BILLING SYSTEM DATA VALIDATION



Watershed Management

and



CPA 1216193 Executed June 24, 2020

Corporate History-Ownership

- Headquartered in Houston, Texas, Utility Revenue Management (URM) is a privately held business that provides revenue enhancement services to the public water and wastewater utility industry.
- Incorporated in 1992, the company was founded by A. Mitch Robertson and William P. Bulloch, Jr.
- URM has provided its services continuously for over twenty-seven years.
- URM has identified over \$70,000,000 in annual unbilled or under billed revenue.
- URM has successfully completed assignments for thirty-two water and wastewater utilities.



URM is proud to note the following previous and ongoing engagements:

- Washington Suburban Sanitary Commission (WSSC)
- East Bay Municipal Utility District (EBMUD)
- Phoenix Water Services
- San Antonio Water System (SAWS)
- Dallas Water Utilities
- The City of Baltimore
- The City of San Diego
- Austin Water
- Columbus Utilities (Ohio) (active)
- The City of Atlanta Georgia (1993-96)
- Metro Water Services, Nashville-Davidson County
- Charlotte Mecklenburg Utilities Department
- Augusta Georgia (active)
- The Pittsburgh Water and Sewer Authority
- Youngstown Ohio

- Jefferson Parish Water Department, Louisiana
- The City of Plano Texas
- Tampa Water Utilities
- The City of Tucson Arizona
- Fulton County Georgia (two engagements)
- Richmond Virginia
- Anne Arundel County Maryland
- Irving Texas
- Corpus Christi Texas
- The City of Tempe Arizona
- San Angelo Texas
- Charleston South Carolina
- Cobb County Georgia
- Columbia South Carolina
- St. John the Baptist Parish Louisiana
- Baltimore County Maryland

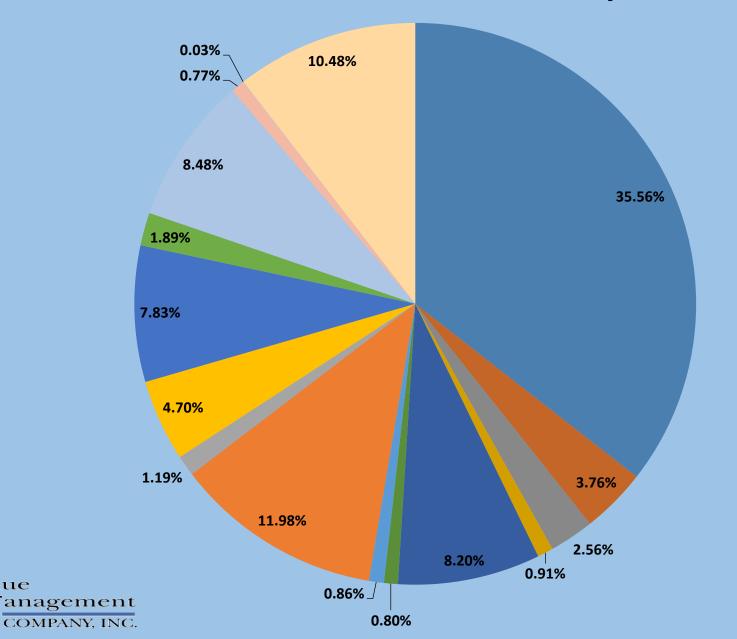
DeKalb County Utility Billing System Data Validation

DeKalb County Contract Overview

- Entered into contract June 24, 2020
- The Billing System data base evaluation is limited to non-single family residential accounts only
- July 29th, 2020, received the non-residential data file from Cynthia D. Moran, IT Architect, Department of Innovation & Technology
 - The data based contained 31,421 accounts
 - URM begins individual account evaluation of the 31,421 accounts on the billing system (access to the billing system granted for "read only")
- Held "virtual" Contract Start Up Meeting on August 13, 2020. Members in attendance:
 - From Dekalb County:
 - Ms. Lynette V. Ferguson, Senior Division Manager and Project Administrator for the DeKalb contract
 - Mr. Robert Dunning, Superintendent, Large Meter Maintenance
 - · Mr. Kelvin R. Herbert, Utility Billing Systems Manager
 - Ms. Natasha S. Youngblood, Utility Billing Systems Operations Analyst
 - From URM:
 - · Mitch Robertson, President, CEO
 - Bill Bulloch, P.E., Principal
 - Mr. Bruce Jones, Vice President of Operations,
 - Mr. Scott Rowold, Senior Operations Manager, and Project Manager for the DeKalb contract.
- September 10th, 2020. URM staff (Bruce Jones and Scott Rowold) begin field evaluation of those accounts reviewed on the billing system that appear to have increased revenue potential.

