

Customer Affordability “Data Package” Components

- HRPDC 2020 Regional Cost Scenarios (includes all utilities)
- Individual Utility Tables & Tools
 - Socio-Economic Indicator Data, Tables, & Charts
 - Households Impacted at Different Income Levels (Wastewater Costs)
 - UNC Residential Rates Affordability Assessment Tool

Answers the question: **“Who in my community will be ‘burdened’ if costs are pushed to certain levels?”**

Locality-specific 2020 Regional Cost Scenarios - Assumptions

Locality	Household Water Use (gal/mo)	Assumptions for Water Rate Increases 2015-2020		Assumptions for Wastewater Rate Increases 2015-2020		Assumptions for Stormwater Utility Fee Increases 2015-2020	
		Low Estimate	High Estimate	Low Estimate	High Estimate	Low Estimate	High Estimate
Chesapeake	5,000	4.9% annually for 3 yrs, then 3% annually for 2 yrs	8% annually for 5 years	4.9% annually for 3 yrs, then 3% annually for 2 yrs	50% increase from 2015 monthly cost	15% increase from 2015 monthly cost	30% increase from 2015 monthly cost
Franklin	4,000	3% annually for 5 years	8% annually for 5 years	30% increase from 2015 monthly cost	50% increase from 2015 monthly cost	Not estimated (no SW fee)	Not estimated (no SW fee)
Gloucester County	5,000	No change from FY15 rates	No change from FY15 rates	No change from FY15 rates	No change from FY15 rates	Not estimated (no SW fee)	Not estimated (no SW fee)
Hampton	4,200	3% annually for 5 years	8% annually for 5 years	15% increase from 2015 monthly cost	30% increase from 2015 monthly cost	15% increase from 2015 monthly cost	30% increase from 2015 monthly cost
Isle of Wight County	5,000	8% annually for 5 years	11% annually for 5 years	30% increase from 2015 monthly cost	50% increase from 2015 monthly cost	15% increase from 2015 monthly cost	30% increase from 2015 monthly cost
JCSA	5,000	3% annually for 5 years	8% annually for 5 years	3% annually for 5 years	8% annually for 5 years	Not estimated (no SW fee)	Not estimated (no SW fee)
Newport News	4,200	3% annually for 5 years	8% annually for 5 years	30% increase from 2015 monthly cost	50% increase from 2015 monthly cost	15% increase from 2015 monthly cost	30% increase from 2015 monthly cost
Norfolk	5,000	3% annually for 5 years	8% annually for 5 years	30% increase from 2015 monthly cost	50% increase from 2015 monthly cost	15% increase from 2015 monthly cost	30% increase from 2015 monthly cost
Poquoson	4,200	3% annually for 5 years	8% annually for 5 years	30% increase from 2015 monthly cost	50% increase from 2015 monthly cost	Not estimated (no SW fee)	Not estimated (no SW fee)
Portsmouth	3,000	3% annually for 5 years	8% annually for 5 years	3% annually for 5 years	8% annually for 5 years	15% increase from 2015 monthly cost	30% increase from 2015 monthly cost
Smithfield Town	5,000	3% annually for 5 years	8% annually for 5 years	30% increase from 2015 monthly cost	50% increase from 2015 monthly cost	Not estimated (no SW fee)	Not estimated (no SW fee)
Southampton	5,000	3% annually for 5 years	8% annually for 5 years	30% increase from 2015 monthly cost	50% increase from 2015 monthly cost	Not estimated (no SW fee)	Not estimated (no SW fee)
Suffolk	4,114	5% annually for 5 years	10% annually for 5 years	5% annually for 5 years	10% annually for 5 years	15% increase from 2015 monthly cost	30% increase from 2015 monthly cost
Surry	(varies by town)	Not estimated (rates vary by town)	Not estimated (rates vary by town)	30% increase from 2015 monthly cost	50% increase from 2015 monthly cost	Not estimated (no SW fee)	Not estimated (no SW fee)
Virginia Beach	5,500	3% annually for 5 years	5% annually for 5 years	4% annually for 5 years	6% annually for 5 years	15% increase from 2015 monthly cost	30% increase from 2015 monthly cost
Williamsburg	5,000	2.5% annually for 5 years	6% annually for 5 years	HRSD only (\$5.48/ccf)	HRSD only (\$5.48/ccf)	Not estimated (no SW fee)	Not estimated (no SW fee)
Windsor	5,000	3% annually for 5 years	8% annually for 5 years	30% increase from 2015 monthly cost	50% increase from 2015 monthly cost	Not estimated (no SW fee)	Not estimated (no SW fee)
York County	4,200	3% annually for 5 years	8% annually for 5 years	30% increase from 2015 monthly cost	50% increase from 2015 monthly cost	Not estimated (no SW fee)	Not estimated (no SW fee)

