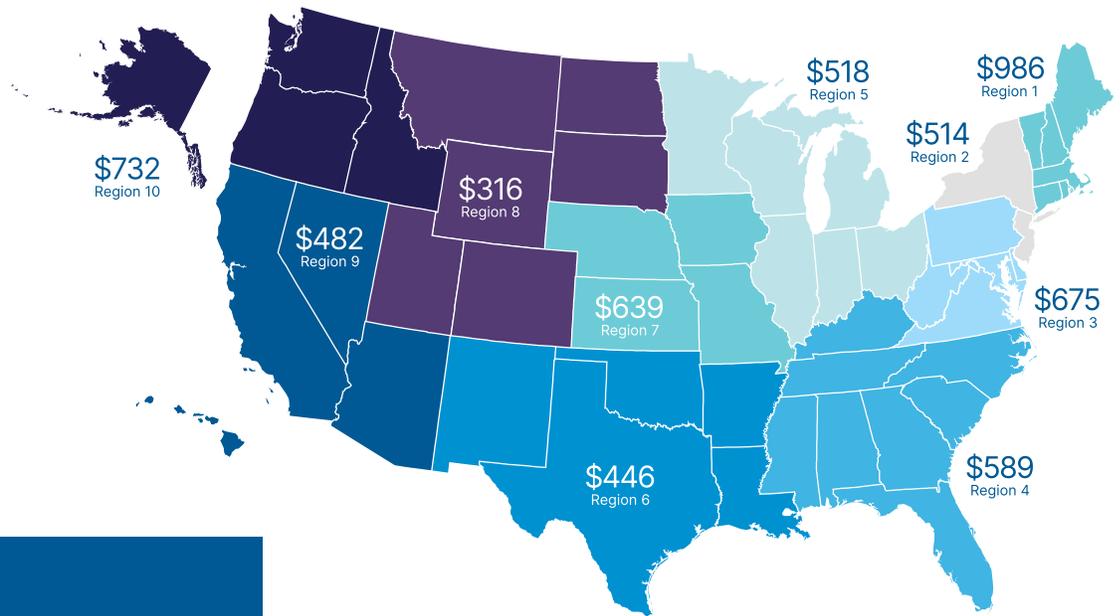


2021

# Cost of Clean Water Index



**Regional Average Annual Charges, 2021**

All Respondents

**105 Million**

POPULATION SERVED

**171**

UTILITY RESPONDENTS

**\$551**

AVERAGE NATIONAL ANNUAL SEWER SERVICE CHARGE

**3.1%**

INCREASE IN SEWER CHARGES FROM 2020-2021

**4.7%**

INCREASE IN CONSUMER PRICE INDEX 2020-2021

## Average Charge for Wastewater Services Increased 3.1% in 2021

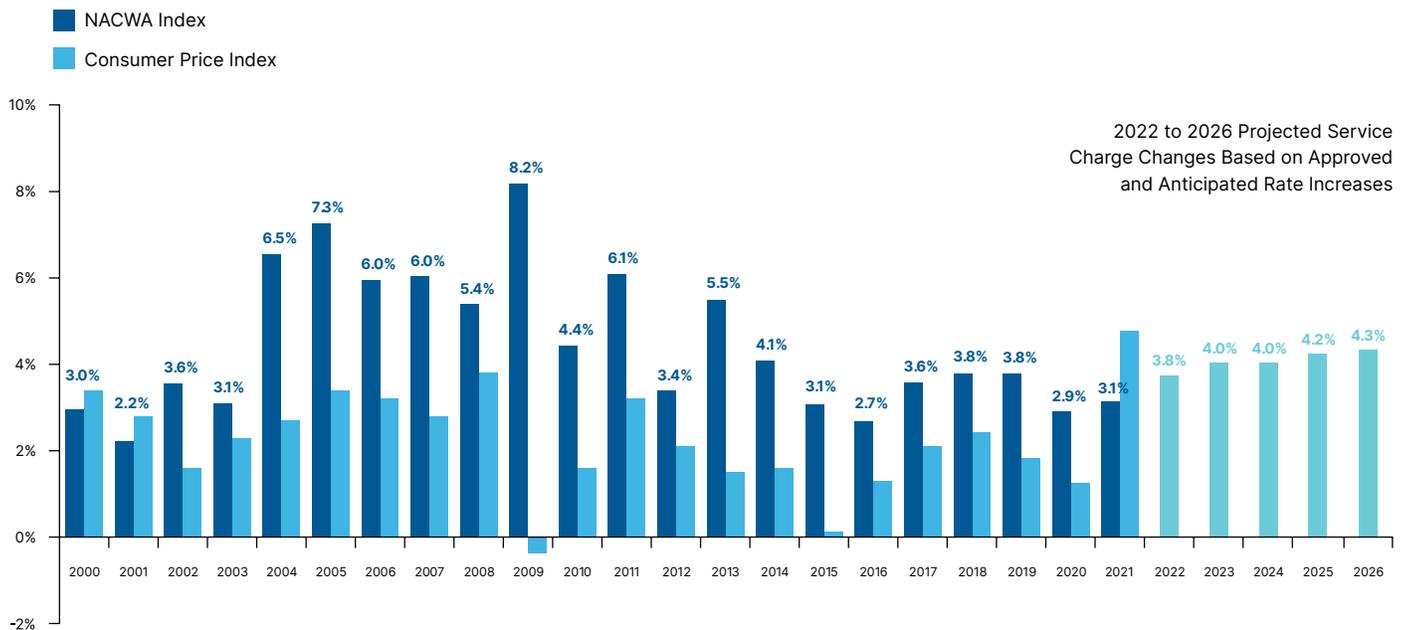
NACWA's 2021 *Cost of Clean Water Index* indicates that the average cost of wastewater services rose 3.1 percent in 2021. The increase was higher than the 2.9 percent increase in 2020, but lower than the increase in the rate of inflation as measured by the Consumer Price Index (CPI), which was 4.7 percent (see *Annual Change in Cost of Clean Water Index vs. Inflation* chart on page 2). This marks the first time in 21 years that the increase in national charges for wastewater collection and treatment services has been outpaced by inflation.

In 2021, the national average amount that a single-family residence paid for wastewater services was \$551. Wastewater service charges vary widely among EPA regions and states, and are affected by demographics, geography, system age, regulatory requirements, and a range of other issues. To illustrate these variations, the *Regional Average Annual Charge* map shows a breakdown of average charges by EPA region. The average service charge by Region varies from a low of \$316 in EPA Region 8 to a high of \$986 in EPA Region 1.



