Data Needs Sheet

GettingGreatRates.com does cost-of-service based rate analyses. That means, we figure out who causes what costs, so rates can be set accordingly, if you so choose. Cost-of-service rate analysis requires data, lots of it.

Sure, we could make lots of assumptions and come up with rates that would pay for those assumptions. But, the more data-based the analysis is, the more accurate the rates will be. We want to calculate rates as accurately as possible for you. Thus, with few exceptions, we really do need the data described in the following.

It is likely you have never gathered some of this data before, but most of it exists right now in your accounting program, billing program and other sources you can access. What doesn't can be created or estimated. We have done this a few hundred times before, so if you have any problems gathering any of this data, we can probably talk you through it.

Data needs are discussed here in the context of water and sewer, the most common group of local government-owned utilities. Except for the fact that stormwater, electric, trash collection and other services have different units of measure and the infrastructure is different, most of the kinds of data and their sources are the same for those services, too. Thus, if we are analyzing your electric rates, usage will be measured in kWH, instead of gallons or cubic feet. Some items in the equipment repair and replacement (R&R) schedule for a trash collection service will be unique to that service, but all utilities require trucks and other rolling stock, buildings to house things, computers, office equipment and so on. The infrastructure differs, but how you manage it and the people who run it, and how we analyze the rates-related issues are all about the same.

You are going to send us lots of data, information and related documents. If that material is in electronic form, or you can make so, send it to us electronically, usually as e-mail attachments. With only one rare exception, we need volume usage data electronically. But then, your billing program handles it that way so that is not a big issue. If yours is a small, simple utility, we can deal with paper versions of balance sheets and income and expense statements. But, you probably would create these using an accounting program, so it is easy to get that data electronically, too.

If you sense that we deal with very little paper, you're right. Try to send us everything electronically; numerical data in Microsoft Excel, text documents in Word or Rich Text Format (rtf), and things like old supply agreements in Portable Document Format (pdf) if you don't have those in the format they were originally created in.

Before gathering any data, decide on your "test year." The test year is the one-year period from which you will pull most data. Almost always, it is most convenient to use your last completed fiscal year as the test year. Unless we have discussed it and decided another period of time is appropriate, use the last fiscal year. It will simplify data gathering because you have already finalized financial and other reports for that year.

A suggestion – print out this sheet, keep it on your desk and use it as a check list to track what you have sent us. If we need clarification of something, or you missed sending us something, not to worry. We need the data so we will ding you for it.

Now, to the data we need.

Documents, data and information we need and comments about them:

1) Volume usage files, sorted or organized by water meter size, if that data is in the data set (one file for water usage, another for sewer usage if you bill for sewer differently, like "winter-averaged use" billing for residential sewer use, or if any of your sewer service locations is not also a water service location). Save this file, or these files, in Excel format. This may be the most technically challenging part of data retrieval for you, so do feel free to have us talk you through it. See "More about usage data" on page 7, for details.
2) Rates and fees table or rate ordinances (on-line? – give us links):
    a) The rates, connection or system development fees, other charges, etc. paid by meters or service locations.
    b) If rates changed during the test year, give us the before and after rates and tell us when the new rates became effective.
    c) If the volume usage file(s) you send us list rate "classes" or "codes," we need a key for what those codes mean. We need to be able to match up every data point of volume usage with the rates that apply to that usage.
3) Policies related to rates: If your governing body already has a strong rate structure preference (they like conservation rates, declining rates, a usage allowance, high or low minimum charge); a preference about when during the year they like to adjust rates; or anything else that might impact how we would model new rates; tell us about it. If it is practical and advisable, we will try to accommodate those preferences.

4) Agreements with special customers and service providers:
   a) If you have any special "deals" – rates, fees, demand surcharges, etc. assessed to certain meters or service locations (or yourself); or discounts, waivers, free service because the customer granted an easement for your transmission line, limits on future rate increases or any "deals," we need to know about those. Now, if the deal was for one low-volume, small meter customer, we don't need to know about that. Those situations affect rates little, if at all. We need to know about the important "stuff."
   b) If these deals are in writing, send us a copy.
5) Wholesale or otherwise contracted meters or service locations, or "troublesome" customers:
   a) If you have any contracted meters or service locations, give us a copy of the contract(s).
   b) If a contracted customer, or any other important customer, has a "beef" about their rates, tell us about it. If it would be practical and reasonable, and desired by you, we will try to model rates that will make the "beef" go away.
   c) If someone has threatened, or actually filed a lawsuit against you, or you against them, send us a copy.
6) Balance sheets:
   a) We need the one for the test year.
   b) If the test year balance sheet does not show the starting balances for the test year, also give us the balance sheet for the year before the test year, so we know what balances to start you off with for the test year.
7) Detailed income and expense statements (not the statements in your audited financials because those are not detailed enough). We need itemized incomes collected and expenses paid during the test year. They need to show this level of detail:
   a) Separate income items like user charge fees, new connection or system development charges, penalties paid to you, interest earned on deposits, etc.
   b) Separate cost items like administration and billing staff time costs and their benefits and related costs, operations staff time costs and their benefits and related costs, office costs, electricity to operate the system, chemicals to treat water, system maintenance costs, water purchased under a wholesale contract, etc.