2020 Regional Cost Scenarios – 2015 Costs

Entity	US CENSUS DATA			2015 Monthly Cost per Single Family Residence (based on estimated average water use or 1 Equivalent Residential Unit (ERU))					
	No. of Households (2013)	Median Household Income (MHI) in 2013 adj \$	Estimated Average Water Use, Single Family Residence (gal/mo)	Wastewater and Stormwater Utility Expenses (FY15 Rates)			Water, Wastewater, and Stormwater Utility Expenses (FY15 Rates)		
				2015 Cost (\$/mo)	2015 Cost (% Locality MHI)	2015 Cost (% MSA MHI)	2015 Cost (\$/mo)	2015 Cost (% Locality MHI)	2015 Cost (% MSA MHI)
Chesapeake	80,014	\$ 67,252	5,000	\$ 58.90	1.05%	1.26%	\$ 96.17	1.72%	2.05%
Franklin*	3,551	\$ 31,928	4,000	\$ 32.63	1.23%	0.70%	\$ 56.57	2.13%	1.21%
Gloucester County	13,756	\$ 59,134	5,000	\$ 51.29	1.04%	1.10%	\$ 101.47	2.06%	2.17%
Hampton	53,255	\$ 43,785	4,200	\$ 40.51	1.11%	0.87%	\$ 72.65	1.99%	1.55%
Isle of Wight County	13,882	\$ 62,778	5,000	\$ 59.10	1.13%	1.26%	\$ 113.10	2.16%	2.42%
James City County	27,484	\$ 73,632	5,000	\$ 41.70	0.68%	0.89%	\$ 55.95	0.91%	1.20%
Newport News	67,538	\$ 49,184	4,200	\$ 53.28	1.30%	1.14%	\$ 85.62	2.09%	1.83%
Norfolk	85,484	\$ 44,030	5,000	\$ 60.67	1.65%	1.30%	\$ 97.04	2.64%	2.07%
Poquoson	4,591	\$ 81,892	4,200	\$ 52.50	0.77%	1.12%	\$ 83.49	1.22%	1.78%
Portsmouth	36,012	\$ 43,904	3,000	\$ 35.76	0.98%	0.76%	\$ 58.88	1.61%	1.26%
Smithfield Town	3,260	\$ 69,250	5,000	\$ 55.17	0.96%	1.18%	\$ 88.05	1.53%	1.88%
Southampton*	6,708	\$ 46,150	5,000	\$ 41.00	1.07%	0.88%	\$ 72.00	1.87%	1.54%
Suffolk	30,989	\$ 60,637	4,114	\$ 62.65	1.24%	1.34%	\$ 114.55	2.27%	2.45%
Surry**	2,602	\$ 47,292	(varies by town)	(varies by town)	(varies by town)	(varies by town)	(varies by town)	(varies by town)	(varies by town)
Virginia Beach	165,428	\$ 62,855	5,500	\$ 72.39	1.38%	1.55%	\$ 104.06	1.99%	2.22%
Williamsburg	4,391	\$ 48,616	5,000	\$ 25.60	0.63%	0.55%	\$ 50.35	1.24%	1.08%
Windsor	993	\$ 42,964	5,000	\$ 53.10	1.48%	1.13%	\$ 88.10	2.46%	1.88%
York County	24,042	\$ 78,073	4,200	\$ 45.50	0.70%	0.97%	\$ 76.49	1.18%	1.63%
MSA (Virginia Beach-Norfolk-Newport News, VA-NC)	625,540	\$ 56,161							

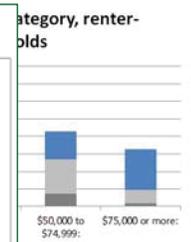
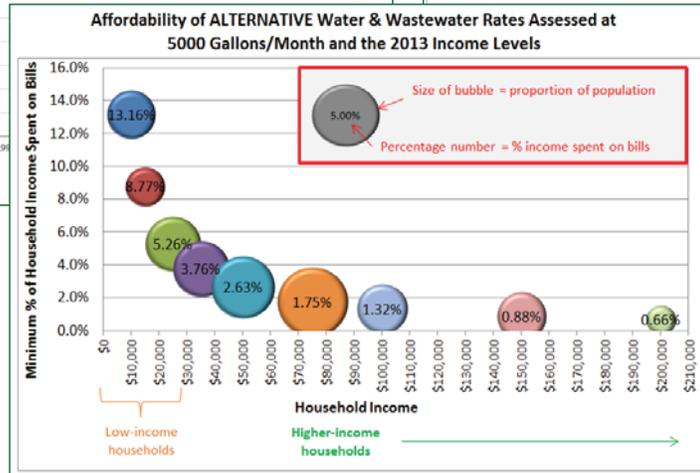
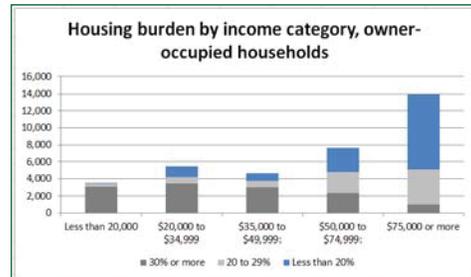
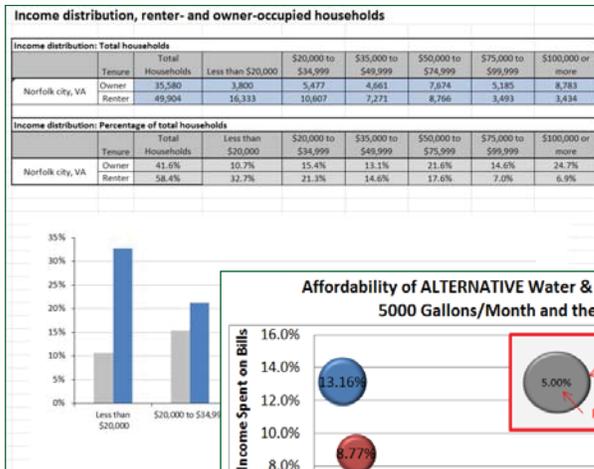
2020 Regional Cost Scenarios – 2020 Low Estimate

