



## Local Government Invests Record \$125.5 Billion in Municipal Water and Sewer Infrastructure and Services in 2017



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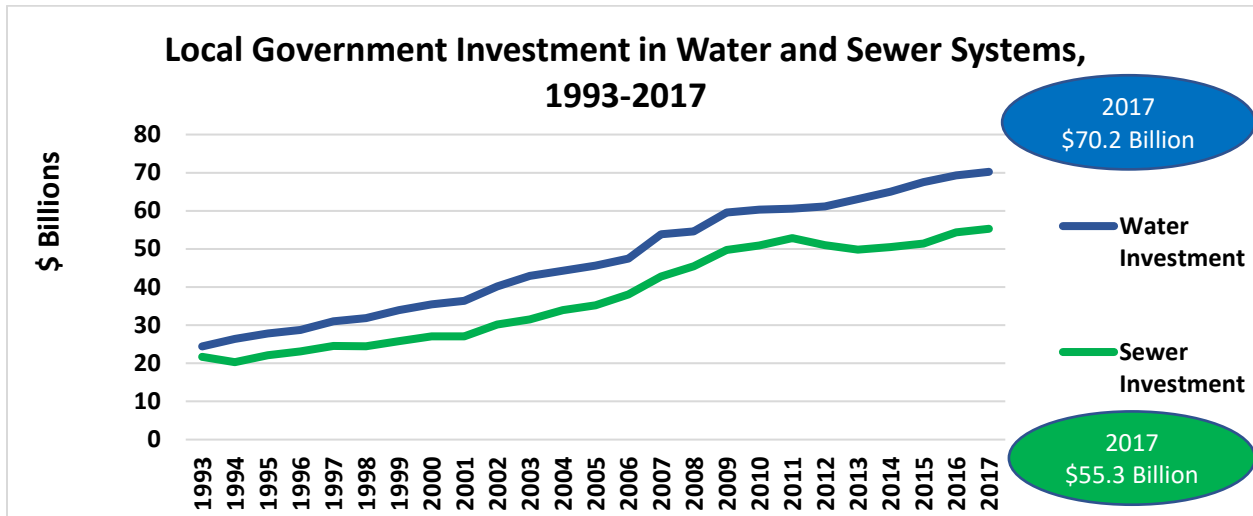
The Census released 2017 data on local government expenditures and revenues including municipal water and sewer systems in October of 2019. The data confirms 2 trends that have been decades in the making:

- Combined water and sewer investments reached a record high at \$125.5 billion in 2017, and adds up to a \$2.2 trillion investment in infrastructure and service.
- The average annual growth in investment for combined public water and sewer is roughly 4.3% in the 25-year period 1993-2017.
  - **Sewer investment** increased at a rate of 4.1% annually in the 25-year period.
    - Since 2012 the average annual investment was a sluggish 0.8% with noticeable variability.
      - Declining investment in 2012 (- 3.5%) and 2013 (-2.3%);
      - Under 2% growth in 2014, 2015 and 2017;
      - Positive 5.8% growth in 2016.
  - **Water investment** increased at a rate of 4.5% annually from 1993-2017.
    - Since 2012 the average annual water investment increased only 2.5%

### Local Water and Sewer Expenditures

Local government contributes from 95% to 98% of total water and sewer utility infrastructure spending each year, (Chart 1). Combined water and sewer spending estimated at \$2.12 trillion from 1993 to 2017 based on Census data. Water spending, over this period accounts for 56% at \$1.18 trillion; and, sewer spending accounts for 44% at \$939 billion. 2017 water spending was over \$70 billion; and, sewer spending was over \$55 billion.

Chart 1:



### Investment Trend is Changing

The 25-year annual average growth of 4.3% in water and sewer utility investments includes considerable variability over the 1993-2017 period, (Chart 2).

**Water expenditures** from 1993-2017 yield a 4.5% average annual increase. Annual water spending during this period increased between 1.2% and 7.8% more than two-thirds of the time, (Chart 3). More recently, since 2012, the average annual increase in investment was 2.5%, much lower than the long term 25-year average of 4.5%. The 2017 increase from 2016 is 1.3%.

**Sewer expenditures** from 1993-2017 yield a 4.1% average annual increase. Annual sewer spending exhibits wide annual variability ranging from negative 6% to about positive 9% two-thirds of the time, (Chart 3). Since 2012 local investment in sewer averaged 0.8% growth. The 2017 increase from 2016 is 1.65%.

