

Water Rate Affordability & Customer Assistance Programs

Presentation to the WSSC Commissioners

September 13, 2017

Introduction

- ▶ Affordability Concepts
- ▶ WSSC Demographic Profile
- ▶ WSSC Customer Assistance Program

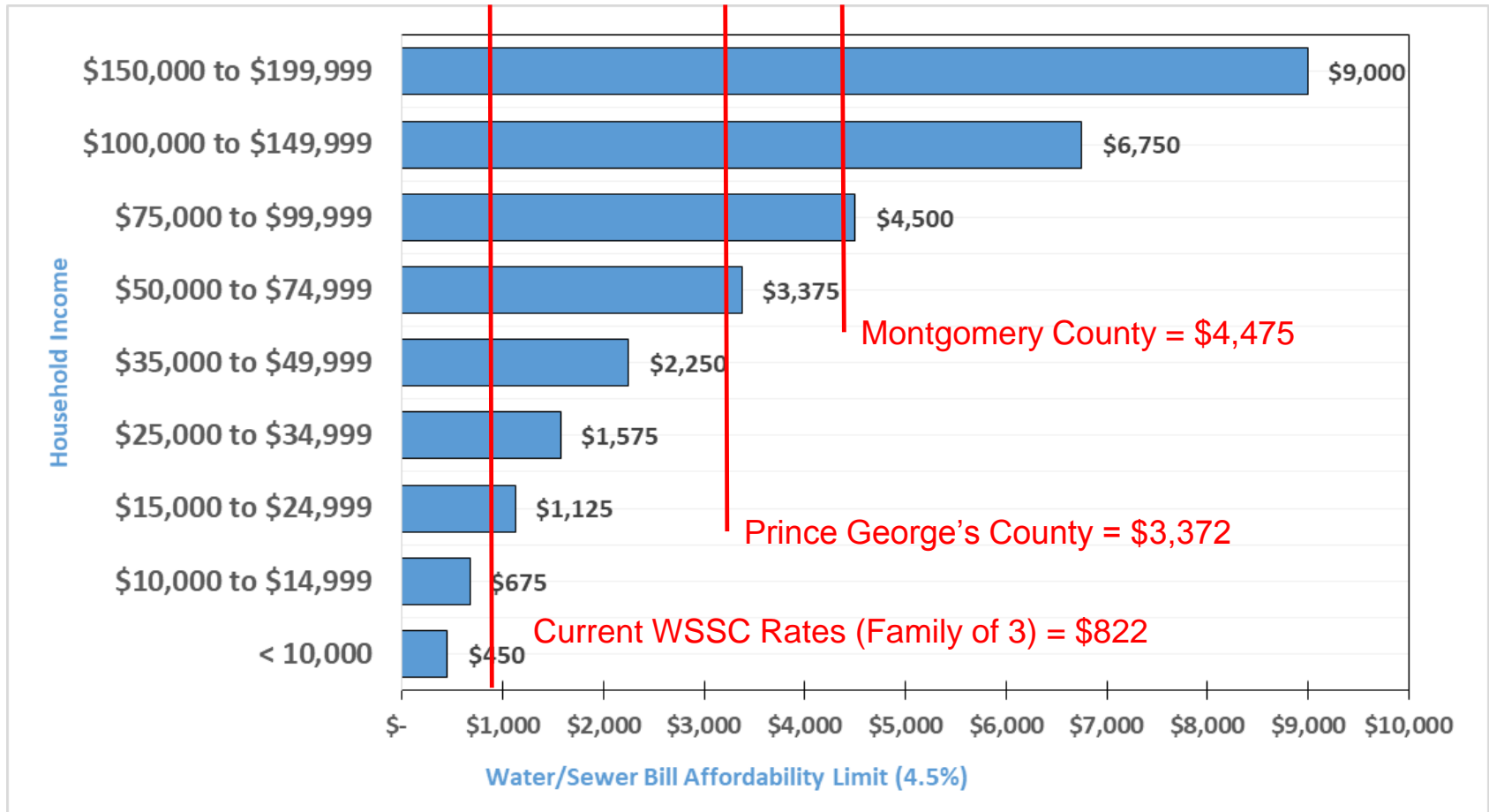
Defining Affordability

- ▶ Community's ability to pay for improvements needed to meet federal water standards.
- ▶ Average/Median customers' ability to pay water & sewer bill.
- ▶ Ability to pay essential needs (water, housing, food, heating, basic medical needs, etc)
- ▶ Ability of low-income customers to pay water & sewer bills.
- ▶ Ability to pay is not the same as willingness to pay.

EPA's Affordability Thresholds

- ▶ Wastewater & Stormwater: 2.0% of Median Household Income (EPA CSO Guidance, 1997).
- ▶ Water: 2.5% of Median Household Income (EPA Small Water System Guidance 1996).
- ▶ Combined Water & Sewer: 4.5% of Median Household Income (EPA Affordability Guidance 2014).

Water & Sewer Bill Affordability Limits (4.5% of Household Income)



Affordability Trends

“A best practice utility is one that recognizes that going beyond the normal realm of standard commercial collections practices is pragmatic and worthwhile when weighed in terms of the overall mission of the utility within the community.”

–Best Practices in Customer Payment Assistance Programs,
Water Research Foundation

Best Practices in Affordability

- ▶ Uses a comprehensive and systematic view in the design of customer assistance programs
- ▶ Uses a business process methodology that defines clear strategies and objectives, evaluating results and outcomes regularly, and measuring program effectiveness through well-defined performance measures.
- ▶ Recognizes that there are various causes of nonpayment at the household level, not just income. Job loss, illness, disability, domestic turmoil, and unexpected expenses are factors that all contribute to non-payment of water bills.
- ▶ A well-designed assistance program will offer a mix of solutions that address these different problems.

Key Elements to an Effective Customer Assistance Program

- ▶ Examine patterns of nonpayment.
- ▶ Design custom approaches to meet customers differing needs.
- ▶ Integrate of assistance efforts with those of private and governmental social service and assistance providers.
- ▶ Implement communications campaigns to expand awareness of utility and other assistance programs.
- ▶ Train customer service staff to a high level of readiness to connect clients with the appropriate assistance on the first call, or at the first point of contact.
- ▶ Provide various forms of after-care to assist customers in the aftermath of resolving an incidence of payment troubles in order to help minimize recurrences.

Demographic Profile of WSSC's Customer Base

- Total Population = 1,767,058 (2015 American Community Survey)
- Population living below Federal Poverty Level = 157,926 (2015 American Community Survey)
- Total Households = 658,907 (2015 American Community Survey)
- Households with Income below Federal Poverty Level = 55,856.
- WSSC Residential Accounts: 438,495

Demographic Profile of WSSC's Customer Base

- WSSC's service population is roughly similar to a city the size of Philadelphia.
- Senior's represent about 12% of the total population, which is slightly lower than the Maryland and U.S. average.
- The rate of disability is similar to the rates in Maryland and the U.S.
- The numbers of veterans as a percentage of population is lower than average.
- The distribution of renter and owners, and average household size, is similar to the Maryland and U.S. averages. Portland, DC, and Philadelphia have significantly higher rates of rental units.

General Demographic Comparison

Table 1 - General Demographic Profile

	Montgomery County	Prince George's County	Fairfax County	Washington DC	Philadelphia, PA	Multnomah County, OR	Maryland	U.S
Population	1,017,859	892,816	1,128,722	647,484	1,555,072	768,418	5,930,538	316,515,021
Over 65	135,226	96,128	124,787	73,299	192,198	88,522	791,151	44,615,477
% over 65	13.3%	10.8%	11.1%	11.3%	12.4%	11.5%	13.3%	14.1%
Households	365,235	305,610	392,355	273,390	581,050	310,669	2,166,389	116,926,305
Disability Status	11.2%	8.7%	6.6%	11.2%	15.9%	12.9%	10.5%	12.4%
Veteran Status	4.3%	5.8%	3.2%	7.4%	13.0%	9.9%	6.9%	10.6%
Renter Occupied Housing	33.8%	38.0%	32.3%	58.8%	47.4%	46.2%	33.2%	36.1%
Average Household Size - Owner Occupied	2.86	2.92	2.88	2.35	2.75	2.56	2.76	2.70
Average Household Size - Renters	2.56	2.76	2.80	2.13	2.41	2.25	2.50	2.53

Source: U.S. Census Bureau, American Community Survey, 5 year estimates (2011-2015).

Income Comparison

Table 2 - Income Profile

	Montgomery County	Prince George's County	Fairfax County	Washington DC	Philadelphia, PA	Multnomah County, OR	Maryland	U.S
Median Household Income (MHI)	\$99,435	\$74,260	\$112,552	\$70,848	\$38,253	\$54,102	\$74,551	\$53,889
MHI (Owner Occupied)	\$126,189	\$95,413	\$138,056	\$113,632	\$51,181	\$77,429	\$94,111	\$68,797
MHI (Renter Occupied)	\$60,290	\$50,297	\$74,263	\$47,802	\$27,114	\$33,865	\$45,793	\$33,784
MHI (over 65 years old)	\$77,264	\$60,981	\$88,376	\$47,763	\$27,129	\$39,632	\$51,162	\$38,726
Upper Limit of Lowest Quintile	\$44,321	\$35,937	\$53,838	\$22,526	\$13,546	\$21,346	\$31,468	\$22,001

Source: U.S. Census Bureau, American Community Survey, 5 year estimates (2011-2015).

