



hooker & holcombe

The background features several overlapping geometric shapes in various colors: a large green square in the top left, a smaller orange square below it, a teal square to the left, a large blue rectangle on the right, a yellow square in the center, a purple rectangle at the bottom left, and a teal square at the bottom right. The text is positioned in the white space between these shapes.

**MUNICIPAL PENSION
& OPEB REPORT
2021**

Hooker & Holcombe (H&H) is pleased to share our third annual Municipal Pension & OPEB Report. The report represents our analysis of both pension and other postretirement benefits (OPEB) plan information based on data extracted from the Comprehensive Annual Financial Reports (CAFRs) submitted by local municipalities in Connecticut for the fiscal year ending June 30, 2020.

The pension section of the report provides analysis on approximately 200 municipal pension plans in Connecticut, representing over 70,000 participants and more than \$11.6 billion in pension fund assets.

The OPEB section of the report reveals findings for approximately 180 municipal OPEB plans in Connecticut, representing over 115,000 participants and more than \$10.2 billion in actuarial accrued liability.

We hope you find the results of our 2021 Municipal Pension & OPEB Report useful in understanding the current Connecticut municipal pension and OPEB environment, and for benchmarking your plan against the report findings.

MAJOR FINDINGS

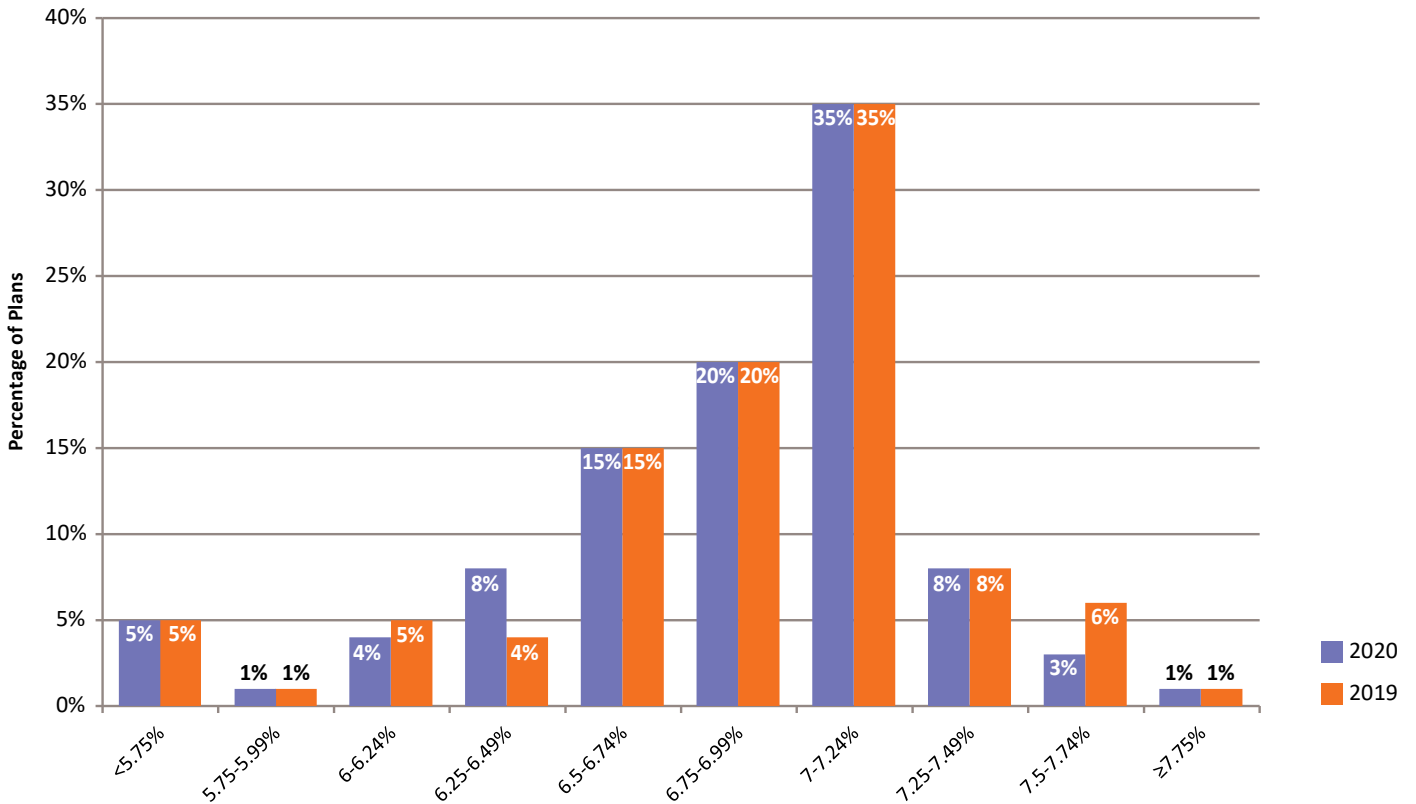
Municipalities with Pension plans:

- The average long-term rate of investment return assumption declined by 8 basis points to 6.66%, compared to an average of 6.74% in our 2020 report. Moreover, this assumption has declined by nearly 50 basis points over the past five years. We also analyzed the investment return assumption based on plan size. Within each range of plan asset size, the average assumption decreased from 4 to 10 basis points from 2019 to 2020, and the average decrease for all plans was 8 basis points (from 6.74% to 6.66%).
- The average funded ratio decreased to 72.2% compared to 74.2% in the June 30, 2019 CAFRs. We also analyzed the average funded ratio based on plan size. Interestingly, while the average funded ratio declined on average between 3.0% and 4.2% for the larger plans, the average increased slightly (by 0.3%) for plans with less than \$10 million in assets.
- The average money-weighted rate of return for FYE 2020 is 2.87%, compared with the five-year trailing average of 5.32%. We also reviewed the money-weighted rate of return by plan size. Larger plans generally achieved higher average money-weighted rates of return versus smaller plans. However, on average, the smallest plans outperformed larger plans for FYE 2020 (3.17% rate of return for plans under \$10 million, vs. 2.62% to 2.82% on average for larger plans).
- Forty-four percent of municipalities use a mortality assumption based on the RP-2014 Mortality Table, which is a significant decline from 60% in our 2020 report. The Pub-2010 public sector-specific mortality table is now in use by 33% of plans, which is a noticeable increase versus 1% of plans in our 2020 report. Use of the RP-2000 Mortality Table declined dramatically, with 18% of plans using this table versus 36% in the previous study. A mere 5% of plans utilize an assumption based on “other” mortality tables.
- When looking at the mortality improvement scale assumption, 73% of plans use Scale MP as provided annually by the Society of Actuaries (SOA) versus 60% in our 2020 report, followed by Scale AA (14%, versus 28% in 2019) and Scale BB (9%, unchanged since 2019). Only 4% of plans use another approach.
- When looking at amortization payment schedules for purposes of determining annual employer contributions, Connecticut pension plans use an average period of 18 years, which is unchanged from our 2020 report.

Municipalities with OPEB plans:

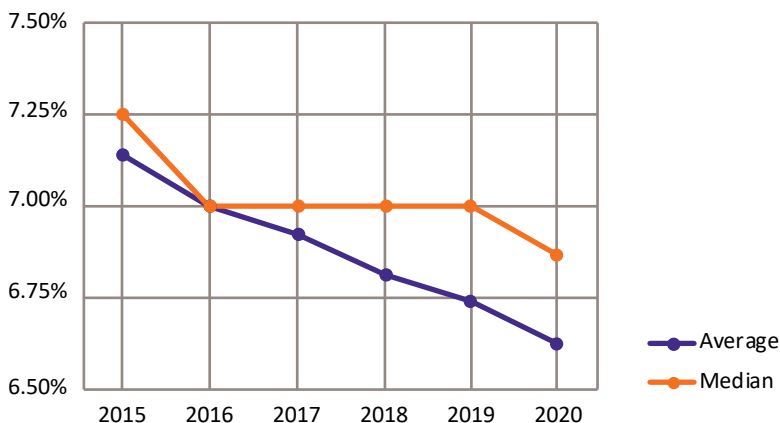
- Fifty-five percent of OPEB plans are unfunded (unchanged from our 2020 study), with 45% of plans funded with an OPEB trust.
- For those plans funded using an OPEB trust, the average funded ratio is 31.7%, which is an increase from an average funded ratio of 27.9% in our 2020 report.
- The median investment return assumption for funded OPEB plans is 6.50%, which is unchanged from our 2020 report, and is slightly lower when compared to pension plans (6.66%).
- For FYE 2020, the average money-weighted rate of return for funded OPEB plans is 2.90%, which is a mere 3 basis points higher than the comparable average return for pension plans (2.87%).
- The average initial year health care trend assumption is 6.44% (median is 6.50%), and the average ultimate year health care assumption is 4.57% (median is 4.60%). These statistics compare with last year's average initial year health care trend assumption of 6.72% (median 7.00%), and an average ultimate year health care assumption of 4.60% (median also 4.60%).
- The median number of years to reach the ultimate trend assumption is 7 years, which is an increase of one year from the median period of 6 years in our 2020 report.

PENSION: LONG-TERM INVESTMENT RETURN ASSUMPTION (FYE 2020 VS. FYE 2019)



The average investment return assumption is 6.66% (median is 6.875%). This represents a decline of 8 basis points from the 6.74% average (7.00% median) in our 2020 report. This assumption is generally tied to either the July 1, 2019 or July 1, 2018 actuarial valuation used in determining the employer’s cash contribution amount (also known as the Actuarially Determined Employer Contribution, or ADEC).

PENSION: AVERAGE AND MEDIAN INVESTMENT RETURN ASSUMPTION TRENDS

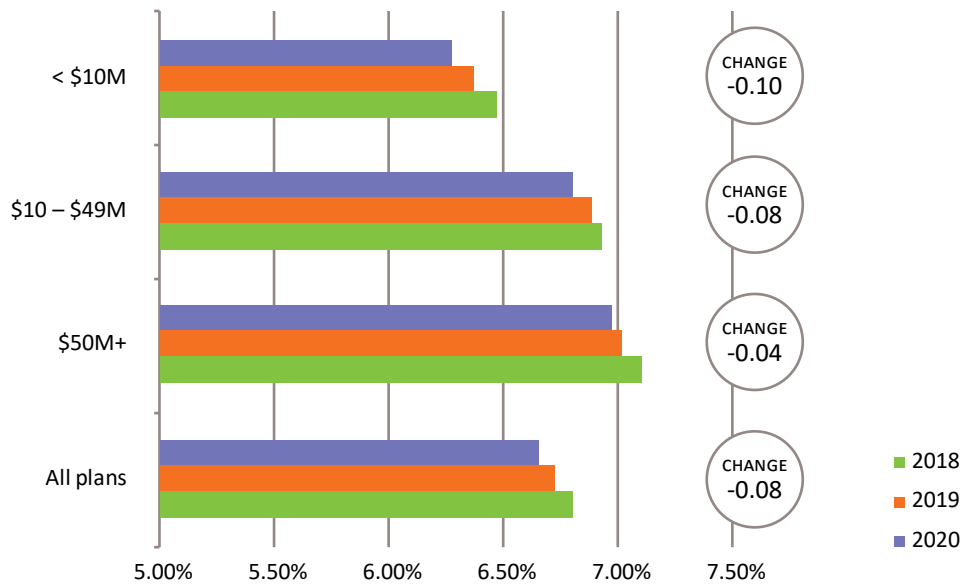


When looking at trends, the average long-term rate of return assumption has declined by 48 basis points (from 7.14% to 6.66%) from FYE 2015 to 2020. The median assumption has declined 25 basis points (from 7.25% to 6.875%) during that same period. Approximately 29% of plans reduced the long-term rate of return assumption from FYE 2019 to FYE 2020, with the most common reduction being 12.5 basis points. All else being equal, a lower investment return assumption results in higher actuarial liability and ADEC, and a lower funded ratio.

