and the 2014 medians continue this practice.

This report also continues Fitch's presentation of key ratios used in the rating process to give the market a better understanding of the priority in weighting certain ratios. To allow a comparison with prior statistics, Fitch also has included historical information from the 2007—2013 medians (see Appendix E, page 14); the 2004 medians were excluded, given that the methodology for a selection of credits was revised following its release. Fitch expects to add subsequent information annually to Appendix E as ensuing medians are published to allow readers to follow long-term trends.

As with Fitch's prior medians, those for 2014 cover only wholly or predominantly retail systems for which Fitch has taken rating actions on senior lien debt or debt that effectively acts as senior lien obligations. The data include water and sewer revenue bond credits rated between September 2012 and August 2013. Certain credits have been excluded for various reasons, as outlined below (for a complete list of issuers included in the 2014 medians, see Appendix B, pages 8–11). In cases where the same issuer was rated multiple times over the median selection period, only data from the most recent rating were incorporated into the medians.

In the 2014 medians, combined water and sewer utilities accounted for 92 credits (56% of the total), individual water systems numbered 41 (25%), and individual sewer systems were 30 (18%). Excluded for median-reporting purposes from the 2014 data set are certain credits with ratings of 'BBB+' or below, because Fitch traditionally has viewed these issuers as outliers with extenuating circumstances. Also excluded were issuers for which the majority of system revenues were derived from other utility (e.g. electric power) revenues. In both cases, the data have a tendency to skew median results.

Appendix A: Water and Sewer Median Definitions

Median	Definition	Significance
Population	Estimated population of the service area	Provides an overview of the scope of operations in the service area
MHI (\$)	Median household income for the primary municipal entity served by the utility based on the most recent year as reported by the U.S. Census Bureau	Indicates the overall wealth of average residential customers and their ability to pay for services
Total Water Customers	Most recent water customer accounts total, if applicable	Provides an overview of the scope of operations in the service area
Water Customer Annual Growth (%)	Percentage of historical average annual customer accounts growth rates over the prior five-year period	Indicates the pressures a utility may be facing to meet customer demands
Total Sewer Customers	Most recent sewer customer accounts total, if applicable	Provides an overview of the scope of operations in the service area
Sewer Customer Annual Growth (%)	Percentage of historical average annual customer accounts growth rates over the prior five-year period	Indicates the pressures a utility may be facing to meet customer demands
Top 10 Customers as % of Revenues	Total annual receipts from the 10 largest customers divided by total operating system revenues for the year	Indicates revenue concentration levels
Age of Plant (Years)	Total accumulated depreciation divided by annual depreciation	Indicates age of facilities and potential deferred plant maintenance
Water Treatment Capacity Remaining (%)	Percentage of average permitted treatment capacity remaining above most recent production level	Indicates the pressures a utility may be facing to meet customer demands
Sewer Treatment Capacity Remaining (%)	Percentage of average permitted treatment capacity remaining above most recent production level	Indicates the pressures a utility may be facing to meet customer demands
Average Annual CIP Costs per Customer (\$)	Total projected capital needs in the CIP divided by the number of years of the CIP, divided by total number of customers (for a combined utility, the aggregate number of water and sewer accounts are used)	Indicates effect of the CIP on ratepayers (principal only)
CIP Debt Financed (%)	Percentage of issuer's total CIP expected to be debt financed	Indicates future debt leverage of capital assets
Total Outstanding Debt to Net Plant Assets (%)	Total amount of utility long-term debt divided by the net asset value of the plant	Indicates existing debt leverage of capital assets
Debt to FADS (x)	Total amount of utility long-term debt divided by the total funds available for debt service	Indicates existing debt leverage relative to existing funds available for debt service
Debt to Equity (x)	Total amount of utility long-term debt divided by unrestricted net assets	Indicates existing debt leverage relative to system equity
Total Outstanding Long-Term Debt Per Customer (\$)*	Total amount of utility long-term debt divided by the total number of utility customers (for a combined utility, the aggregate number of water and sewer accounts are used)	Indicates the existing debt burden attributable to ratepayers (principal only)
Total Outstanding Long-Term Debt Per Capita (\$)*	Total amount of utility long-term debt divided by total population served by the utility	Indicates the existing debt burden of an utility attributable to each person served by the utility (principal only)
Ten-Year Principal Payout (%)	Percentage of principal amortizing within 10 years	Indicates longevity of system debt
Twenty-Year Principal Payout (%)	Percentage of principal amortizing within 20 years	Indicates longevity of system debt
Projected Debt Per Customer – Year Five (\$)*	Total projected outstanding system debt (existing debt less scheduled amortization plus planned issuances) divided by total outstanding projected customers five years from the date of the rating (for a combined utility, the aggregate number of water and sewer accounts are used and are inflated by anticipated growth)	Indicates the total debt burden to ratepayers five years from the date of the rating (principal only)
Projected Debt Per Capita – Year Five (\$)*	Total projected outstanding system debt (existing debt less scheduled amortization plus planned issuances) divided by total projected population served by the utility (population is inflated based on anticipated growth)	Indicates the total debt burden of an utility to each person served by the utility five years from the date of the rating (principal only)
Individual Water/Sewer Utility Average Monthly Residential Bill (\$)	Average monthly residential bill for individual utilities; when billing was not calculated on a monthly basis, it was converted to a monthly amount for standardization	Indicates the monthly cost of service to residential customers
Individual Water/Sewer Utility Average Annual Bill as % of MHI	Average monthly residential bill for individual utilities times 12, divided by the most recent yearly MHI as reported by the U.S. Census Bureau	Indicates the annual burden for cost of service to ratepayers
Combined Water/Sewer Utility Average Monthly Residential Bill (\$)	Average monthly residential bill for combined utilities; when billing was not calculated on a monthly basis, it was converted to a monthly amount for standardization	Indicates the monthly cost of service to residential customers
Combined Water/Sewer Utility Average Annual Bill as % of MHI	Average monthly residential bill for combined utilities times 12, divided by the most recent yearly MHI as reported by the U.S. Census Bureau	Indicates the annual burden for cost of service to ratepayers

*Indicates key ratio. MHI – Median household income. CIP – Capital improvement program. FADS – Funds available for debt service.