## Annual Change in Cost of Clean Water

Index vs. Inflation



The *Annual Change in Cost of Clean Water Index vs. Inflation* chart above presents a national snapshot of the increase in service charges, as compared to inflation, since 2000. Table A-1 provides additional detail, including a breakdown of *NACWA Index* values and service charges back to 1985, the base year for the *Index*. The values for 2021 are based on the responses from 171 NACWA members serving over 105 million people.

Customers pay for sewer services in a variety of ways. Charges may be based on property values, gallons of water used, on a flat rate, or include some combination of these values. Because of this variability, the NACWA Index uses what the average single-family residence pays annually because it is a more consistent measure to track the cost of services over time. In 2021, a majority of clean water utilities implemented rate structures that resulted in increases in the average annual household service charge. However, in some communities, volume-based rates increased, but average service charges dropped due to reductions in actual or estimated residential water use or decreased revenues. Additional national and regional data are included in Tables A-1 and A-3.

### Average Annual Charge Has Increased at Twice the Rate of Inflation Since 2000

The *Average Annual Service Charge* chart (page 3) presents a national snapshot of wastewater service charges since 2000 and provides a projection of average charges through 2026. In comparison to the Consumer Price Index (CPI), the annual sewer service charge has increased at double the rate of the CPI since 2000. The average annual sewer charge of \$551 represents 2.1 percent of the 2021 Federal poverty income threshold (\$26,500) for a family of four. This proportion has risen from 1.3 percent in 2000.



## Average Annual Service Charge

2000 – 2021 & Projected

2022 to 2026 Projected Service Charge Changes Based on Approved and Anticipated Rate Increases



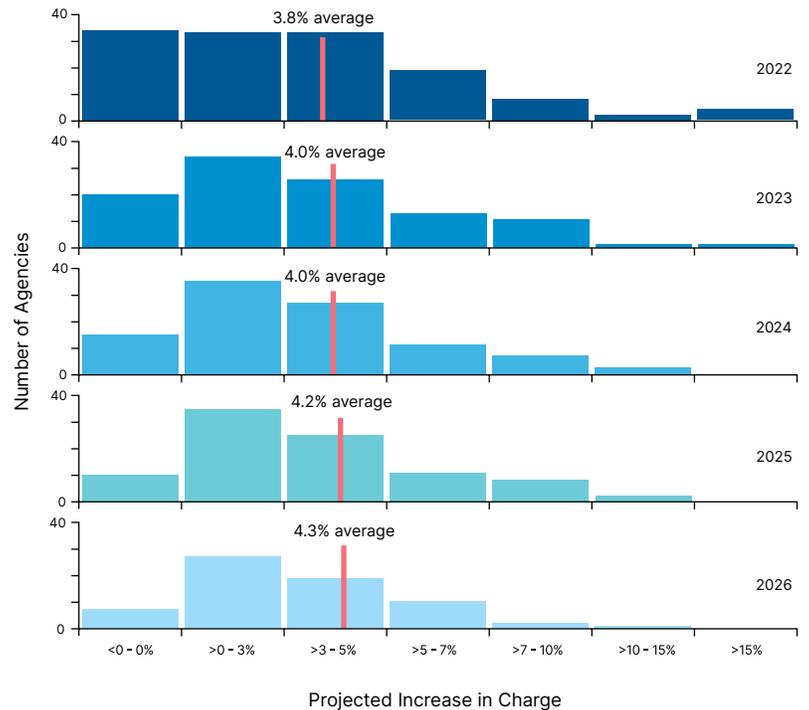
## Rates are Projected to Increase for More Agencies in 2022

While many agencies reported cancelled or postponed rate increases for 2021 due to the pandemic, the actual increase in the average service charge for 2021 outpaced the projections NACWA reported last year. Looking ahead, nearly 80% of agencies indicated rates will move upward in 2022.

From 2022-2026, rates are projected to rise by approximately four percent per year (see *Projected Increases in Charges* chart which shows the distribution of projected increases in charges among agency respondents). Replacement of aging infrastructure and associated costs of debt-financing, increasing O&M, and consent decree compliance were the top reasons cited by respondents for large projected rate increases. Additional drivers for rate increases included nutrient and other regulatory requirements as well as decreases in per capita consumption.

## Projected Increases in Charges

2022 - 2026



Disclaimers: The NACWA Index strives to use the best available data each year when determining current and historical household charges and trends. These data are intended for comparison purposes only, and are subject to change from one year to the next. While this document presents the most up-to-date data available, if better data become available in the future, the data presented here may be modified.

Additional data and information on the NACWA Index and past years' surveys are available on NACWA's website.