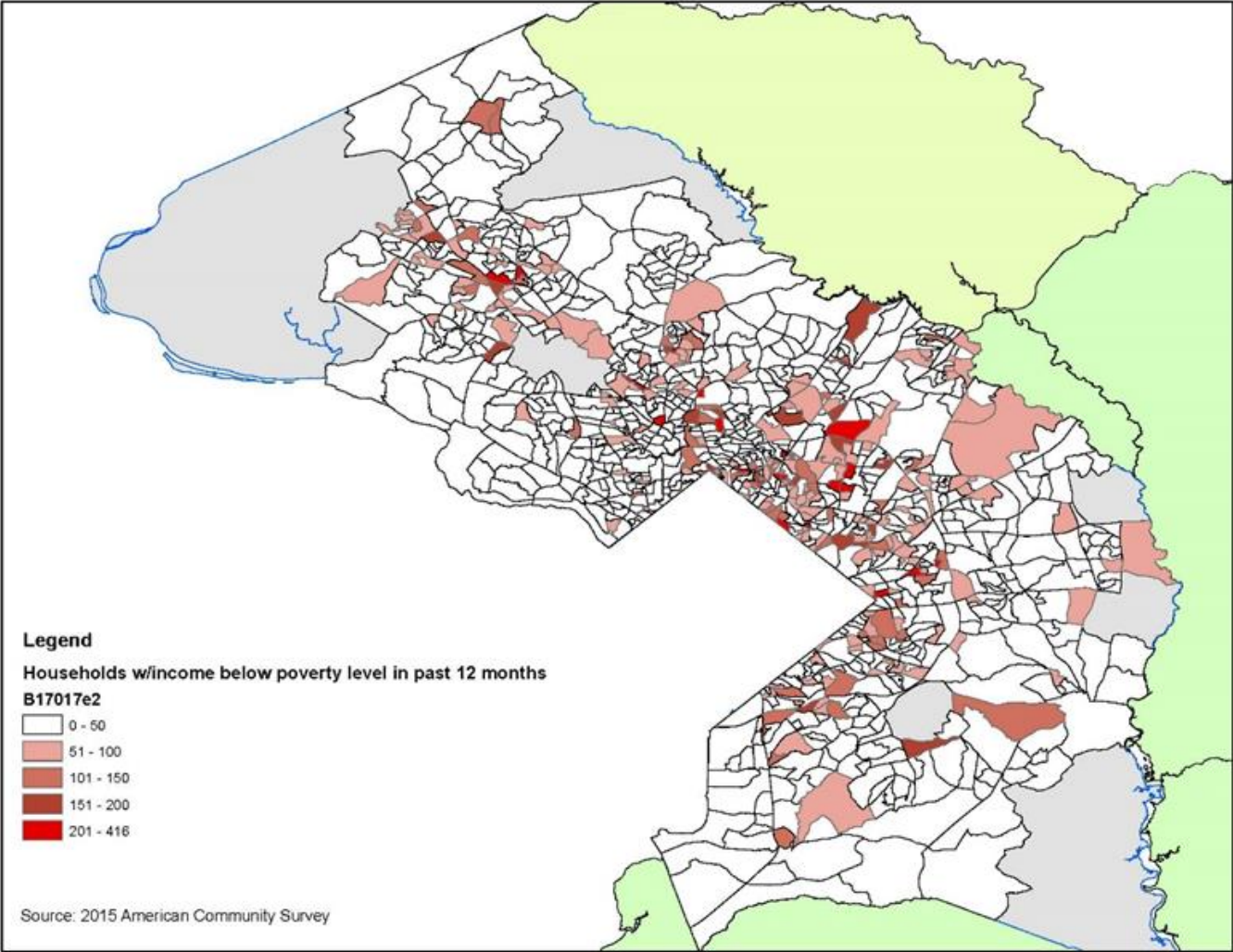
Rates of Poverty Comparison

Table 3. - Rate of Poverty

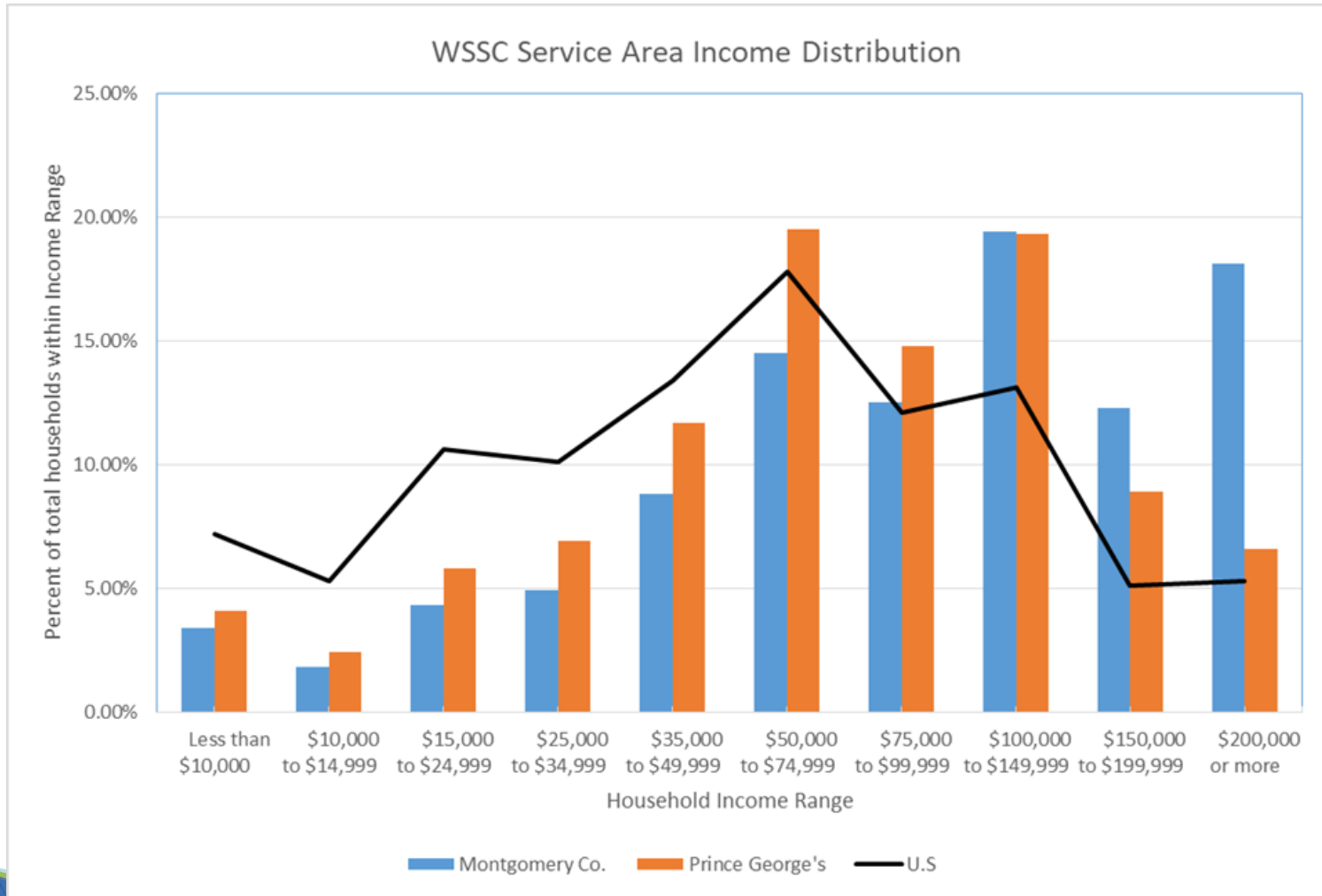
	Montgomery County	Prince George's County	Fairfax County	Washington DC	Philadelphia, PA	Multnomah County, OR	Maryland	U.S
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Households with income below poverty level	22,699	25,460	21,240	42,930	141,310	50,311	204,361	16,811,595
% of Households below poverty level	6.2%	8.3%	5.4%	15.7%	24.3%	16.2%	9.4%	14.4%
% of Households w/Income & Benefits <\$25,000	9.5%	12.3%	7.2%	21.8%	35.1%	23.5%	15.3%	23.1%
% of Household w/Income and benefits: <\$10,000.	3.4%	4.1%	2.6%	10.2%	14.2%	8.3%	5.1%	7.2%
% of Household w/Income and benefits: \$10,000 to \$14,999.	1.8%	2.4%	1.4%	4.2%	7.9%	5.3%	3.3%	5.3%
% of Household w/Income and benefits: \$15,000 to \$24,999 .	4.3%	5.8%	3.2%	7.4%	13.0%	9.9%	6.9%	10.6%

Source: U.S. Census Bureau, American Community Survey, 5 year estimates (2011-2015).