Chart 2:

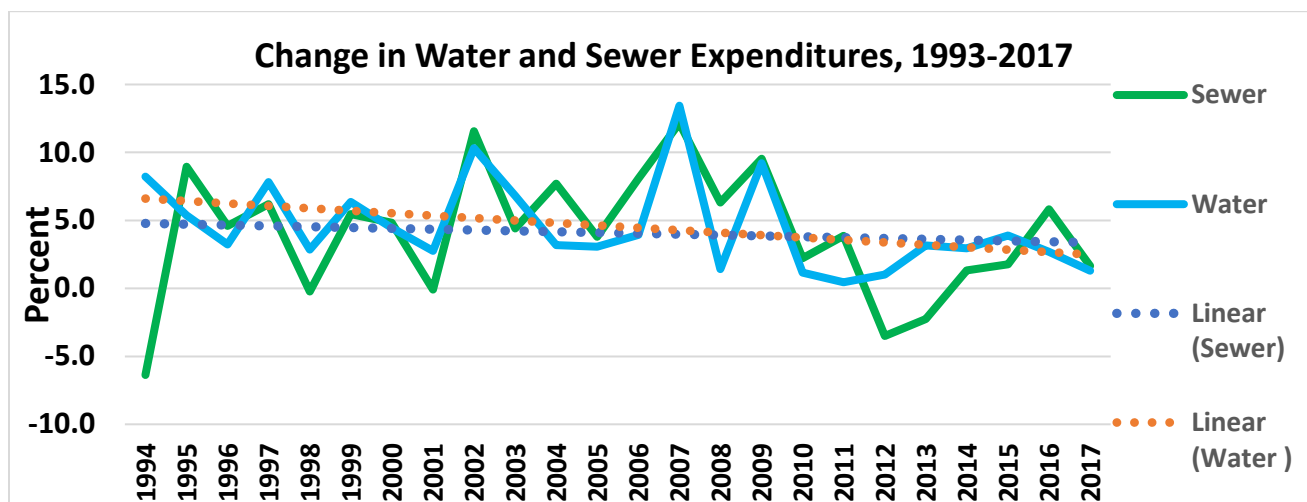


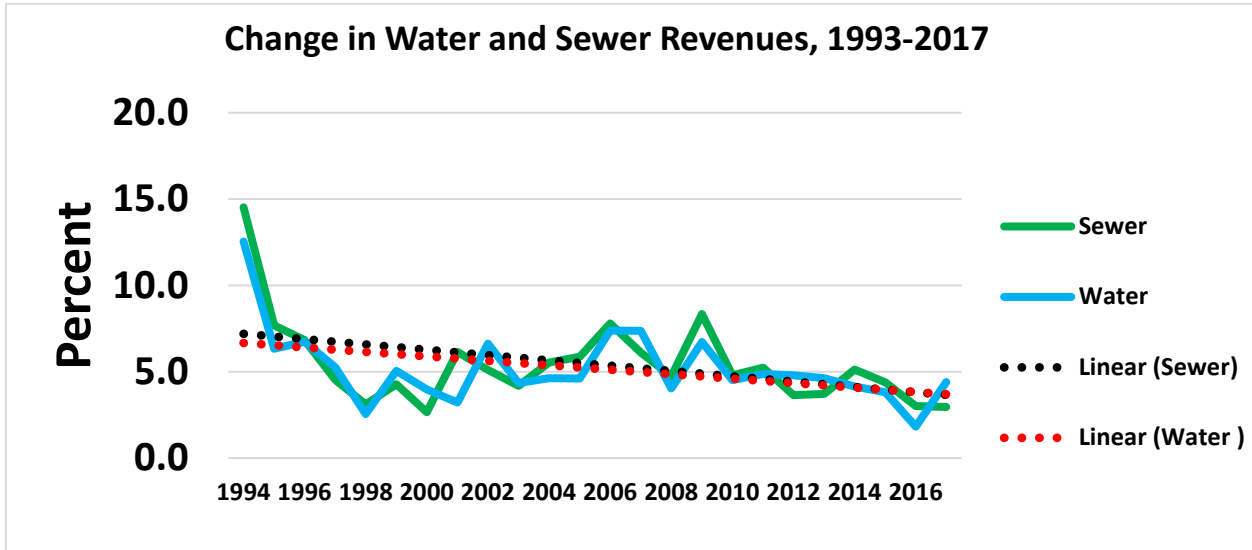
Chart 3: Average and Median % Change in Water and Sewer Expenditures, 1993-2017

	Water (%)	Sewer (%)
<b>Average</b>	<b>4.5</b>	<b>4.1</b>
<b>1 Standard Deviation</b>	<b>3.3</b>	<b>4.6</b>
<b>Median</b>	<b>3.2</b>	<b>4.5</b>

### Local Water and Sewer Revenues

Water and sewer revenues generally change in a range between 2% and 8% a year based on Census data from 1993 to 2017. The trend line for both Water and Sewer suggest that revenues may be increasing, in tandem with spending, at just under 4% a year, with some variation, (Chart 5). Notably, sewer revenues have exceeded spending levels for the last four years of released Census data, (2014-2017).

Chart 5:



2017 Local Government Expenditure on Water  
and Sewer

**\$125.5 Billion**

That is:

- \$14.3 Million every Hour
- \$343.8 Million every Day
- \$2.4 Billion every Week
- \$10.4 Billion every Month