

# Assessing Financial Condition

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# Session Objectives

- Understanding where your water system is right now financially
- Learning some standard measures that funders will be concerned with



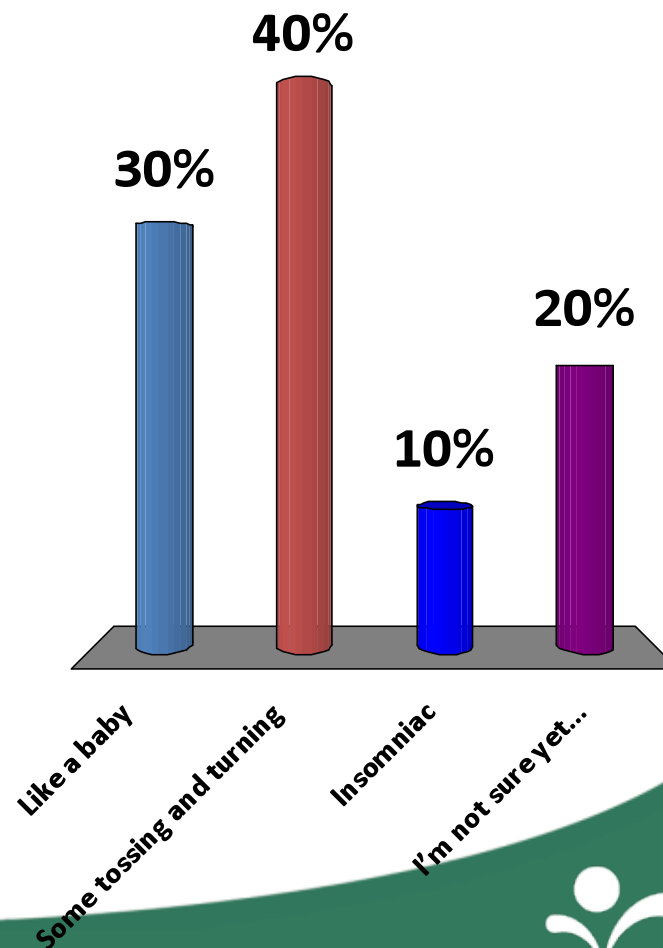
# Can You Sleep at Night?

- Is your utility (public enterprise) self sufficient?
  - Can your utility meet its short term obligations?
  - If your customers stop paying their bills, how long can you maintain operations?
  - Are you able to cover your debt service after paying for your day to day operations?
  - How much of your utility's expected life has already run out (and how much is left)?
- Operating Ratio
- Quick Ratio
- Days Cash on Hand
- Debt Service Coverage Ratio
- Asset Depreciation



# In terms of your system's finances, how do you sleep at night?

1. Like a baby
2. Some tossing and turning
3. Insomniac
4. I'm not sure yet...



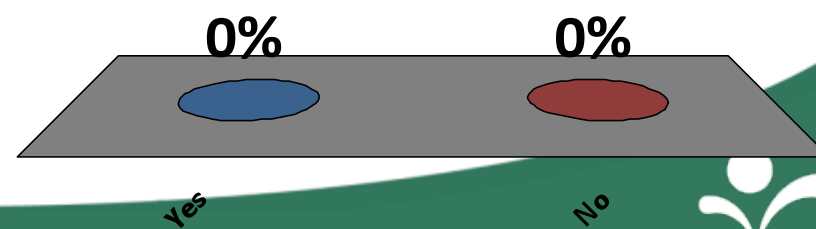
# Where Do We Get Started?

- Audited Financial Statements!
- (but Glenn, it's barely 10 am...)