c) If you have existing debt and the payments vary from year to year, send us the debt payment schedule for each loan or lease. If, however, you have a State Revolving Fund (SRF) loan and the payments on it stay the same from year to year, and for at least the next 10 years (our projection window), you can just tell us the total current loan payment amount and we will continue that payment in our projections for the next 10 years.

8) If you have a projected budget for the year following the test year (which is normal format for income and expense statements), give us that, too. Bullet point number 14, that follows, covers income and expense changes that you think will come in the future.

9) Equipment repair and replacement (R&R) schedule for the next 20 years (if you have one). R&R items are expensive, but not expensive enough that you might get grants and loans to pay for them. However, they generally are too expensive or occur too infrequently to work into the regular annual budget. Thus, R&R covers the in-between items. To schedule these things:

   a) We need estimated equipment replacement needs, timing and costs.

   b) If you do not have a R&R schedule yet, we recommend you start putting one together now. To make that easier for you (and for us to get your data), we extracted the R&R schedule from our rate analysis template and made it into a do-it-yourself R&R scheduling spreadsheet. Visit https://gettinggreatrates.com/freebies/freebies.shtml and download the "ReplacementScheduler," enter your data and e-mail the spreadsheet back to us. (If you do not already have a more practical scheduling program, we recommend you use ours.)

   c) Some R&R items are shared across two or more utilities or services (trucks, tractors, computers, shops, etc.). Be sure to identify those and only include the water portion of the cost in the water R&R schedule, the sewer portion of the cost in the sewer R&R schedule, and so on. The ReplacementScheduler instructions give more detail on this.

   d) If you just handle R&R in your regular budget and you want to keep it that way (we recommend you not do that), tell us how much R&R should cost in a typical year if you were to replace everything you should replace. We will model rates that will recover that amount, with inflation, every year.

   e) If we must, we will estimate R&R costs based on a percentage of operating costs that we have found to be common.

10) Capital improvement plans (CIP) for the next 10 years. As mentioned above, these are the big-ticket items:

    a) Estimated capital improvement needs, timing, costs and how you plan to pay those costs. Include your "wish list" items, too. We will model rates that cover your "must-have" items. And, if your new rates can comfortably handle it, we will model doing as much of your wish list projects as possible, too. You may be surprised at how little rates need to go up to accommodate needed CIP, so do not withhold what you really need at the analysis stage. If the wish list will run the rates up too much, the analysis will show that. Then you can decide what to cut.

    b) If you do not have a CIP yet, we recommend you start putting one together now. Sound familiar? Like R&R, we created a do-it-yourself CIP template. Visit the link above and download the "CIPScheduler," enter your data, identify the "wish list" items somehow and e-mail the spreadsheet back to us. Or, if you have lots of "wish list" items, just put those into a separate sheet, identify it and send us both.

11) Master metered flows: This is the volume produced or purchased (water) or volume received at or discharged from the treatment plant (sewer). You report these volumes to the State primacy agency, so you probably can just send us a copy of the report that corresponds to the test year. If those two years are not the same, send us the master metered flow data that corresponds to the volumes you billed for during the test year. We use this volume as a check on the volumes in your usage data file and to calculate your unbilled volume ("lost" water or "inflow and infiltration" for sewer).

12) A count of the number of each meter size, and total number of meters, served by the system during the test year, inside your service area, and also outside.

    a) The meter size count can be a simple list in an e-mail, such as:

    5/8 Inch 763

    3/4 Inch 544

    1 Inch 45

    And so on.

    If you track meter size for each customer in your billing program (and you should), the usage data file(s) you send us will include this data. In that case, we don't need a separate count of meter sizes from you. But, those files need to be sorted or organized by meter, not by customer or some other criterion.

b) If you serve meters or service locations outside of town or outside of the district's boundaries, give us a list of inside meters and another for outside meters. Again, if your billing program data indicates inside and outside meters or service locations, that will suffice. We use this data to calculate revenues you will get from meter size-based surcharges and out of service area surcharges, which we are very likely to recommend you assess.

c) If data in the billing program does not include meter size, we need your count of the total number of meters of each size served during the test year. We will use that as a check against the sum of the service locations included in the billing program data set(s) you send us.

13) A count of the new customers connected during the test year, along with their meter sizes and what you expect for new connections in future years. We use this data to project revenues you will collect due to growth and to project how rapidly costs will rise in the future.

