

# 2023 PSAR Guide: Part A Line 6 Functional Population

# Overview

- What is Functional Population?
- How to Properly Calculate Functional Population
- How to Use the 2023 REQPOP Calculator
- How to Use the 2023 REQPOP Calculator – Master Meters
- How to Use the 2023 REQPOP Calculator – Master Meters Example

## What is Functional Population?

Functional Population is the served permanent population as adjusted by the seasonal residents, tourist, group quarters, and net commuter population within a utility service area.

This value is not simply the number of residents who live within a utility service area year-round. Functional population considers all types of residents (permanent, seasonal, tourist, etc.) to get an accurate picture of per capita water usage throughout the year.

# How to Properly Calculate Functional Population

To ensure that Part A Line 6 Functional Population is properly calculated, use the 2023 REQPOP Calculator. The calculator can be found on the [Section D, Public Supply Annual Reports and Significant Use](#) webpage in the PSAR Resources box.

**It's important to use the 2023 REQPOP Calculator, not a calculator from a previous year.** REQPOP Calculators are updated yearly with population variables, so using an older calculator will yield an incorrect value.

The screenshot displays the 2023 REQPOP Calculator spreadsheet. The spreadsheet includes a dropdown menu for service area selection, a text box for 'RESUMITS', and a formula bar showing 'REQPOP+FTOURPOP+FNETCOM'. Below the spreadsheet is a table titled 'Total Dwellings Units Served' and a bar chart showing the same data.

| Year                         | 2019  | 2020  | 2021  | 2022  | 2023 | Average |
|------------------------------|-------|-------|-------|-------|------|---------|
| Total Dwellings Units Served | 1,990 | 2,003 | 2,013 | 2,012 | 0    | 2,005   |

# How to Use the 2023 REQPOP Calculator

1. Select your service area from the dropdown menu. The menu is organized by county then WUP Number.

The screenshot shows the Microsoft Excel interface for the 2023 REQPOP Calculator. The spreadsheet is titled "Population Served" and contains instructions for users to input their service area and total dwelling units. A dropdown menu is open, displaying a list of service areas organized by county (Charlotte and Citrus) and then by WUP Number. The selected service area is "CHARLOTTE\_GASPARILLA ISLAND WATER ASSOC.\_WUP#\_718".

The spreadsheet includes the following data:

2) Enter your total dwelling units served: **RESUMITS**

Voilà! Here is your total population served:

**REQPOP=FTOURPOP+FNETCOM**

0

Note: The above population served estimates includes the permanent, seasonal, tourist, and net commuters. If you plan to take a significant use deduction, you may not be able to include tourist and net commuters. Restrictions apply.

Data from the last five years:

| Total Dwellings Units Served |       |       |       |      |         |
|------------------------------|-------|-------|-------|------|---------|
| 2019                         | 2020  | 2021  | 2022  | 2023 | Average |
| 1,990                        | 2,003 | 2,013 | 2,012 | 0    | 2,005   |

Total Dwellings Units Served

The bar chart displays the total dwellings units served for each year from 2019 to 2023. The y-axis ranges from 0 to 2,500. The x-axis shows the years 2019, 2020, 2021, 2022, and 2023. The bars for 2019, 2020, 2021, and 2022 are blue, with values of 1,990, 2,003, 2,013, and 2,012 respectively. The bar for 2023 is white with a black outline and a value of 0.

# How to Use the 2023 REQPOP Calculator (Continued)

2. Enter the value from Part B Line 5 Subtotal of Residential Service, Number of Dwelling Units served from your PSAR under RESUNITS.

(If residential dwelling units in your service area use a master meter, please see the next slides.)