Appendix A: Water and Sewer Median Definitions (continued)

Median	Definition	Significance
Average Annual Projected Water Rate Increases (%)	Sum of planned annual rate increases divided by the number of years over which increases are forecast	Indicates the future expected burden for cost of service to ratepayers
Average Annual Projected Sewer Rate Increases (%)	Sum of planned annual rate increases divided by the number of years over which increases are forecast	Indicates the future expected burden for cost of service to ratepayers
Three-Year Historical Average Senior Lien ADS Coverage (x) ^a	Most recent three-year historical average of annual revenues available for debt service divided by respective senior lien debt service for the year	Indicates the historical trend in senior lien ADS coverage
Senior Lien ADS Coverage (x) ^a	Current-year revenues available for debt service divided by current-year senior lien debt service	Indicates the financial margin to meet current senior lien ADS with current revenues available for debt service
Senior Lien ADS Coverage Excluding Connection Fees (x)	Current-year revenues available for debt service, excluding one-time revenues such as connection fees, divided by current-year senior lien debt service	Indicates the financial margin to meet current senior lien ADS with current revenues available for debt service, excluding one-time revenues such as connection fees
Senior Lien ADS Coverage Net of Transfers Out (x)	Current-year revenues available for debt service, excluding operating transfers out, divided by current-year senior lien debt service	Indicates the financial margin to meet current senior lien ADS with current revenues available for debt service, excluding transfers out
Minimum Projected Senior Lien ADS Coverage (x) ^a	Minimum debt service coverage projected typically over the ensuing five-year period, based on revenues available for debt service in any given fiscal year, divided by the respective senior lien debt service amount for that fiscal year	Indicates the financial margin during the year in which future senior lien ADS coverage is projected to be the lowest
Senior Lien MADS Coverage (x)	Current-year revenues available for debt service divided by projected senior lien MADS	Indicates the financial margin to meet projected senior lien MADS with current revenues available for debt service
Senior Lien Debt Service as % of Gross Revenues	Current-year senior lien debt service divided by current-year gross revenues	Indicates the level of annual senior lien debt service burden on system operations
Three-Year Historical Average All-In ADS Coverage (x) ^a	Most recent three-year historical average of annual revenues available for debt service divided by respective total debt service for the year	Indicates the historical trend in total ADS coverage
All-In ADS Coverage (x) ^a	Current-year revenues available for debt service divided by current-year total debt service	Indicates the financial margin to meet current total ADS with current revenues available for debt service
All-In ADS Coverage Excluding Connection Fees (x)	Current-year revenues available for debt service, excluding one-time revenues such as connection fees, divided by current-year total debt service	Indicates the financial margin to meet current total ADS with current revenues available for debt service, excluding one-time revenues such as connection fees
All-In ADS Coverage Net of Transfers Out (x)	Current-year revenues available for debt service, excluding operating transfers out, divided by current-year total debt service	Indicates the financial margin to meet current total ADS with current revenues available for debt service, excluding transfers out
Minimum Projected All-In ADS Coverage (x) ^a	Minimum debt service coverage projected typically over the ensuing five-year period, based on revenues available for debt service in any given fiscal year, divided by the respective total debt service amount for that fiscal year	Indicates the financial margin during the year in which future total ADS coverage is projected to be the lowest
All-In MADS Coverage (x)	Current-year revenues available for debt service divided by projected total MADS	Indicates the financial margin to meet projected total MADS with current revenues available for debt service
All-In Debt Service as % of Gross Revenues	Current-year total debt service divided by current-year gross revenues	Indicates the level of annual total debt service burden on system operations
Operating Margin (%)	Operating revenues minus operating expenditures plus depreciation, divided by operating revenues	Indicates financial margin to pay operating expenses
Operating Cash Flow Ratio (x)	Cash flows from current operations divided by current liabilities	Indicates the strength of existing cash flows to meet near-term obligations
Operating Revenue Growth – Current Year (%)	Most recent audited operating revenues divided by the immediately prior year operating revenues minus one	Indicates revenue gains
Operating Revenue Growth – Three Year Average (%)	Average of operating revenues divided by the immediately prior year operating revenues minus one for the three most recent audited fiscal years	Indicates revenue gains
Operating Expenditure Growth – Current Year (%)	Most recent audited operating expenses divided by the immediately prior year operating expenses minus one	Indicates expenditure pressures

^aIndicates key ratio. ADS – Annual debt service. MADS – Maximum annual debt service.

Appendix A: Water and Sewer Median Definitions (continued)

Median	Definition	Significance
Operating Expenditure Growth – Three-Year Average (%)	Average of operating expenses divided by the immediately prior year operating expenses minus 1 for the three most recent audited fiscal years	Indicates expenditure pressures
Days of Operating Revenues in Accounts Receivable	Current unrestricted accounts receivable divided by operating revenues, divided by 365	Indicates rate at which customer revenues are received
Days Cash on Hand*	Current unrestricted cash and investments plus any restricted cash and investments (if available for general system purposes), divided by operating expenditures minus depreciation, divided by 365	Indicates financial flexibility to pay near-term obligations
Days of Working Capital*	Current unrestricted assets plus any restricted cash and investments (if available for general system purposes), minus current liabilities payable from unrestricted assets, divided by operating expenditures minus depreciation, divided by 365	Indicates financial flexibility to pay near-term obligations
Quick Ratio	Current cash plus current receivables divided by current liabilities	Indicates financial flexibility to pay near-term obligations
Current Ratio	Current assets divided by current liabilities	Indicates financial flexibility to pay near-term obligations
Free Cash as % of Depreciation*	Current surplus revenues after payment of operating expenses, debt service, and operating transfers out divided by current year depreciation	Indicates annual financial capacity to maintain facilities at current level of service from existing cash flows
Capital Spending as % of Depreciation	Current year additions to property, plant, and equipment divided by current year depreciation	Indicates annual improvements made to system facilities relative to level of annual depreciation to effectively determine if facilities are being maintained

*Indicates key ratio.