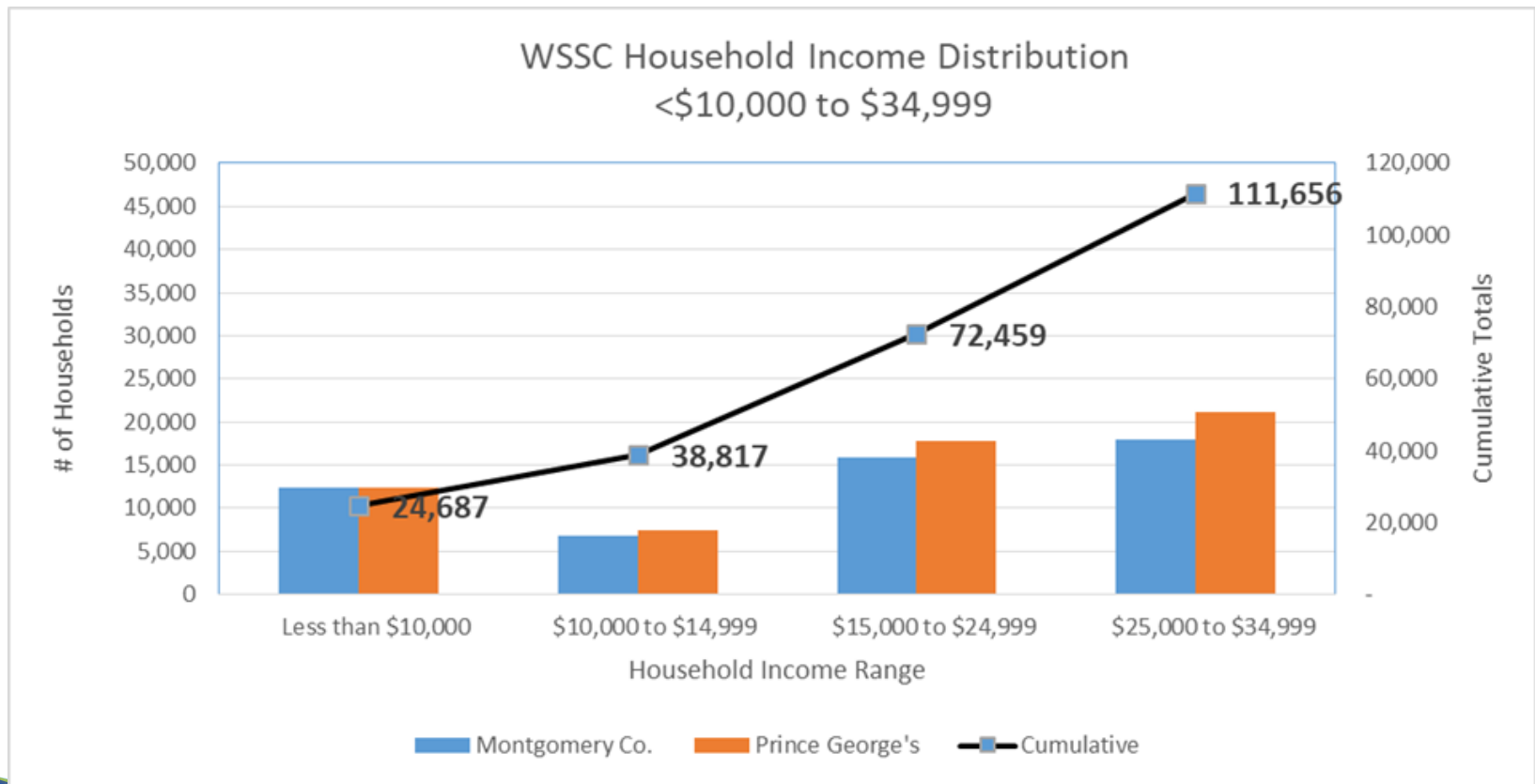
WSSC Service Area – Census Blocks with high numbers of Households below poverty index



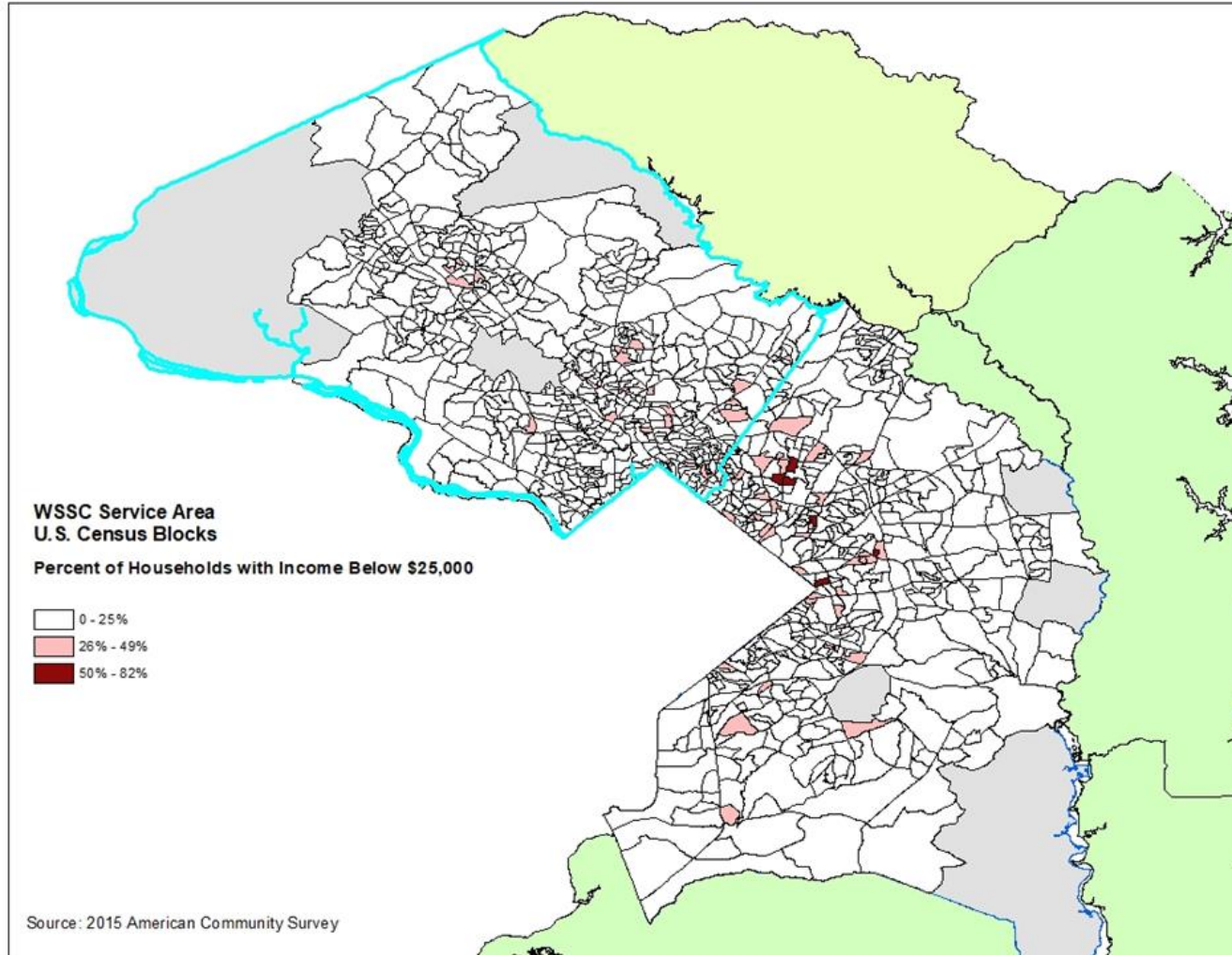
Household Income Distribution



Households with Incomes below \$35,000/year



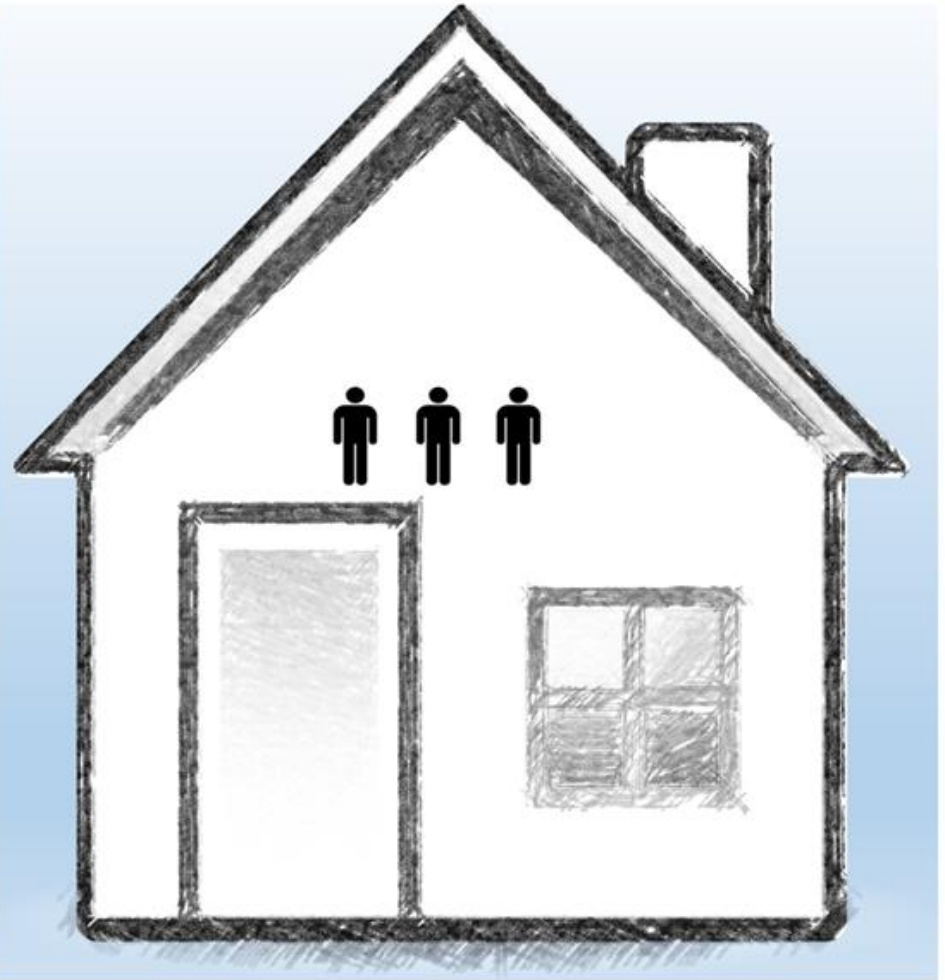
Census Blocks with High Percentages of Households with incomes below \$25,000/year