14) Some things or events can affect rates drastically, but they are not included in a balance sheet or income and expense statement. Give us a description of important things that will or might change, like:

a) If you have the growth plan of a manufacturing plant you serve that uses 10 percent of your water, and that plan calls for the plant to double its water use in five years, tell us about that.

b) If your wholesale water supplier will be increasing the rates charged to you each year for the next five years, tell us about that (or whatever will happen to those rates). Give us a copy of that contract, too.

c) If you plan to enter into a new wholesale water purchase agreement within the next 10 years, we need to know the particulars of that potential deal. In fact, we will make a set of recommendations about how to structure the pricing in such a contract. Consider those recommendations before entering into such a deal.

d) If you plan to add a new operations employee, we need to know the salary you expect to pay them, plus the benefits they will receive and when this event will happen.

e) If a big customer is mad about their rates or if they have talked about suing the utility, tell us about it. This is a repeat, for good reason.

f) If you plan to build a $10,000,000 treatment plant, you hope for $5,000,000 in grants, but you might only get $2,500,000 in grants, or no grants, tell us about that. We can run different scenarios to show the rate effects of each possible outcome.

More about usage data

"Usage" data for electric, trash and stormwater services is very situation-specific. While the following case descriptions generally apply to these "other" services, too, let's talk about what usage data to gather and how before you gather anything we won't need.

Speaking mainly about water and sewer now, the usage data is in your billing program (a database). Usually, getting the data out of that program is simple. Sometimes it is hard (hence, the work-arounds on pages 10 and 11). But, it will come out. You will probably export that data to Excel spreadsheets using a standard report from the program. For each service location, we need three data points:

1. The meter size at each service location,
2. The rate code each meter or location is assessed, and
3. The volume billed to each meter or location during each billing period of the test year.

Following are several scenarios for this data export.

Case 1 – Easy data extraction

When the billing program has a report that is a complete data dump, sometimes called a "register report," data export is easy. This is usually the case. A data dump report works for us because it includes the three data points we need – meter size, rate code and volume used by each meter or at each location during each billing period. We can sort and filter to find the three data points and just ignore all the rest.

Case 2 – Sewer usage data

Sewer usage, for residential service locations-only, is often billed on a "winter-averaged use" basis. We usually recommend it be done that way, too. Therefore, if we are analyzing both water and sewer rates for you, we need usage data for water. And, separately, another file for sewer. Each of these needs to be sorted or organized by meter size, if that is in the data.

Case 3 – No billing program data needs to be exported

There is a special case where we do not need customer by customer, every billing period usage data from your billing program. That is when:

- You currently have no usage allowance ("give-away" volume),
- You assess a level unit charge for all volumes of use by all meters or service locations, and
- We have already told you that this is the structure we will recommend.

Case 3, data is very simple, so let's dispense with that first.

Getting Case 3 data to us

The data you send us, probably in the body of an e-mail message, will look like this:

"During the test year, we sold 31,560,000 gallons. We averaged 526 meters or service locations: 500 had 3/4-inch meters, the rest had one-inch meters. We billed monthly. The minimum charge was $32.50. The unit charge was $5.25 per 1,000 gallons. There was no usage allowance – we billed for all volume. And, we did not change rates during the test year."

That little paragraph covers volume usage, a count of meter sizes and rates.

Data gathering gets more involved for Cases 1 and 2.

Cases 1 and 2 data

Most billing programs have a standard report that includes the complete usage data we need. Those reports usually arrange the usage data for each customer in one or maybe two formats – columnar or row format. We prefer columnar format, but we can work with either format.

Columnar formatted reports run the usage volume for each billing period for all meters or service locations down a single column. In this arrangement, the other data and information about each meter or service location runs down other columns. The key is, the repeating information (rate code, etc.) actually needs to repeat on each row for each meter or service location. That report needs to look something like the following table.

Columnar Formatted Data

Rate Class	Customer Name	Customer Number	Meter Size in Decimals	Bill Date	Meter Reading Date	Volume used
100	John Jones	10001	0.750	1/1/2015	12/15/2014	5,000
100	Jane Smith	10002	0.625	1/1/2015	12/15/2014	1,000
200	Good Eats Café	10003	1.500	1/1/2015	12/15/2014	10,000
100	John Jones	10001	0.750	2/1/2015	1/15/2015	5,500
100	Jane Smith	10002	0.625	2/1/2015	1/15/2015	900
200	Good Eats Café	10003	1.500	2/1/2015	1/15/2015	9,900
100	John Jones	10001	0.750	3/1/2015	2/15/2015	6,000
100	Jane Smith	10002	0.625	3/1/2015	2/15/2015	1,100
200	Good Eats Café	10003	1.500	3/1/2015	2/15/2015	11,000

There may be tens of thousands of lines of data in probably one or two dozen columns in such a report. The data shown above includes what we need, plus a bit more. We disregard the additional data, so don't take it upon yourself to delete data we do not need. Just leave everything in and we'll take it from there.