Entity	US CENSUS DATA			2020 Low Estimate - Monthly Cost per Single Family Residence (based on estimated average water use and 1 ERU)					
	No. of Households (2013)	Median Household Income (MHI) in 2013 adj \$	Estimated Average Water Use, Single Family Residence (gal/mo)	2020 Low Estimate Wastewater and Stormwater Utility Expenses			2020 Low Estimate Water, Wastewater, and Stormwater Utility Expenses		
				2020 Low Estimate (\$/mo)	2020 Low Estimate (% Locality MHI)	2020 Low Estimate (% MSA MHI)	2020 Low Estimate (\$/mo)	2020 Low Estimate (% Locality MHI)	2020 Low Estimate (% MSA MHI)
Chesapeake	80,014	\$ 67,252	5,000	\$ 76.86	1.37%	1.64%	\$ 122.50	2.19%	2.62%
Franklin*	3,551	\$ 31,928	4,000	\$ 42.42	1.59%	0.91%	\$ 70.17	2.64%	1.50%
Gloucester County	13,756	\$ 59,134	5,000	\$ 62.32	1.26%	1.33%	\$ 112.50	2.28%	2.40%
Hampton	53,255	\$ 43,785	4,200	\$ 52.63	1.44%	1.12%	\$ 89.89	2.46%	1.92%
Isle of Wight County	13,882	\$ 62,778	5,000	\$ 79.28	1.52%	1.69%	\$ 158.62	3.03%	3.39%
James City County	27,484	\$ 73,632	5,000	\$ 55.29	0.90%	1.18%	\$ 71.81	1.17%	1.53%
Newport News	67,538	\$ 49,184	4,200	\$ 70.61	1.72%	1.51%	\$ 108.10	2.64%	2.31%
Norfolk	85,484	\$ 44,030	5,000	\$ 80.64	2.20%	1.72%	\$ 121.75	3.32%	2.60%
Poquoson	4,591	\$ 81,892	4,200	\$ 71.07	1.04%	1.52%	\$ 107.00	1.57%	2.29%
Portsmouth	36,012	\$ 43,904	3,000	\$ 45.54	1.24%	0.97%	\$ 72.34	1.98%	1.55%
Smithfield Town	3,260	\$ 69,250	5,000	\$ 75.07	1.30%	1.60%	\$ 113.18	1.96%	2.42%
Southampton*	6,708	\$ 46,150	5,000	\$ 53.30	1.39%	1.14%	\$ 89.24	2.32%	1.91%
Suffolk	30,989	\$ 60,637	4,114	\$ 82.46	1.63%	1.76%	\$ 148.69	2.94%	3.18%
Surry**	2,602	\$ 47,292	(varies by town)	(varies by town)	(varies by town)	(varies by town)	(varies by town)	(varies by town)	(varies by town)
Virginia Beach	165,428	\$ 62,855	5,500	\$ 93.21	1.78%	1.99%	\$ 129.44	2.47%	2.77%
Williamsburg	4,391	\$ 48,616	5,000	\$ 36.63	0.90%	0.78%	\$ 64.63	1.60%	1.38%
Windsor	993	\$ 42,964	5,000	\$ 72.38	2.02%	1.55%	\$ 112.95	3.15%	2.41%
York County	24,042	\$ 78,073	4,200	\$ 61.97	0.95%	1.32%	\$ 97.90	1.50%	2.09%
MSA (Virginia Beach-Norfolk-Newport News, VA-NC)	625,540	\$ 56,161							

2020 Regional Cost Scenarios – 2020 High Estimate

Entity	US CENSUS DATA			2020 High Estimate - Monthly Cost per Single Family Residence (based on estimated average water use and 1 ERU)					
	No. of Households (2013)	Median Household Income (MHI) in 2013 adj \$	Estimated Average Water Use, Single Family Residence (gal/mo)	2020 High Estimate Wastewater and Stormwater Utility Expenses			2020 High Estimate Water, Wastewater, and Stormwater Utility Expenses		
				2020 High Estimate (\$/mo)	2020 High Estimate (% Locality MHI)	2020 High Estimate (% MSA MHI)	2020 High Estimate (\$/mo)	2020 High Estimate (% Locality MHI)	2020 High Estimate (% MSA MHI)
Chesapeake	80,014	\$ 67,252	5,000	\$ 85.11	1.52%	1.82%	\$ 139.87	2.50%	2.99%
Franklin*	3,551	\$ 31,928	4,000	\$ 48.95	1.84%	1.05%	\$ 84.13	3.16%	1.80%
Gloucester County	13,756	\$ 59,134	5,000	\$ 62.32	1.26%	1.33%	\$ 112.50	2.28%	2.40%
Hampton	53,255	\$ 43,785	4,200	\$ 55.48	1.52%	1.19%	\$ 102.71	2.81%	2.19%
Isle of Wight County	13,882	\$ 62,778	5,000	\$ 85.68	1.64%	1.83%	\$ 176.67	3.38%	3.77%
James City County	27,484	\$ 73,632	5,000	\$ 60.28	0.98%	1.29%	\$ 81.22	1.32%	1.74%
Newport News	67,538	\$ 49,184	4,200	\$ 76.48	1.87%	1.63%	\$ 124.00	3.03%	2.65%
Norfolk	85,484	\$ 44,030	5,000	\$ 87.13	2.37%	1.86%	\$ 137.46	3.75%	2.94%
Poquoson	4,591	\$ 81,892	4,200	\$ 77.27	1.13%	1.65%	\$ 122.81	1.80%	2.62%
Portsmouth	36,012	\$ 43,904	3,000	\$ 50.39	1.38%	1.08%	\$ 84.36	2.31%	1.80%
Smithfield Town	3,260	\$ 69,250	5,000	\$ 80.98	1.40%	1.73%	\$ 129.28	2.24%	2.76%
Southampton*	6,708	\$ 46,150	5,000	\$ 61.50	1.60%	1.31%	\$ 107.05	2.78%	2.29%
Suffolk	30,989	\$ 60,637	4,114	\$ 95.25	1.88%	2.04%	\$ 178.83	3.54%	3.82%
Surry**	2,602	\$ 47,292	(varies by town)	(varies by town)	(varies by town)	(varies by town)	(varies by town)	(varies by town)	(varies by town)
Virginia Beach	165,428	\$ 62,855	5,500	\$ 98.97	1.89%	2.11%	\$ 138.55	2.65%	2.96%
Williamsburg	4,391	\$ 48,616	5,000	\$ 36.63	0.90%	0.78%	\$ 69.75	1.72%	1.49%
Windsor	993	\$ 42,964	5,000	\$ 77.88	2.18%	1.66%	\$ 129.31	3.61%	2.76%
York County	24,042	\$ 78,073	4,200	\$ 66.77	1.03%	1.43%	\$ 112.31	1.73%	2.40%
MSA (Virginia Beach-Norfolk-Newport News, VA-NC)	625,540	\$ 56,161							