Appendix B: Utility Obligor Included in 2014 Water and Sewer Medians

	Date of Senior-Most Lien Rating	Long-Term Rating	Rating Outlook
Arkansas			
Pine Bluff	11/2/12	AA-	Stable
Arizona			
Lake Havasu City	7/19/13	A	Stable
Pima County	11/1/12	AA	Stable
Pima County Metropolitan Domestic Water Improvement District	11/13/12	AA-	Stable
Surprise (Sewer)	3/13/13	A-	Stable
Tucson	5/22/13	AA	Stable
Yuma	5/22/13	AA-	Stable
California			
Anaheim (Water)	9/19/12	AAA	Stable
Burbank	10/16/12	AAA	Stable
Contra Costa Water District	6/14/13	AA+	Negative
Cucamonga Valley Water District	10/9/12	AA	Stable
Dublin San Ramon Services District	12/10/12	AA	Stable
East Bay Municipal Utility District (Water)	11/2/12	AA+	Stable
East Bay Municipal Utility District (Sewer)	12/19/12	AA+	Stable
East Valley Water District	5/22/13	AA-	Stable
Eastern Municipal Water District	3/7/13	AA+	Stable
Elsinore Valley Municipal Water District	5/3/13	AA-	Positive
Fresno (Water)	11/9/12	AA	Negative
Fresno (Sewer)	11/9/12	AA	Negative
Glendale Water & Power	11/28/12	A+	Negative
Helix Water District	8/21/13	AA+	Stable
Hillsborough	7/9/13	AA+	Stable
Indian Wells Valley Water District	6/3/13	AA-	Stable
Irvine Ranch Water District	3/13/13	AAA	Stable
Lake Arrowhead Community Services District	8/21/13	AA	Positive
Lomita	7/11/13	A	Negative
Los Angeles	4/18/13	AA+	Stable
Los Angeles Department of Water & Power	7/17/13	AA	Stable
Lynwood Utility Authority	7/9/13	A	Stable
Manteca	6/7/13	AA-	Stable
Mesa Consolidated Water District	10/22/12	AAA	Stable
Oakland	8/16/13	AA-	Positive
Orange County Sanitation District	10/10/12	AAA	Stable
Padre Dam Municipal Water District	7/15/13	AA	Stable
Palmdale Water District	4/29/13	A+	Stable
Rancho California Water District	12/20/12	AA+	Stable
Riverside	4/16/13	AA+	Stable
Sacramento (Water)	3/8/13	AA-	Stable
Sacramento (Sewer)	6/13/13	AA	Stable
San Jose	3/22/13	AAA	Stable
San Juan Capistrano	4/22/13	A	Stable
Sonoma Valley County Sanitation District	12/3/12	AA-	Stable
South Coast Water District	4/1/13	AA+	Stable
Vallejos Water District	7/24/13	AA+	Stable
Yuba City	4/24/13	AA-	Stable
Colorado			
Arvada	3/1/13	AAA	Stable
Fort Collins	1/29/13	AA+	Stable
District of Columbia			
District of Columbia Water & Sewer	6/25/13	AA	Stable
Delaware			
Dover	7/24/13	AA	Positive
Florida			
Boca Raton	1/17/13	AAA	Stable
Cape Coral	5/9/13	A	Stable
Citrus County	1/3/13	AA-	Stable
Clearwater	5/20/13	AA-	Stable

Appendix B: Utility Obligors Included in 2014 Water and Sewer Medians (continued)

	Date of Senior-Most Lien Rating	Long-Term Rating	Rating Outlook
Florida (continued)			
Collier County Water-Sewer District	6/19/13	AA+	Positive
Deltona	8/15/13	A+	Stable
Florida Community Services Corp.	8/22/13	AA	Stable
Florida Governmental Utility Authority (Lehigh System)	11/27/12	A	Stable
Florida Governmental Utility Authority (Lake Aqua Utility System)	3/8/13	A-	Stable
Florida Governmental Utility Authority (Unified Utility System)	3/8/13	A-	Stable
Florida Keys Aqueduct Authority	3/8/13	AA-	Stable
Fort Walton Beach	8/1/13	AA	Stable
Hernando County	5/20/13	AA-	Stable
Hialeah	4/16/13	A+	Stable
Hillsborough County	9/6/12	AAA	Stable
Indian River County	2/28/13	AAA	Stable
JEA	7/18/13	AA	Stable
Jupiter	2/1/13	AAA	Stable
Lee County	6/24/13	AA	Stable
Leesburg	4/2/13	AA-	Stable
Marco Island	8/21/13	AA-	Stable
Melbourne	1/10/13	AA-	Stable
North Miami Beach	11/27/12	A+	Stable
North Sumter County Utility Dependent District	11/7/12	A	Stable
Orlando	12/21/12	AAA	Stable
Palm Beach County	1/18/13	AAA	Stable
Palm Coast	5/21/13	A+	Stable
Pasco County	7/1/13	AA	Stable
Pinellas Park	5/16/13	AA	Stable
Polk County	11/16/12	AA-	Stable
Sanford	3/4/13	A+	Stable
Sarasota	6/19/13	AA	Stable
St. Augustine	1/28/13	AA-	Stable
St. Petersburg	12/5/12	AA	Stable
Tamarac	5/31/13	AA	Stable
Tampa	7/22/13	AA+	Positive
Tohopekalgia Water Authority	5/22/13	AA+	Stable
Venice	12/6/12	AA	Stable
Wellington Village	6/26/13	AA+	Stable
West Palm Beach	5/1/13	AA-	Stable
Winter Park	2/27/13	AA-	Stable
Georgia			
Athens-Clarke County Unified Government	2/6/13	AA+	Stable
Atlanta	8/19/13	A+	Stable
Cobb County	6/24/13	AAA	Stable
Columbia County	7/25/13	AAA	Stable
Fulton County	2/27/13	AA-	Stable
Hawaii			
Honolulu (City & County)	9/14/12	AA	Stable
Illinois			
Chicago (Sewer - Second Lien)	4/23/13	AA	Positive
Chicago (Water)	4/23/13	AA+	Positive
DuPage County	1/23/13	AAA	Stable
Melrose Park	3/4/13	A+	Stable
Springfield Metro Sanitary District	7/1/13	AA-	Stable
Indiana			
Indianapolis (Water)	7/23/13	A	Stable
Kentucky			
Louisville & Jefferson County Metropolitan Sewer District	4/11/13	AA-	Stable
Louisiana			
East Baton Rouge Sewerage Commission	4/17/13	AA	Stable

Appendix B: Utility Obligors Included in 2014 Water and Sewer Medians (continued)