**Table A-1: NACWA Service Charge Index, 1985 to 2021**

Year	NACWA Index <sup>(1)</sup>	Change from Previous Year <sup>(2)</sup>	Average Service Charge (\$)	Change from Previous Year (\$)	Change to Consumer Price Index	Total Responses	Population represented (in millions)	Total Responses in Both Previous and Current Year
1985	100.0		\$102.75			155	88.6	
1986	106.8	6.8%	\$109.69	\$6.95	1.9%	158	88.8	155
1987	112.4	5.3%	\$115.51	\$5.82	3.6%	157	88.8	157
1988	119.9	6.9%	\$123.17	\$7.99	4.1%	163	91.3	157
1989	130.1	8.4%	\$133.65	\$10.35	4.8%	166	92.0	163
1990	141.0	8.4%	\$144.84	\$11.25	5.4%	169	92.3	166
1991	153.7	8.9%	\$157.88	\$12.84	4.2%	171	92.5	169
1992	166.7	8.5%	\$171.33	\$13.84	3.0%	175	94.7	171
1993	183.1	8.3%	\$188.12	\$13.78	3.0%	184	100.5	170
1994	193.4	5.1%	\$198.68	\$10.32	2.6%	194	102.4	182
1995	197.8	2.2%	\$203.22	\$4.23	2.8%	199	99.6	189
1996	201.7	3.6%	\$207.28	\$6.44	3.0%	205	105.8	195
1997	203.9	1.3%	\$209.49	\$2.88	2.3%	208	107.9	202
1998	207.8	2.4%	\$213.52	\$4.89	1.6%	214	106.6	204
1999	209.8	0.7%	\$215.61	\$1.90	2.2%	224	109.4	210
2000	216.4	3.0%	\$222.31	\$6.41	3.4%	234	113.7	218
2001	223.5	2.2%	\$229.63	\$4.47	2.8%	238	113.5	227
2002	232.6	3.6%	\$238.99	\$8.45	1.6%	220	107.8	215
2003	243.0	3.1%	\$249.71	\$7.69	2.3%	232	108.4	198
2004	254.8	6.5%	\$261.79	\$16.10	2.7%	222	109.0	200
2005	276.3	7.3%	\$283.91	\$18.79	3.4%	213	108.7	188
2006	287.1	6.0%	\$295.03	\$17.23	3.2%	203	107.0	177
2007	299.4	6.0%	\$307.60	\$16.47	2.8%	196	104.6	173
2008	315.4	5.4%	\$324.11	\$18.00	3.8%	191	107.6	165
2009	347.3	8.2%	\$356.90	\$26.41	-0.4%	171	103.4	161
2010	371.2	4.4%	\$381.45	\$16.82	1.6%	181	100.7	143
2011	387.7	6.1%	\$398.57	\$23.78	3.2%	176	104.0	158
2012	401.6	3.3%	\$412.17	\$13.97	2.1%	179	108.1	148
2013	424.3	5.5%	\$435.26	\$22.53	1.5%	183	107.8	155
2014	436.0	4.1%	\$447.99	\$17.45	1.6%	184	112.8	164
2015	439.8	3.1%	\$451.93	\$13.53	0.1%	176	110.6	160
2016	466.3	2.7%	\$479.07	\$11.85	1.3%	173	104.4	156
2017	487.8	3.6%	\$501.21	\$11.49	2.1%	180	105.4	144
2018	489.5	3.8%	\$503.01	\$19.77	2.4%	178	109.6	154
2019	498.3	3.8%	\$512.01	\$6.30	1.8%	178	110.3	149
2020	512.3	2.8%	\$526.44	\$14.57	1.2%	175	104.4	154
2021	536.1	3.1%	\$550.81	\$15.73	4.7%	171	105.5	144

**Note 1:** The value of the Service Charge Index is based on all responses received. The base year, 1985 has been indexed to a value of 100 at the national level.

**Note 2:** The annual percent change in the Index is based on the responses of those agencies that responded in both the previous year and current year using the same calculation method.



**Table A-2: Projected Annual Service Charge Increases, 2022-2026**

	2022	2023	2024	2025	2026
<b>Average Annual Increase (%)</b>	3.8%	4.0%	4.0%	4.2%	4.3%
<b>Average Service Charge (Projected \$)</b>	\$573.30	\$601.26	\$628.91	\$658.33	\$689.57
Change from Previous Year (\$)	\$22.49	\$27.97	\$27.64	\$29.43	\$31.24
<b># of Total Responses</b>	160	156	151	147	146
<b># of Responses with Numeric Estimates</b>	138	104	97	82	71
<b>Approved</b>	45%	20%	17%	10%	6%
<b>Planned</b>	32%	53%	54%	56%	58%
<b>No Change</b>	19%	10%	7%	5%	5%
<b>Uncertain</b>	4%	17%	23%	29%	32%

**Table A-3: Regional Annual Average Sewer Service Charges, 2021 Summary**

	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Region 8	Region 9	Region 10	National
<b># of Agencies</b>	9	11	19	24	29	17	14	11	23	14	171
<b>Population</b>	3.2	13.6	11.2	10.8	19.7	12.3	4.9	3.1	21.0	5.3	105.5
<b>2021 Charge</b>											
Average	\$985.96	\$513.97	\$674.82	\$589.33	\$517.52	\$446.31	\$638.61	\$315.78	\$482.11	\$731.58	\$550.81
Median	\$551.35	\$457.48	\$513.24	\$492.96	\$481.92	\$471.96	\$439.14	\$396.17	\$511.20	\$636.53	\$496.84
Minimum	\$367.00	\$193.87	\$264.84	\$230.76	\$178.32	\$263.64	\$57.63	\$259.39	\$239.84	\$461.28	\$57.63
Maximum	\$1,125.75	\$614.40	\$987.72	\$1,017.57	\$732.98	\$926.40	\$821.04	\$522.00	\$1,325.04	\$970.80	\$1,325.04
<b>% Change<sup>(3)</sup></b>											
1-year (2020-21)	3.2%	1.7%	4.3%	3.1%	4.6%	1.6%	6.5%	3.7%	1.3%	4.1%	3.1%
3-year (2018-21)	8.3%	1.4%	15.7%	10.0%	11.8%	5.6%	13.6%	14.3%	5.1%	18.3%	10.1%
5-year (2016-21)	14.3%	12.9%	16.8%	23.6%	23.6%	13.6%	28.8%	21.9%	11.8%	28.9%	15.3%

**Note 3:** The percent change values in Table A-3 are based on the responses of those agencies that responded in both the previous year and current year using the same calculation method.