Individual Utility Tables & Tools



SUMMARY OF SELECTED SOCIOECONOMIC FACTORS AND HOUSEHOLD INCOME BY LOCALITY

Entity	PEOPLE ¹		HOUSEHOLDS ¹						SELECTED SOCIOECONOMIC FACTORS ²										INCOME AND BENEFITS (IN 2013 INFLATION-ADJUSTED DOLLARS) ¹									
	Poverty Rate: All Residents (2013)	Total Households (2013)	Elderly Households (2013)	Households with Social Security	Households with Supplemental Security Income	Households with cash public assistance income	Households with Food Stamps/SNAP Benefits in Past 12 Months	MHI (2013)	Households with Income Less than \$10,000	Households with Income \$10,000 to \$14,999	Households with Income \$15,000 to \$19,999	Households with Income \$20,000 to \$24,999	Estimated Number of Households with income to poverty ratio < or =1	Estimated Number of Households with income to poverty ratio < or =1 (%)	Households with Income \$25,000 to \$29,999	Households with Income \$30,000 to \$34,999	Estimated Number of Households with income to poverty ratio of 1 to 1.5 (%)											
Chesapeake	9.3%	80,014	18.6%	28.0%	1.5%	2.2%	3.2%	\$ 67,252	3,478	2,672	2,637	3,264	2,051	15.1%	3,025	3,407	3.8%											
Franklin*	23.0%	3,551	2.4%	35.5%	13.0%	1.3%	32.8%	\$ 31,928	431							315	4.1%											
Gloucester County	8.6%	13,756	24.5%	33.1%	3.3%	2.0%	8.0%	\$ 59,134	891						445	4.5%												
Hampton	15.7%	53,255	22.5%	27.3%	4.6%	3.0%	12.1%					3,007	25.0%	3,685	4,452	6.9%												
Isle of Wight County	13.0%	13,882	24.5%	37.1%	4.2%	2.5%	12.1%					31	16.8%	486	634	3.5%												
James City County	7.0%	27,484	37.1%	38.0%	1.7%	2.2%						3,314	12.1%	1,105	739	4.0%												
Newport News	17.6%	67,538	20.2%	25.9%	4.3%	3.3%	13.3%	\$ 49,184	5,262	3,403	4,540	3,070	16,275	24.1%	4,748	3,030	7.0%											
Norfolk	22.4%	85,484	18.6%	22.7%	5.0%							26,089	30.5%	4,439	5,689	5.2%												
Poquoson	5.6%	4,591	26.0%	29.9%	2.8%	1.3%	2.5%	\$ 81,892	200	57	78	209	544	11.8%	160	112	3.5%											
Portsmouth	21.3%	6,012	24.1%	30.6%							1,742						6.4%											
Smithfield Town	13.2%	3,260	20.9%	25.2%																								
Southampton*	16.0%	6,708	26.0%						615	358																		
Suffolk	9.5%	30,589	20.9%						1,372	1,094																		
Surry**	11.5%	2,607	23.3%	24.8%	10.4%	6.0%	15.0%	\$ 47,292	107	95																		
Virginia Beach	8.8%	165,421	18.5%	15.5%	5.8%			\$ 62,855	5,959	5,606	5,800																	
Williamsburg	19.5%	4,391	29.6%	31.0%	1.3%	3.8%	5.9%	\$ 48,616	461	121																		
Windsor	12.9%	993	31.3%	40.7%	6.1%	8.3%	27.7%	\$ 42,964	115	31																		
York County	6.5%	24,042	23.5%	26.2%	2.2%	1.8%	3.4%	\$ 78,073	670	684																		
MSA (Virginia Beach-Norfolk-Newport News, VA-NC)	13.0%	625,540	21.4%					\$ 56,161	36,644	27,603	28,445						6.9%											

Income Distribution & Depth of Poverty

Food Stamps/SNAP

Cash Public Assistance

Supplemental Security Income

Social Security Income

Elderly Households

Poverty Rate

- Vulnerable Populations:
- % population in poverty
 - Households in poverty or just above poverty threshold
 - Elderly households
 - Households receiving public assistance

(Income to poverty ratio of <1 to approximately 1) (Income to poverty ratio of 1 to approximately 1.5)
 For a family of four (2 adults and 2 children under 18 years old), the 2013 weighted average poverty threshold was \$23,624.

Comparisons to other MSAs under Consent Decrees

Comparison with Other Communities, Monthly Household Costs for Water, Wastewater, and Stormwater Services (5000 gal/mo; 1 ERU)

Community or Locality	US CENSUS DATA (2013 ACS)		2015 MONTHLY HOUSEHOLD COSTS (FY15 Rates)				Consent Decree Summary Not Locality-specific		
	Households	MHI	Water, Sewer, & Stormwater		Sewer & Stormwater		Date	Cost Estimate	Compliance Timeframe
			\$	% MHI	\$	% MHI			
Comparable Communities with Consent Decrees¹									
Baltimore MSA	1,029,322	\$ 69,367	\$ 110.70	1.92%	\$ 69.88	1.21%	2002/2005	\$1B to \$2B	14 years (2016)
Indianapolis MSA	728,202	\$ 52,147	\$ 61.93	1.43%	\$ 32.96	0.76%	2006/2010	\$1.73B	20 years (2025)
Memphis MSA	379,626	\$ 47,104	\$ 25.40	0.65%	\$ 15.35	0.39%	2012	\$250M	10 years (2022)
San Antonio MSA	759,762	\$ 52,139	\$ 46.43	1.07%	\$ 33.83	0.78%	2013	\$492M	10 years (2023); 12 yrs certain work
Other Consent Decree Communities									
St. Louis County	403,293	\$ 58,910	\$ 82.38	1.68%	\$ 55.38	1.13%	2011	\$4.7B	23 years (CD effective 2012)
St. Louis City	140,652	\$ 34,582	\$ 68.85	2.39%	\$ 49.08	1.70%			
VB-NO-NN, VA-NC MSA	625,540	\$ 56,161							
Chesapeake	80,014	\$ 67,252	\$ 96.17	1.72%	\$ 58.90	1.05%			
Franklin	3,551	\$ 31,928	\$ 63.33	2.38%	\$ 36.56	1.37%	No stormwater fee		
Gloucester County	13,756	\$ 59,134	\$ 101.47	2.06%	\$ 51.29	1.04%	No stormwater fee		
Hampton	53,255	\$ 43,785	\$ 82.83	2.27%	\$ 46.89	1.29%			
Isle of Wight County	13,882	\$ 62,778	\$ 113.10	2.16%	\$ 59.10	1.13%			
James City County	27,484	\$ 73,632	\$ 55.95	0.91%	\$ 41.70	0.68%	No stormwater fee		
Newport News	67,538	\$ 49,184	\$ 96.95	2.37%	\$ 60.81	1.48%			
Norfolk	85,484	\$ 44,030	\$ 97.04	2.64%	\$ 60.67	1.65%			
Poquoson	4,591	\$ 81,892	\$ 91.39	1.34%	\$ 56.60	0.83%	No stormwater fee		
Portsmouth	36,012	\$ 43,904	\$ 87.96	2.40%	\$ 53.43	1.46%			
Smithfield Town	3,260	\$ 69,250	\$ 88.05	1.53%	\$ 55.17	0.96%	No stormwater fee		
Southampton	6,708	\$ 46,150	\$ 72.00	1.87%	\$ 41.00	1.07%	No stormwater fee		
Suffolk	30,989	\$ 60,637	\$ 136.56	2.70%	\$ 74.85	1.48%			
Surry	2,602	\$ 47,292	(varies by town)		(varies by town)		No stormwater fee		
Virginia Beach	165,428	\$ 62,855	\$ 99.29	1.90%	\$ 69.83	1.33%			
Williamsburg	4,391	\$ 48,616	\$ 50.35	1.24%	\$ 25.60	0.63%	No stormwater fee		
Windsor	993	\$ 42,964	\$ 85.60	2.39%	\$ 53.10	1.48%	No stormwater fee		
York County	24,042	\$ 78,073	\$ 84.39	1.30%	\$ 49.60	0.76%	No stormwater fee		