Rate Impact on Low-Income Household (Current Rates)

Example 1 – Current Water Rate

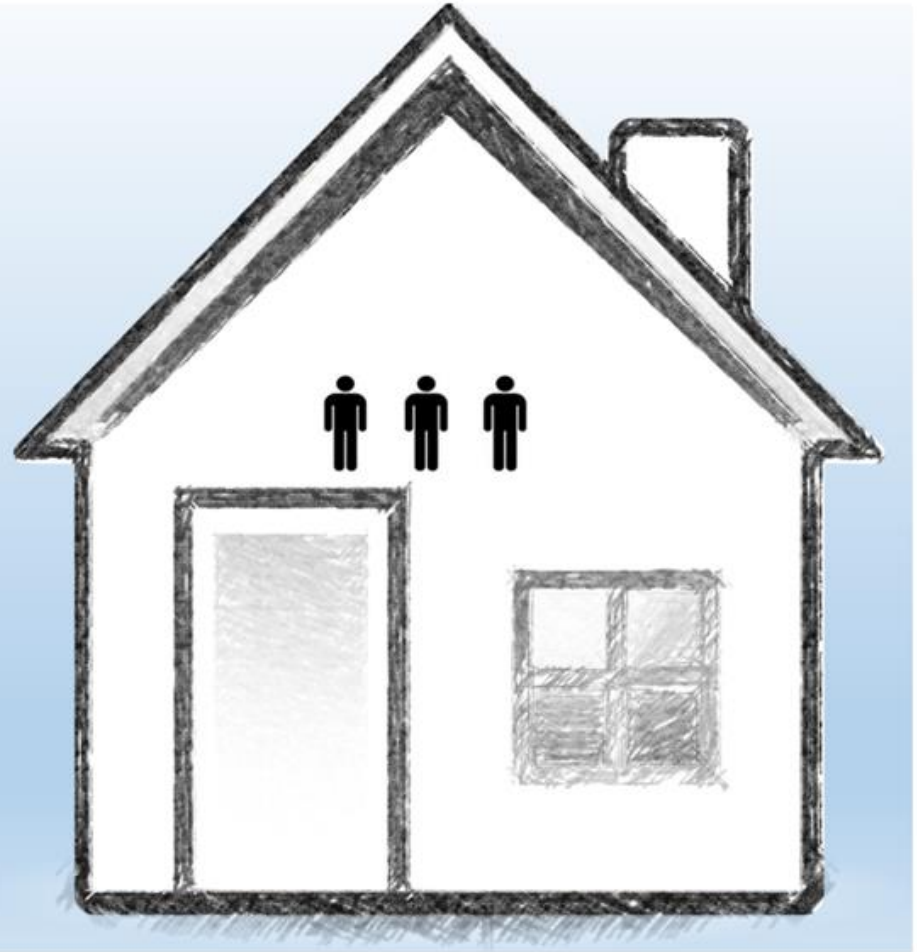
- 3 Person Household
- Household Income = \$20,000 (<FPL)
- 55 Gallons/person/day = 165 GPD
- Annual Water Bill = \$821.80
- **% of Household Income = 4.1%**
- **With CAP assistance = 2.0%**



Rate Impact on Low-Income Household (Proposed Uniform Rate)

Example 2 – Uniform Water Rate

- 3 Person Household
- Household Income = \$20,000 (<FPL)
- 55 Gallons/person/day = 165 GPD
- Annual Water Bill = \$995.80
- **% of Household Income = 5.0%**
- **With CAP assistance = 2.9%**



Renters & Other Hard to Reach (H2R) Customers

- ▶ Well-Recognized Challenge for Utility Industry.
- ▶ More work needed to identify universe of H2R customers.
- ▶ Strategies include:
 - Partnering with existing and well-trusted community-based organizations (CBOs), and piggybacking onto existing programs that have track records of successfully engaging and providing support to the H2R.
 - Working more closely or consistently with landlords to help reach and extend assistance to residents in multi-family units.
 - Working with local trade organizations and housing agencies to develop successful programs to reach their H2R tenants.
 - Building trust through ongoing, frequent, culturally appropriate connections. For example, reaching non-English speakers requires providing services in their languages and understanding their cultural communication styles, needs, and expectations.

WSSC's Customer Assistance Programs

- ▶ Customer Assistance Program (CAP)
- ▶ Water Fund
- ▶ BRF Exemption
- ▶ HomeServe Utility Insurance



Income Eligibility

Income Eligibility Limits Effective July 1, 2017 to June 30, 2018		
Household Size	Maximum Gross Monthly Income Standards	Maximum Gross Yearly Income Standards
1	\$1,759	\$21,105
2	\$2,368	\$28,420
3	\$2,978	\$35,735
4	\$3,588	\$43,050
5	\$4,197	\$50,365
6	\$4,807	\$57,680
7	\$5,416	\$64,995
8	\$6,026	\$72,310
For Each Additional Person, Add	\$701	\$8,418

Current Program Improvement Efforts

- ▶ Working with the Maryland Office of Home Energy Programs (OHEP) and social service agencies to strengthen relationships and improve participation in WSSC's CAP program.
- ▶ Conducting outreach to private companies and other organizations to increase donations to the Water Fund.
- ▶ Examining utility billing data (delinquency, payment plans, and shut-off's) to identify customers who may be eligible for customer assistance.
- ▶ Working with the Salvation Army to improve the visibility and reach of the Water Fund Program.
- ▶ Working with WASHCOG to develop an in-depth demographic analysis of the WSSC service area.
- ▶ Analyzing customer information to identify universe of renters, and other vulnerable populations.

Affordability Challenges

- Identifying Hard to Reach (H2R) Customers.
- Improving the reach of existing assistance programs.
- Developing a better understanding of the reasons for non-payment of water bills.
- Characterizing the universe of vulnerable customers.
- Current Billing system limitations.
- Addressing affordability through rates would be complex, expensive, and difficult to administer.

Additional Opportunities for CAP Improvements

- ▶ Examine patterns of nonpayment to define key subgroups of payment-troubled customers and design custom approaches to meet their differing needs.
- ▶ Integrate its assistance efforts with those of private and governmental social service and assistance providers in the community– such as sharing of database resources to identify potential clients and improve outreach for assistance programs at a communitywide level.
- ▶ Implement communications campaigns to expand awareness of utility and other assistance programs, conveying effective knowledge to target subgroups of customers, enabling and encouraging them to seek assistance.
- ▶ Develop custom approaches to treating different types of nonpayment situations for various subgroups and train customer service staff to a high level of readiness to connect clients with the appropriate assistance on the first call, or at the first point of contact.
- ▶ Provide various forms of after-care to assist customers in the aftermath of resolving an incidence of payment troubles in order to help minimize recurrences.

WSSC FY19 Rate Structure Review

Affordability & Customer Assistance Programs

Introduction

The focus of this briefing document is on affordability and customer assistance programs. Understanding how WSSC's water rates impact customers, particularly low income and fixed income customers, is an important consideration whenever significant rate increases are being considered. This paper presents some of the industry's current thinking on the subject of customer affordability programs and presents the results of a preliminary demographic analysis of WSSC's service area that will help the Commission evaluate the effectiveness of its customer assistance programs.

Section 1 of this paper provides an overview of the utility industry's current understanding of how affordability can and should be defined and presents some of the best practice approaches to addressing affordability through well-designed, well-targeted customer assistance programs. Summaries of key studies, industry reports, articles, and guidance documents are provided at the end of this report for reference.

Section 2 of the report presents a comparative demographic profile of the WSSC service population, using the latest (2015) estimates from the U.S. Census Bureau. This analysis includes comparisons of some key demographic factors (median household income, rates of poverty, income distribution, housing profiles) for Prince George's and Montgomery Counties, the State of Maryland, Fairfax County VA, Washington DC, Philadelphia PA, Multnomah County OR (Portland), and the United States. Although this information does not fully encompass the type of in-depth analysis that is described in current affordability guidance, this presentation of data can serve as a starting point for the Commission's evaluation of its customer assistance programs (CAPs).

Section 3 discusses some of the implications for WSSC's CAP programs and outlines some strategies for how these programs can be improved based on industry best practices.

Section 1. – Best Practices in Water Affordability Programs

Within the water industry, utilities' understanding of affordability has been evolving, particularly within the last two decades. Historically, affordability was defined as a community's overall ability to meet Clean Water Act and Safe Drinking Water Act mandates. The oft-cited EPA guidelines, which express affordability thresholds based on a community's median household income (2.0% for wastewater, 2.5% for drinking water, 4.5% for combined utilities) were developed primarily to determine whether communities could afford to comply with changing regulatory mandates.