**Table R-1: Service Charge Index by EPA Region (1985-2021)<sup>(1)</sup>**

Year	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Region 8	Region 9	Region 10	National
1985	69.8	85.4	121.1	139.0	137.5	106.0	63.4	101.8	63.1	115.4	100.0
1986	80.0	89.6	137.2	144.0	141.3	121.4	68.2	101.9	68.0	124.8	106.8
1987	98.0	100.3	139.1	152.7	136.5	142.4	70.7	102.1	73.4	129.4	112.4
1988	106.2	110.1	142.8	148.1	139.5	155.2	72.2	108.8	85.2	139.0	119.9
1989	143.0	127.2	151.5	155.6	140.3	163.6	74.2	105.6	100.4	150.5	130.1
1990	166.7	147.0	154.3	163.4	145.3	176.0	73.6	115.3	114.8	158.6	141.0
1991	194.4	166.8	185.5	171.1	149.9	168.7	82.3	120.4	131.8	173.7	153.7
1992	218.5	195.3	187.1	178.4	158.0	171.0	92.8	125.8	147.6	193.0	166.7
1993	304.2	196.7	208.7	189.6	166.6	187.4	132.1	137.9	162.4	200.7	183.1
1994	306.0	222.5	213.5	203.8	173.3	191.7	141.6	136.2	173.2	224.9	193.4
1995	303.3	215.2	213.3	215.5	178.9	206.9	142.3	145.9	175.9	245.6	197.8
1996	320.6	206.4	222.6	224.2	180.4	212.1	144.9	143.9	183.2	258.7	201.7
1997	310.2	208.1	222.9	235.3	176.8	211.0	153.5	143.6	187.2	265.2	203.9
1998	314.7	214.6	228.7	234.1	177.8	208.6	160.5	145.3	196.6	272.7	207.8
1999	316.1	222.4	230.1	241.1	182.9	207.0	163.1	150.6	191.5	277.5	209.8
2000	312.6	222.1	237.2	251.5	186.7	212.3	163.9	151.2	202.0	297.5	216.4
2001	310.2	249.0	243.5	257.2	190.0	212.8	170.3	155.4	206.7	305.9	223.5
2002	316.9	268.7	242.9	261.6	201.8	219.6	175.3	154.2	215.1	338.9	232.6
2003	337.6	279.0	237.6	303.0	214.2	222.5	166.9	148.4	214.1	365.1	243.0
2004	364.5	280.9	275.4	292.0	212.7	257.9	179.7	171.2	230.3	376.7	254.8
2005	423.1	313.1	299.2	323.4	227.8	259.0	199.7	167.4	242.3	413.1	276.3
2006	438.3	328.7	319.8	308.8	250.5	278.8	231.0	169.5	260.6	352.9	287.1
2007	507.6	341.8	343.0	337.0	254.4	251.8	229.3	175.1	271.9	371.6	299.4
2008	558.8	365.1	357.3	317.6	270.5	265.3	240.7	175.5	304.5	396.5	315.4
2009	593.5	380.6	389.8	342.3	329.5	283.4	271.9	185.1	338.7	403.7	347.3
2010	587.2	386.5	398.8	386.7	353.4	281.6	268.3	194.0	411.8	403.1	371.2
2011	676.2	425.7	422.4	425.0	369.0	307.4	312.8	212.9	377.1	435.0	387.7
2012	680.2	424.3	450.2	469.4	376.7	325.4	347.7	213.4	377.1	459.3	401.6
2013	681.1	447.9	480.5	477.6	396.6	357.1	384.5	219.0	389.9	488.8	424.3
2014	703.0	468.9	474.1	454.8	425.6	361.7	427.6	226.1	408.1	497.7	436.0
2015	791.0	482.8	483.6	460.0	416.9	361.7	463.3	244.9	404.3	519.1	439.8
2016	837.1	496.7	532.6	568.7	390.1	366.7	488.5	252.3	423.9	538.8	466.3
2017	860.8	498.5	556.5	581.9	446.2	407.7	517.1	254.8	432.3	578.1	487.8
2018	891.3	515.1	538.7	566.3	421.9	449.0	533.0	281.7	433.3	602.9	489.5
2019	885.7	468.2	566.1	582.6	464.7	398.1	580.3	298.0	456.1	556.3	498.3
2020	878.5	471.8	580.0	553.8	488.7	429.1	589.2	301.6	492.0	578.0	512.3
2021	959.6	500.2	656.8	573.6	503.7	434.4	621.5	307.3	469.2	712.0	536.1
# of Responses	9	11	19	24	29	17	14	11	23	14	171
Population (millions)	3.2	13.6	11.2	10.8	19.7	12.3	4.9	3.1	21	5.3	105.5

**Note 1:** The value of the Service Charge Index is based on all responses received. The base year, 1985 has been indexed to a value of 100 at the national level.