	Date of Senior-Most Lien Rating	Long-Term Rating	Rating Outlook
Michigan			
Battle Creek	12/19/12	AA-	Stable
Missouri			
Metropolitan St. Louis Sewer District	10/12/12	AA+	Stable
North Carolina			
Buncombe County Metropolitan Sewerage District	3/26/13	AA+	Stable
Cary	12/21/12	AAA	Stable
Charlotte	6/27/13	AAA	Stable
Dare County	5/13/13	AA-	Stable
Durham	4/8/13	AAA	Stable
Gastonia	4/4/13	AA-	Stable
Raleigh	4/23/13	AAA	Stable
Salisbury	10/11/12	AA-	Stable
Sanford	11/20/12	AA-	Stable
Union County	7/18/13	AA	Stable
Wilson	5/13/13	AA	Stable
Winston-Salem	9/28/12	AA+	Negative Watch
New Mexico			
Albuquerque Bernalillo County Water Utility Authority	6/6/13	AA	Stable
Rio Rancho	7/1/13	A+	Stable
New York			
New York City Municipal Water Finance Authority	6/12/13	AA+	Stable
Suffolk County Water Authority	1/15/13	AAA	Stable
Ohio			
Canal Winchester	12/14/12	A+	Stable
Columbus	4/4/13	AA+	Stable
Oregon			
Eugene	5/22/13	AA+	Stable
Pennsylvania			
Philadelphia	6/27/13	A+	Stable
South Carolina			
Greenville	7/17/13	AAA	Stable
Tennessee			
Clarksville	6/7/13	AA-	Stable
Memphis	10/29/12	AA-	Stable
Texas			
Arlington	6/3/13	AAA	Stable
Burleson	9/14/12	AA-	Stable
Cleburne	12/4/12	AA-	Stable
Corpus Christi	12/11/12	AA-	Stable
Eagle Pass	5/10/13	A	Stable
El Paso	11/15/12	AA+	Stable
Fort Worth	4/10/13	AA	Stable
Garland	4/25/13	AA+	Negative
Grand Prairie	3/8/13	AA+	Stable
Killeen	3/15/13	AA	Stable
Laredo	4/1/13	AA-	Negative
Lewisville	5/3/13	AAA	Stable
North Texas Municipal Water District – Panther Creek (Frisco)	3/8/13	A+	Stable
Pasadena	9/14/12	AA-	Stable
Pearland	2/11/13	AA-	Stable
San Antonio	3/7/13	AA+	Stable
San Antonio – Special Purpose District	5/24/13	A+	Stable
Sugar Land	9/27/12	AA+	Stable

Appendix B: Utility Obligors Included in 2014 Water and Sewer Medians (continued)

	Date of Senior-Most Lien Rating	Long-Term Rating	Rating Outlook
Utah			
Cedar Hills	11/28/12	AA-	Stable
Clearfield City	11/30/12	AA-	Positive
North Salt Lake	11/12/12	A-	Negative
South Jordan	4/15/13	AA	Stable
South Valley Sewer District	5/28/13	AA	Stable
St. George (Utah Water Finance Agency)	2/25/13	AA-	Stable
West Bountiful	1/25/13	A+	Stable
Virginia			
Chesterfield County	3/14/13	AAA	Stable
Fairfax County Water Authority	2/8/13	AAA	Stable
Hampton Roads Sanitation District	12/5/12	AA+	Stable
Henrico County	2/5/13	AAA	Negative
Loudoun County Sanitation Authority	6/6/13	AAA	Stable
Richmond	4/8/13	AA	Stable
Spotsylvania County	7/1/13	AA-	Stable
Washington			
Douglas County Sewer District No. 1	12/17/12	A+	Stable
Tacoma	8/30/13	AA+	Stable

Appendix C: 2014 Regional Medians

	Far West	Midwest	Northeast	Southeast	Southwest	All Credits
Community Characteristics/Customer Growth and Concentration						
Population	145,000	916,924	2,200,000	155,082	138,390	149,025
MHI (\$)	59,830	46,877	50,285	47,282	45,850	49,655
Total Water Customers	23,253	28,905	389,724	42,195	41,422	40,431
Annual Growth (%)	0.1	0.5	0.4	0.7	1.3	0.6
Total Sewer Customers	32,255	58,326	723,042	33,035	36,688	35,210
Annual Growth (%)	0.4	0.3	0.2	0.6	1.1	0.6
Top 10 Customers as % of Revenues	7	8	10	9	8	8
Capacity						
Age of Plant (Years)	13	17	14	13	12	13
Water Treatment Capacity Remaining (%)	59	50	59	55	58	58
Sewer Treatment Capacity Remaining (%)	40	16	25	49	47	47
Capital Demands and Debt Policies						
Average Annual CIP Costs Per Customer (\$)	238	306	260	210	219	226
CIP Debt Financed (%)	11	42	69	28	63	32
Total Outstanding Debt to Net Plant Assets (%)	39	72	70	40	47	43
Debt to FADS (x)	5.6	10.0	9.8	5.4	6.6	6.1
Debt to Equity (x)	2.7	2.3	3.6	3.1	5.1	3.3
Total Outstanding Long-Term Debt Per Customer (\$) ^a	1,721	1,566	1,903	1,383	1,745	1,581
Total Outstanding Long-Term Debt Per Capita (\$) ^a	571	474	394	395	571	459
Ten-Year Principal Payout (%)	34	39	14	38	59	39
Twenty-Year Principal Payout (%)	74	70	57	82	99	80
Projected Debt Per Customer – Year Five (\$) ^a	2,010	2,496	1,853	1,704	1,536	1,868
Projected Debt Per Capita – Year Five (\$) ^a	496	711	771	480	558	519
Charges and Rate Affordability						
Individual Water/Sewer Utility Average Monthly Residential Bill (\$)	42	27	28	37	33	36
Individual Water/Sewer Utility Average Annual Bill as % of MHI	0.9	0.5	0.4	1.0	0.8	0.9
Combined Water/Sewer Utility Average Monthly Residential Bill (\$)	82	60	58	70	56	68
Combined Water/Sewer Utility Average Annual Bill as % of MHI	1.5	1.7	1.5	1.8	1.4	1.6
Average Annual Projected Water Rate Increases (%)	5.1	6.2	4.8	3.0	4.3	4.0
Average Annual Projected Sewer Rate Increases (%)	4.0	6.5	5.7	3.5	3.6	3.7
Coverage and Financial Performance/Cash and Balance Sheet Considerations						
Three-Year Historical Average Senior Lien ADS Coverage (x) ^a	2.5	3.4	3.3	2.6	2.3	2.5
Senior Lien ADS Coverage (x) ^a	2.6	3.3	3.9	2.6	2.3	2.7
Senior Lien ADS Coverage Excluding Connection Fees (x)	2.4	3.3	3.9	2.4	2.2	2.5
Senior Lien ADS Coverage Net of Transfers Out (x)	2.5	3.1	3.4	2.4	2.1	2.4
Minimum Projected Senior Lien ADS Coverage (x) ^a	2.2	3.2	2.5	2.0	1.8	2.1
Senior Lien MADS Coverage (x)	2.7	2.0	N.A.	2.9	2.0	2.1
Senior Lien Debt Service as % of Gross Revenues	16	9	13	17	21	16
Three-Year Historical Average All-In ADS Coverage (x) ^a	2.2	1.5	1.6	2.0	1.9	2.0
All-In ADS Coverage (x) ^a	2.2	1.6	1.8	2.1	1.9	2.1
All-In ADS Coverage Excluding Connection Fees (x)	2.1	1.5	1.8	2.0	1.8	1.9
All-In ADS Coverage Net of Transfers Out (x)	1.9	1.6	1.8	2.1	1.7	1.9
Minimum Projected All-In ADS Coverage (x) ^a	1.9	1.5	1.6	1.7	1.4	1.7
All-In MADS Coverage (x)	2.0	1.3	1.1	2.0	1.6	1.7
All-In Debt Service as % of Gross Revenues	19	26	22	21	26	21
Operating Margin (%)	29	39	39	39	43	39
Operating Cash Flow Ratio (x)	1.0	0.6	1.3	1.6	1.3	1.3
Operating Revenue Growth – Current Year (%)	5.8	3.7	5.5	5.6	5.5	5.5
Operating Revenue Growth – Three-Year Average (%)	5.5	5.5	7.2	5.0	6.1	5.5
Operating Expenditure Growth – Current Year (%)	2.4	2.7	0.5	2.0	1.3	2.0
Operating Expenditure Growth – Three-Year Average (%)	2.5	4.1	1.2	0.7	3.3	1.9
Days of Operating Revenues in Accounts Receivable	46	71	35	42	47	46
Days Cash on Hand ^a	426	165	299	479	330	404
Days of Working Capital ^a	414	180	241	521	366	414
Quick Ratio	2.9	2.3	1.9	4.4	2.8	3.4
Current Ratio	3.4	3.1	2.0	5.9	3.7	4.1
Free Cash as % of Depreciation ^a	102	78	91	89	81	91
Capital Spending as % of Depreciation	170	243	257	102	146	134

