

**BEFORE THE PHILADELPHIA WATER, SEWER AND STORM WATER  
RATE BOARD**

**In the Matter of a Proposed Rate Increase in** :  
**Water, Sewer and Storm Water Rates** : **FY 2017-2018 Rates**

**Public Advocate's Interrogatories & Requests for Production of Documents**

Instructions: Please respond to the following Interrogatories and Requests for Production of Documents. Please repeat the interrogatory and provide the name of the person providing the response. Please provide copies of all replies in PDF and/or XLS format via email and/or on CDs.

- PA-RDC-16. Please provide by month for the most recent 36 months available, disaggregated by type of deferred payment arrangement:
- a. The number of agreements where the arrangement was not met during the month;
  - b. The number of agreements on which the payment was made during the month;
  - c. The number of agreements that defaulted (i.e., cancelled for nonpayment) during the month.
- PA-RDC-17. By month for the most recent 36 months available, please provide for the first day of each month:
- a. The dollars subject to active deferred payment arrangements;
  - b. The dollars of residential accounts in arrears;
  - c. The dollars of accounts subject to active deferred payment arrangements.
- PA-RDC-18. Please provide all collectability studies, prepared within the past five years, for:
- a. Residential accounts in arrears;
  - b. Residential accounts in arrears subject to deferred payment arrangements.
- PA-RDC-19. Please provide all studies, memos or other written documents of any nature within the possession or control of the PWD/WRB evaluating, assessing or otherwise discussing:
- a. Why utility customers do not pay their utility bills;
  - b. The order in which residential customers pay their bills (e.g., rent/mortgage first, utility bills second, credit cards third, etc.);
  - c. To whom or to where customers turn for information and/or bill payment assistance when they have unpaid utility bills.

PA-RDC-20. Please provide all studies, memos or other written documents of any nature within the possession or control of the PWD/WRB evaluating, assessing or otherwise discussing why utility customers do not contact their billing utility when asked to do so in shutoff notices or in other communications proffered to the customer in response to nonpayment.

PA-RDC-21. Please provide a schedule indicating, by year for the past three years:

- a. All entities external to the PWD, including all municipal agencies or entities, charged with collecting revenue for the Department;
- b. For each entity identified, the fees paid that entity, in total and by unit (e.g., dollars collected, account collected) for their collection activity;
- c. The basis for determining the level of the fees paid to each entity.

PA-RDC-22. Reference: Davis. Exhibit JD-1. From the projects listed in “relevant project experience,” as well as from the “other relevant project experience,” please identify each project in which the design and/or funding of a low-income rate assistance program, and/or the affordability of water, wastewater or stormwater service, was explicitly considered and/or discussed. For each identified project, please provide a single copy of all written work-products (e.g., testimony, report, memo PowerPoint) that sets forth such consideration and/or discussion.

PA-RDC-23. Reference: Davis. Exhibit JD-1. From each of the speaking engagements listed, please identify each one in which the design and/or funding of a low-income rate assistance program, and/or the affordability of water, wastewater or stormwater service, was explicitly considered and/or addressed. For each identified speaking engagement, please provide a single copy of all written work-products (e.g., speech, PowerPoint, underlying article/report) that sets forth such consideration and/or discussion.

PA-RDC-24. Reference: Davis. Exhibit JD-1. For each publication for which the witness was an author, co-author or contributor, whether a report, memo, article, book chapter or other publication of any nature, please identify each one in which the design and/or funding of a low-income rate assistance program, and/or the affordability of water, wastewater or stormwater service, was explicitly considered and/or addressed. For each identified publication, please provide a single copy of the publication that sets forth such consideration and/or discussion.

PA-RDC-25. Reference: Kreps. Exhibit BK-1. From the projects listed in “relevant project experience,” as well as from the “other relevant project experience,” please identify each project in which the design and/or funding of a low-income rate assistance program, and/or the affordability of water, wastewater or stormwater service, was explicitly considered and/or discussed. For each identified project, please provide a

single copy of all written work-products (e.g., testimony, report, memo PowerPoint) that sets forth such consideration and/or discussion.

PA-RDC-26. Reference: Kreps. Exhibit BK-1. From each of the speaking engagements listed, please identify each one in which the design and/or funding of a low-income rate assistance program, and/or the affordability of water, wastewater or stormwater service, was explicitly considered and/or addressed. For each identified speaking engagement, please provide a single copy of all written work-products (e.g., speech, PowerPoint, underlying article/report) that sets forth such consideration and/or discussion.