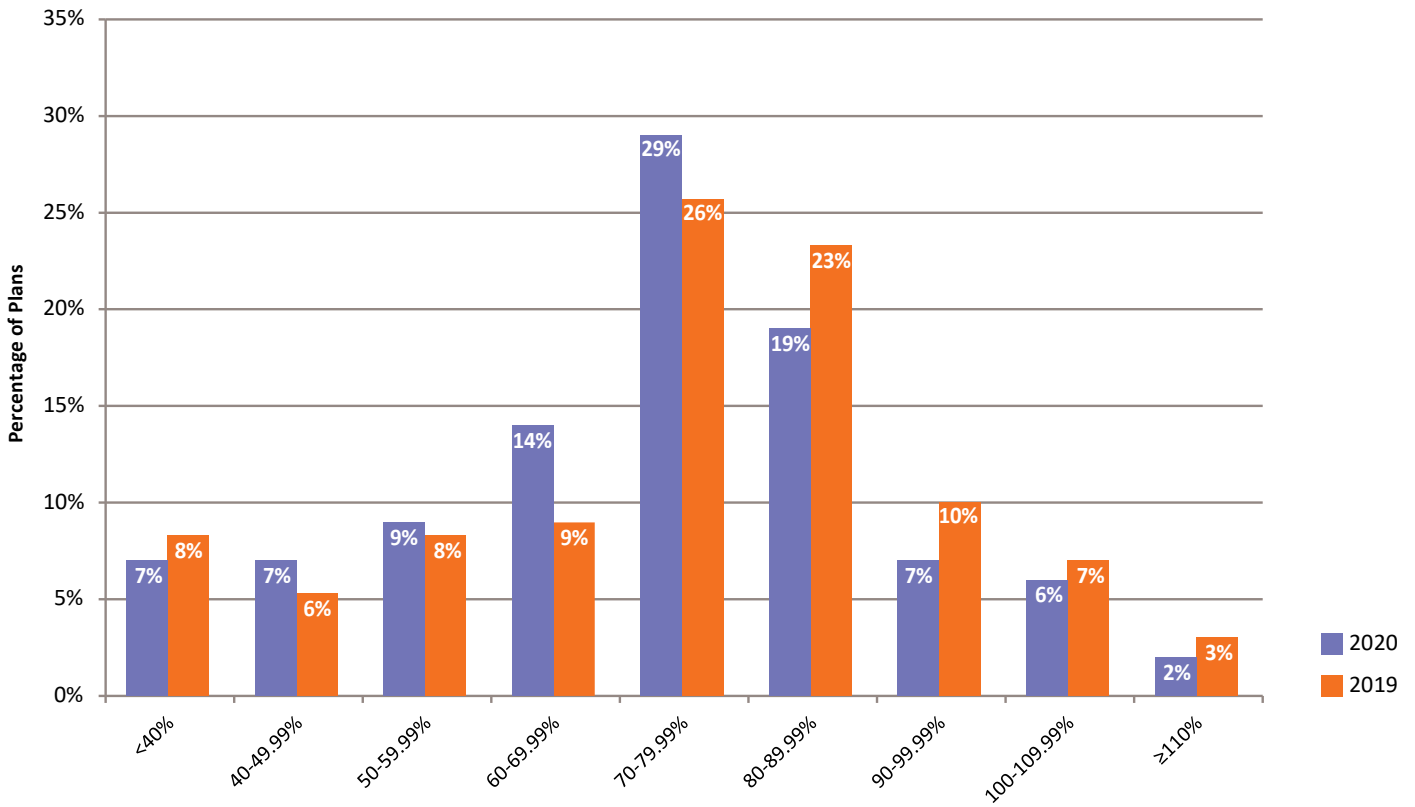
PENSION: AVERAGE INVESTMENT RETURN ASSUMPTION BY PLAN SIZE

In this report, we also analyzed the investment return assumption based on plan size. For this purpose, we classified a plan by asset size (under \$10 million, \$10 to \$49 million, \$50 million plus). The results show that as plan size increases, the average investment return assumption increases as well. Within each range of plan asset size, the average assumption decreased from 4 to 10 basis points from 2019 to 2020, and the average decrease for all plans was 8 basis points (from 6.74% to 6.66%).