# Have you ever read your system's financial statements?

1. Yes
2. No



# Sample Income Statement

4/9/13

	<u>Water and Sewer</u>
Operating revenues:	
Charges for services	\$ 11,329,883
Miscellaneous	—
Total operating revenues	<u>11,329,883</u>
Operating expenses:	
Personal services	3,400,559
Contractual services	344,422
Utilities	754,107
Repairs and maintenance	747,315
Other supplies and expenses	498,213
Insurance claims and expenses	—
Depreciation	1,163,140
Total operating expenses	<u>6,907,756</u>
Operating income (loss)	<u>4,422,127</u>
Nonoperating revenues (expenses):	
Interest and investment revenue	454,793
Miscellaneous revenue	—
Interest expense	(1,600,830)
Miscellaneous expense	—
Total nonoperating revenue (expenses)	<u>(1,146,037)</u>
Income (loss) before contributions and transfers	3,276,090
Capital contributions	1,645,919
Transfers out	(290,000)

Interest is a source of **non-operating** expense/revenue

Impact fees (system development charges) are a source of **non-operating** revenue. Separate them out from your tap (connection) fees, which ARE operating revenues.



# Operating Ratio

$$= \frac{\textit{Operating Revenues}}{\textit{Operating Expenses}}$$

Natural Benchmark: > 1.0

A measure of self sufficiency.

The revenue you get from daily operations, divided by the expenditures or expenses you make to keep operations running (see next slides)





# This Funny Thing Called Depreciation

- This is an accounting solution to the problem of things getting old
- You have a “cost” every year of your infrastructure wearing out, a percentage of its value



# T'mayto, Tahmahto: Operating Ratio

- ▶ **You may wish to include depreciation in your operating ratio**
  - Operating revenues divided by operating expenses including depreciation and the provision for bad debts.
  
- ▶ **National Association of Clean Water Agencies**
  - Operating revenues divided by operating expenditures (excludes depreciation).



# T'mayto, Tahmahto: Operating Ratio

▶ Mississippi Water Association  
Financial Indicators Study

- **Operating Expenses** are equal to the sum of the following: salaries, board per diem, fringe benefits, office supplies, utilities, insurance, repairs, contractual services, travel, interest, depreciation, and other expenditures not included in non-operating expenses.
- **Non-operating expenses** are defined as being equal to the purchase of investments. While this definition is not one that is prescribed to by most financial analysts, investment purchase is used as a significant cash flow tool by water associations making these purchases and therefore is included here.

*Includes interest payments and impact fees.*

**STATE OF MISSISSIPPI  
OFFICE OF THE STATE AUDITOR  
Annual Financial Report for Non-Profit Public Water Systems**

**C) Expenditures**

Salaries .....	
Board per diem .....	
Fringe benefits .....	
Office supplies .....	
Utilities .....	
Insurance .....	
Repairs .....	
Contractual services .....	
Travel .....	
Capital outlay .....	
equipment .....	
construction .....	
construction contracts ...	
Debt payments .....	
principal .....	
interest .....	
Purchase of investments .....	
Other expenditures .....	



# Quick Ratio

$$= \frac{\text{Quick Assets (unrestricted, excluding Inventories and Prepaid Items)}}{\text{Current Liabilities}}$$

Accepted Benchmark: > 2

A measure of short-term liquidity: ability to pay your current bills



# Days Cash on Hand

$$= \frac{\text{Unrestricted cash and cash equivalents} \times 365}{\text{Operating Expenses} - \text{Depreciation}}$$

Benchmark? At the very least, enough to last a billing cycle or when you expect a substantial inflow of cash

A measure of the ability of the utility to weather a significant temporary reduction in revenue to continue paying for daily operations



# Debt Service Coverage Ratio

$$= \frac{\text{Operating Revenues} - \text{Operating Expenditures (excludes depreciation)}}{\text{Principal} + \text{Interest Payments on Long Term Debt}}$$

Natural Benchmark: > 1

A measure of the ability to pay debt service with operating revenue:  
Operating revenue left over after daily operation expenditures,  
divided by  
debt service



# Infrastructure Condition\*

\*Caveat – This indicator is only as good as your depreciation schedule and even then historic pricing is likely to distort the results.

$$= \frac{\textit{Accumulated Depreciation}}{\textit{Gross Plant and Equipment}}$$

**Benchmark? Don't get close to 1.0**

A measure of how much of your total assets have already depreciated. As you approach 1.0, your system is near the end of its expected life.