PA-RDC-27. Reference: Kreps. Exhibit BK-1. For each publication for which the witness was an author, co-author or contributor, whether a report, memo, article, book chapter or other publication of any nature, please identify each one in which the design and/or funding of a low-income rate assistance program, and/or the affordability of water, wastewater or stormwater service, was explicitly considered and/or addressed. For each identified publication, please provide a single copy of the publication that sets forth such consideration and/or discussion.

PA-RDC-28. Reference: Locklear. Exhibit HL-1. From the projects listed in "relevant project experience," as well as from the "other relevant project experience," please identify each project in which the design and/or funding of a low-income rate assistance program, and/or the affordability of water, wastewater or stormwater service, was explicitly considered and/or discussed. For each identified project, please provide a single copy of all written work-products (e.g., testimony, report, memo PowerPoint) that sets forth such consideration and/or discussion.

PA-RDC-29. Reference: Locklear. Exhibit HL-1. From each of the speaking engagements listed, please identify each one in which the design and/or funding of a low-income rate assistance program, and/or the affordability of water, wastewater or stormwater service, was explicitly considered and/or addressed. For each identified speaking engagement, please provide a single copy of all written work-products (e.g., speech, PowerPoint, underlying article/report) that sets forth such consideration and/or discussion.

PA-RDC-30. Reference: Locklear. Exhibit HL-1. For each publication for which the witness was an author, co-author or contributor, whether a report, memo, article, book chapter or other publication of any nature, please identify each one in which the design and/or funding of a low-income rate assistance program, and/or the affordability of water, wastewater or stormwater service, was explicitly considered and/or addressed. For each identified publication, please provide a single copy of the publication that sets forth such consideration and/or discussion.

PA-RDC-31. Reference: Davis. Testimony, page 1. From each client listed, please identify each one for whom you prepared a written work product in which the design and/or funding of a low-income rate assistance program, and/or the affordability of water, wastewater or stormwater service, was explicitly considered and/or discussed. Please provide a copy of each written work product so identified.

PA-RDC-32. Reference: Kreps. Testimony, page 1. From each client listed, please identify each one for whom you prepared a written work product in which the design and/or funding of a low-income rate assistance program, and/or the affordability of water, wastewater or stormwater service, was explicitly considered and/or discussed. Please provide a copy of each written work product so identified.

PA-RDC-33. Reference: Locklear. Testimony, page 1. From each client listed, please identify each one for whom you prepared a written work product in which the design and/or funding of a low-income rate assistance program, and/or the affordability of water, wastewater or stormwater service, was explicitly considered and/or discussed. Please provide a copy of each written work product so identified.

PA-RDC-34. Reference: Davis. Testimony, page 1. For the “numerous financial management engagements for water, sewer and storm water utilities” mentioned, please identify each one for whom you prepared a written work product (e.g., memo, report, PowerPoint) in which the design and/or funding of a low-income rate assistance program, and/or the affordability of water, wastewater or stormwater service, was explicitly considered and/or discussed. Please provide a copy of each written work product.

PA-RDC-35. Reference: Davis. Testimony, page 2. Please provide a copy of:

- a. The 2014 book chapter on “Financial capability and affordability”;
- b. The July 2014 AWWA Journal article “Is Our Water Affordable”.

PA-RDC-36. Reference: Davis. Testimony, page 2. For each year for the past three years, for each of the four payment plan types identified, provide:

- a. The number of payment plans entered into by payment plan type;
- b. The aggregate dollars of arrears subject to such payment plans by payment plan type;
- c. The number of payment plans defaulted (defined as having the plan cancelled due to nonpayment) by payment plan type;
- d. The percent of dollars subject to such payment plans actually collected by payment plan type.

PA-RDC-37. Reference: Davis. Testimony, page 2. Please provide all written documents of any nature prepared within the past 36 months by, for or on behalf of PWD/WRB that considers or otherwise discusses the “rate impacts on the customer base as a whole” of providing “delinquency relief for qualifying customers” through WRAP.

PA-RDC-38. Reference: Davis. Testimony, page 3. For each new “Customer Affordability Program” listed, provide a copy of:

- a. The written scope of work governing your engagement;
- b. Any final written work product, including a final report, exit memo, PowerPoint presentation, or written document of any nature.