^aIndicates key ratio. ADS – Annual debt service. CIP – Capital improvement program. FADS – Funds available for debt service. MADS – Maximum annual debt service. MHI – Median household income. N.A. – Not available

Appendix D: 2014 Medians Relative to System Size

	System Size Classification			All
	Large	Medium	Small	Credits
Community Characteristics/Customer Growth and Concentration				
Population	983,641	200,000	52,760	149,025
MHI (\$)	49,457	51,144	48,042	49,655
Total Water Customers	226,916	55,628	17,387	40,431
Annual Growth (%)	0.7	0.8	0.3	0.6
Total Sewer Customers	234,071	55,211	14,900	35,210
Annual Growth (%)	0.5	0.9	0.4	0.6
Top 10 Customers as % of Revenues	8	6	12	8
Capacity				
Age of Plant (Years)	14	13	13	13
Water Treatment Capacity Remaining (%)	60	55	58	58
Sewer Treatment Capacity Remaining (%)	37	51	49	47
Capital Demands and Debt Policies				
Average Annual CIP Costs Per Customer (\$)	241	234	199	226
CIP Debt Financed (%)	52	38	11	32
Total Outstanding Debt to Net Plant Assets (%)	57	37	42	43
Debt to FADS (x)	8.3	5.6	5.3	6.1
Debt to Equity (x)	5.8	2.9	2.8	3.3
Total Outstanding Long-Term Debt Per Customer (\$) ^a	1,951	1,550	1,592	1,581
Total Outstanding Long-Term Debt Per Capita (\$) ^a	494	388	518	459
Ten-Year Principal Payout (%)	34	38	42	39
Twenty-Year Principal Payout (%)	75	76	92	80
Projected Debt Per Customer Capita – Year Five (\$) ^a	2,486	1,919	1,477	1,868
Projected Debt Per Capita – Year Five (\$) ^a	761	496	454	519
Charges and Rate Affordability				
Individual Water/Sewer Utility Average Monthly Residential Bill (\$)	30	35	46	36
Individual Water/Sewer Utility Average Annual Bill as % of MHI	0.7	0.9	0.9	0.9
Combined Water/Sewer Utility Average Monthly Residential Bill (\$)	64	67	72	68
Combined Water/Sewer Utility Average Annual Bill as % of MHI	1.5	1.6	1.7	1.6
Average Annual Projected Water Rate Increases (%)	4.5	4.5	3.1	4.0
Average Annual Projected Sewer Rate Increases (%)	5.4	4.2	3.0	3.7
Coverage and Financial Performance/Cash and Balance Sheet Considerations				
Three-Year Historical Average Senior Lien ADS Coverage (x) ^a	2.3	2.8	2.5	2.5
Senior Lien ADS Coverage (x) ^a	2.4	2.9	2.7	2.7
Senior Lien ADS Coverage Excluding Connection Fees (x)	2.4	2.4	2.5	2.5
Senior Lien ADS Coverage Net of Transfers Out (x)	2.3	2.5	2.4	2.4
Minimum Projected Senior Lien ADS Coverage (x) ^a	2.1	2.1	2.1	2.1
Senior Lien MADS Coverage (x)	1.8	2.6	2.2	2.1
Senior Lien Debt Service as % of Gross Revenues	19	14	18	16
Three-Year Historical Average All-In ADS Coverage (x) ^a	1.6	2.1	2.0	2.0
All-In ADS Coverage (x) ^a	1.6	2.2	2.1	2.1
All-In ADS Coverage Excluding Connection Fees (x)	1.6	2.0	2.0	1.9
All-In ADS Coverage Net of Transfers Out (x)	1.6	2.1	1.9	1.9
Minimum Projected All-In ADS Coverage (x) ^a	1.6	1.8	1.8	1.7
All-In MADS Coverage (x)	1.4	2.0	2.0	1.7
All-In Debt Service as % of Gross Revenues	27	20	21	21
Operating Margin (%)	43	38	39	39
Operating Cash Flow Ratio (x)	1.2	1.3	1.5	1.3
Operating Revenue Growth – Current Year (%)	5.8	5.8	4.7	5.5
Operating Revenue Growth – Three-Year Average (%)	6.3	5.1	5.5	5.5
Operating Expenditure Growth – Current Year (%)	2.4	2.7	1.7	2.0
Operating Expenditure Growth –Three-Year Average (%)	2.6	2.4	1.2	1.9
Days of Operating Revenues in Accounts Receivable	40	48	42	46
Days Cash on Hand ^a	373	458	404	404
Days of Working Capital ^a	292	510	400	414
Quick Ratio	2.5	4.5	3.5	3.4
Current Ratio	2.8	5.8	4.2	4.1
Free Cash as % of Depreciation ^a	81	101	95	91
Capital Spending as % of Depreciation	182	146	100	134

^aIndicates key ratio. ADS – Annual debt service. CIP – Capital improvement program. FADS – Funds available for debt service. MADS – Maximum annual debt service. MHI – Median household income.

