

Session 1A: Origins and Implications of our Current Infrastructure Paradigm

Mark Reiner, PhD, PE, CEO at WISRD, LLC

75 percent of infrastructure required to support and provide the basic needs to the two-thirds of the world's 9.8 billion people that will live in urban areas by 2050, has not yet been built.*



*Egler, H.-P.; Frazao, R. Sustainable Infrastructure and Finance: How to Contribute to a Sustainable Future; United Nations Environment Programme: Geneva, Switzerland, 2016. http://unepinquiry.org/wp-content/uploads/2016/06/Sustainable_Infrastructure_and_Finance.pdf

Aging Infrastructure

Bloomberg Businessweek

Nobody Knows What Lies Beneath New York City

■ August 10, 2017 3:00 AM MDT



The New York Times

By [Winnie Hu](#)

Dec. 10, 2018

What Happens When 25,000 Amazon Workers Flush Toilets?

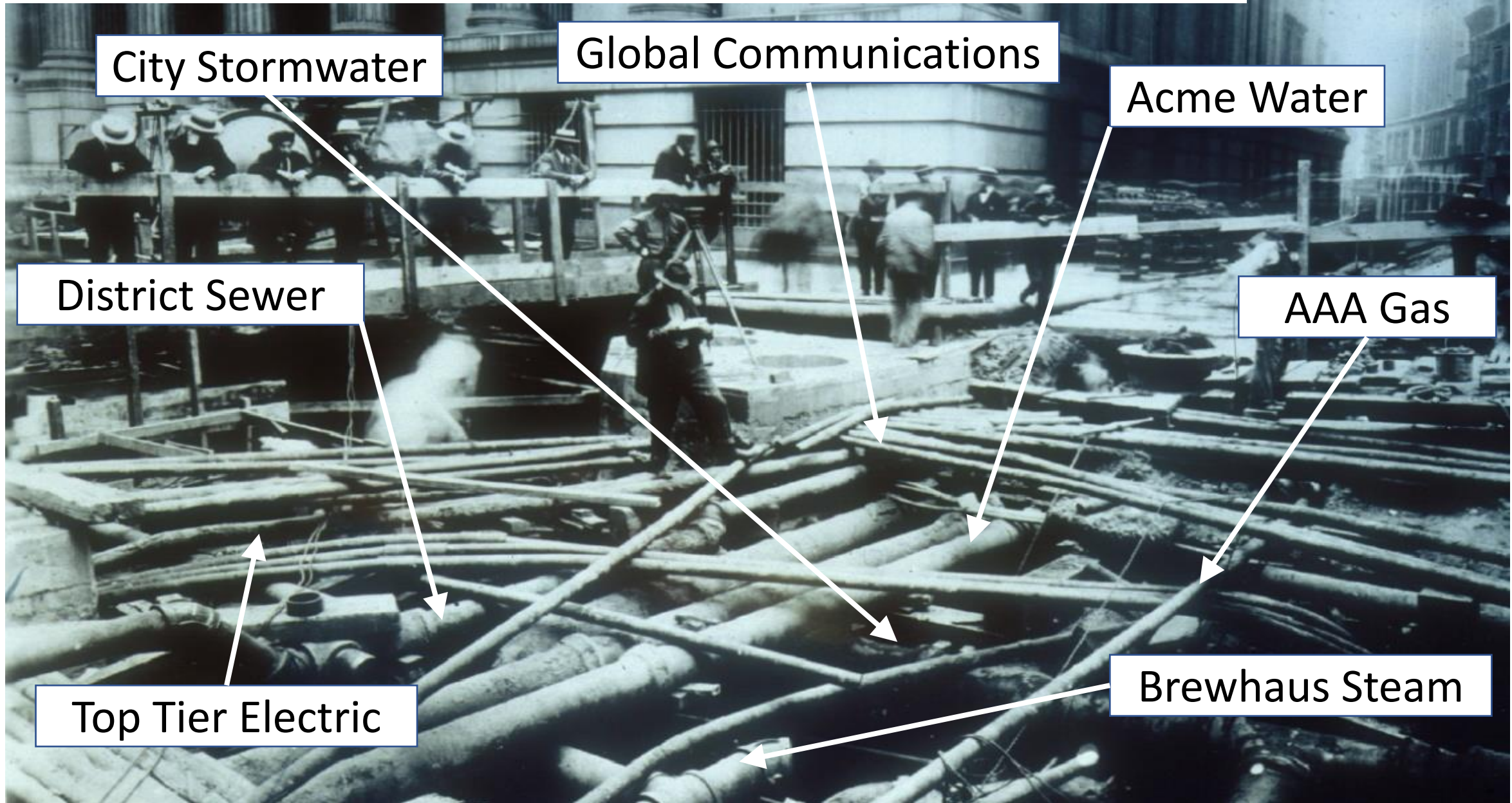


U.S. SEPTEMBER 14, 2018 / 1:11 PM / UPDATED A DAY AGO

Massachusetts gas explosions shine spotlight on century-old pipelines

Tim McLaughlin

Hazards of Collocation and Multiple Stakeholders



Foundation of a Smart City



Smart City: Failure Not an Option



The Inaccessibility of Urban Infrastructure

- 200 years
- 6 billion
- 47 years
- 2/3