PA-RDC-39. Reference: Davis. Testimony, page 3. For each of the existing “Customer Affordability Program” listed, provide a copy of:

- a. The written scope of work governing your engagement;
- b. Any final written work product, including a final report, exit memo, PowerPoint presentation, or written document of any nature.

PA-RDC-40. Reference: Davis. Testimony, page 3. Please list all quantitative indicators developed and/or used by RFC by which the City can objectively determine the level of assistance below which that assistance is not “meaningful assistance to low-income customers. . .”

- a. Provide all documents used to support the reasonableness of these indicators;
- b. Provide a copy of all prior written documents of any nature in which these indicators were applied to a low-income program for a client other than PWD/WRB.

PA-RDC-41. Reference: Davis. Testimony, page 3. Please list all quantitative indicators developed by and/or used by RFC by which the City can objectively determine the level at which program costs become “overly burdensome for City Ratepayers.”

- a. Provide all documents used to support the reasonableness of these indicators;
- b. Provide a copy of all prior written documents of any nature in which these indicators were applied to a low-income program for a client other than PWD/WRB;
- c. Provide a copy of all prior written documents of any nature in which these indicators were applied to a program other than a low-income program for a client other than PWD/WRB.

PA-RDC-42. Reference: Davis. Testimony, page 3. Please list all quantitative indicators developed by and/or used by RFC by which the City can objectively determine the level at which program costs become “detrimental to the financial stability of the utility.”

- a. Provide all documents used to support the reasonableness of these indicators.
- b. Provide a copy of all written documents of any nature in which these indicators were applied to a low-income program for a client other than PWD/WRB.
- c. Provide a copy of all prior written documents of any nature in which these indicators were applied to a program other than a low-income program for a client other than PWD/WRB.

PA-RDC-43. Reference: Davis. Testimony, page 3. Of the written work products provided in response to Data Requests 31 through 34, please identify which, if any, calculated and/or discussed the fixed costs related to upfront information technology costs necessary to implement the program.

PA-RDC-44. Reference: Davis. Testimony, page 3. Of the written work products provided in response to Data Requests 31 through 34, please identify which, if any, calculated and/or discussed the “ongoing administration costs” necessary to implement the program.

PA-RDC-45. Reference: Davis. Testimony, page 3. Of the written work products provided in response to Data Requests 31 through 34, please identify which, if any, calculated and/or discussed the “delinquency costs. . .related to the limitations on the ability to collect on delinquent balances for customers enrolled” in an affordability program.

PA-RDC-46. Reference: Davis. Testimony, page 3. Of the written work products provided in response to Data Requests 31 through 34, please identify which, if any, calculated and/or discussed the “lost revenue costs related to the annual value of discounts given to customers enrolled in the affordability program.”

PA-RDC-47. Reference: Davis. Testimony, page 3. For each of the five (5) (Richmond, Washington Suburban, Honolulu, DC Water, Columbus, GA) new and existing Customer Affordability Programs with which you have worked as identified in your testimony, provide the following table:

	Year 1	Year 2	Year 3	Year 4	Year 5
Up-front information technology costs					
Ongoing annual administration costs for customer qualification					

Ongoing annual administration costs for IT support					
Delinquency costs related to limitations on ability to collect					
Lost revenue costs related to annual value of discounts given to program enrollees					
Number of participants					
Number of customers eligible to participate					
Total billed revenue					
Total collected revenue					
Annual FTE for IT support					
Annual FTE for program administration					
Total program costs included in rates					
Rate impact as percent of average residential bill					

PA-RDC-48. Reference: Davis. Testimony, page 3. Based on your work on the five new and existing Customer Affordability programs identified in your testimony, please identify each City, company, department or jurisdiction which provides a water, sewer and/or stormwater program on which you and/or RFC have *not* worked.

PA-RDC-49. Reference: Davis. Testimony, page 3. Please identify each City, company, department or jurisdiction on which RFC staff, although not you personally, have, within the past ten years, worked with developing a new Customer Affordability Program or worked on an existing Customer Affordability Program. Identify each RFC staff person, the jurisdiction in which that staff person worked, the date of the engagement, and whether the program was a new or existing program.