Appendix E: Year-Over-Year Sectorwide Medians Comparison

	2007	2008	2009	2010	2011	2012	2013	2014
Community Characteristics/Customer Growth and Concentration								
Population	119,037	234,103	162,338	144,162	150,142	153,272	172,778	149,025
MHI (\$)	40,656	45,733	45,820	47,179	50,146	50,294	51,518	49,655
Total Water Customers	37,299	61,076	50,410	37,264	40,755	39,441	48,169	40,431
Annual Growth (%)	2.5	2.4	1.6	1.7	1.4	0.5	0.4	0.6
Total Sewer Customers	32,903	64,039	48,000	40,306	48,949	34,984	50,296	35,210
Annual Growth (%)	2.8	2.5	1.9	1.5	1.7	0.6	0.8	0.6
Top 10 Customers as % of Revenues	9	8	8	7	7	8	8	8
Capacity								
Age of Plant (Years)	13	13	12	13	12	13	13	13
Water Treatment Capacity Remaining (%)	53	50	50	54	53	58	58	58
Sewer Treatment Capacity Remaining (%)	32	35	35	38	42	41	47	47
Capital Demands and Debt Policies								
Average Annual CIP Costs Per Customer (\$)	266	348	356	273	297	248	251	226
CIP Debt Financed (%)	62	63	66	60	49	45	39	32
Total Outstanding Debt to Net Plant Assets (%)	40	39	39	43	44	45	47	43
Debt to FADS (x)	—	—	4.9	5.5	6.4	6.7	6.8	6.1
Debt to Equity (x)	—	—	—	—	3.2	3.5	3.8	3.3
Total Outstanding Long-Term Debt Per Customer (\$) ^a	1,012	1,185	1,454	1,297	1,527	1,611	1,650	1,581
Total Outstanding Long-Term Debt Per Capita (\$) ^a	—	—	379	375	425	458	460	459
Ten-Year Principal Payout (%)	40	30	40	39	38	39	38	39
Twenty-Year Principal Payout (%)	87	70	82	80	79	80	78	80
Projected Debt Per Customer – Year Five (\$) ^a	1,599	1,808	2,036	1,774	1,877	1,803	2,024	1,868
Projected Debt Per Capita – Year Five (\$) ^a	—	—	607	446	531	532	566	519
Charges and Rate Affordability								
Individual Water/Sewer Utility Average Monthly Residential Bill (\$)	23	29	28	28	35	33	37	36
Individual Water/Sewer Utility Average Annual Bill as % of MHI	0.6	0.7	0.8	0.7	0.8	0.7	0.8	0.9
Combined Water/Sewer Utility Average Monthly Residential Bill (\$)	47	56	56	59	61	61	65	68
Combined Water/Sewer Utility Average Annual Bill as % of MHI	1.4	1.4	1.3	1.5	1.4	1.5	1.5	1.6
Average Annual Projected Water Rate Increases (%)	4.1	4.4	4.9	5.3	5.0	4.8	4.4	4.0
Average Annual Projected Sewer Rate Increases (%)	5.0	5.1	5.9	5.9	5.8	5.1	5.0	3.7
Coverage and Financial Performance/Cash and Balance Sheet Considerations								
Three-Year Historical Average Senior Lien ADS Coverage (x) ^a	—	2.7	3.0	2.9	2.7	2.5	2.4	2.5
Senior Lien ADS Coverage (x) ^a	2.3	2.8	2.9	2.6	2.3	2.2	2.4	2.7
Senior Lien ADS Coverage Excluding Connection Fees (x)	2.0	2.3	2.3	2.4	2.1	2.1	2.3	2.5
Senior Lien ADS Coverage Net of Transfers Out (x)	—	—	—	—	2.1	2.1	2.3	2.4
Minimum Projected Senior Lien ADS Coverage (x) ^a	1.8	1.9	1.9	1.9	1.8	1.9	1.8	2.1
Senior Lien MADS Coverage (x)	1.9	2.0	2.1	2.4	1.9	2.1	2.0	2.1
Senior Lien Debt Service as % of Gross Revenues	18	16	15	16	17	17	17	16
Three-Year Historical Average All-In ADS Coverage (x) ^a	—	—	2.1	2.4	2.3	2.1	2.0	2.0
All-In ADS Coverage (x) ^a	—	2.2	2.3	2.2	1.9	1.8	2.0	2.1
All-In ADS Coverage Excluding Connection Fees (x)	—	—	1.8	1.9	1.7	1.7	1.8	1.9
All-In ADS Coverage Net of Transfers Out (x)	—	—	—	—	1.8	1.7	1.8	1.9
Minimum Projected All-In ADS Coverage (x) ^a	—	—	1.7	1.6	1.5	1.6	1.5	1.7
All-In MADS Coverage (x)	—	—	1.8	2.0	1.7	1.6	1.6	1.7
All-In Debt Service as % of Gross Revenues	—	20	21	18	20	22	21	21
Operating Margin (%)	34	36	33	32	33	36	39	39
Operating Cash Flow Ratio (x)	—	—	1.1	1.0	1.0	1.1	1.3	1.3
Operating Revenue Growth – Current Year (%)	5.4	8.0	7.1	4.5	3.6	3.3	5.8	5.5
Operating Revenue Growth – Three-Year Average (%)	—	—	6.5	6.0	5.3	4.3	4.7	5.5
Operating Expenditure Growth – Current Year (%)	5.0	8.4	7.3	6.2	4.3	4.1	1.0	2.0
Operating Expenditure Growth – Three-Year Average (%)	—	—	7.5	7.7	8.1	4.1	2.7	1.9
Days of Operating Revenues in Accounts Receivable	45	45	47	48	46	47	46	46
Days Cash on Hand ^a	266	313	331	344	328	310	417	404
Days of Working Capital ^a	279	316	345	361	331	343	373	414
Quick Ratio	—	—	2.9	3.3	2.9	2.9	3.1	3.4
Current Ratio	—	—	3.3	3.8	3.3	3.9	3.8	4.1
Free Cash as % of Depreciation ^a	—	—	122	107	83	74	82	91
Capital Spending as % of Depreciation	223	264	240	214	219	187	167	134

^aIndicates key ratio. ADS – Annual debt service. CIP – Capital improvement program. FADS – Funds available for debt service. MADS – Maximum annual debt service. MHI – Median household income.