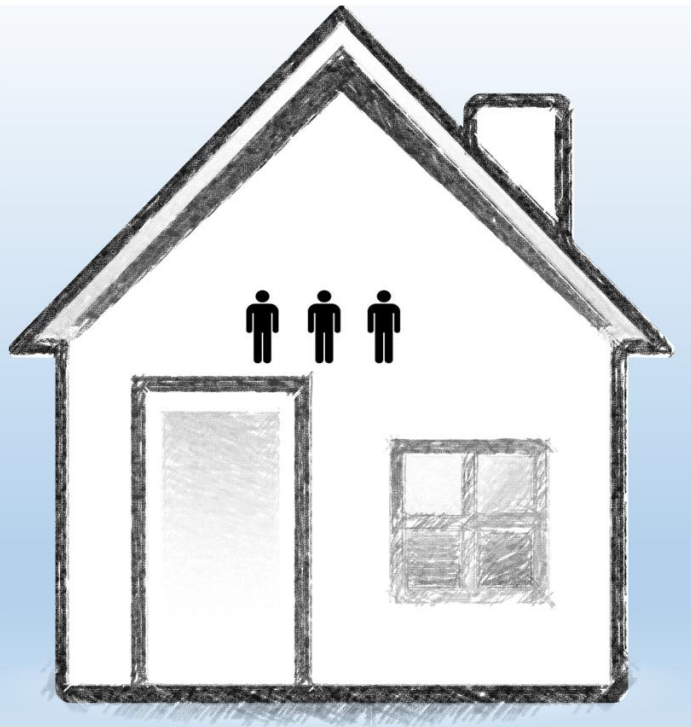
There has been a growing recognition within the utility industry that these historical measures of affordability based on median household income are not designed to, and do not measure the

impact on vulnerable populations. In the last decade, there has been a significant effort within the industry to develop better tools to assess the impact of water and sewer bills on disadvantaged populations, using detailed census data and other socio-economic indicators to fully characterize income and poverty distributions within a community. The “Affordability Assessment Tool for Federal Water Mandates” that was developed by AWWA and WEF in 2013 in consultation with the U.S. Conference of Mayors, is one such tool. This tool provides a framework for developing a much more detailed picture of affordability within a utility’s customer base and describes potential resources that can be used to develop alternative affordability measures that go beyond median household income.

To illustrate this point, an estimated annual water and sewer bill was calculated for a hypothetical family of three using current rates and the proposed single uniform rate. Although an average usage water bill for this household would be well below EPA’s affordability threshold if they earned a median income, the impact on a family living near the poverty level is significant – 4.1% of household income. If these customers took full advantage of WSSC’s existing assistance programs, this impact could be reduced to 2.0%. Although these examples are theoretical, they demonstrate that customer assistance programs can have a significant impact in increasing the affordability of water for the lowest income customers.

Example 1 – Current Water Rate

- 3 Person Household
- Household Income = \$20,000 (<FPL)
- 55 Gallons/person/day = 165 GPD
- Annual Water Bill = \$821.80
- **% of Household Income = 4.1%**
- **With CAP assistance = 2.0%**

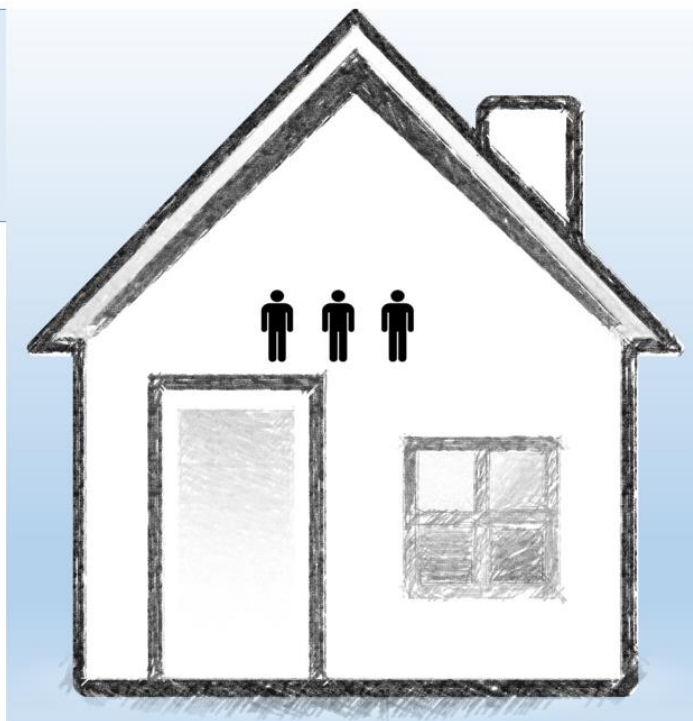


In the second example, again a hypothetical family of three living at or near the federal poverty level, the impact of a proposed water increase would push the household’s annual water and

sewer bill above 5% of its income. But again, existing customer assistance programs could help reduce the overall burden on the household to 2.9% of household income.

Example 2 – Uniform Water Rate

- 3 Person Household
- Household Income = \$20,000 (<FPL)
- 55 Gallons/person/day = 165 GPD
- Annual Water Bill = \$995.80
- **% of Household Income = 5.0%**
- **With CAP assistance = 2.9%**



Current guidance suggests, however, that utilities go well beyond examining single metrics to answer the question: “Are our rates affordable?”

A best practice approach uses a comprehensive and systematic view in the design of customer assistance programs, using a business process methodology that defines clear strategies and objectives, evaluating results and outcomes regularly, and measuring program effectiveness through well- defined performance measures. A critical factor in the success of a customer assistance

A best practice utility is one that recognizes that going beyond the normal realm of standard commercial collections practices is pragmatic and worthwhile when weighed in terms of the overall mission of the utility within the community.

“Best Practices in Customer Payment Assistance Programs”, Water Research Foundation

program is recognition that there are various causes of nonpayment at the household level, not just income. Job loss, illness, disability, domestic turmoil, and unexpected expenses are factors that all contribute to non-payment of water bills and a well-designed assistance program will

offer a mix of solutions that address these different problems. Portland Water’s program is an example of this comprehensive approach.

There also is a growing awareness that affordability and public health are connected. At its most basic level, public health is adversely impacted by water shut-offs or service interruptions. Moreover, because households place a very high priority on keeping water in the home, low-income households may forego other essential, health-related spending (such as food, medicine, and medical care) to pay the water bill. (Raucher et al. 2011) Consequently, addressing affordability can help enhance a community’s overall health, providing another compelling reason to “go beyond normal commercial collections practices and help meet higher community goals in this area of service.”

The Water Research Federation’s 2010 guidance “Best Practices in Customer Payment Assistance Programs” lists the following elements in a well-planned and effective affordability program:

- An examination of patterns of nonpayment to define key subgroups of payment-troubled customers and design custom approaches to meet their differing needs.
- Integration of assistance efforts with those of private and governmental social service and assistance providers in the community– such as sharing of database resources to identify potential clients and improve outreach for assistance programs at a communitywide level.
- Implementation of communications campaigns to expand awareness of utility and other assistance programs, conveying effective knowledge to target subgroups of customers, enabling and encouraging them to seek assistance.
- Development of custom approaches to treating different types of nonpayment situations for various subgroups and train customer service staff to a high level of readiness to connect clients with the appropriate assistance on the first call, or at the first point of contact.
- Providing various forms of after-care to assist customers in the aftermath of resolving an incidence of payment troubles in order to help minimize recurrences.

Ultimately, the question of affordability is one that WSSC must evaluate based on its own assessment of its customer needs. The document summaries at the end of this report describe how a best practices approach to the problem of affordability might be undertaken.

Section 2. Demographic Profile of the WSSC Service Area

The information in this section is intended to provide additional context to the discussion of affordability and customer assistance programs. The following demographic profile of WSSC customer base was developed using block and tract level census data gathered from the U.S. Census Bureau’s American FactFinder website and represents income, poverty, and housing summaries generated from the American Community Survey for 2011-2015. WSSC’s customer base is well represented by profiles for Prince George’s and Montgomery Counties since the

service area encompasses 94% of the census blocks within the two counties (1069 out of 1137 census block areas).

The analysis contained in this section of the report characterizes WSSC’s customers by income, age and rates of poverty. A much more detailed analysis of WSSC’s customers can be developed using additional American Community Survey microdata to break this information down further by housing unit types and rates of home ownership. This type of analysis may shed additional light on identifying the universe of households that are struggling to pay their water bills.

For comparative purposes, data for the U.S, Maryland, Fairfax County Virginia, Washington D.C., Philadelphia, and Multnomah County Oregon (City of Portland) is also shown.

An examination of the U.S. Census Bureau’s 2015 American Community Survey data indicates that WSSC’s customer base has the following demographic characteristics:

- WSSC’s service population is roughly similar to a city the size of Philadelphia.
- Senior’s represent about 12% of the total population, which is slightly lower than the Maryland and U.S. average.
- The rate of disability is similar to the rates in Maryland and the U.S.
- The numbers of veterans as a percentage of population is lower than average.
- The distribution of renter and owners, and average household size, is similar to the Maryland and U.S. averages. Portland, DC, and Philadelphia have significantly higher rates of rental units, as would be expected.

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	Montgomery County	Prince George's County	Fairfax County	Washington DC	Philadelphia, PA	Multnomah County, OR	Maryland	U.S
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Average Household Size - Owner Occupied	2.86	2.92	2.88	2.35	2.75	2.56	2.76	2.70
Average Household Size - Renters	2.56	2.76	2.80	2.13	2.41	2.25	2.50	2.53

Source: U.S. Census Bureau, American Community Survey, 5 year estimates (2011-2015).

Table 2. below shows the income profiles for Prince Georges and Montgomery Counties and the same six areas in the comparison set. This data indicates that WSSC’s services population has a significantly higher median household income across all demographic categories except for

Fairfax County. WSSC’s median income differential is particularly pronounced at the lowest income quintile compared to Philadelphia, Washington DC, and Portland.

Table 3. provides data on the incidence of poverty among households. Montgomery County and Prince George’s Counties have a significantly lower rates of poverty than the state-wide and US average, and half the rates of poverty in the three comparison cities. There are an estimated 48,159 households with incomes at or below the federal poverty index in the counties that comprise the WSSC service area.