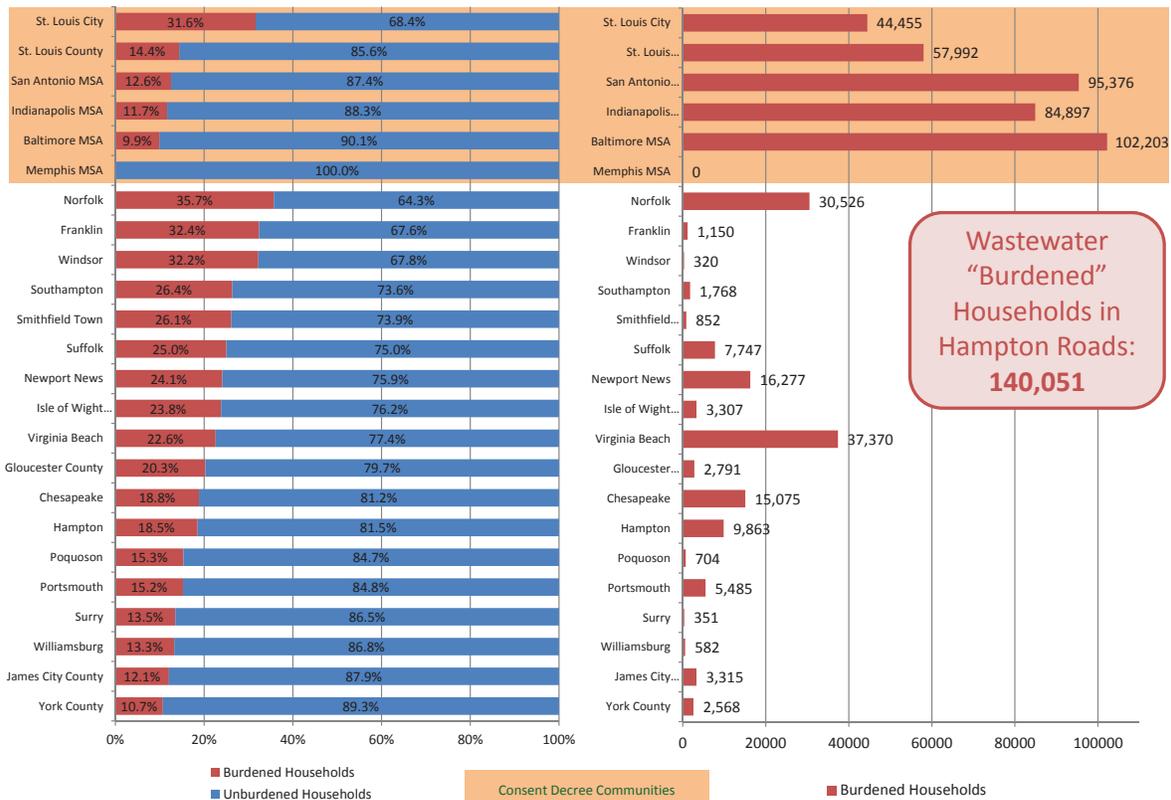
Comparison of 2020 Low Estimates of Monthly Household Costs for Water, Wastewater, and Stormwater Services (5000 gal/mo; 1 ERU)

Community or Locality	US CENSUS DATA (2013 ACS)		2020 LOW EST. MONTHLY HOUSEHOLD COSTS				Consent Decree Summary		
	Households	MHI	Water, Sewer, & Stormwater		Sewer & Stormwater		Date	Cost Estimate	Compliance Timeframe
			\$	% MHI	\$	% MHI			
Comparable Communities with Consent Decrees¹									
Baltimore MSA	1,029,322	\$ 69,367	2020 COSTS NOT ESTIMATED				2002/2005	\$1B to \$2B	14 years (2016)
Indianapolis MSA	728,202	\$ 52,147					2006/2010	\$1.73B	20 years (2025)
Memphis MSA	379,626	\$ 47,104					2012	\$250M	10 years (2022)
San Antonio MSA	759,762	\$ 52,139					2013	\$492M	10 years (2023); 12 yrs certain work
Other Consent Decree Communities									
St. Louis County	403,293	\$ 58,910					2011	\$4.7B	23 years (CD effective 2012)
St. Louis City	140,652	\$ 34,582							
VB-NO-NN, VA-NC MSA	625,540	\$ 56,161							
Chesapeake	80,014	\$ 67,252	\$ 123.50	2.20%	\$ 76.86	1.37%			
Franklin	3,551	\$ 31,928	\$ 78.56	2.95%	\$ 47.53	1.79%	No stormwater fee		
Gloucester County	13,756	\$ 59,134	\$ 112.50	2.28%	\$ 62.32	1.26%	No stormwater fee		
Hampton	53,255	\$ 43,785	\$ 102.78	2.82%	\$ 61.12	1.68%			
Isle of Wight County	13,882	\$ 62,778	\$ 158.62	3.03%	\$ 79.28	1.52%			
James City County	27,484	\$ 73,632	\$ 71.81	1.17%	\$ 55.29	0.90%	No stormwater fee		
Newport News	67,538	\$ 49,184	\$ 122.82	3.00%	\$ 80.93	1.97%			
Norfolk	85,484	\$ 44,030	\$ 121.75	3.32%	\$ 80.64	2.20%			
Poquoson	4,591	\$ 81,892	\$ 117.26	1.72%	\$ 76.93	1.13%	No stormwater fee		
Portsmouth	36,012	\$ 43,904	\$ 108.84	2.97%	\$ 68.81	1.88%			
Smithfield Town	3,260	\$ 69,250	\$ 113.18	1.96%	\$ 75.07	1.30%	No stormwater fee		
Southampton	6,708	\$ 46,150	\$ 89.24	2.32%	\$ 53.30	1.39%	No stormwater fee		
Suffolk	30,989	\$ 60,637	\$ 177.48	3.51%	\$ 98.72	1.95%			
Surry	2,602	\$ 47,292	(varies by town)		(varies by town)		No stormwater fee		
Virginia Beach	165,428	\$ 62,855	\$ 123.21	2.35%	\$ 89.54	1.71%			
Williamsburg	4,391	\$ 48,616	\$ 64.63	1.60%	\$ 36.63	0.90%	No stormwater fee		
Windsor	993	\$ 42,964	\$ 112.95	3.15%	\$ 72.38	2.02%	No stormwater fee		
York County	24,042	\$ 78,073	\$ 108.16	1.66%	\$ 67.83	1.04%	No stormwater fee		