3. That's it! Functional Population will auto-populate. Enter this value on Line 6 of your PSAR, Part A.

| Residential Water Service Category | Number of Dwelling Units | Number of Metered Connections | Annual Average (gpd) | % of Total | Documentation on an Attached Sheet                                  |
|------------------------------------|--------------------------|-------------------------------|----------------------|------------|---------------------------------------------------------------------|
| 1. Single Family Dwelling Units    | 2,031                    | 1,862                         | 358,816              | 62.75%     | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| 2. Multiple Family Dwelling Units  | 168                      | 118                           | 20,517               | 3.59%      | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| 3. Mobile Home Dwelling Units      | 0                        | 0                             | 0                    | 0.00%      | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| 4. Residential Irrigation Accounts | N/A                      | 0                             | 0                    | 0.00%      | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| 5. Subtotal of Residential Service | 2,199                    | 1,980                         | 379,333              | 66.33%     | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |

F G H I J K

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tion Manual.  
roceed to calculate your  
nt Worksheets A-I and Submit with your PSAR

11 RESUNITS  
2,199

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14 Note: For master-metered communities, please utilize the Index A-Residential Account sheet to calculate total dwelling units served

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18 Voila! Here is your total population served:

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20 REQPOP+FTOURPOP+FNETCOM  
5,681

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24 Note: The above population served estimates includes the permanent, seasonal, tourist, and net commuters. If you plan to take a significant use deduction, you may not be able to include tourist and net commuters. Restrictions apply.

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28 Data from the last five years:

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30 Total Dwellings Units Served

| 2019  | 2020  | 2021  | 2022  | 2023  | Average |
|-------|-------|-------|-------|-------|---------|
| 2,072 | 1,931 | 2,135 | 2,199 | 2,199 | 2,107   |

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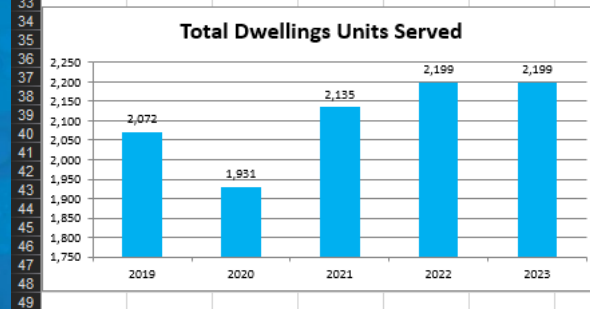
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# How to Use the 2023 REQPOP Calculator - Master Meters

To calculate residential accounts that are master metered, go to the Index A-Residential Accounts tab of the REQPOP Calculator.

This tab, Worksheet A: Residential Account Housing Unit Estimation, allows you to estimate the number of residential units if the exact number is unknown and to demonstrate how many residential account housing units are in each meter size category.

The worksheet is divided into 4 categories of master metered residential accounts: Single Family, Multi-Family, Mobile Home (Trailer), and Manufactured Home.

**Worksheet A: Residential Account Housing Unit Estimation**

Permittee Name: CITY OF FORT MEADE  
 Permit Number(s): 645  
 Year of Interest: 2023