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	Montgomery County	Prince George's County	Fairfax County	Washington DC	Philadelphia, PA	Multnomah County, OR	Maryland	U.S
Median Household Income (MHI)	\$99,435	\$74,260	\$112,552	\$70,848	\$38,253	\$54,102	\$74,551	\$53,889
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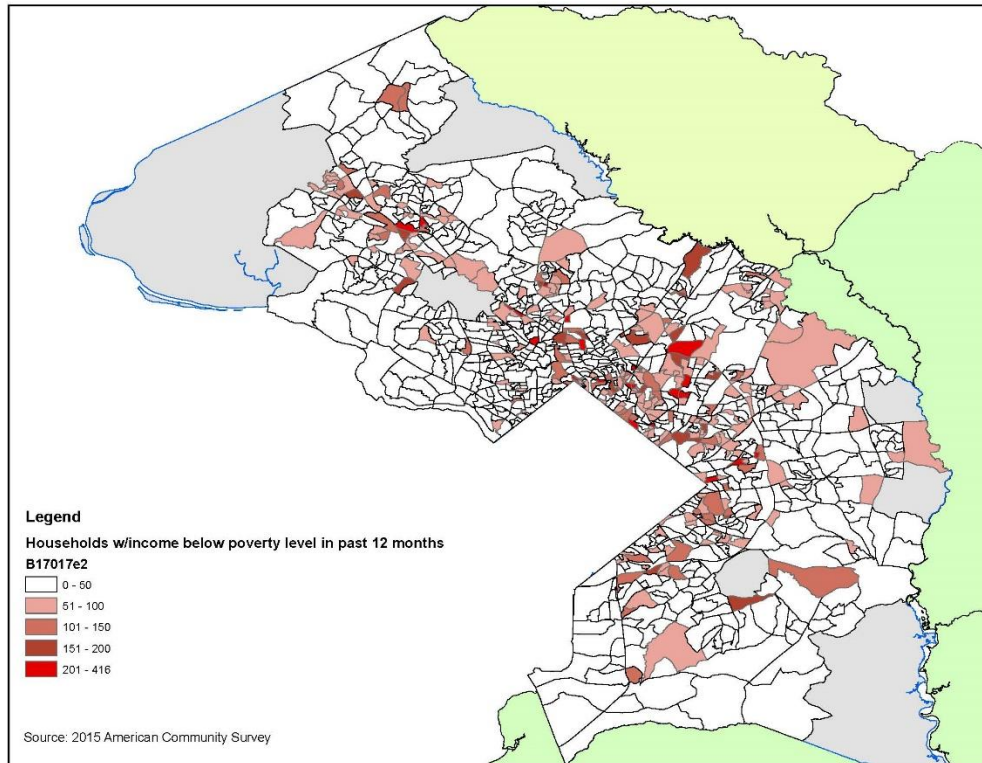
Source: U.S. Census Bureau, American Community Survey, 5 year estimates (2011-2015).

Table 3. - Rate of Poverty

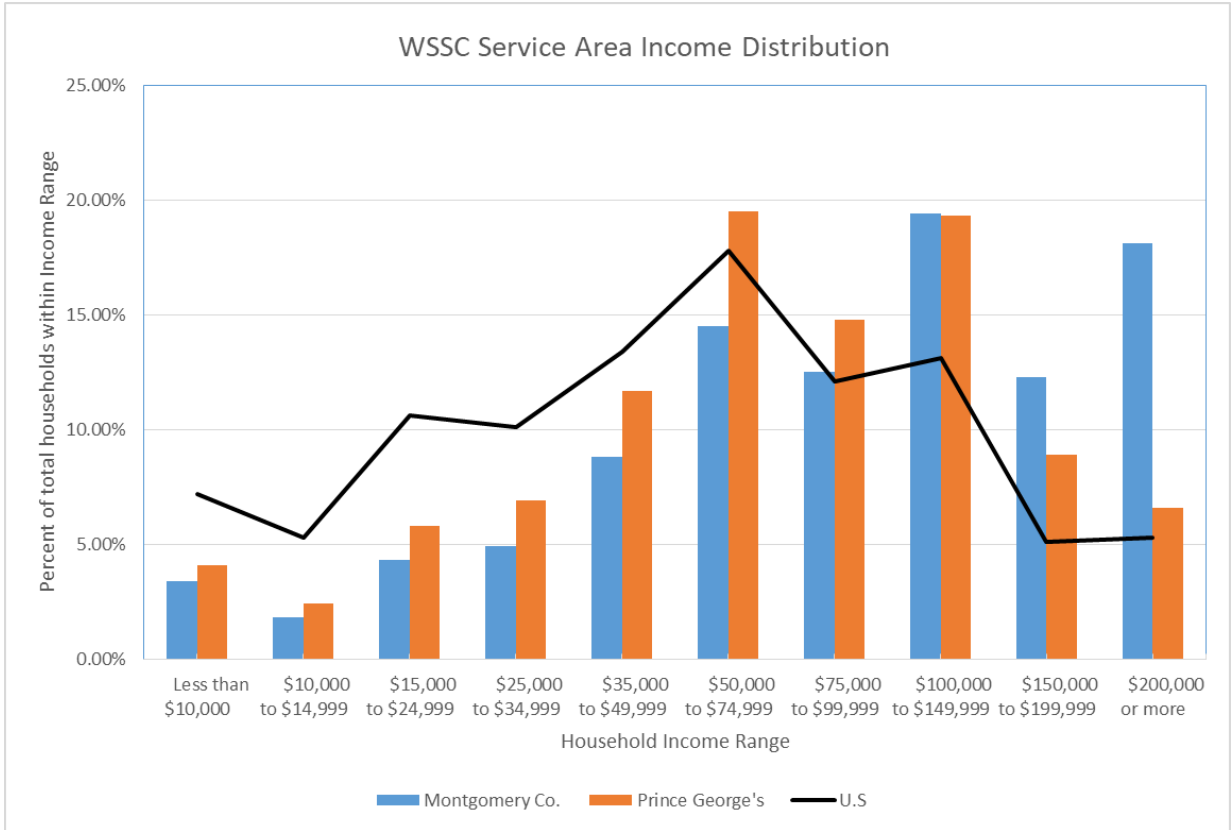
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% of Household w/Income and benefits: <\$10,000.	3.4%	4.1%	2.6%	10.2%	14.2%	8.3%	5.1%	7.2%
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Source: U.S. Census Bureau, American Community Survey, 5 year estimates (2011-2015).

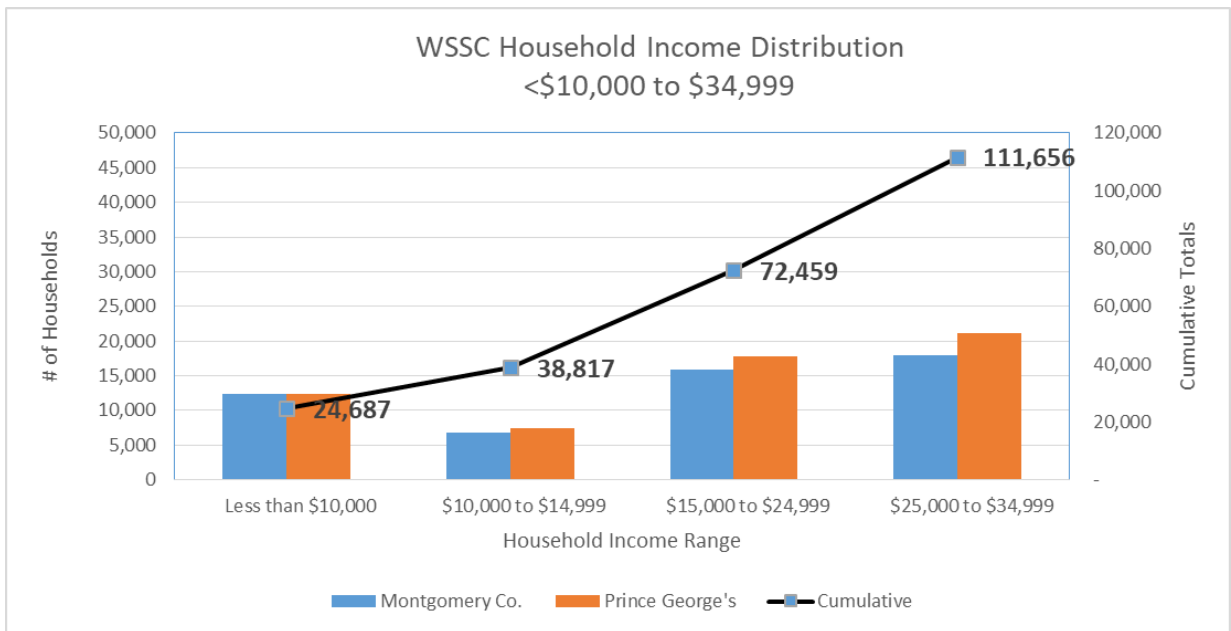
The map below indicates where the highest concentrations of households with incomes at or below the federal poverty level are located. Understanding where low-income or disadvantaged customers are located can help a utility target outreach and communications efforts for customer assistance programs and may reveal opportunities to work with local governments or local community organizations to improve program utilization.