In this report format, the "100" (rate class designation) needs to show up on each row for John Jones' volume usage data, the "200" needs to show up for each row of Good Eats Cafe' volume usage data, and so on. (If the rate classification shows up only once and leaves the others blank, that won't work. If that is how your billing program formats this file, a work-around is described below.) You would also need to tell us, probably by e-mail message, which rate class "100" is so we can apply the right rates to John Jones' usage.

Row formatted reports include the same data, but all the data for a meter or service location will be shown on one row, placing usage for each billing period in successive columns. Thus, for monthly billing, there would be a "January" column for that month's use by each meter or service location running down the column, a "February" column, a "March" column, and so on. All the data for one meter or service location will be on one row. The information and data that does not change for each meter or service location (rate code, etc.) is shown once, too, in designated columns. That report should look something like this:

Row Formatted Data

			Bill Dates and Volumes Used					
Rate Class	Customer	Meter Size	1/1/2015	2/1/2015	3/1/2015	4/1/2015	5/1/2015	6/1/2015
100	John Jones	0.75	5,000	5,500	4,000	6,000	7,000	7,000
100	Next Cust	0.75	More volumes					
and so on for each customer for each month								

How to create the Case 1 and Case 2, usage data file(s)

If your billing program includes a report like one of the above examples, do the following in the report or output menu of the program:

1. Select the type of report you want,
2. Set the time period to cover the "test year" you decided on,
3. Specify that the report be exported to Excel, or "Saved As" a Microsoft Excel Workbook. If the menu does not give those options, in the "Save as" box, elect to save the file as a "tab-delimited" text file. Specifying tab-delimited is critical to prevent data in one cell from running over into other cells, making the data useless,
4. Export or save the file,
5. Open the file in Excel, to see that the export worked OK,
6. E-mail the file to us.
    - If you have 10,000 + meters or service locations, the file might be too big to attach to an e-mail (10Mb is our e-mail server's size limit). If that happens, we will tell you we did not get the attachment.
    - In that case, and if you don't already have another "Cloud-based" storage and transfer service, we suggest you use "Dropbox" to save and transfer the file to us. Visit https://www.dropbox.com/ and follow the simple instructions to set up an account. This free service gives you a giga-bite of storage space. We have used it for about three years now and it has been trouble-free. The program is pretty simple to use, and they don't ding you all the time to subscribe to their paid services. The program creates a link to each file you save there. Thus,
        - You right click on a file's name in Dropbox to copy the link.
        - It will tell you it copied a hyperlink to that file.
        - Then, you paste the link into an e-mail and send it to us.
        - We click on that link, download your file and we're in business.

An easy work-around

The standard reports of some billing programs do not show the rate class that each volume of use is subject to. Or, they do not repeat the rate class or other data on multiple rows in a columnar format and the program does not offer the row format for such a report. If your program is like that, use this work-around.

Do as described in the instructions above except select only one rate class at a time to export. One rate class at a time, export the data for each rate class to its own separate spreadsheet file. Name each file descriptively, something like, "In-town Res Rates," "Out of Town Com Rates," etc. Thus, using the example above, you will first select the "100" rate class data set for the report, name the file "In-town Res" and save the report in Excel format. Do the same for all the "200s" and so forth. Then, e-mail all those files to us.

That is a bit more work for you. But, we would filter volume data by rate class before entering it into your rate analysis model. Thus, when you export data by rate class, we can be sure of what the data in each file represents. This creates multiple volume data files, a little more work for you. But on the positive side, it almost always reduces file size enough that you can e-mail the files to us in a couple or just a few e-mails, avoiding any "Cloud" transfer steps.

Two, even easier work-arounds

1. If your billing program does not have a standard report that includes the complete usage data we need (recommendation – when you upgrade your billing program, make sure the new one has that feature), and you cannot directly access the data in the program to get that data yourself, call us. We may be able to talk you through the export as you are doing it.
2. If we cannot talk you through the export, you will need to ask your software provider to do the export for you. The company will probably charge you $500 or so for that service, but it is usually fail-safe, almost effortless on your part and worth the small price.
    a. You may not want to be in the middle of arranging data export by your billing software provider and forwarding that to us. If you would prefer we work directly with that company, just give them your permission to work directly with us and give them our contact information. We will guide them in what data and format we need.

That's it

Call us if you have questions (you will). Otherwise, start gathering and sending us data right away. Send us the easy things first. Then work on the more difficult ones. We will build your model and get you into great rates just as soon as we can.