INDEX 1

**Enter Only Meter Data for Residential Accounts (No Commercial)**  
**Do Not Include Irrigation Account Meters**

**Data Entry Required in Solid Bordered Cells**  
**Calculated Output in Dashed Bordered Cells**

Total Individually Metered Residences: = A

**Master Metered Residential Accounts Worksheet**

| Single Family Master Metered |                                |                                       |                         |                                              |                                              | Multi-family Master Metered |                                |                                      |                         |                                              |                                              |
|------------------------------|--------------------------------|---------------------------------------|-------------------------|----------------------------------------------|----------------------------------------------|-----------------------------|--------------------------------|--------------------------------------|-------------------------|----------------------------------------------|----------------------------------------------|
| Meter Size                   | Single Family Equivalent Units | Number of Single Family Master Meters | Unit Adjust-ment Factor | Equivalent Residential Account Housing Units | OR Counted Residential Account Housing Units | Meter Size                  | Single Family Equivalent Units | Number of Multi Family Master Meters | Unit Adjust-ment Factor | Equivalent Residential Account Housing Units | OR Counted Residential Account Housing Units |
|                              | B                              | C                                     | D                       | $B \times C / D$                             | = E                                          |                             | B                              | C                                    | D                       | $B \times C / D$                             | = F                                          |
| 3/4"                         | 1.5                            |                                       | 1                       | 1.5                                          | 0                                            | 3/4"                        | 1.5                            |                                      | 1                       | 1.5                                          | 0                                            |
| 1"                           | 2.5                            |                                       | 1                       | 2.5                                          | 0                                            | 1"                          | 2.5                            |                                      | 1                       | 2.5                                          | 0                                            |
| 1 1/2"                       | 5                              |                                       | 1                       | 5                                            | 0                                            | 1 1/2"                      | 5                              |                                      | 1                       | 5                                            | 0                                            |
| 2"                           | 8                              |                                       | 1                       | 8                                            | 0                                            | 2"                          | 8                              |                                      | 1                       | 8                                            | 0                                            |
| 3"                           | 17.5                           |                                       | 1                       | 17.5                                         | 0                                            | 3"                          | 17.5                           |                                      | 1                       | 17.5                                         | 0                                            |
| 4"                           | 30                             |                                       | 1                       | 30                                           | 0                                            | 4"                          | 30                             |                                      | 1                       | 30                                           | 0                                            |
| 6"                           | 62.5                           |                                       | 1                       | 62.5                                         | 0                                            | 6"                          | 62.5                           |                                      | 1                       | 62.5                                         | 0                                            |
| 8"                           | 90                             |                                       | 1                       | 90                                           | 0                                            | 8"                          | 90                             |                                      | 1                       | 90                                           | 0                                            |
| 10"                          | 145                            |                                       | 1                       | 145                                          | 0                                            | 10"                         | 145                            |                                      | 1                       | 145                                          | 0                                            |
| 12"                          | 215                            |                                       | 1                       | 215                                          | 0                                            | 12"                         | 215                            |                                      | 1                       | 215                                          | 0                                            |
|                              |                                |                                       | Sum:                    | 0                                            | 0                                            |                             |                                |                                      | Sum:                    | 0                                            | 0                                            |

| Mobile Home (Trailer) Master Metered |                                |                                     |                         |                                              |                                              | Manufactured Home Master Metered |                                |                                             |                         |                                              |                                              |
|--------------------------------------|--------------------------------|-------------------------------------|-------------------------|----------------------------------------------|----------------------------------------------|----------------------------------|--------------------------------|---------------------------------------------|-------------------------|----------------------------------------------|----------------------------------------------|
| Meter Size                           | Single Family Equivalent Units | Number of Mobile Home Master Meters | Unit Adjust-ment Factor | Equivalent Residential Account Housing Units | OR Counted Residential Account Housing Units | Meter Size                       | Single Family Equivalent Units | Number of Manu- factured Home Master Meters | Unit Adjust-ment Factor | Equivalent Residential Account Housing Units | OR Counted Residential Account Housing Units |
|                                      | B                              | C                                   | D                       | $B \times C / D$                             | = E                                          |                                  | B                              | C                                           | D                       | $B \times C / D$                             | = F                                          |
| 3/4"                                 | 1.5                            |                                     | 0.6                     | 0.75                                         | 0                                            | 3/4"                             | 1.5                            |                                             | 0.8                     | 0.75                                         | 0                                            |
| 1"                                   | 2.5                            |                                     | 0.6                     | 1.25                                         | 0                                            | 1"                               | 2.5                            |                                             | 0.8                     | 1.25                                         | 0                                            |
| 1 1/2"                               | 5                              |                                     | 0.6                     | 2.5                                          | 0                                            | 1 1/2"                           | 5                              |                                             | 0.8                     | 2.5                                          | 0                                            |
| 2"                                   | 8                              |                                     | 0.6                     | 4                                            | 0                                            | 2"                               | 8                              |                                             | 0.8                     | 4                                            | 0                                            |
| 3"                                   | 17.5                           |                                     | 0.6                     | 14                                           | 0                                            | 3"                               | 17.5                           |                                             | 0.8                     | 14                                           | 0                                            |
| 4"                                   | 30                             |                                     | 0.6                     | 24                                           | 0                                            | 4"                               | 30                             |                                             | 0.8                     | 24                                           | 0                                            |
| 6"                                   | 62.5                           |                                     | 0.6                     | 52                                           | 0                                            | 6"                               | 62.5                           |                                             | 0.8                     | 50                                           | 0                                            |
| 8"                                   | 90                             |                                     | 0.6                     | 72                                           | 0                                            | 8"                               | 90                             |                                             | 0.8                     | 72                                           | 0                                            |
| 10"                                  | 145                            |                                     | 0.6                     | 117                                          | 0                                            | 10"                              | 145                            |                                             | 0.8                     | 116                                          | 0                                            |
| 12"                                  | 215                            |                                     | 0.6                     | 172                                          | 0                                            | 12"                              | 215                            |                                             | 0.8                     | 172                                          | 0                                            |
|                                      |                                |                                     | Sum:                    | 0                                            | 0                                            |                                  |                                |                                             | Sum:                    | 0                                            | 0                                            |