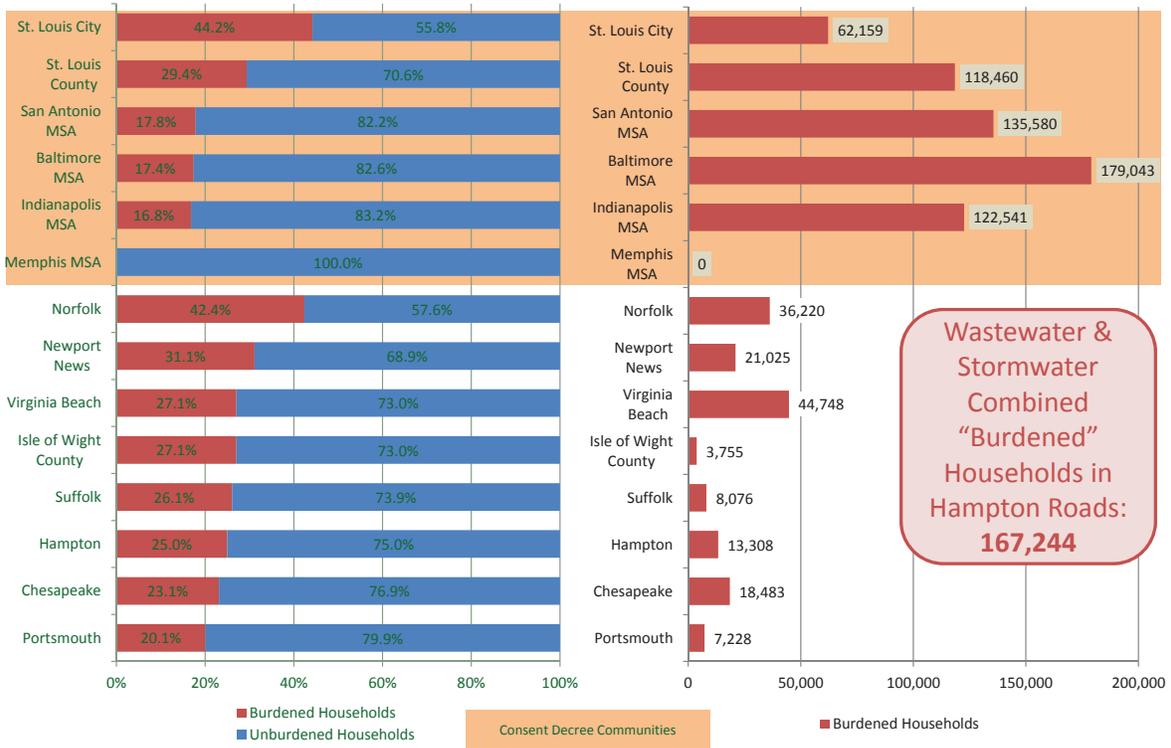
Comparison of 2020 High Estimates of Monthly Household Costs for Water, Wastewater, and Stormwater Services (5000 gal/mo; 1 ERU)

Community or Locality	US CENSUS DATA (2013 ACS)		2020 HIGH EST. MONTHLY HOUSEHOLD COSTS (FY15 Rates)				Consent Decree Summary		
	Households	MHI	Water, Sewer, & Stormwater		Sewer & Stormwater		Date	Cost Estimate	Compliance Timeframe
			\$	% MHI	\$	% MHI			
Comparable Communities with Consent Decrees¹									
Baltimore MSA	1,029,322	\$ 69,367	2020 COSTS NOT ESTIMATED				2002/2005	\$1B to \$2B	14 years (2016)
Indianapolis MSA	728,202	\$ 52,147					2006/2010	\$1.73B	20 years (2025)
Memphis MSA	379,626	\$ 47,104					2012	\$250M	10 years (2022)
San Antonio MSA	759,762	\$ 52,139					2013	\$492M	10 years (2023); 12 yrs certain work
Other Consent Decree Communities									
St. Louis County	403,293	\$ 58,910					2011	\$4.7B	23 years (CD effective 2012)
St. Louis City	140,652	\$ 34,582							
VB-NO-NN, VA-NC MSA	625,540	\$ 56,161							
Chesapeake	80,014	\$ 67,252	\$ 139.87	2.50%	\$ 85.11	1.52%			
Franklin	3,551	\$ 31,928	\$ 94.17	3.54%	\$ 54.84	2.06%	No stormwater fee		
Gloucester County	13,756	\$ 59,134	\$ 112.50	2.28%	\$ 62.32	1.26%	No stormwater fee		
Hampton	53,255	\$ 43,785	\$ 117.12	3.21%	\$ 64.31	1.76%			
Isle of Wight County	13,882	\$ 62,778	\$ 176.67	3.38%	\$ 85.68	1.64%			
James City County	27,484	\$ 73,632	\$ 81.22	1.32%	\$ 60.28	0.98%	No stormwater fee		
Newport News	67,538	\$ 49,184	\$ 140.59	3.43%	\$ 87.49	2.13%			
Norfolk	85,484	\$ 44,030	\$ 137.46	3.75%	\$ 87.13	2.37%			
Poquoson	4,591	\$ 81,892	\$ 134.25	1.97%	\$ 83.13	1.22%	No stormwater fee		
Portsmouth	36,012	\$ 43,904	\$ 126.70	3.46%	\$ 75.96	2.08%			
Smithfield Town	3,260	\$ 69,250	\$ 129.28	2.24%	\$ 80.98	1.40%	No stormwater fee		
Southampton	6,708	\$ 46,150	\$ 107.05	2.78%	\$ 61.50	1.60%	No stormwater fee		
Suffolk	30,989	\$ 60,637	\$ 213.47	4.22%	\$ 114.08	2.26%			
Surry	2,602	\$ 47,292	(varies by town)		(varies by town)		No stormwater fee		
Virginia Beach	165,428	\$ 62,855	\$ 132.08	2.52%	\$ 95.31	1.82%			
Williamsburg	4,391	\$ 48,616	\$ 69.75	1.72%	\$ 36.63	0.90%	No stormwater fee		
Windsor	993	\$ 42,964	\$ 129.31	3.61%	\$ 77.88	2.18%	No stormwater fee		
York County	24,042	\$ 78,073	\$ 123.75	1.90%	\$ 72.63	1.12%	No stormwater fee		