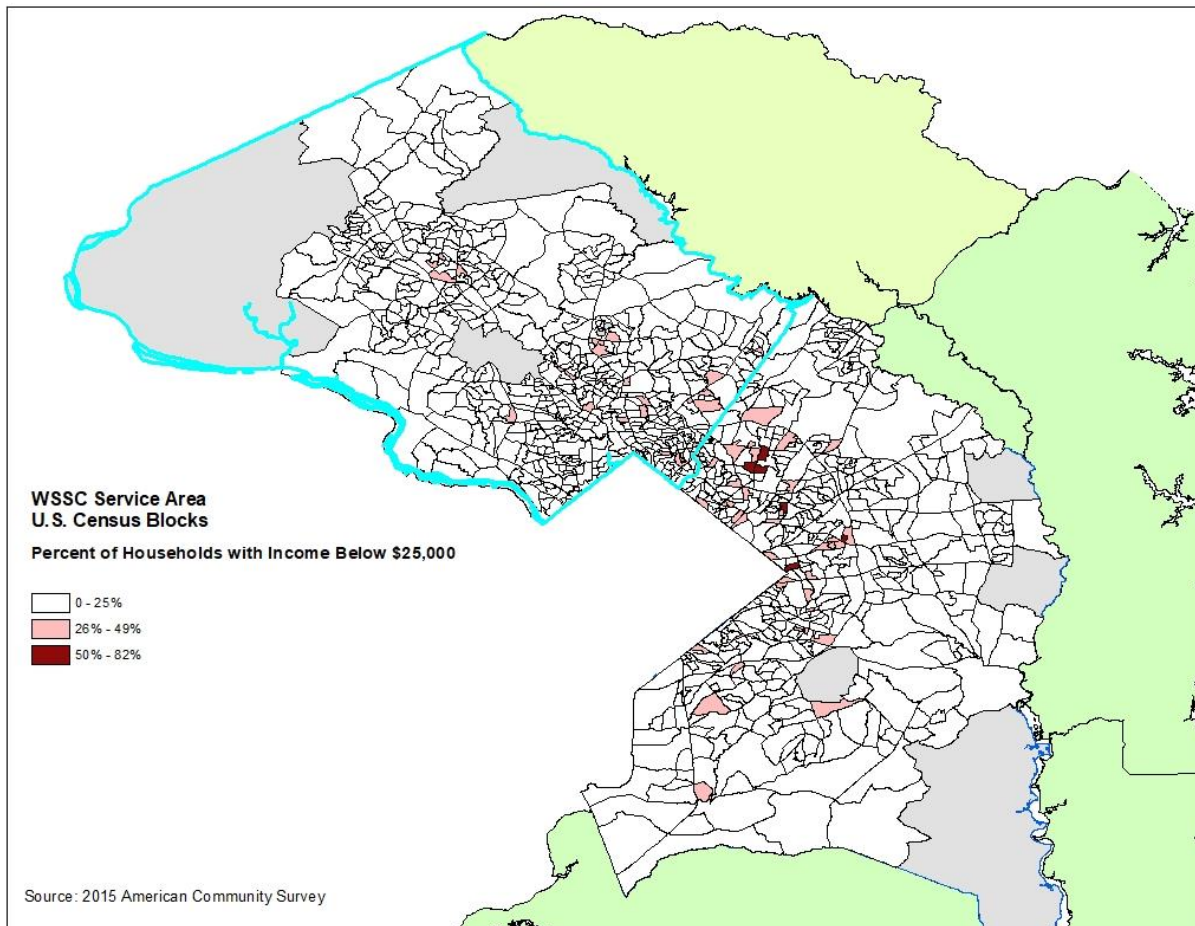


The 2015 American Community Survey data also provides information on the distribution of income within different communities. This information is useful in identifying the universe of potential customer assistance program applicants. As the figure below indicates, Prince George's and Montgomery Counties have an income distribution that is skewed significantly to the higher income ranges compared to the national average.



With respect to the universe of customers at the lowest income levels, the chart below shows that there are over 24,500 households with incomes less than \$10,000 per year, and over 72,000 households in the two county area with incomes below \$25,000. The map on the following page shows where the highest concentrations of these households are located.





The Question of Renters

One of the most significant challenges with customer assistance programs for water utilities is the problem of addressing customers in multi-family rental units, who may or may not be responsible for some or all of the water bill. This problem has been recognized as a challenge for water utilities and is accurately described in the excerpt below, which was taken from EPA's Compendium of Drinking Water and Wastewater Customer Assistance Programs.

Reaching the Renter: The Owner-Occupier Dilemma

CAP recipients are often required to be the owner-occupier of a residence; this prevents landlords from receiving benefits and not passing them along. However, because low-income households are generally less likely to own the home they occupy, this requirement can prevent access to CAPs. Drinking water and wastewater utilities often find it difficult to provide assistance to households paying for water indirectly through rent or condo fees because those households do not receive a water bill. Similar CAP access problems arise for those receiving subsidized housing through the Housing Choice Voucher Program (Section 8) or other programs. Some water utilities work with the electric utility to issue a credit through the electric bill (because most apartments and condos have individual electric meters and receive a power bill). When developing a CAP, utilities should identify ways to reach needy households who are not owner-occupiers. WRF is developing a document, *Customer Assistance Programs for Multi-Family Residential and Other Hard-to-Reach Customers*, which will provide suggested methods to reach and provide assistance to people not in owner-occupier households.

The Water Research Federation has recently published a guide for working with renters and other hard to reach (H2R) customers. A summary of this study is included at the end of this report and identifies a number of potential strategies for dealing with this customer group in customer assistance programs. Some of these strategies include:

- Partnering with existing and well-trusted community-based organizations (CBOs), and piggybacking onto existing programs that have track records of successfully engaging and providing support to the H2R.
- Working more closely or consistently with landlords to help reach and extend assistance to residents in multi-family units.
- Working with local trade organizations and housing agencies to develop successful programs to reach their H2R tenants.
- Building trust through ongoing, frequent, culturally appropriate connections. For example, reaching non-English speakers requires providing services in their languages and understanding their cultural communication styles, needs, and expectations.

The information provided in this section is not intended to answer the question: Does WSSC have an affordability problem? What it reveals is that there is a community of customers within WSSC's service area who will have challenges paying current and future water bills. Although the data indicates that this universe of customers may be smaller, on average, than comparable cities or areas, the impact of water bills on the most vulnerable populations is no less severe and it will be important to understand how WSSC's existing or future customer assistance programs can mitigate this impact.

The next section discusses how WSSC assess its current customer assistance programs in the context of the industry's understanding of best practice approaches to addressing affordability.

Section 3. Improving WSSC's Customer Assistance Programs

Besides payment plans and the HomeServe insurance program, WSSC maintains three discrete customer assistance programs to help lower-income customers reduce their water bills. The Water Fund offers residential customers a one-time, donation-financed grant of up to \$300 to help households facing hardship pay their delinquent water and sewer bills. This program is administered through the Salvation Army. The Customer Assistance Program (CAP) provides

relief from fixed fee portions of the water bill (up to \$112 annually) for customers who meet the eligibility requirements of the State's Home Energy Assistance Program. Finally WSSC offers customers with low incomes (two times the Federal Poverty Index) an exemption from the Bay Restoration Fee, which amounts to \$60 per year.

WSSC's Water Fund has been in place for many years, whereas the Customer Assistance Program (CAP) was implemented more recently in July 2015. Collectively, these programs are capable of providing up to \$472 in assistance annually to help reduce the water bills for low-income customers (\$112 for the CAP program, \$300 for the Water Fund, \$60 for the BRF Exemption Program). In FY 2017, customer savings for the Customer Assistance Program amounted to \$858,144. Although WSSC keeps records on the utilization of these programs, it is not yet known what percentage of eligible customers are actually taking advantage of the existing CAP programs. WSSC does not collect income data and is currently unable to identify the total base of eligible customers.

WSSC has several efforts underway to enhance its existing customer assistance programs:

1. WSSC is working with the Maryland Office of Home Energy Programs (OHEP) and social service agencies to strengthen relationships and improve participation in WSSC's CAP program.
2. WSSC is conducting outreach to private companies and other organizations to increase donations to the Water Fund.
3. WSSC is examining utility billing data (delinquency, payment plans, and shut-off's) to identify customers who may be eligible for customer assistance.
4. WSSC is working with the Salvation Army to improve the visibility and reach of the Water Fund Program.
5. WSSC is working with the Washington Metropolitan Council of Governments (WASHCOG) to develop an in-depth demographic analysis of the WSSC service area.
6. WSSC is using GIS technology to refine its analysis of customers, renters, and vulnerable populations.

Additional opportunities for CAP improvements.

- Examine patterns of nonpayment to define key subgroups of payment-troubled customers and design custom approaches to meet their differing needs.
- Integrate its assistance efforts with those of private and governmental social service and assistance providers in the community— such as sharing of database resources to identify potential clients and improve outreach for assistance programs at a communitywide level.

- Implement communications campaigns to expand awareness of utility and other assistance programs, conveying effective knowledge to target subgroups of customers, enabling and encouraging them to seek assistance.
- Develop custom approaches to treating different types of nonpayment situations for various subgroups and train customer service staff to a high level of readiness to connect clients with the appropriate assistance on the first call, or at the first point of contact.
- Provide various forms of after-care to assist customers in the aftermath of resolving an incidence of payment troubles in order to help minimize recurrences.

Document Summaries related to Affordability and Customer Assistance Programs .

1. “When It Comes To Water Service How Expensive Is Too Expensive?”, article by Brett Walton, Circle of Blue - Water News, August 24, 2017.

Synopsis:

This short article describes the current challenges faced by water utilities in defining water affordability. The article focusses on the work of Manny Teodoro, a Texas A & M associate professor to define a better method of measuring the financial burden of water bills on the poor. The article discusses many of the flaws with EPA’s historical approaches to affordability, which relies on a community’s median household income to determine if the rate burden of meeting regulatory mandates is excessive. The article discusses on-going work by Teodoro to define better measures of affordability that incorporate truer measures of the ability of impoverished households to pay their water bills.

