BUILDING A WORLD OF DIFFERENCE

9 February 2015

CITY OF ANN ARBOR

WATER & WASTEWATER SYSTEM CAPITAL COST RECOVERY STUDY

BLACK & VEATCH
Building a world of difference.®

AGENDA

- Welcome & Project Background
- Project Team
- Project Concepts & Approach
- Next Steps
- Q&A

PROJECT TEAM

INTRODUCTION & PROJECT TEAM

Troy Baughman
Project Manager

Consultant Team

ENGAGEMENT LEAD
David Koch, PE

QA/QC
William Zieburtz

MANAGEMENT TEAM
Brian Jewett
William Zieburtz
Teresa Weed Newman – *Outreach Task Manager* (Project Innovations)

TECHNICAL SPECIALISTS
James Broz - WW
Robert Harbron – WW
David Koch - W
Mike Borchers - SME
Lori Byron (Famous in Your Field) - SME

PROJECT CONCEPTS & APPROACH

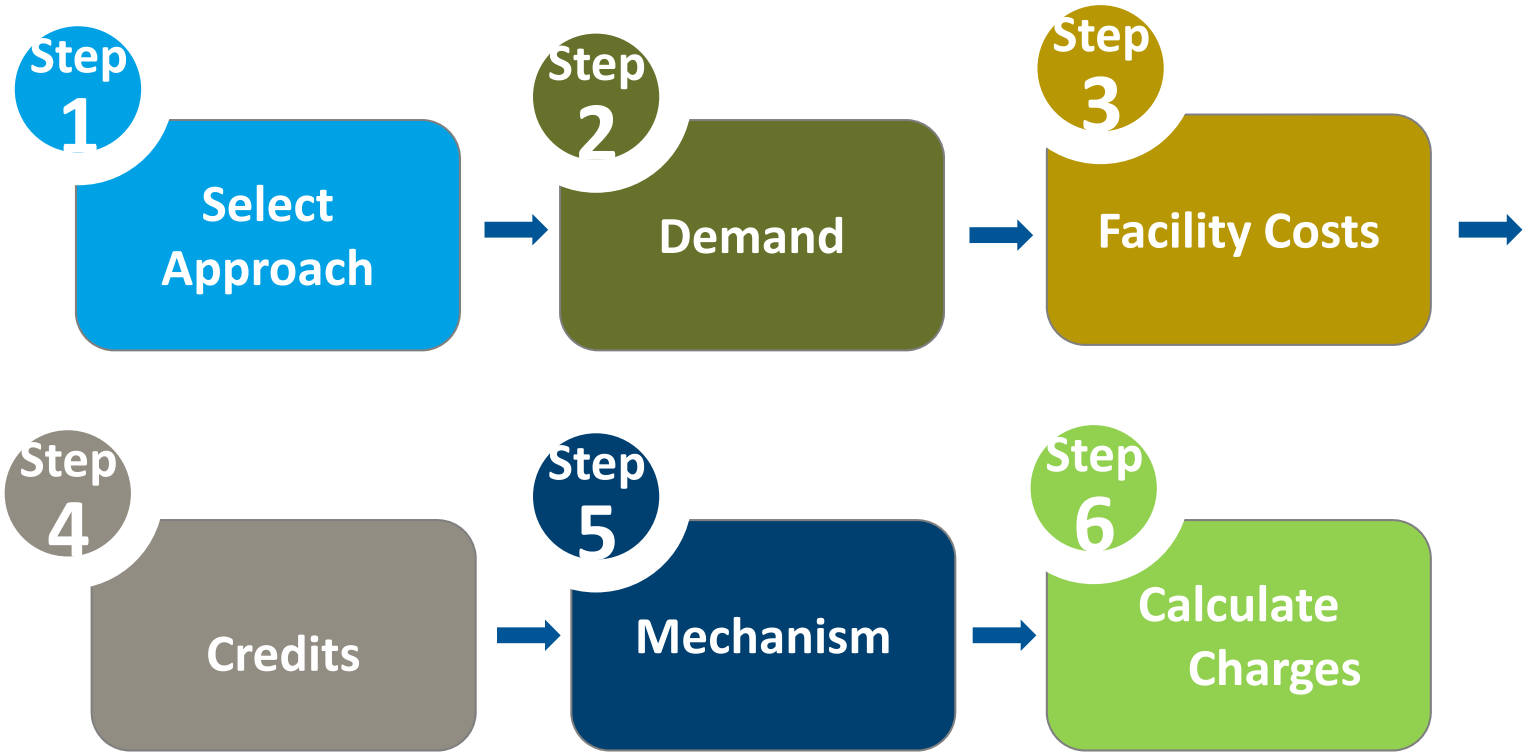
ANN ARBOR CAPITAL COST RECOVERY CONSIDERATIONS

WHY IMPOSE CAPITAL CHARGES?

- **Maintain existing levels of service**
- **Help ensure growth/development pays for growth/development**
- **Encourage disciplined capital improvement planning**
  - Earmark money for capital projects and debt service that financed past improvements
  - Help ensure adequate public facilities to serve new connections
- **Help ensure level playing field for system investment, i.e. equity**

DEVELOPING ANN ARBOR'S CAPITAL CHARGES

Process to combine current Improvement Charge & Connection Fee into a single Capital Recovery Charge

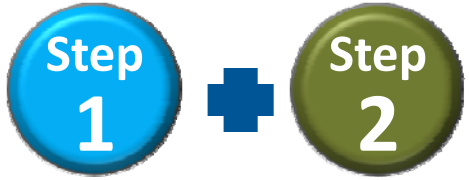


VARIOUS INDUSTRY APPROACHES

Asset Valuation	Structure
Original Cost (OC) of Assets	Remaining Capacity in Systems
OC less Depreciation (OCLD)	Demand on Systems
Replacement Cost (RC) of Assets	Buy – In to Existing Assets
RC less Depreciation (RCLD)	Growth or Planned Facility

All valid components – Ultimately, choose one or more components most appropriate for jurisdiction

APPROACH



Demand-based

- Current & Future Customers
- Water/Sewer Capacity Demand
- Maintain Same Level of Service