**Table R-2: Service Charge Index Change vs. Inflation Rate by EPA Region (1986-2021)<sup>(2)</sup>**

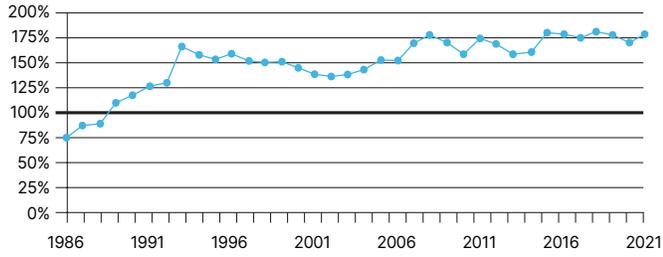
Year	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Region 8	Region 9	Region 10	National	CPI
1986	14.6%	4.9%	13.3%	4.1%	2.7%	14.6%	7.7%	0.1%	7.7%	8.2%	6.8%	1.9%
1987	22.4%	11.9%	1.4%	6.0%	-3.4%	17.3%	3.6%	0.2%	7.9%	3.7%	5.3%	3.6%
1988	8.9%	9.8%	2.8%	3.3%	2.2%	8.8%	2.1%	6.5%	15.7%	7.4%	6.9%	4.1%
1989	34.7%	15.6%	6.1%	5.1%	0.6%	5.4%	2.7%	-3.0%	17.1%	8.2%	8.4%	4.8%
1990	20.0%	15.6%	1.9%	5.0%	3.5%	7.6%	-0.8%	9.3%	14.1%	5.4%	8.4%	5.4%
1991	16.6%	13.4%	20.3%	3.7%	3.2%	-4.2%	11.8%	4.4%	14.8%	9.5%	8.9%	4.2%
1992	12.4%	16.9%	2.0%	4.3%	5.4%	1.0%	12.8%	4.4%	11.9%	11.1%	8.5%	3.0%
1993	34.9%	1.4%	1.4%	6.9%	6.1%	9.9%	42.3%	6.9%	10.1%	3.3%	8.3%	3.0%
1994	4.0%	5.0%	2.2%	8.8%	4.0%	2.3%	10.3%	2.8%	6.6%	12.4%	5.1%	2.6%
1995	0.6%	0.9%	-1.3%	4.6%	1.1%	7.9%	-2.8%	6.1%	1.4%	9.2%	2.2%	2.8%
1996	1.8%	4.4%	4.4%	4.0%	2.1%	2.0%	1.8%	0.1%	4.2%	5.3%	3.6%	3.0%
1997	0.4%	1.2%	0.1%	6.0%	-1.8%	-0.6%	6.0%	-0.3%	2.2%	2.5%	1.3%	2.3%
1998	1.6%	3.0%	1.7%	1.6%	0.8%	-1.1%	4.6%	0.5%	5.0%	2.9%	2.4%	1.6%
1999	0.4%	1.5%	0.7%	2.8%	2.4%	-0.6%	2.5%	3.6%	-2.3%	1.9%	0.7%	2.2%
2000	0.1%	1.8%	-0.1%	3.4%	2.3%	2.6%	-2.9%	0.4%	6.0%	7.2%	3.0%	3.4%
2001	1.5%	2.3%	2.6%	3.2%	1.4%	0.5%	3.9%	2.1%	2.1%	2.8%	2.2%	2.8%
2002	1.9%	5.1%	-0.2%	1.9%	6.3%	1.6%	3.2%	-0.8%	3.9%	10.2%	3.6%	1.6%
2003	7.3%	5.3%	-0.7%	5.6%	6.2%	1.1%	1.7%	-3.7%	0.1%	4.7%	3.1%	2.3%
2004	11.8%	2.7%	16.6%	7.0%	-0.5%	14.5%	11.4%	2.9%	5.8%	5.8%	6.5%	2.7%
2005	17.4%	4.6%	6.3%	9.0%	10.6%	4.4%	11.3%	0.2%	4.6%	9.0%	7.3%	3.4%
2006	6.3%	8.0%	6.6%	3.3%	8.9%	7.2%	3.7%	1.3%	4.3%	4.6%	6.0%	3.2%
2007	10.9%	4.3%	6.7%	5.5%	3.0%	-7.5%	0.9%	3.6%	10.0%	5.6%	6.0%	2.8%
2008	5.5%	11.1%	1.7%	1.8%	3.5%	3.6%	11.3%	1.7%	6.4%	2.8%	5.4%	3.8%
2009	6.0%	6.1%	8.5%	5.5%	12.7%	7.2%	5.9%	4.0%	9.9%	3.9%	8.2%	-0.4%
2010	4.4%	2.2%	3.8%	10.7%	6.9%	0.7%	9.0%	-3.4%	4.5%	-2.4%	4.4%	1.6%
2011	5.2%	8.0%	6.3%	4.6%	5.3%	6.8%	9.8%	12.5%	4.0%	9.6%	6.0%	3.2%
2012	4.7%	1.8%	3.3%	2.6%	1.2%	4.3%	8.4%	0.1%	5.3%	4.8%	3.4%	2.1%
2013	4.8%	6.6%	8.7%	2.1%	5.0%	8.6%	10.0%	2.1%	3.8%	5.6%	5.5%	1.5%
2014	2.7%	5.0%	1.6%	5.0%	7.4%	-0.4%	7.1%	3.7%	3.8%	3.3%	4.1%	1.6%
2015	4.2%	2.2%	7.0%	0.7%	7.9%	3.0%	8.5%	8.4%	-0.8%	2.3%	3.1%	0.1%
2016	5.8%	1.2%	2.7%	3.3%	1.0%	2.4%	8.9%	3.0%	2.4%	3.9%	2.7%	1.3%
2017	2.4%	0.5%	4.1%	4.4%	3.9%	4.5%	8.8%	3.7%	3.5%	5.3%	3.6%	2.1%
2018	4.4%	3.0%	4.3%	2.1%	5.0%	9.5%	4.6%	4.2%	3.0%	3.3%	3.8%	2.4%
2019	2.7%	1.3%	4.6%	4.3%	2.5%	0.7%	5.4%	5.4%	2.5%	5.6%	3.8%	1.8%
2020	2.5%	0.8%	4.5%	1.5%	3.9%	4.4%	1.2%	4.2%	2.6%	3.7%	2.8%	1.2%
2021	3.2%	1.7%	4.3%	3.1%	4.6%	1.6%	6.5%	3.7%	1.3%	4.1%	3.1%	4.7%

**Note 2:** The annual percent change in the Index (national and regional) is based on the responses of those agencies that responded in both the previous year and current year using the same calculation method.