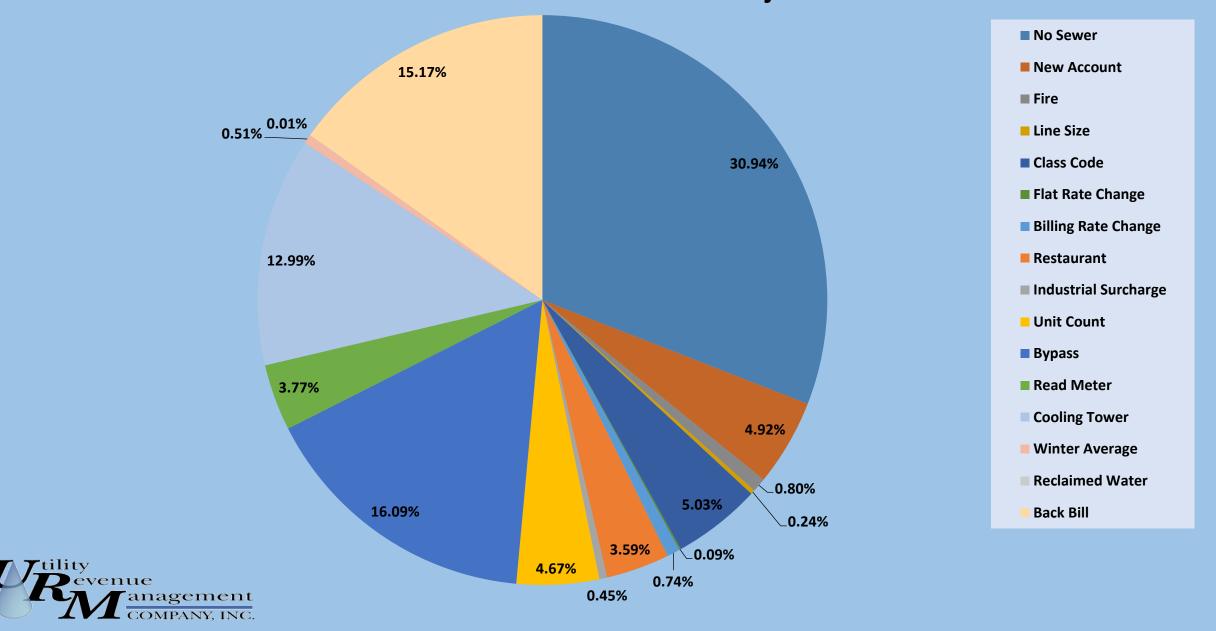


Percentage Occurrence of Billing and Meter Reading Inconsistencies Results from 32 Non-Residential Projects