Appendix F: 2014 Medians Relative to Rating Category

	Rating Category			All Credits
	AAA	AA	A	
Community Characteristics/Customer Growth and Concentration				
Population	328,169	150,653	76,499	149,025
MHI (\$)	65,144	48,266	47,776	49,655
Total Water Customers	79,397	40,431	28,905	40,431
Annual Growth (%)	0.9	0.6	0.2	0.6
Total Sewer Customers	90,068	33,292	18,063	35,210
Annual Growth (%)	0.8	0.6	0.4	0.6
Top 10 Customers as % of Revenues	6	9	6	8
Capacity				
Age of Plant (Years)	14	14	10	13
Water Treatment Capacity Remaining (%)	61	58	52	58
Sewer Treatment Capacity Remaining (%)	49	47	45	47
Capital Demands and Debt Policies				
Average Annual CIP Costs Per Customer (\$)	190	243	159	226
CIP Debt Financed (%)	22	40	22	32
Total Outstanding Debt to Net Plant Assets (%)	24	47	54	43
Debt to FADS (x)	4.0	6.4	6.6	6.1
Debt to Equity (x)	1.8	3.4	5.7	3.3
Total Outstanding Long-Term Debt Per Customer (\$) ^a	1,165	1,812	1,963	1,581
Total Outstanding Long-Term Debt Per Capita (\$) ^a	285	514	558	459
Ten-Year Principal Payout (%)	46	39	32	39
Twenty-Year Principal Payout (%)	90	77	74	80
Projected Debt Per Customer Year Five (\$) ^a	1,068	1,973	2,041	1,868
Projected Debt Per Capita Year Five (\$) ^a	254	558	584	519
Charges and Rate Affordability				
Individual Water/Sewer Utility Average Monthly Residential Bill (\$)	37	35	46	36
Individual Water/Sewer Utility Average Annual Bill as % MHI	0.6	0.9	1.0	0.9
Combined Water/Sewer Utility Average Monthly Residential Bill (\$)	62	70	63	68
Combined Water/Sewer Utility Average Annual Bill as % of MHI	1.2	1.6	1.8	1.6
Average Annual Projected Water Rate Increases (%)	3.0	4.3	3.3	4.0
Average Annual Projected Sewer Rate Increases (%)	5.0	3.7	3.1	3.7
Coverage and Financial Performance/Cash and Balance Sheet Considerations				
Three-Year Historical Average Senior Lien ADS Coverage (x) ^a	3.4	2.5	2.1	2.5
Senior Lien ADS Coverage (x) ^a	3.4	2.6	2.1	2.7
Senior Lien ADS Coverage Excluding Connection Fees (x)	3.1	2.4	2.0	2.5
Senior Lien ADS Coverage Net of Transfers Out (x)	3.2	2.4	2.1	2.4
Minimum Projected Senior Lien ADS Coverage (x) ^a	3.2	2.1	1.5	2.1
Senior Lien MADS Coverage (x)	2.7	2.1	2.0	2.1
Senior Lien Debt Service as % of Gross Revenues	12	16	24	16
Three-Year Historical Average All-In ADS Coverage (x) ^a	2.5	2.0	1.6	2.0
All-In ADS Coverage (x) ^a	2.6	2.0	1.7	2.1
All-In ADS Coverage Excluding Connection Fees (x)	2.3	1.8	1.6	1.9
All-In ADS Coverage Net of Transfers Out (x)	2.4	1.8	1.6	1.9
Minimum Projected All-In ADS Coverage (x) ^a	2.2	1.7	1.4	1.7
All-In MADS Coverage (x)	2.3	1.6	1.9	1.7
All-In Debt Service as % of Gross Revenues	18	22	24	21
Operating Margin (%)	38	39	48	39
Operating Cash Flow Ratio (x)	1.2	1.4	1.3	1.3
Operating Revenue Growth Current Year (%)	4.7	5.8	5.2	5.5
Operating Revenue Growth Three-Year Average (%)	5.3	5.0	7.2	5.5
Operating Expenditure Growth Current Year (%)	2.4	2.7	0.0	2.0
Operating Expenditure Growth Three-Year Average (%)	2.4	1.7	2.6	1.9
Days of Operating Revenues in Accounts Receivable	39	45	60	46
Days Cash on Hand ^a	671	398	254	404
Days of Working Capital ^a	621	410	275	414
Quick Ratio	4.2	3.4	1.9	3.4
Current Ratio	5.2	4.1	2.0	4.1
Free Cash as % of Depreciation ^a	114	87	102	91
Capital Spending as % of Depreciation	127	148	122	134

^aIndicates key ratio. ADS – Annual debt service. CIP – Capital improvement program. FADS – Funds available for debt service. MADS – Maximum annual debt service. MHI – Median household income.

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Response to Request No. 3-82