# Transfers to the General Fund

- Generally, your water system should be subsidizing the tax base and vice versa
- However, if you receive services from the local government, it is appropriate for you to pay for them (time of town manager, attorney, payroll, etc.)





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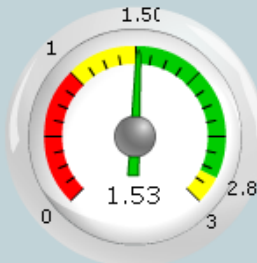
Example Utility

Rates Comparison | **Financial Benchmarks** | Characteristics | Links

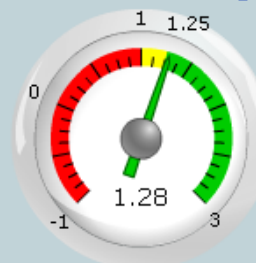
Based on Local Government Commission audited data for your utility for FY 2010

**Ability to cover operations and debt service**

Op. Rev / Op. Expend    Debt Service Coverage Ratio



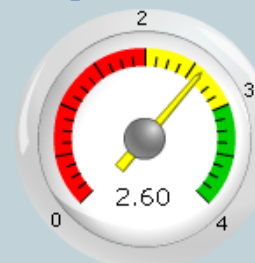
More info



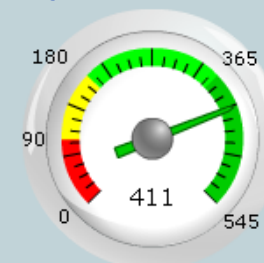
More info

**Measures of liquidity**

Quick Ratio    Days Cash on Hand



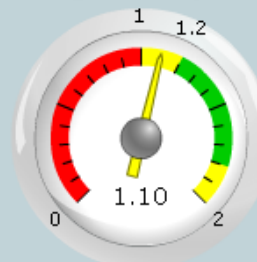
More info



More info

**Cost Recovery**

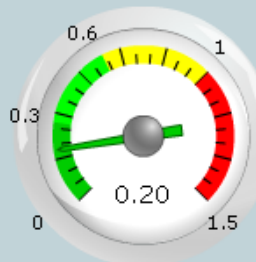
Operating Ratio (Inc Dep.)



More info

**Leverage**

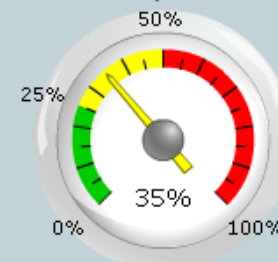
Debt-to-Equity Ratio



More info

**Condition of physical assets**

Asset Depreciation



More info

**Net Transfers**

Utility Enterprise Fund



Other funds

More info

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Print



# Why Care About This?

- Funders care about this
- As you think about the future needs of your system, you have to know where you are starting from



# Debt Ratios



## Public Finance

### Key Ratios Used in the 10Cs Rating Process — 2008 Medians

	Rating Category			All Credits
	AAA	AA	A	
<b>Capital Demands and Debt Policies</b>				
Total Outstanding Long-Term Debt Per Customer (\$)	1,121	1,168	1,375	1,185
Projected Debt Per Customer — Year Five (\$)	1,793	1,680	1,926	1,808
<b>Coverage and Financial Performance/Cash and Balance Sheet Considerations</b>				
Three-Year Historical Average Senior Lien ADS Coverage (x)	3.0	2.8	2.3	2.7
Current Senior Lien ADS Coverage (x)	2.8	3.0	2.5	2.8
Minimum Projected Senior Lien ADS Coverage (x)	1.7	2.0	1.7	1.9
All-In ADS Coverage (x)	2.4	2.3	2.2	2.2
Operating Margin (%)	41	36	35	36
Days Cash on Hand	571	318	282	313
Days of Working Capital	594	305	319	316



# Soooooooooooo....

- Once we figure out where we are, how do we know where we are going?
- How do we estimate the future costs and revenues?