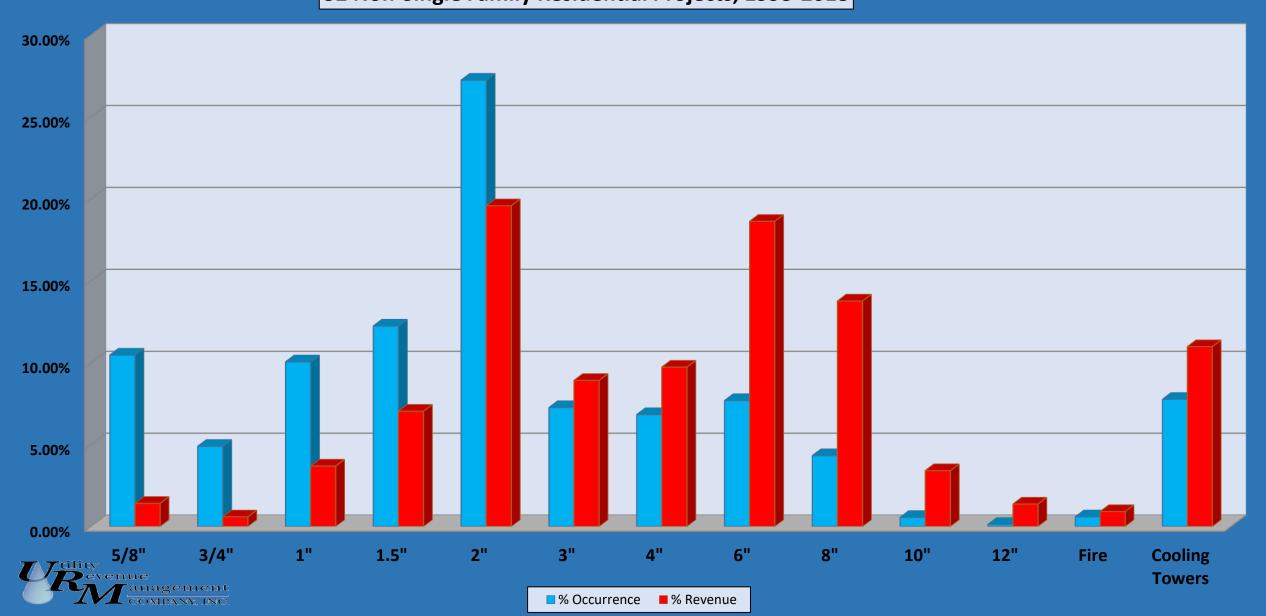




Percentage Revenue of Billing and Meter Reading Inconsistencies Results from 32 Non-Residential Projects



Distribution of Billing and Meter Reading Inconsistencies by Meter Size 32 Non-Single Family Residential Projects, 1993-2018



IDENTIFICATION OF POSSIBLE BILLING SYSTEM INCONSISTENCIES AND REVENUE LOSS

Consumption
Pattern
Analysis

Meter Size and Type

Land Use Type



DeKalb County Billing System Data Validation Identification of Inconsistencies and Revenue Loss

- Consumption Pattern Analysis
- Class Coding
- Applied Billing Rates
- Flat Rate Charges
- Meter Size Charges
- Zero Consumption
- Estimated Meter Reads
- Accounts Paying No or Incorrect Sewer Charges

- Consumption by Meter Size
- Unit Count
- Line Size Charges
- Property Type and Size Comparison
- Fire Line Charges
- Industrial Surcharges
- Restaurant Surcharges
- Cooling Tower Credits
- Irrigation Credits



DeKalb County Billing/Meter Reading Systems Data Validation Identification of Inconsistencies and Revenue Loss

- Billing
 - Account Set-Up/Lost Accounts
 - Obtaining Incorrect Information
 - Data Input Errors
 - Improper Account Structure
 - Correct ERU's
 - Systematic Bill Handling
 - Programming Errors
 - Billing Adjustment Procedures
 - Are dollars and gallons or just dollars adjusted?

- Meter Reading
- Billing/Meter Reading Systems Interface
 - Programming
 - Theft of Service (meter tampering)
 - Move-Ins/Move-Outs
 - Open Bypasses
 - Meter reading programming (Hand held, AMR/AMI)
 - Faulty MIU/UME/ERT wiring
 - Battery Life



DeKalb County Billing System Data Validation WATER BILLING RELATED

Field Investigation of Identified Possible Revenue Loss

- Land Use Verification
- Meter Bypass Check
- Meter Read Accuracy
- Review of all Related Property Water Connections
- Automated Meter Reading Accuracy
- Lost Accounts/Illegal Connections



DeKalb County Billing System Data Validation WASTEWATER BILLING RELATED

Field Investigation of Identified Possible Revenue Loss

- Verification of Sewer Connections by Dye Testing
- Irrigation Meter Connection Testing
- Correct Property Type Surcharge Application
- Cooling Tower Credit Verification
- Fire Line Connections



DeKalb County Billing System Data Validation GENERAL BILLING RELATED

Field Investigation of Identified Possible Revenue Loss

- Verify Correct Billing/Class Coding
- Correct Line Size Billing
- Fire Line Charges
- Unit Count Verification
- New or Lost Account Identification
- Correct Billing Rate Application
- URM technicians perform a detailed on-site analysis of all metering, wastewater and property characteristics to confirm the overall accurate billing of each individual customer



DeKalb County Billing System Data Validation REVENUE RECOVERY STARTS WITH A WORK ORDER Work Orders Include the Following Information

Utility Customer Information

- Account Number
- Customer Name
- Address
- Meter Number/Size/Maker/Model
- Current Billing Rate Information
- Consumption History

URM Field Investigation Data

- Work Order Type (metering, billing and/or sewer)
- Land/Water Usage
- Current Meter Reads (low & high flow)
- Interconnected Meters
- Corrected Meter Sizes
- Sewer Dye Connection Results
- Corrected Billing Data (Rates/Codes/Unit Counts)
- Increased Monthly Revenue Calculations
- Recommended Actions
- Back Billing Recommendations