Buy-In

- Existing Assets
- Construction in Progress
- Asset Valuation
- A^2 Charge Structure & History

Standard industry approach

FACILITY COSTS

- Assets still in use
- New Assets (Construction Work in Progress)
- Bring to today's dollars (replacement value)
- Consider appropriate depreciation to recognize that existing customers have utilized some of the useful life of older assets

CREDITS

- **Past special assessments**
- **Past capital contributions, e.g. main extension**
- **Current outstanding debt**
  - Present Value approach on debt service payments
  - Discount Rate is Real Interest Cost – nominal interest rate less inflation rate

CHARGE MECHANISM

Step 5

- **Meter size**
  - Standard industry approach – good measure of capacity demand
  - Easy to explain and administer
  - Customer rates are based on meter size too

Meter Size (in)	Meter Equivalents
Displacement Meters	
0.62	1.00
0.75	1.50
1.00	2.50
1.50	5.00
2.00	8.00
Magmeters	
0.75	2.75
1.50	6.75
2.00	11.00
2.50	25.00
3.00	37.50
4.00	62.50
6.00	140.00
8.00	182.50
10.00	292.50
12.00	440.00

CALCULATE CHARGES

- **Preliminary indications of proposed charges compared to current charges:**
  - Smaller meters (typically residential) likely lower than current charges
  - Larger meters likely to experience higher charges
- **Other considerations of this analysis:**
  - Benchmarking
  - Accounting of charges
  - Annual reporting

PAST TASKS & NEXT STEPS

PROJECT TIMELINE

September - October

- Conducted data review and analysis
- Held initial Stakeholder meetings

November - December

- Developed capital charge model & methodology

January - February

- Conducted staff meeting to refine approaches
- **Tonight** - City Council study session
- Finalize capital charge recommendation

March - April

- Hold Stakeholder meetings
- Prepare report
- City Council approval as part of budget process

Q&A