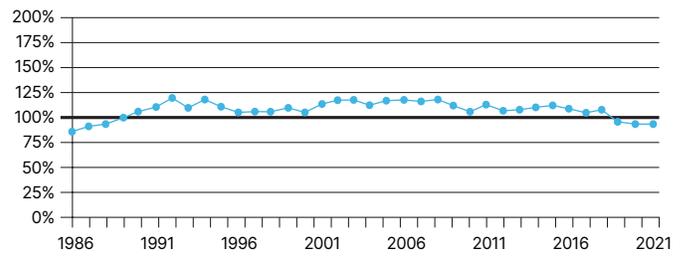


# Regional Service Charge Index as a Percent of the National Average (1986-2021)

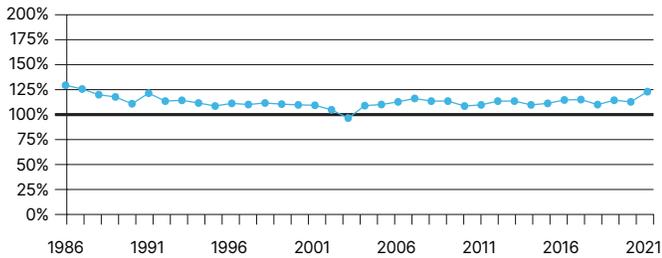
EPA REGION 1



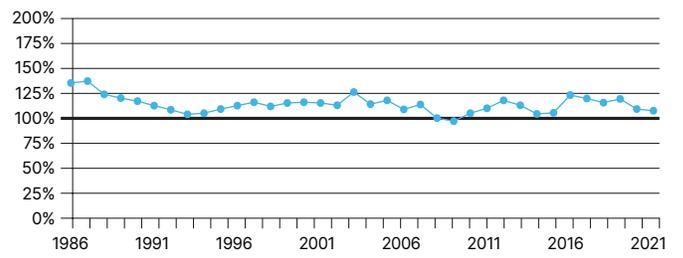
EPA REGION 2



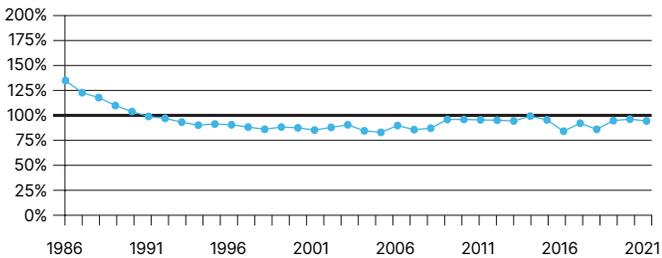
EPA REGION 3



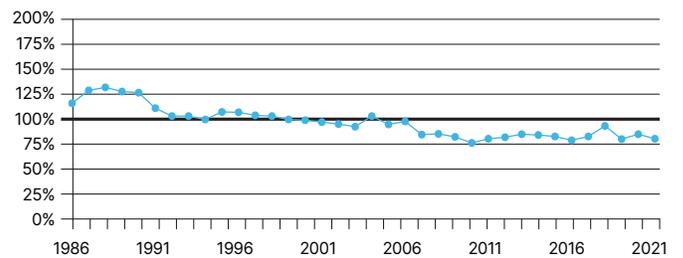
EPA REGION 4



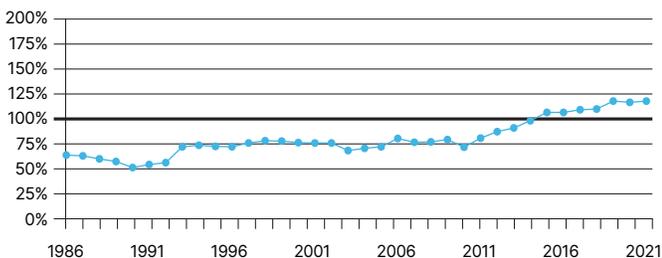
EPA REGION 5



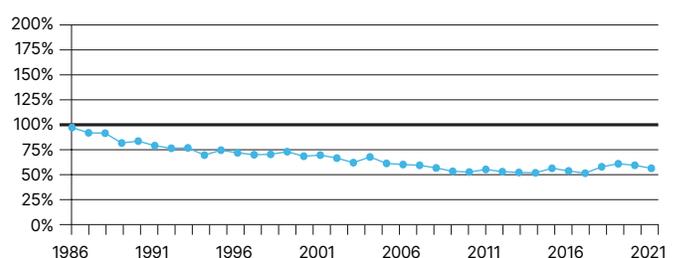
EPA REGION 6



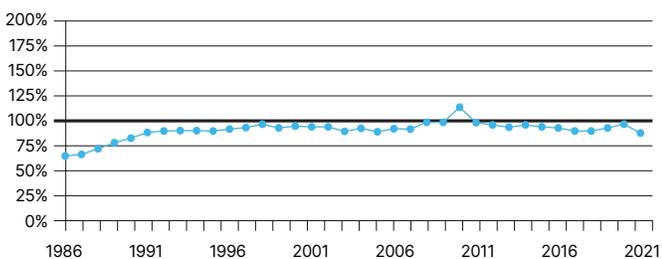
EPA REGION 7



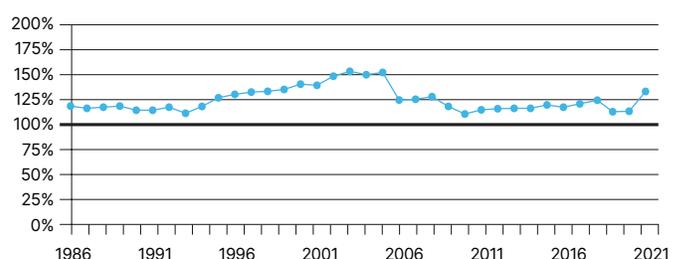
EPA REGION 8



EPA REGION 9



EPA REGION 10

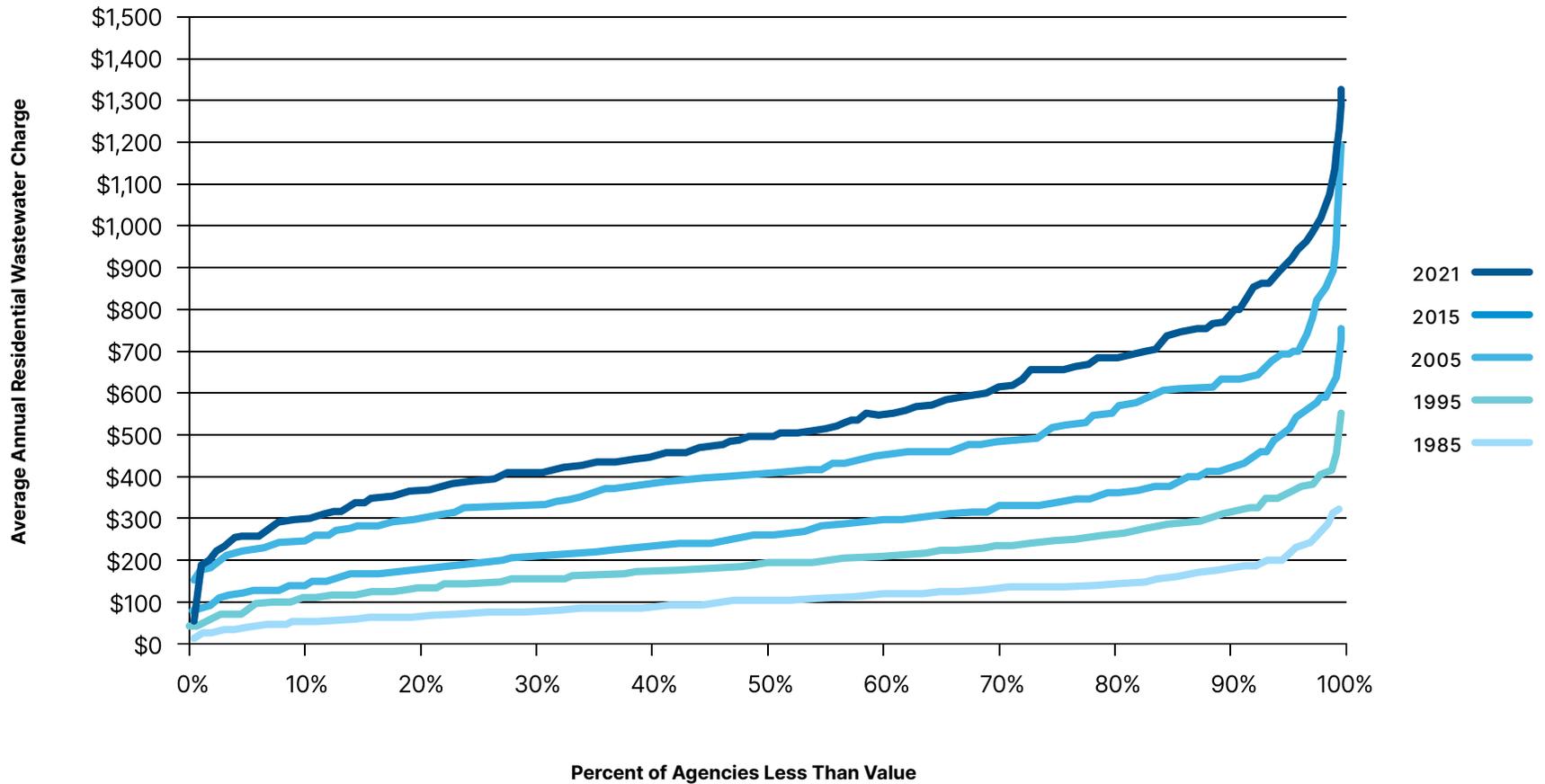


**Table R-3: Average Annual Sewer Service Charge by EPA Region (1985-2021)**

Year	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Region 8	Region 9	Region 10	National
1985	\$71.74	\$87.74	\$124.46	\$142.85	\$141.32	\$108.90	\$65.12	\$104.57	\$64.87	\$118.54	\$102.75
1986	\$82.23	\$92.07	\$140.97	\$147.95	\$145.19	\$124.77	\$70.12	\$104.70	\$69.87	\$128.23	\$109.69
1987	\$100.65	\$103.02	\$142.94	\$156.86	\$140.29	\$146.30	\$72.68	\$104.95	\$75.39	\$132.98	\$115.51
1988	\$109.09	\$113.10	\$146.69	\$152.13	\$143.33	\$159.47	\$74.20	\$111.79	\$87.50	\$142.84	\$123.17
1989	\$146.94	\$130.73	\$155.64	\$159.89	\$144.18	\$168.07	\$76.20	\$108.46	\$103.14	\$154.60	\$133.65
1990	\$171.31	\$151.08	\$158.54	\$167.91	\$149.25	\$180.86	\$75.60	\$118.51	\$117.91	\$162.91	\$144.84
1991	\$199.77	\$171.40	\$190.65	\$175.78	\$154.06	\$173.30	\$84.55	\$123.73	\$135.38	\$178.43	\$157.88
1992	\$224.52	\$200.66	\$192.20	\$183.28	\$162.39	\$175.65	\$95.38	\$129.22	\$151.63	\$198.31	\$171.33
1993	\$312.62	\$202.08	\$214.43	\$194.79	\$171.21	\$192.52	\$135.78	\$141.67	\$166.91	\$206.26	\$188.12
1994	\$314.46	\$228.65	\$219.33	\$209.38	\$178.02	\$196.97	\$145.44	\$139.99	\$177.98	\$231.06	\$198.68
1995	\$311.61	\$221.16	\$219.13	\$221.46	\$183.78	\$212.54	\$146.26	\$149.95	\$180.75	\$252.36	\$203.22
1996	\$329.39	\$212.09	\$228.72	\$230.37	\$185.35	\$217.93	\$148.84	\$147.90	\$188.26	\$265.79	\$207.28
1997	\$318.71	\$213.84	\$229.04	\$241.79	\$181.65	\$216.85	\$157.71	\$147.52	\$192.36	\$272.46	\$209.49
1998	\$323.37	\$220.48	\$234.95	\$240.56	\$182.65	\$214.37	\$164.92	\$149.30	\$202.00	\$280.25	\$213.52
1999	\$324.77	\$228.57	\$236.39	\$247.73	\$187.89	\$212.70	\$167.56	\$154.73	\$196.78	\$285.14	\$215.61