Key Excerpts:

- Affordability is a comparative concept, the place where income and expenditures cross.
 - Affordability is one of the most important issues for our industry and a defining issue for some time to come.
 - According to the U.S. Census Bureau, the number of households earning less than \$US 15,000 per year grew more between 2000 and 2015 than any equivalent segment of the income distribution. At the same time water rates, driven by the cost to maintain or replace water treatment plants and delivery pipes, are rising at double or triple the rate of inflation.
 - A common theme among these endeavors is rejection of the prevailing wisdom, which is a two-decade-old standard used by the U.S. Environmental Protection Agency to assess the cost to water utilities of meeting federal pollution-control requirements.
2. “Best Practices in Customer Payment Assistance Programs”, Water Research Foundation, Cromwell, J; Colton R., Rubin, S; Herrick, C. , 2010.

Synopsis:

Review of best practices in utility programs to assist payment-troubled customers and reference guide for use by utility management teams in developing and improving customer assistance programs. The report reviews prior industry survey results, industry research and literature on the topic of customer assistance programs, including consultations with utilities and other organizations involved in providing assistance to low income and other difficult-to-reach populations, considers commercial collections practices, examines of practices employed by electric and gas utilities, and examines practices in Europe and Australia.

Key excerpts:

- A central finding of this research is that while most water utilities can say that they take steps to help payment-troubled customers, their programs are usually ad hoc collections of practices, not well integrated with the utility's mission or other management practices, and operated without clearly articulated objectives.
- Comprehensive utility programs that reflect the deliberate intention and follow-through of a business process are likely to function better than ad hoc programs in both good and bad economic conditions.
- Another critical factor in the success of a customer assistance program is recognition that there are various causes of nonpayment at the household level, including job loss, illness, disability, domestic turmoil, and unexpected expenses that upset fragile budgets in low-income households.
- Poverty researchers have documented that utility bills compete with other necessities such as food and medical care in the household budgets of low-income families... Utilities must acknowledge this connection between affordability and public health as another compelling reason to go beyond normal commercial collections practices and help meet higher community goals in this area of service.
- A best practice utility is one that adopts a comprehensive and systematic view of its customer assistance program, treating it as a mainline business process that has clearly articulated strategic and operational objectives and that is submitted to regular evaluation and refinement based on well-defined measures of process performance.

A best practice utility should be proactive rather than reactive in assisting payment troubled customers. A proactive utility will:

- Examine patterns of nonpayment to define key subgroups of payment-troubled customers and design custom approaches to meet their differing needs.
 - Integrate its assistance efforts with those of private and governmental social service and assistance providers in the community – such as sharing of database resources to identify potential clients and improve outreach for assistance programs at a communitywide level.
 - Implement communications campaigns to expand awareness of utility and other assistance programs, conveying effective knowledge to target subgroups of customers, enabling and encouraging them to seek assistance.
 - Develop custom approaches to treating different types of nonpayment situations for various subgroups and train customer service staff to a high level of readiness to connect clients with the appropriate assistance on the first call, or at the first point of contact.
 - Provide various forms of after-care to assist customers in the aftermath of resolving an incidence of payment troubles in order to help minimize recurrences.
- A best practice utility is one that recognizes that going beyond the normal realm of standard commercial collections practices is pragmatic and worthwhile when weighed in terms of the overall mission of the utility within the community.

3. Thinking Outside the Bill: A Utility Manager's Guide to Assisting Low-Income Water Customers, A study sponsored by the AWWA Water Utility Council, American Water Works Association, 2nd edition 2014.

Synopsis:

Second edition of an AWWA guidance manual for water utilities who are considering developing or enhancing customer assistance programs for low-income customers. The document provides a step-by-step guide to developing effective programs. The document also provides an extensive compilation of key national demographic profile data from the 2010 Census and 2012 American Community Survey as reference inputs for the needs assessment element of the program.

Highlights:

- Lower-income households tend to spend less than the average household for all utility services. In 2011, a household with incomes between \$10,000 and \$27,000 per year spent about 20% less than the average household for all utility services, including water and wastewater.
- There has been considerable debate in recent years as to whether median household income is an appropriate statistic to measure affordability, and if not, what should be used in its place. Utilities, therefore, will need to explore the unique conditions of their communities to help assess how this metric may or may not apply in their areas.
- A first step in assessing a utility's need for a low-income program is to gather information about the community and begin a dialogue with community organizations and agencies that work with low-income people.
- Although affordability concerns have not reached the crisis point for many utilities, nearly one third of water utilities recognize the problem is growing and could become serious in the future.
- Rather than "reinventing the wheel," a utility can maximize the impact of its resources, and minimize its administrative and outreach costs, by working with existing community organizations.
- Types of Water Affordability Programs include:
 - Bill Discounts
 - Leak Repairs or other Conservation Measures
 - Community & Local Government Assistance Programs
 - Monthly Billing, Budget Billing, & Conservation
 - Arrearage Forgiveness
 - Crisis Funding
- Thinking Outside the Bill – Work with existing assistance programs, such as Home Energy Assistance to improve access to aid for low income residents, indirectly improving their overall ability to pay their water bills.

4. Drinking Water and Wastewater Customer Assistance Programs, EPA, April 2016.

Synopsis:

A compendium of customer assistance programs among 795 U.S. water and wastewater utilities. The report summarizes research of large and mid-sized utilities, relying primarily on public available program information and descriptions and identifies the types of customer assistance programs in place currently, case studies of five large utility assistance programs (California Water, Northeast Ohio Regional Sewer District, Orange County Water & Sewer Authority, San Antonio Water, and WSSC), and provides basic guidance on program implementation.

Highlights of the report:

- The review effort considered 795 utilities, and found that more than a quarter (228 utilities, or 28.7 percent) offer one or more CAPs. A total of 365 CAPs are currently offered, mostly by large utilities.
- CAP program benefits include:
 - Offers an Opportunity to Practice Social and Corporate Responsibility – Taking care of the less fortunate in our communities is the right thing to do. Utilities have a unique opportunity to help neighbors in need.
 - Improves Public Relations – From a business standpoint, CAPs allow utilities to:
 - Improve public health and environmental quality,
 - Continue their critical role in the community and local economy,
 - Improve their standing with customers, and
 - Bolster their reputation with other key stakeholders in the community.
 - Improves Financial Health – Utilities can save on administrative and legal costs associated with collecting on debts, disconnection, and reconnection of water services.
- Recognized that legal/policy impediments to CAP program implementation exist as well as the dilemma of reaching the renter population.

5. Affordability Assessment Tool for Federal Water Mandates, U.S. Conference of Mayors, American Water Works Association, and Water Environment Federation. 2013.

Synopsis:

This report describes an alternative methodology to view the affordability of meeting federal water mandates within a community. The report offers a critique of EPA's historical methodology for assessing the financial and economic impacts of Clean Water Act and Safe Drinking Water mandates, including consent decrees, and provides guidance for developing alternative measures of affordability that are tailored to the unique characteristics of a given community, or service population, and provide a better picture of the impact of potential water rate increases on vulnerable populations.

Key concepts:

- There are several critical limitations to how EPA defines affordability and applies its assessment criteria. This is due in part to EPA’s reliance on metrics such as median household income (MHI), which is highly misleading as an indicator of a community’s ability to pay. As a result, regulatory relief is not provided in many communities where substantial and widespread economic hardships are indeed being created.
- It is commonly inferred that EPA would consider a combined annual water and wastewater bill of less than 4.5% of MHI to be affordable (2.5% for water, plus 2% for wastewater services and CSO controls).
- MHI is a poor indicator of economic distress and bears little relationship to poverty or other measures of economic need within a community.

6. “Customer Assistance Programs for Multi-Family Residential and Other Hard-to-Reach Customers, Water Research Foundation, 2017.

Synopsis:

Guidance document for addressing hard to reach customers, such as renters, within customer assistance programs. The report attempts to quantify the extent of the problem of reaching customers who may not have a direct financial relationship with the utility. The report provides water utilities with options, evaluation criteria, lessons learned, and guidance for CAPs that want to target hard to reach customers.

Key excerpts:

- Hard to Reach (H2R) households constitute a significant percentage of the population served by water utilities.
- H2R households generally have lower incomes than the average household and often face a greater degree of economic and other life challenges.
- Utilities typically do not have channels in place to effectively communicate and engage with the H2R.
- The most effective and efficient ways for utilities to provide support to the H2R involve partnering with existing and well-trusted community-based organizations (CBOs), and piggybacking onto existing programs that have track records of successfully engaging and providing support to the H2R. There are multiple benefits of partnering with organizations that already understand, and already have strategies in place for reaching, low income H2R customers. These benefits include more effective outreach to the H2R households and cost savings for the utility, among others. The nature of utilities’ partnerships with CBOs varies widely. Some community groups work closely with utilities and manage utilities’ assistance program enrollment and administration. Others play a more indirect role in utilities’ programs and simply refer eligible customers to utility customer service for program information and enrollment.

- Although some utilities offer assistance to renters in single-family homes, few have worked closely or consistently with landlords to help reach and extend assistance to residents in multi-family units. A common obstacle that utilities cite in working with landlords to extend assistance to renters is an inability to track whether the landlord passes discounts on to renters. However, several utilities have worked with local trade organizations and housing agencies to develop successful programs and/or reach their H2R tenants.
- It is critical to build trust through ongoing, frequent, culturally appropriate connections. For example, reaching non-English speakers requires providing services in their languages and understanding their cultural communication styles, needs, and expectations.
- It is important to be creative and persistent. Providing the short-term financial assistance or debt management service that keeps water services turned on can make a huge difference in people's lives.

Other References

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5. Water Utility Options for Low Income Assistance Programs, David S. Hasson, AWWA Journal, April 2002.