



Drinking Water 123 Academy



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Westmont Case Study Overview

Westmont Water System

Challenges

Replacement Program
Overview

Costs and Benefits

How to Get Started!



Westmont Water System



1909

- Provide Water to Residents

1950s

- First Filtration Plant
- Public Works Facility

1970s-1980s

- Two 1.5MG Water Storage Tanks

1990s

- Lake Michigan Water
- Replacement Program



Westmont Water System



Two 1.5MG Ground Storage Tanks

1MG Elevated Storage Tank

91 Miles of Main

1,250 Valves

1,330 Hydrants

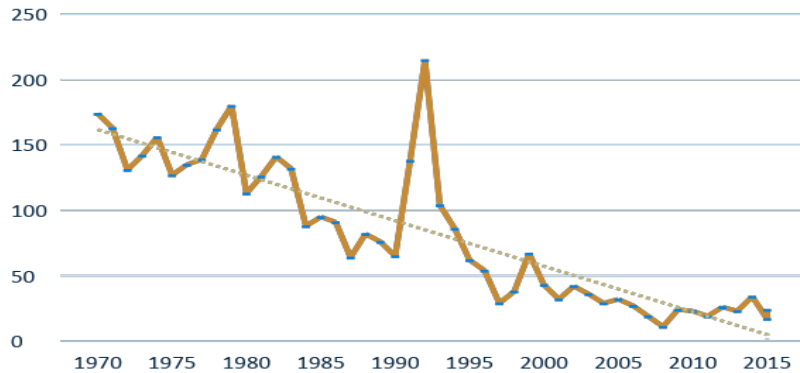


Challenges



Water Main Breaks

Aging sand cast water mains (1910-1950)



Time Period	Average Breaks
1970s	151
1980s	101
1990s	86
2000s	30
2010s	24



Replacement Program Overview

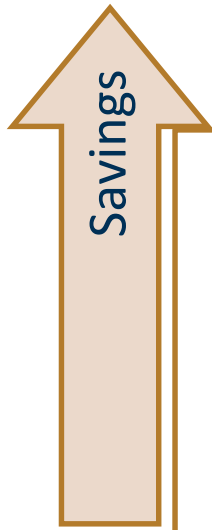


Started in 1991

Replaced more than 19 miles – $\frac{3}{4}$ mile annually

All PVC and Ductile



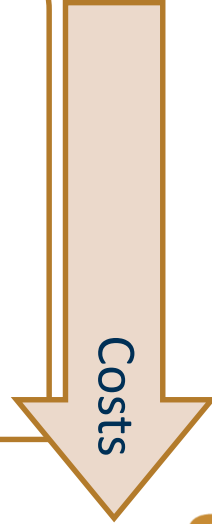


Savings from Replacements

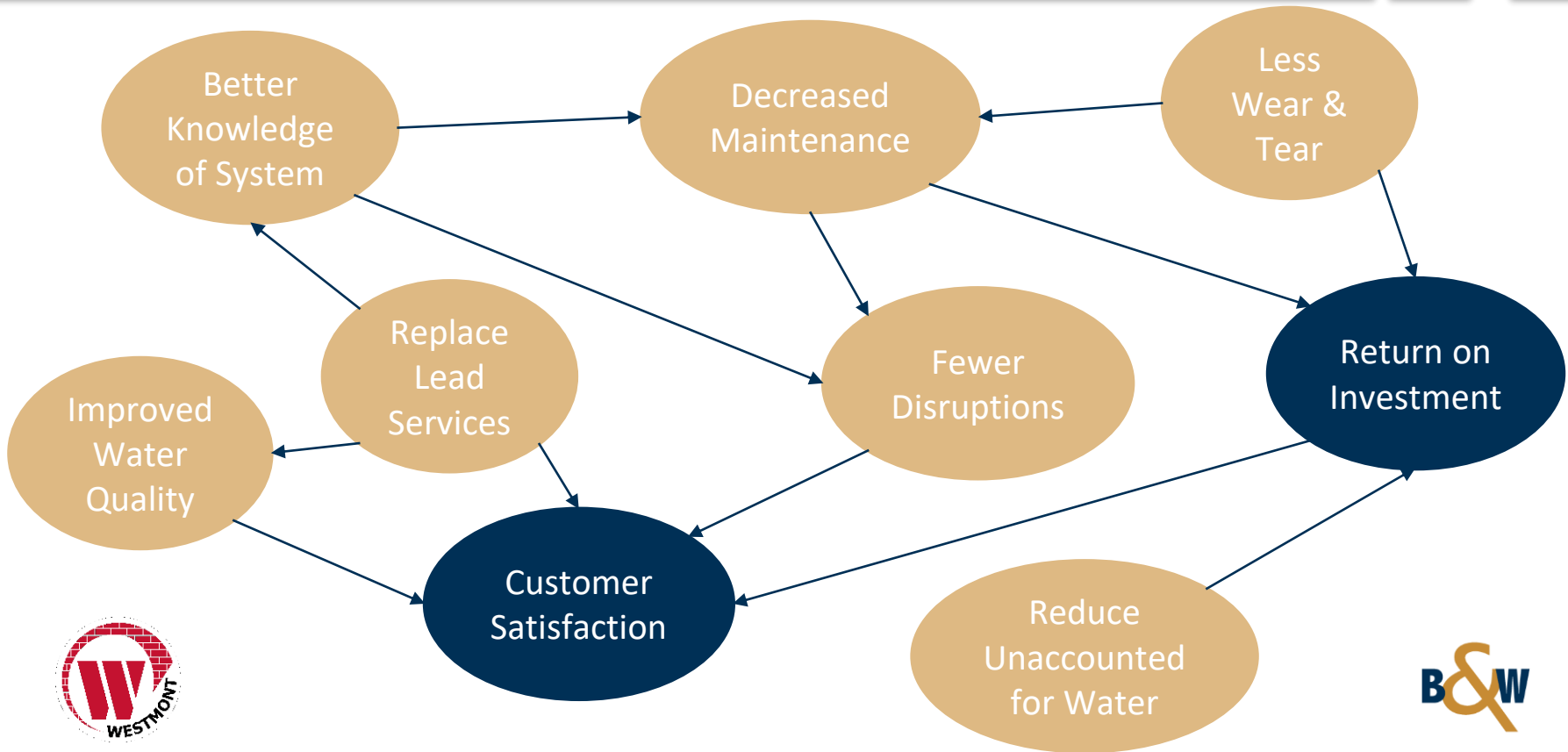
- \$12,000,000
- Water loss
- Repairs
- Overtime