PA-RDC-50. Reference: Davis. Testimony, page 3. Provide a line-item breakdown of the \$1.1 million in upfront costs in the greatest detail available.

PA-RDC-51. Reference: Davis. Testimony, page 3. By year for the next three years, provide a line-item breakdown in the greatest detail available, of the \$2.8 million annual ongoing costs.

PA-RDC-52. Reference: Davis. Testimony, page 3. By year for the next three years, provide a line-item breakdown in the greatest detail available of the administrative tasks to be performed by each of the 22 WRB positions and the number of annual hours devoted to each task.

PA-RDC-53. Reference: Davis. Testimony, page 3. Confirm or deny. The 22 WRB positions used for program administration of the proposed Affordability Program are all new, incremental staff additions to WRB that would not be staff positions at WRB in the absence of the Affordability Program. If denied, provide a detailed estimate of: (a) how many of the 22 positions are new, incremental staff positions at WRB that would not be staff at WRB in the absence of the Affordability Program; (b) how many are staff positions reassigned and/or reallocated from existing WRB work; and (c) what existing staff positions will be reassigned and/or reallocated to the Affordability Program.

PA-RDC-54. Reference: Davis. Testimony, page 3. Provide all internal workpapers and/or correspondence, including e-mails, generated by City Revenue, WRB, PWD, and/or Prophecy in developing:

- a. The upfront costs of the Affordability Program;
- b. The ongoing costs of the Affordability Program.

PA-RDC-55. Reference: Davis. Testimony, page 4. Please provide by month for existing WRAP participants for the most recent twelve (12) months available:

- a. The total billed revenue for current service;
- b. The total collected revenue;
- c. The average months dollars of arrears (not taking into account the dollars subject to the underlying payment plan);
- d. The collection factor for WRAP billings.

PA-RDC-56. Reference: Davis. Testimony, page 4. Please provide by month for existing WRAP participants for the most recent twelve (12) months available:

- a. The monthly participation number;
- b. The average monthly bill for current service;
- c. The monthly revenue collected;
- d. The average monthly payment;
- e. The aging of accounts by available aging buckets by the number of accounts;
- f. The aging of accounts by available aging buckets by dollars.

PA-RDC-57. Reference: Davis. Testimony, page 4. In concluding that “changes to the collection factor resulting from delinquency payment patterns under the new affordability program should result in de minimis changes to the blended collection factor,” please indicate:

- a. Whether that statement applies to the “blended collection factor” for the total PWD billings;
- b. If so, whether the identical statement would be made as to a “blended collection factor” applied only to WRAP billings;
- c. A list of each Pennsylvania utility, whether water, gas, or electricity, for which the impact of an affordability program on collection rates for program participants was reviewed and/or considered in reaching this conclusion;
- d. A copy of each evaluation of an affordability program, whether for a water, gas or electric utility, reviewed and/or considered by you and/or RFC in reaching your conclusion about the impact of an affordability program on payment patterns, which evaluation considered, reported or otherwise discussed the impacts of an affordability program on program participant payment patterns.
- e. A list of each evaluation of an affordability program, whether for a water, gas or electric utility, reviewed by you and/or RFC in reaching your conclusion which supports your conclusion that an affordability program “should result in de minimis changes to the blended collection factor.”

PA-RDC-58. Reference: Davis. Testimony, page 4. For each year for the most recent three years available, provide:

- a. The gross uncollectible rate for residential customers;
- b. The gross uncollectible rate for WRAP participants;
- c. The net uncollectible rate for residential customers;
- d. The net uncollectible rate for WRAP participants;
- e. The average residential bill for current service;
- f. The average residential bill for WRAP participants for current service;
- g. The average residential monthly arrears (all residential customers);
- h. The average residential monthly arrears (WRAP participants);
- i. The number of residential liens for unpaid water bills (all residential customers);
- j. The number of residential liens for unpaid water bills (WRAP participants);
- k. The dollar amount of unpaid residential bills subject to lien (all residential customers);
- l. The dollar amount of unpaid residential bills subject to lien (WRAP participants).

PA-RDC-59. Reference: Davis. Testimony, page 4. Provide the complete set of Census data and PUMS data downloaded or otherwise secured in developing lost revenue estimates.

PA-RDC-60. Reference: Davis. Testimony, pages 4-6. Provide the workpapers, including all electronic files with all formulae active and intact:

- a. Underlying Table 1;
- b. Underlying Table 2;
- c. Underlying Table 3.