Total Residential Account Housing Units for the Year of Interest (RESUNITS) = G

*Use this value in PopulationServed sheet to calculation functional population*

(Sum the total individually metered residences (A) and the sums of equivalent master metered residential account housing units (Es) or the sums of the counted master metered residential account housing units (Fs).

PopulationServed | **Index A-Residential Account** | Indexed B-Service Area Summary | G-Functional Tourist Population

# How to Use the 2023 REQPOP Calculator - Master Meters (Continued)

1. Start by entering A - the total number of **known individual** metered residences.

2A. If the exact number of Master Metered Residential Account Housing Units is **unknown** in any of the 4 categories, use the C columns for those categories.

2B. If the exact number of Master Metered Residential Account Housing Units is **known** for any of the 4 categories, use the F columns for those categories.

3. The worksheet ends with G - your auto-calculated estimated RESUNITS value.

Worksheet A: Residential Account Housing Unit Estimation

Permittee Name: CITY OF FORT MEADE INDEX 1  
 Permit Number(s): 645  
 Year of Interest: 2023

Enter Only Meter Data for Residential Accounts (No Commercial)  
 Do Not Include Irrigation Account Meters

Data Entry Required in Solid Bordered Cells  
 Calculated Output in Dashed Bordered Cells

Total Individually Metered Residences: = A

Master Metered Residential Accounts Worksheet

| Single Family Master Metered |                  |                                       |                   |                                              | Multi-family Master Metered |                  |                                      |                   |                                              |
|------------------------------|------------------|---------------------------------------|-------------------|----------------------------------------------|-----------------------------|------------------|--------------------------------------|-------------------|----------------------------------------------|
| Meter Size                   | Equivalent Units | Number of Single Family Master Meters | Adjustment Factor | OR Counted Residential Account Housing Units | Meter Size                  | Equivalent Units | Number of Multi Family Master Meters | Adjustment Factor | OR Counted Residential Account Housing Units |
| B                            | C                | D                                     | E                 | F                                            | B                           | C                | D                                    | E                 | F                                            |
| 1"                           | 2.5              |                                       | 1                 |                                              | 1"                          | 2.5              |                                      | 1                 |                                              |
| 1 1/2"                       | 5                |                                       | 1                 |                                              | 1 1/2"                      | 5                |                                      | 1                 |                                              |
| 2"                           | 8                |                                       | 1                 |                                              | 2"                          | 8                |                                      | 1                 |                                              |
| 3"                           | 17.5             |                                       | 1                 |                                              | 3"                          | 17.5             |                                      | 1                 |                                              |
| 4"                           | 30               |                                       | 1                 |                                              | 4"                          | 30               |                                      | 1                 |                                              |
| 6"                           | 62.5             |                                       | 1                 |                                              | 6"                          | 62.5             |                                      | 1                 |                                              |
| 8"                           | 90               |                                       | 1                 |                                              | 8"                          | 90               |                                      | 1                 |                                              |
| 10"                          | 145              |                                       | 1                 |                                              | 10"                         | 145              |                                      | 1                 |                                              |
| 12"                          | 215              |                                       | 1                 |                                              | 12"                         | 215              |                                      | 1                 |                                              |
| Sum:                         |                  |                                       |                   |                                              | Sum:                        |                  |                                      |                   |                                              |