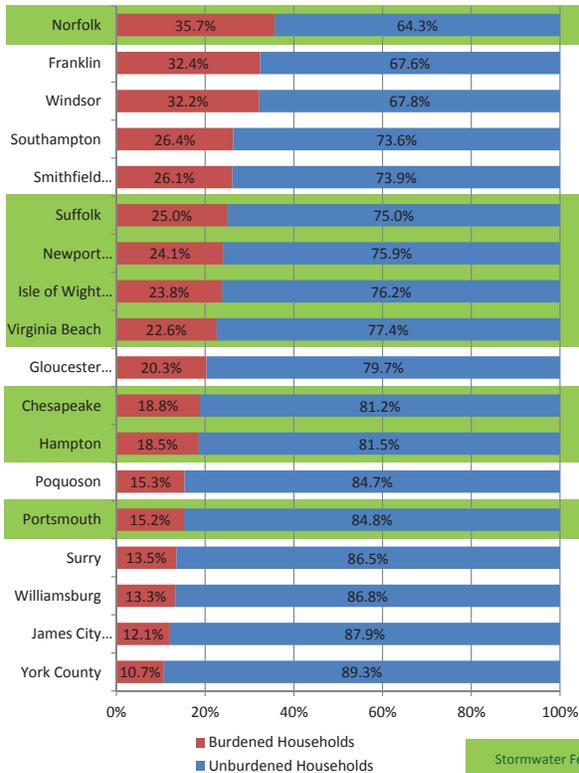
"Burdened" Households Paying 2% or More of Income for 2015 Wastewater Costs



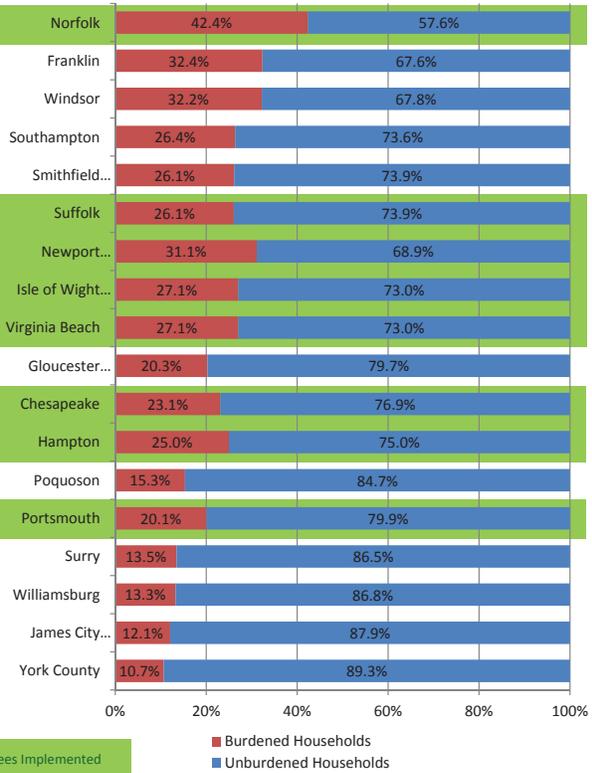
"Burdened" Households Paying 2% or More of Income for 2015 Wastewater and Stormwater Costs (Combined)



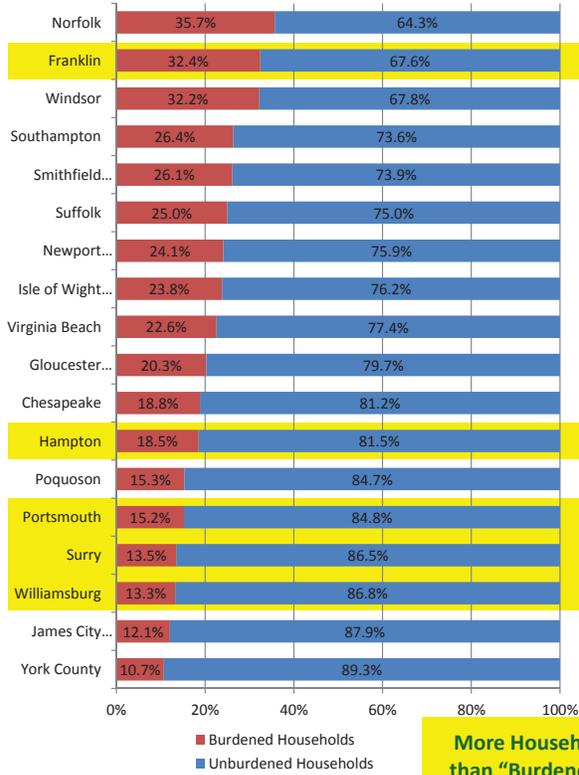
"Burdened" Households Paying 2% or More of Income for 2015 Wastewater Costs



