

PRP Overview

A simplified approach to assess pipe replacement potential on a granular level is made possible with the PRP application by combining critical factors.

- Likelihood of failure (LF)
- Consequence of failure (CF)

Various independent variables contribute to each of these factors with a scoring system dependent on the available data.

The contributing variables are summated using different assigned weights to calculate the LF and CF of each pipe, with the replacement potential calculated as the product of these two factors.

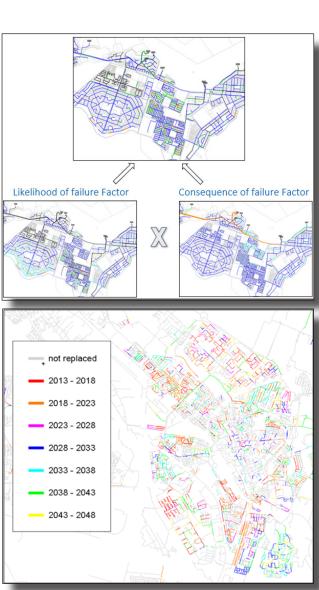
Multiple aggregation (roll-up) fields are used to summarize results and provide the weighted average, maximum or minimum potential for various collection and used in combination with GIS to identify areas of interest, as a more practical indicator of where to focus.

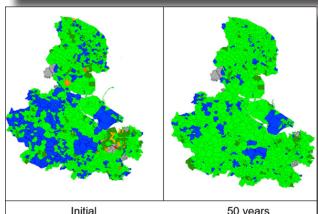
A multi-year implementation has been developed to facilitate investment forecasting based on available budget and known short-term projects, or to investigate the required investment to ensure pipe failure control.

Features

- Capable of analyzing large database in reasonable time
- Collection of independent contributing variables
- Tabular input tables for easy manipulation
- Replacement cost calculated for each pipe
- RUL calculations included in addition to replacement notential
- Support for Google Maps imagery and embedded Google Street View







IIIIIai			50 years		
Description	Unit	Year0	Year1	Year2	Year3
		2,021.00	2,022.00	2,023.00	2,024.00
Average network age	(years)	25.51	26.37	27.24	28.08
Average age of replaced pipes	(years)	47.79	41.05	48.23	36.47
Average network C-RUL	(years)	30.07	29.27	28.45	27.67
Average C-RUL of replaced pipes	(years)	-3.79	0.92	-4.53	12.55