Mobile Home (Trail) Master Metered

| Meter Size | Equivalent Units | Number of Mobile Home Master Meters | Adjustment Factor | OR Counted Residential Account Housing Units |
|------------|------------------|-------------------------------------|-------------------|----------------------------------------------|
| B          | C                | D                                   | E                 | F                                            |
| 3/4"       | 1.5              |                                     | 0.6               |                                              |
| 1"         | 2.5              |                                     | 0.6               |                                              |
| 1 1/2"     | 5                |                                     | 0.6               |                                              |
| 2"         | 8                |                                     | 0.6               |                                              |
| 3"         | 17.5             |                                     | 0.6               |                                              |
| 4"         | 30               |                                     | 0.6               |                                              |
| 6"         | 62.5             |                                     | 0.6               |                                              |
| 8"         | 90               |                                     | 0.6               |                                              |
| 10"        | 145              |                                     | 0.6               |                                              |
| 12"        | 215              |                                     | 0.6               |                                              |
| Sum:       |                  |                                     |                   |                                              |

Manufactured Home Master Metered

| Meter Size | Equivalent Units | Number of Manufactured Home Master Meters | Adjustment Factor | OR Counted Residential Account Housing Units |
|------------|------------------|-------------------------------------------|-------------------|----------------------------------------------|
| B          | C                | D                                         | E                 | F                                            |
| 3/4"       | 1.5              |                                           | 0.8               |                                              |
| 1"         | 2.5              |                                           | 0.8               |                                              |
| 1 1/2"     | 5                |                                           | 0.8               |                                              |
| 2"         | 8                |                                           | 0.8               |                                              |
| 3"         | 17.5             |                                           | 0.8               |                                              |
| 4"         | 30               |                                           | 0.8               |                                              |
| 6"         | 62.5             |                                           | 0.8               |                                              |
| 8"         | 90               |                                           | 0.8               |                                              |
| 10"        | 145              |                                           | 0.8               |                                              |
| 12"        | 215              |                                           | 0.8               |                                              |
| Sum:       |                  |                                           |                   |                                              |

Total Residential Account Housing Units for the Year of Interest (RESUNITS) =

(Sum the total individually metered residences (A) and the sums of equivalent master metered residential account housing units (Es) or the sums of the counted master metered residential account housing units (Fs).



# How to Use the 2023 REQPOP Calculator - Master Meters Example

1. In = A, Enter the total number of **known individual** metered residences.

Total Individually Metered Residences: = A 1,834

2A. In the C columns, enter the number of Master Meters for each meter size. The adjacent blue columns will auto-calculate with an estimated number of residential housing units.

2B. In the F columns, enter the number of residential housing units for each meter size (if known).