Costs of Replacement

- \$14,600,000 to date
- \$8,000,000 remaining



Costs and Benefits

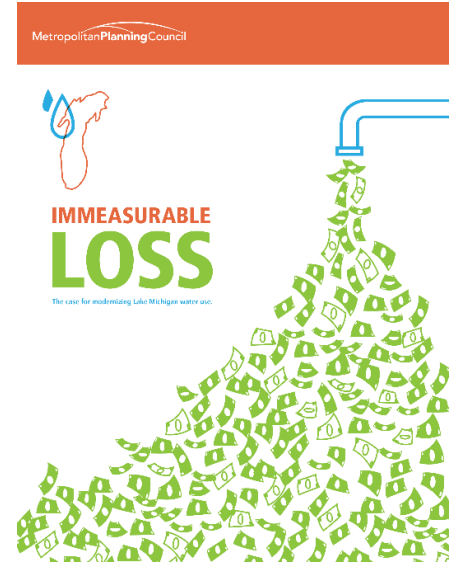


Benefits



Reducing Immeasurable Water Loss

Unknown water leaks, leaking mains and water services can account for a lot of water loss.





Replace Lead Water Services

With the new state and federal regulations a water main replacement program will give you a head start.





Improve Water Quality

With new water main and water services in turn you will have better water quality.





Fewer Disruptions

Better customer relations and less disruptions
to your water system





Less Wear and Tear

Less wear and tear to equipment at treatment plants and pumping stations

With new water main and services less emergency work and long hours for your employees.





Return on Investment

There is a big upfront cost to a water main replacement program but in the long run it will eventually pay for itself.





Decreased Maintenance

With a new infrastructure there is less need for a lot of maintenance to valves, hydrants and water main. You should still do maintenance on your infrastructure just not as often.





Better Knowledge of System

No need to guess about valve or b-box locations with new infrastructure.



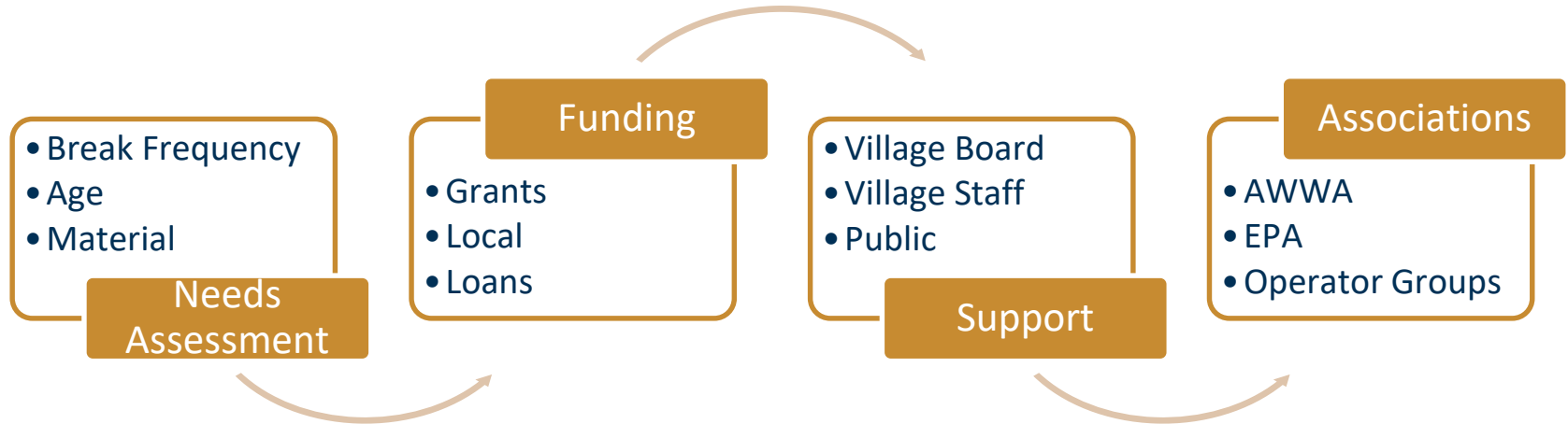


Customer Satisfaction

With less disruptions in water service and better water quality = better customer service.



How to Get Started!



High School Operator In Training



- It is a 64 hour online course
- Summer Internship at a Municipality
- Working towards a Class *D* Water License
- Finding them a career job when finished



Questions?



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