2000	\$321.19	\$228.20	\$243.75	\$258.41	\$191.88	\$218.11	\$168.41	\$155.33	\$207.56	\$305.72	\$222.31
2001	\$318.72	\$255.85	\$250.23	\$264.27	\$195.22	\$218.68	\$174.99	\$159.72	\$212.39	\$314.30	\$229.63
2002	\$325.60	\$276.08	\$249.55	\$268.74	\$207.32	\$225.66	\$180.12	\$158.41	\$220.99	\$348.21	\$238.99
2003	\$346.87	\$286.70	\$244.16	\$311.31	\$220.11	\$228.64	\$171.49	\$152.46	\$220.01	\$375.13	\$249.71
2004	\$374.54	\$288.61	\$282.95	\$300.02	\$218.75	\$264.95	\$184.68	\$175.91	\$235.86	\$387.05	\$261.79
2005	\$434.72	\$321.74	\$307.43	\$332.32	\$234.03	\$266.10	\$205.16	\$172.02	\$248.99	\$424.45	\$283.91
2006	\$450.31	\$337.77	\$328.61	\$317.28	\$257.38	\$286.47	\$237.39	\$174.16	\$267.69	\$362.64	\$295.03
2007	\$521.61	\$351.17	\$352.44	\$346.23	\$261.41	\$258.73	\$235.62	\$179.91	\$279.37	\$381.80	\$307.60
2008	\$574.21	\$375.19	\$367.16	\$326.15	\$277.94	\$272.61	\$247.33	\$180.30	\$312.89	\$407.39	\$324.11
2009	\$609.85	\$391.05	\$400.52	\$351.74	\$338.53	\$291.17	\$279.35	\$190.15	\$347.99	\$414.82	\$356.90
2010	\$603.38	\$397.14	\$409.75	\$397.34	\$363.08	\$289.33	\$275.64	\$199.36	\$423.15	\$414.22	\$381.45
2011	\$694.75	\$437.43	\$433.97	\$436.66	\$379.11	\$315.88	\$321.44	\$218.77	\$387.45	\$447.01	\$398.57
2012	\$698.93	\$435.98	\$462.55	\$482.27	\$386.52	\$334.36	\$357.31	\$219.23	\$387.48	\$471.93	\$412.17
2013	\$699.85	\$460.26	\$493.67	\$490.74	\$407.50	\$366.93	\$395.11	\$225.02	\$400.58	\$502.29	\$435.26
2014	\$722.31	\$481.80	\$487.14	\$467.33	\$437.33	\$371.67	\$439.35	\$232.31	\$419.37	\$511.42	\$447.99
2015	\$812.79	\$496.06	\$496.90	\$472.65	\$428.34	\$371.67	\$476.01	\$251.62	\$415.45	\$533.32	\$451.93
2016	\$860.09	\$510.38	\$547.29	\$584.29	\$400.82	\$376.82	\$501.97	\$259.28	\$435.60	\$553.62	\$479.07
2017	\$884.44	\$512.25	\$571.14	\$535.72	\$455.45	\$418.89	\$531.30	\$261.82	\$444.23	\$594.02	\$501.21
2018	\$915.86	\$529.22	\$553.50	\$581.85	\$433.48	\$461.38	\$547.66	\$289.49	\$445.18	\$619.53	\$503.01
2019	\$910.06	\$481.10	\$581.64	\$598.64	\$477.49	\$409.05	\$596.24	\$306.19	\$468.63	\$571.56	\$512.00
2020	\$902.64	\$484.82	\$595.95	\$569.08	\$497.67	\$440.94	\$605.43	\$309.94	\$505.51	\$593.89	\$527.15
2021	\$985.96	\$513.97	\$674.82	\$589.33	\$517.52	\$446.31	\$638.61	\$315.78	\$482.11	\$731.58	\$550.18
# of Responses	9	11	19	24	29	17	14	11	23	14	171
Population (millions)	3.2	13.6	11.2	10.8	19.7	12.3	4.9	3.1	21.0	5.3	105.5