3. In =G, the totals from each of the 4 categories will auto-calculate. This is your estimated RESUNITS value.

4. Go back to the first tab and enter this value into the RESUNITS cell to calculate your Functional Population.

| Master Metered Residential Accounts Worksheet                                   |                  |                                       |                        |                                                          |                                              |            |                  |                                           |                        |                                                          |                                              |
|---------------------------------------------------------------------------------|------------------|---------------------------------------|------------------------|----------------------------------------------------------|----------------------------------------------|------------|------------------|-------------------------------------------|------------------------|----------------------------------------------------------|----------------------------------------------|
| Single Family Master Metered                                                    |                  |                                       |                        |                                                          | Multi-family Master Metered                  |            |                  |                                           |                        |                                                          |                                              |
| Meter Size                                                                      | Equivalent Units | Number of Single Family Master Meters | Unit Adjustment Factor | Equivalent Residential Account Housing Units (B x C) / D | OR Counted Residential Account Housing Units | Meter Size | Equivalent Units | Number of Multi-Family Master Meters      | Unit Adjustment Factor | Equivalent Residential Account Housing Units (B x C) / D | OR Counted Residential Account Housing Units |
| 1"                                                                              | 2.5              |                                       | 1                      | = E                                                      | = F                                          | 3/4"       | 1.5              | 134                                       | 0.7                    | = E                                                      |                                              |
| 1 1/2"                                                                          | 5                |                                       | 1                      |                                                          |                                              | 1"         | 2.5              | 4                                         | 0.7                    | 287,1428                                                 |                                              |
| 2"                                                                              | 8                |                                       | 1                      |                                                          |                                              | 1 1/2"     | 5                |                                           | 0.7                    | 14,28571                                                 |                                              |
| 3"                                                                              | 17.5             |                                       | 1                      |                                                          |                                              | 2"         | 8                |                                           | 0.7                    |                                                          |                                              |
| 6"                                                                              | 62.5             |                                       | 1                      |                                                          |                                              | 3"         | 17.5             |                                           | 0.7                    |                                                          |                                              |
| 8"                                                                              | 90               |                                       | 1                      |                                                          |                                              | 4"         | 30               |                                           | 0.7                    |                                                          |                                              |
| 10"                                                                             | 145              |                                       | 1                      |                                                          |                                              | 6"         | 62.5             |                                           | 0.7                    |                                                          |                                              |
| 12"                                                                             | 215              |                                       | 1                      |                                                          |                                              | 8"         | 90               |                                           | 0.7                    |                                                          |                                              |
|                                                                                 |                  |                                       |                        |                                                          | 0                                            | 10"        | 145              |                                           | 0.7                    |                                                          |                                              |
|                                                                                 |                  |                                       |                        |                                                          |                                              | 12"        | 215              |                                           | 0.7                    |                                                          |                                              |
|                                                                                 |                  |                                       |                        |                                                          |                                              |            |                  |                                           |                        | 301,4285                                                 | 0                                            |
| Mobile Home (Trailer) Master Metered                                            |                  |                                       |                        |                                                          | Manufactured Home Master Metered             |            |                  |                                           |                        |                                                          |                                              |
| Meter Size                                                                      | Equivalent Units | Number of Mobile Home Master Meters   | Unit Adjustment Factor | Equivalent Residential Account Housing Units (B x C) / D | OR Counted Residential Account Housing Units | Meter Size | Equivalent Units | Number of Manufactured Home Master Meters | Unit Adjustment Factor | Equivalent Residential Account Housing Units (B x C) / D | OR Counted Residential Account Housing Units |
| 3/4"                                                                            | 1.5              |                                       | 0.6                    | = E                                                      |                                              | 3/4"       | 1.5              |                                           | 0.8                    | = E                                                      |                                              |
| 1"                                                                              | 2.5              |                                       | 0.6                    |                                                          |                                              | 1"         | 2.5              |                                           | 0.8                    |                                                          |                                              |
| 1 1/2"                                                                          | 5                |                                       | 0.6                    |                                                          |                                              | 1 1/2"     | 5                |                                           | 0.8                    |                                                          |                                              |
| 2"                                                                              | 8                |                                       | 0.6                    |                                                          |                                              | 2"         | 8                |                                           | 0.8                    |                                                          |                                              |
| 3"                                                                              | 17.5             |                                       | 0.6                    |                                                          |                                              | 3"         | 17.5             |                                           | 0.8                    |                                                          |                                              |
| 4"                                                                              | 30               |                                       | 0.6                    |                                                          |                                              | 4"         | 30               |                                           | 0.8                    |                                                          |                                              |
| 6"                                                                              | 62.5             |                                       | 0.6                    |                                                          |                                              | 6"         | 62.5             |                                           | 0.8                    |                                                          |                                              |
| 8"                                                                              | 90               |                                       | 0.6                    |                                                          |                                              | 8"         | 90               |                                           | 0.8                    |                                                          |                                              |
| 10"                                                                             | 145              |                                       | 0.6                    |                                                          |                                              | 10"        | 145              |                                           | 0.8                    |                                                          |                                              |
| 12"                                                                             | 215              |                                       | 0.6                    |                                                          |                                              | 12"        | 215              |                                           | 0.8                    |                                                          |                                              |
|                                                                                 |                  |                                       |                        |                                                          | 0                                            |            |                  |                                           |                        |                                                          | 0                                            |
| Total Residential Account Housing Units for the Year of Interest (RESUNITS) = G |                  |                                       |                        |                                                          |                                              |            |                  |                                           |                        |                                                          | 2,135                                        |

RESUNITS

2) Enter your total dwelling units served: 2,135

Note: For master-metered communities, please utilize the Index A-Residential

Voila! Here is your total population served:

REQPOP+FOURPOP+FNETCOM

5,893