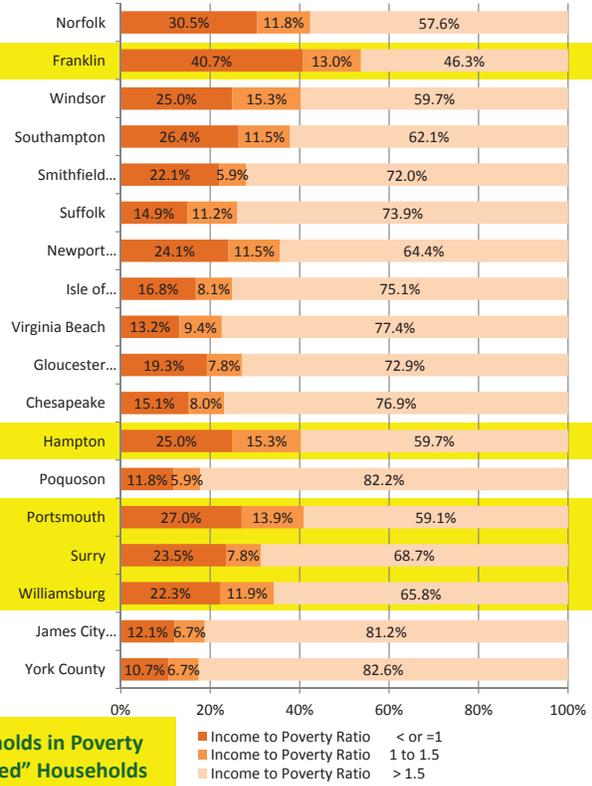
"Burdened" Households Paying 2% or More of Income for 2015 Wastewater and Stormwater Costs (Combined)



"Burdened" Households Paying 2% or More of Income for 2015 Wastewater Costs

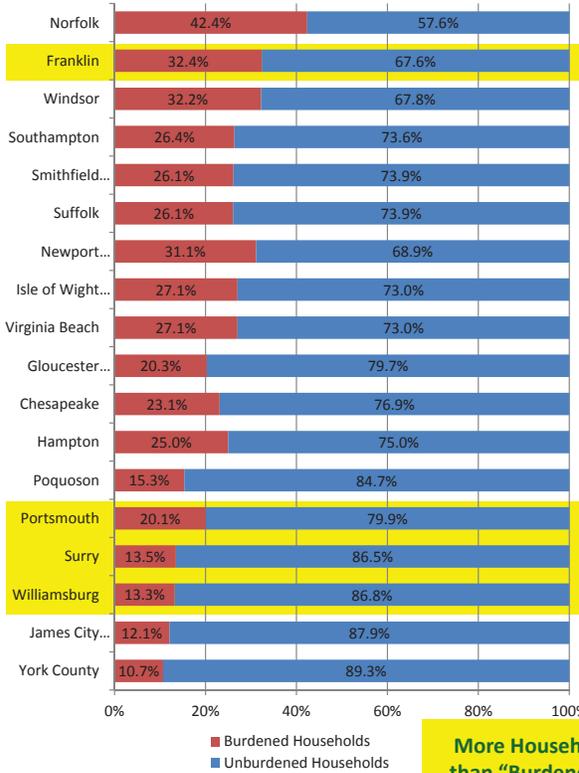


Households by Income to Poverty Ratio

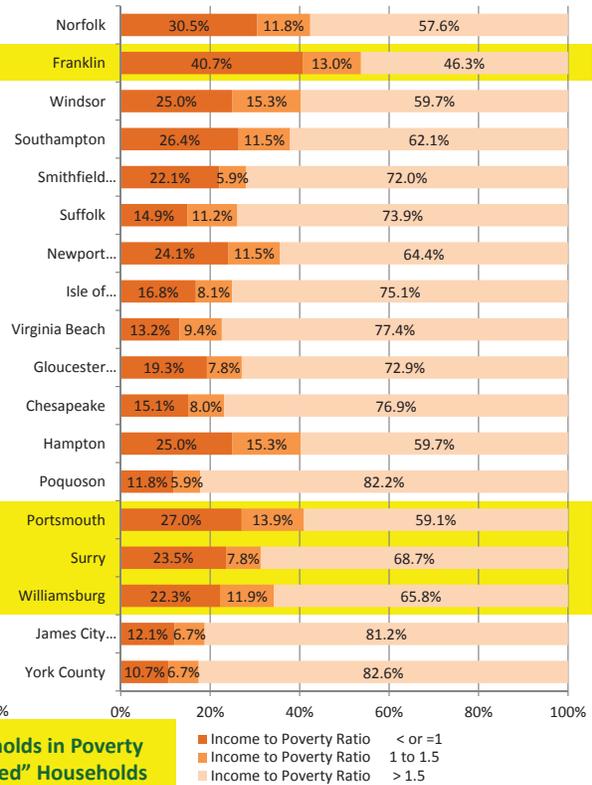


More Households in Poverty than "Burdened" Households

"Burdened" Households Paying 2% or More of Income for 2015 Wastewater and Stormwater Costs (Combined)



Households by Income to Poverty Ratio



More Households in Poverty than "Burdened" Households

WATER UTILITY CUSTOMER ASSISTANCE PROGRAM COST ESTIMATION TOOL

Calculates a rough estimate of the annual cost of funding a new customer assistance program

Household Income Group ENDS in:	Household Income Group	Estimated number of households in the income group	Cumulative	Cumulative Percent
\$10,000	\$0 - \$10,000	8,184	8,184	9%
\$14,999	\$10,001 - \$14,999	5,415	13,599	15%
\$24,999	\$15,000 - \$24,999	10,301	23,900	26%
		34,705	48,426	38%
		64,670	74,541	52%
		85,403	89,196	70%
		92,455	92,455	81%
		92,455	92,455	92%
		92,455	92,455	96%
		92,455	92,455	100%

Projected Income Distribution of the 103217 Residential Customers of Public Utilities of AnyTown, US

Estimated by superimposing the approximated income distribution smoothed trendline estimated from the income data table of the 92455 households in Anytown town, US on to the 103217 residential households served by the utility (Public Utilities of AnyTown, US).

Approximate Household Income Cumulative Distribution

RESULTS

Range of Estimated Net Annual Program Costs to the Utility (ball-park, rough estimates)	
Lowest annual cost estimate	Highest annual cost estimate
Assuming assistance eliminates \$42 bad debt/customer, maximum bad debt recovery is assumed	Assuming no recovery of bad debt, full program cost is assumed
\$690,400	\$991,600
(about \$6.69/residential household customer)	(about \$9.61/residential household customer)

Based on these rough estimates and calculations, the Customer Assistance Program described above could help approximately 7930 residential customers pay their bills, at a net cost of \$690,400 - \$991,600 to the utility.