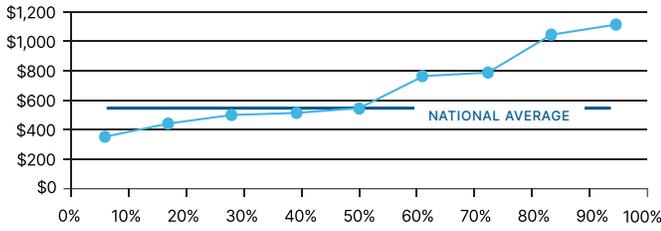
## Distribution Trend of Average Annual Residential Wastewater Charge (National)



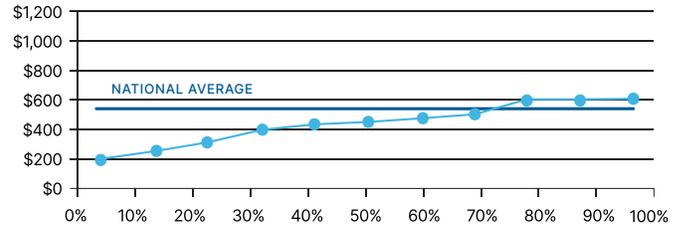
# Regional Distribution of Service Charges (2021)

(Charge vs. Percent of Charges Less Than Value)

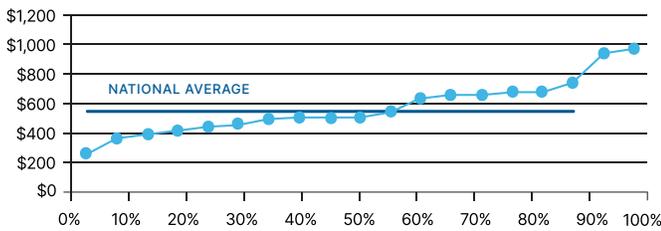
EPA REGION 1



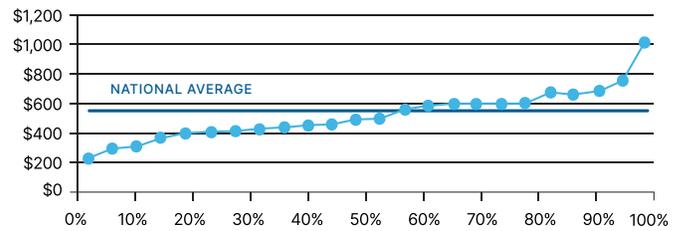
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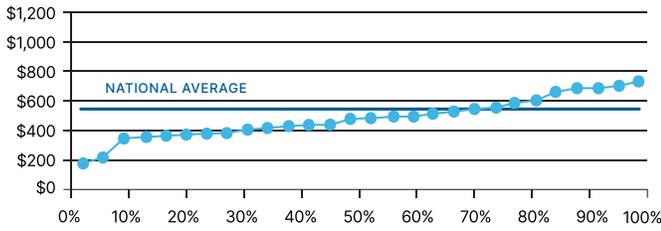
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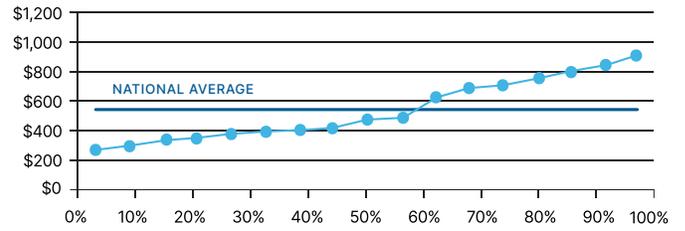
EPA REGION 4



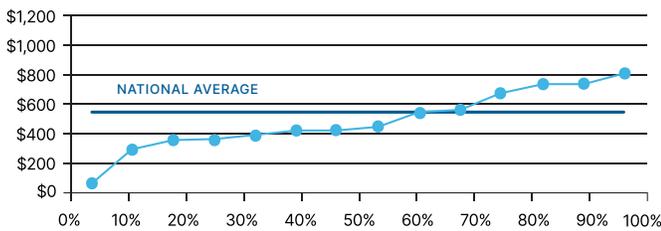
EPA REGION 5



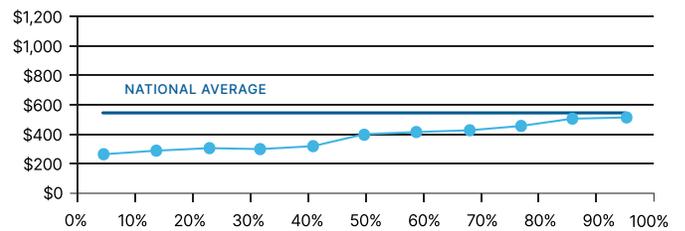
EPA REGION 6



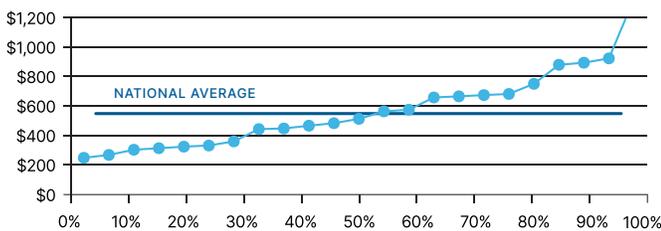
EPA REGION 7



EPA REGION 8



EPA REGION 9



EPA REGION 10

