Tony Marcum
Utilities Operations & Maintenance
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- ➤ Very difficult to compare apples to apples (age, pipe material, soil condition, etc...)
- ➤ Water Research Foundation and American Water Works Association studies have presented differing opinions
- None of the statistics provided include 3rd party breaks (contractor digups, mis-locates, etc..)
- ➤ Spoiler alert Bellevue performance is better than both studies!

- Comprehensive study by Utah St. University/Water Research Foundation (WRF)
 - 308 Survey Participants in US and Canada
 - Completed in 2012 and again in 2018
 - Break rates jumped 27% overall during that 6-year period
 - Overall break rates were 14 per 100 miles of pipe
- ➤ The latest American Water Works Association (AWWA) national benchmarking survey found an average of approximately **9** breaks per **100** miles of pipe pe year
- ➤ Over the last 15 years, the City of Seattle has averaged approximately **9 breaks per 100 miles of pipe** per year

- ➤ Over the last 10 years, Bellevue has averaged **3.5 breaks per 100 miles of pipe** per year
 - Approximately 21 breaks per year
 - Most of our breaks (nearly 75%) are from Asbestos Cement (AC) Pipe, even though AC pipe makes up only 38.8% of our system
 - Break rate is relatively unchanged since a comprehensive analysis complete between 1997 and 2005
 - Unlike national averages, we are not seeing strong upward trends (likely in large part due to our AC Main Replacement CIP).
 - Important to remember, while disruptive, zero breaks caused by system failure would be completely cost prohibitive

> SUMMARY - Bellevue compares very favorably in Water Main Breaks overall!