Collection		Diameter	Owner	Operational Status	Feet	Miles
Record Count						
9		1.25	CITY	IS	1,816	0.34
1		1.25	PRIV	IS	12	0.00
105		1.50	CITY	IS	14,545	2.75
20		1.50	PRIV	IS	4,558	0.86
4		1.50	CITY	PROP	849	0.16
3		1.50	PRIV	PROP	728	0.14
29		2.00	CITY	AB	3,657	0.69
310		2.00	CITY	IS	49,974	9.46
82		2.00	PRIV	IS	17,112	3.24
11		2.00	CITY	PROP	1,291	0.24
5		2.00	PRIV	PROP	1,166	0.22
1		2.50	CITY	AB	719	0.14
66		2.50	CITY	IS	10,963	2.08
1		2.50	PRIV	IS	229	0.04
5		2.50	CITY	PROP	53	0.01
5		2.50	PRIV	PROP	173	0.03
2		3.00	CITY	AB	1,856	0.35
148		3.00	CITY	IS	41,375	7.84
44		3.00	PRIV	IS	27,277	5.17
11		3.00	CITY	PROP	3,319	0.63
9		3.00	PRIV	PROP	3,651	0.69
70		4.00	CITY	AB	35,414	6.71
1		4.00	PRIV	AB	222	0.04
208		4.00	CITY	IS	80,652	15.27
36		4.00	PRIV	IS	18,352	3.48
6		4.00	CITY	PRAB	2,217	0.42
4		4.00	CITY	PROP	996	0.19
4		4.00	PRIV	PROP	5,197	0.98
838		6.00	CITY	AB	260,904	49.41
4,614		6.00	CITY	IS	1,152,619	218.30
193		6.00	PRIV	IS	64,621	12.24
421		6.00	CITY	PRAB	86,780	16.44
99		6.00	CITY	PROP	10,254	1.94
2		6.00	PRIV	PROP	91	0.02
1,162		8.00	CITY	AB	369,727	70.02
5		8.00	PRIV	AB	1,101	0.21
38,660		8.00	CITY	IS	9,471,732	1,793.89
2,025		8.00	PRIV	IS	499,900	94.68
35		8.00	CITY	OUT	9,861	1.87
1		8.00	PRIV	OUT	361	0.07
450		8.00	CITY	PRAB	76,074	14.41
2,558		8.00	CITY	PROP	418,605	79.28
125		8.00	PRIV	PROP	27,410	5.19
210		10.00	CITY	AB	100,796	19.09
3		10.00	PRIV	AB	121	0.02
1,675		10.00	CITY	IS	423,092	80.13
86		10.00	PRIV	IS	22,567	4.27

1	10.00	CITY	OUT	387	0.07
74	10.00	CITY	PRAB	15,286	2.90
23	10.00	CITY	PROP	3,283	0.62
230	12.00	CITY	AB	124,182	23.52
4	12.00	PRIV	AB	545	0.10
3,725	12.00	CITY	IS	877,232	166.14
172	12.00	PRIV	IS	35,518	6.73
10	12.00	CITY	OUT	4,554	0.86
85	12.00	CITY	PRAB	16,649	3.15
17	12.00	PRIV	PRAB	6,248	1.18
389	12.00	CITY	PROP	63,344	12.00
4	12.00	PRIV	PROP	135	0.03
8	14.00	CITY	AB	29,068	5.51
28	14.00	CITY	IS	25,298	4.79
1	14.00	CITY	OUT	5,312	1.01
2	14.00	CITY	PRAB	260	0.05
115	15.00	CITY	AB	47,934	9.08
3	15.00	PRIV	AB	1,392	0.26
1,530	15.00	CITY	IS	371,248	70.31
90	15.00	PRIV	IS	22,640	4.29
6	15.00	CITY	OUT	317	0.06
53	15.00	CITY	PRAB	13,565	2.57
1	15.00	PRIV	PRAB	442	0.08
164	15.00	CITY	PROP	35,959	6.81
7	15.00	PRIV	PROP	944	0.18
10	16.00	CITY	AB	8,650	1.64
2	16.00	PRIV	AB	2,113	0.40
188	16.00	CITY	IS	75,557	14.31
3	16.00	PRIV	IS	8,157	1.54
1	16.00	CITY	OUT	1,943	0.37
2	16.00	CITY	PRAB	846	0.16
61,310				15,123,995	2,864

Interceptors

<u>Record Count</u>	<u>Diameter</u>	<u>Owner</u>	<u>Operational Status</u>	<u>Feet</u>	<u>Miles</u>
46	18.00	CITY	AB	23,744	4.50
1	18.00	PRIV	AB	19	0.00
1,058	18.00	CITY	IS	268,233	50.80
96	18.00	PRIV	IS	26,886	5.09
22	18.00	CITY	PRAB	6,681	1.27
3	18.00	PRIV	PRAB	780	0.15
140	18.00	CITY	PROP	27,751	5.26
10	20.00	CITY	AB	6,771	1.28
75	20.00	CITY	IS	22,814	4.32
1	20.00	PRIV	IS	127	0.02
2	20.00	CITY	PROP	692	0.13
16	21.00	CITY	AB	2,721	0.52
469	21.00	CITY	IS	132,418	25.08
16	21.00	PRIV	IS	5,221	0.99
5	21.00	CITY	PRAB	654	0.12
33	21.00	CITY	PROP	5,799	1.10
87	24.00	CITY	AB	80,156	15.18
966	24.00	CITY	IS	259,459	49.14
51	24.00	PRIV	IS	13,667	2.59
16	24.00	CITY	PRAB	2,860	0.54
79	24.00	CITY	PROP	15,300	2.90
1	27.00	CITY	AB	75	0.01
36	27.00	CITY	IS	11,291	2.14
11	27.00	PRIV	IS	3,412	0.65
3	27.00	CITY	PROP	186	0.04
52	30.00	CITY	AB	18,708	3.54
474	30.00	CITY	IS	158,278	29.98
5	30.00	PRIV	IS	1,710	0.32
6	30.00	CITY	PRAB	598	0.11
51	30.00	CITY	PROP	8,416	1.59
1	33.00	CITY	AB	1,198	0.23
2	33.00	CITY	IS	403	0.08
5	33.00	CITY	PROP	3,430	0.65
449	36.00	CITY	IS	166,911	31.61
1	36.00	CITY	OUT	523	0.10
37	36.00	CITY	PROP	11,661	2.21
12	42.00	CITY	AB	4,048	0.77
264	42.00	CITY	IS	96,225	18.22
6	42.00	CITY	PRAB	3,324	0.63
14	42.00	CITY	PROP	3,856	0.73
10	48.00	CITY	AB	5,035	0.95
214	48.00	CITY	IS	95,319	18.05
2	48.00	CITY	PROP	151	0.03
2	54.00	CITY	AB	302	0.06
166	54.00	CITY	IS	88,908	16.84
2	60.00	CITY	AB	357	0.07

57	60.00	CITY	IS	31,905	6.04
2	60.00	CITY	PRAB	68	0.01
4	60.00	CITY	PROP	13,150	2.49
4	66.00	CITY	IS	1,509	0.29
5	66.00	CITY	PROP	3,362	0.64
16	72.00	CITY	IS	14,831	2.81
31	84.00	CITY	IS	79,870	15.13
2	84.00	CITY	PRAB	73	0.01
1	84.00	CITY	PROP	193	0.04
1	90.00	CITY	IS	1,164	0.22
22	96.00	CITY	IS	74,397	14.09
5,163				1,807,602	342