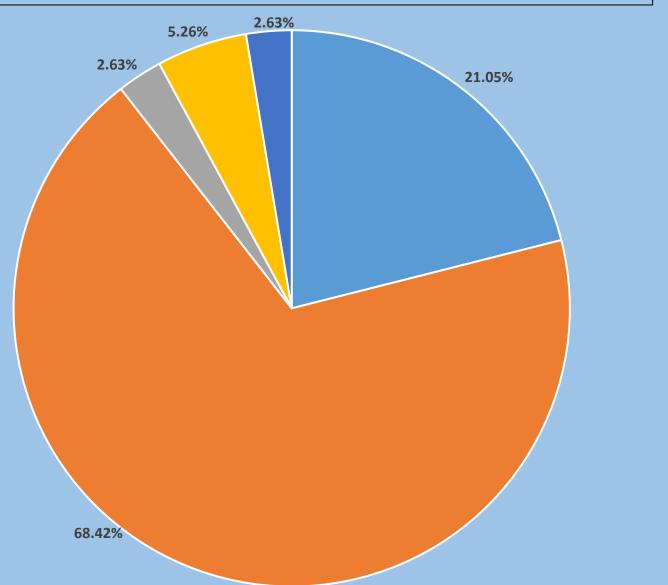


DeKalb County Billing System Data Validation WORK ORDER EVOLUTION

- URM submits Work Orders to DeKalb County Utilities Project Manager
- Project Manager verifies URM findings and, if Approved
- Corrective action is taken
 - Creation of new account for a customer receiving service but not on the billing system
 - Close Bypass
 - Add or Adjust Sewer Charges
 - Add New or Modify any rates, codes, unit counts or meter charges
 - Update Actual or Corrected Meter Reads
 - Addition or Adjustment of Surcharges
- URM Work Order Increased Revenue is then Recovered According to Contract Specifications and Timeframes



DeKalb County Utility Billing System Data Validation Number of Work Orders by Type





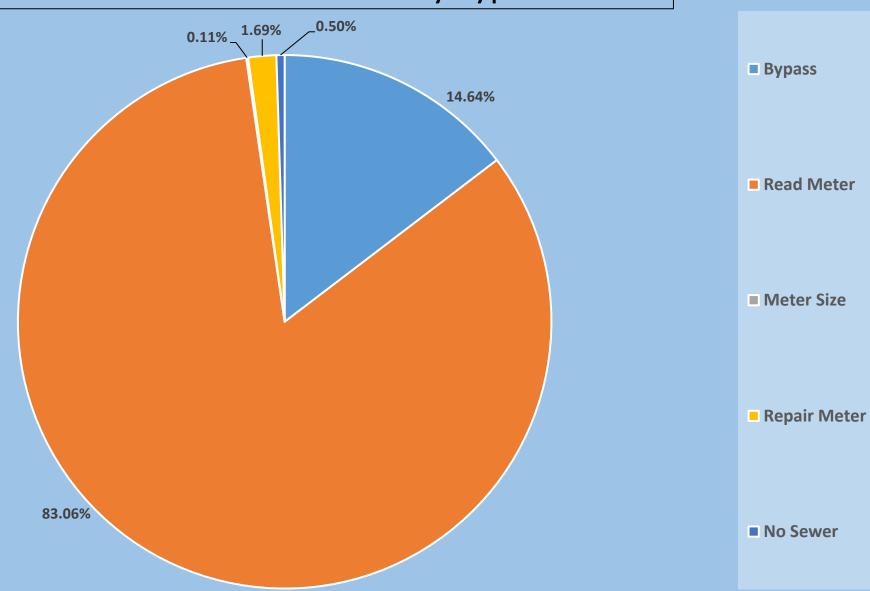
Read Meter

Meter Size

Repair Meter

No Sewer

DeKalb County Utility Billing System Data Validation Revenue of Work Orders by Type





DeKalb County Billing System Data Validation Contract Status Summary

- URM has been actively reviewing non-residential accounts on the Dekalb County Billing System since August of 2020.
- Field investigation of potential billing system data inconsistencies began on September 10th of 2020.
- URM staff have submitted and had approved 38 individual billing system account Work Orders to the Dekalb County Project Managers.
- The approved <u>estimated annual potential increased revenue</u> to DeKalb County for these 38 Work Orders is 3.6 million dollars.
- The <u>potential annual increased revenue</u> to DeKalb County is projected to be 8 million dollars.
- Based on the number of accounts to be field investigated, it is anticipated that URM staff will be in the field for at least 12 more months.



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