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.
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%.
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:

Change in Water and Sewer Revenues, 1993-2017

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