PA-RDC-61. Reference: Davis. Testimony, page 5: Provide a complete active worksheet in electronic format with all formula active and intact, which shows the complete calculations underlying Table 2 for each Tier, including but not necessarily limited to:

- a. Average usage;
- b. Average non-discounted bill (including the bill derivation);
- c. Number of program participants;
- d. Average discounted bill;
- e. Average shortfall between the non-discounted bill and the discounted bill;
- f. The current revenue expected to be collected (bill reduced by the applicable blended collection factor);
- g. The blended collection factor applied;
- h. The average shortfall between the bill at the discounted rate and the revenue expected to be collected reduced by the applicable blended collection factor;
- i. The affordability target in terms of a bill as a percentage of income;
- j. The number of customers not achieving the affordability target;
- k. The mean dollar amount by which the customers not achieving the affordability target fall short of achieving the affordability target.

PA-RDC-62. Reference: Davis. Testimony, page 5. For each Tier presented in Table 2, provide:

- a. The total number of water customers;
- b. The distribution of water customers by quintile of usage;
- c. The distribution of water customers by quintile of income.

If some percentile other than quintiles has been used to determine the distribution of customers by usage and income within each tier, the response should provide that distribution and identify the percentile used.

PA-RDC-63. Reference: Davis. Testimony, page 5. Provide the results of all of the “multiple trials” and the resulting plots of lost revenue referenced. Separately provide the complete distribution of possible lost revenue outcomes. Provide these simulations broken down into as many simulations as existed (e.g., by usage level within each income level).

PA-RDC-64. Reference: Davis. Testimony, page 4-6. Provide Table 1, Table 2, and Table 3 using nine tiers for below 250% of Poverty, as follows: 0 – 25%; 26 – 50%; 51 – 75%; 76 – 100%; 101 - 125%; 126 – 150%; 151 – 175%; 176 – 200%; and 200% or more.

PA-RDC-65. Reference: Davis. Testimony, page 5. Provide Table 2:  
a. Assuming a minimum bill as set forth in Table 3;  
b. Assuming no minimum bill (if different from the existing Table 3).

PA-RDC-66. Reference: Davis. Testimony, page 5. Provide Table 2 broken down into the income tiers and usage levels set forth in Table 3. Include the complete calculation with all formulae active and intact.

PA-RDC-67. Reference: Davis. Testimony, page 5. Provide the subscription rate by income tier at which the projected lost revenue level would cover 80% of the forecasted outcomes. In addition, from all new and existing rate affordability programs in jurisdictions listed in your testimony, in addition to all programs provided in response to Data Requests 48 and 49, please list the jurisdictions in which subscription rate equaled or exceeded the subscription rate the City chose in order to project lost revenue at a level that would cover 80% of forecast outcomes.

PA-RDC-68. Reference: Davis. Testimony, page 6. For Table 3, provide by Tier:  
a. The average bill without a minimum bill;  
b. The affordability target underlying each Tier;  
c. The burden imposed assuming a minimum bill;

PA-RDC-69. Reference: Davis. Testimony, page 6. Your testimony states that “should actual subscription be higher, the revenue could be covered by a manageable transfer from RSF.” Provide a detailed description of the use of revenue collected for the Affordability Program if the subscription rate is lower and the City over-collects program costs.

PA-RDC-70. Please supplement the City’s response to PA-RDC-2 by providing any and all reports, including the most recent draft(s), prepared by Schumaker & Company addressing customer service issues or other issues relevant to the Management Audit.

PA-RDC-71. Reference: McCarty. Testimony, page 4. Please describe the standard that PWD applies in calculating the revenue it is “entitled” as a result of:  
a. Customer meter inaccuracies;  
b. Billing errors;  
c. Unauthorized consumption.

PA-RDC-72. Reference: McCarty. Testimony, page 4-5. Provide the total amount that has been spent on PWD's Revenue Protection Program since 2000.

PA-RDC-73. Reference: McCarty. Testimony, page 4-5. Provide the annual budget for PWD's Revenue Protection Program for each year since 2000.

PA-RDC-74. Reference: McCarty. Testimony, page 5. Provide the workpapers, including all electronic files with all formulae active and intact, and all calculations underlying the table at page 5 (Water Department's Revenue Protection Program).