Plan assets (\$ millions)	% of plans	2020	2019	2018	% Change
< \$10	36%	6.28%	6.38%	6.48%	-0.10%
\$10 – 49	37%	6.81%	6.89%	6.93%	-0.08%
\$50+	27%	6.98%	7.02%	7.11%	-0.04%
All plans	100%	6.66%	6.74%	6.81%	-0.08%



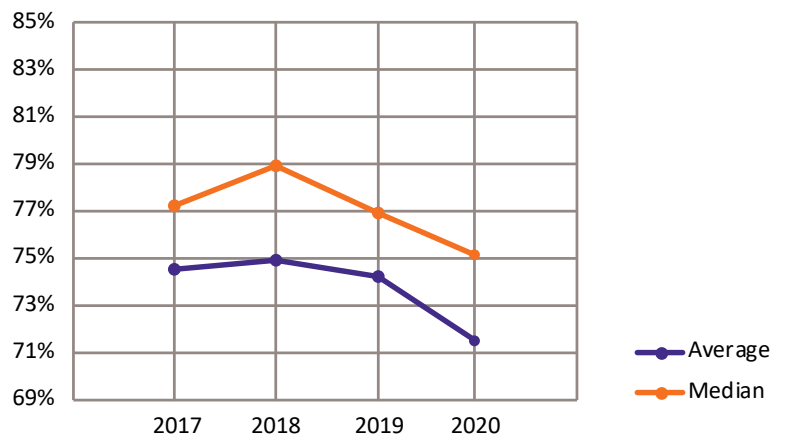
PENSION: FUNDED RATIO



Thirty-four percent of the pension plans analyzed exceeded the 80% funded mark, with 14% falling below 50%. These percentages are consistent with declines in the average and median funded ratios, when compared with 43% of plans exceeding the 80% mark in our 2020 report (and with 14% falling below 50% in our 2020 report). Notably, 8% of plans can boast pensions that are funded at 100% or higher, down slightly from 10% in last year's report.

PENSION: AVERAGE AND MEDIAN FUNDED RATIO TRENDS

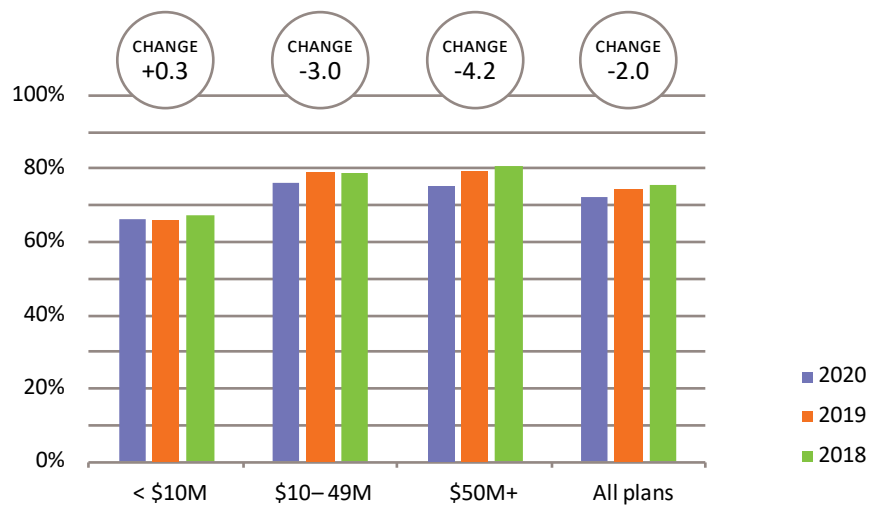
We analyzed the funded ratio (Market Value of Assets divided by Accrued Liability) for each plan. As of FYE 2020, the average funded ratio was 72.2% (median of 75.1%), a decrease versus an average of 74.2% (76.9% median) in our 2020 report.



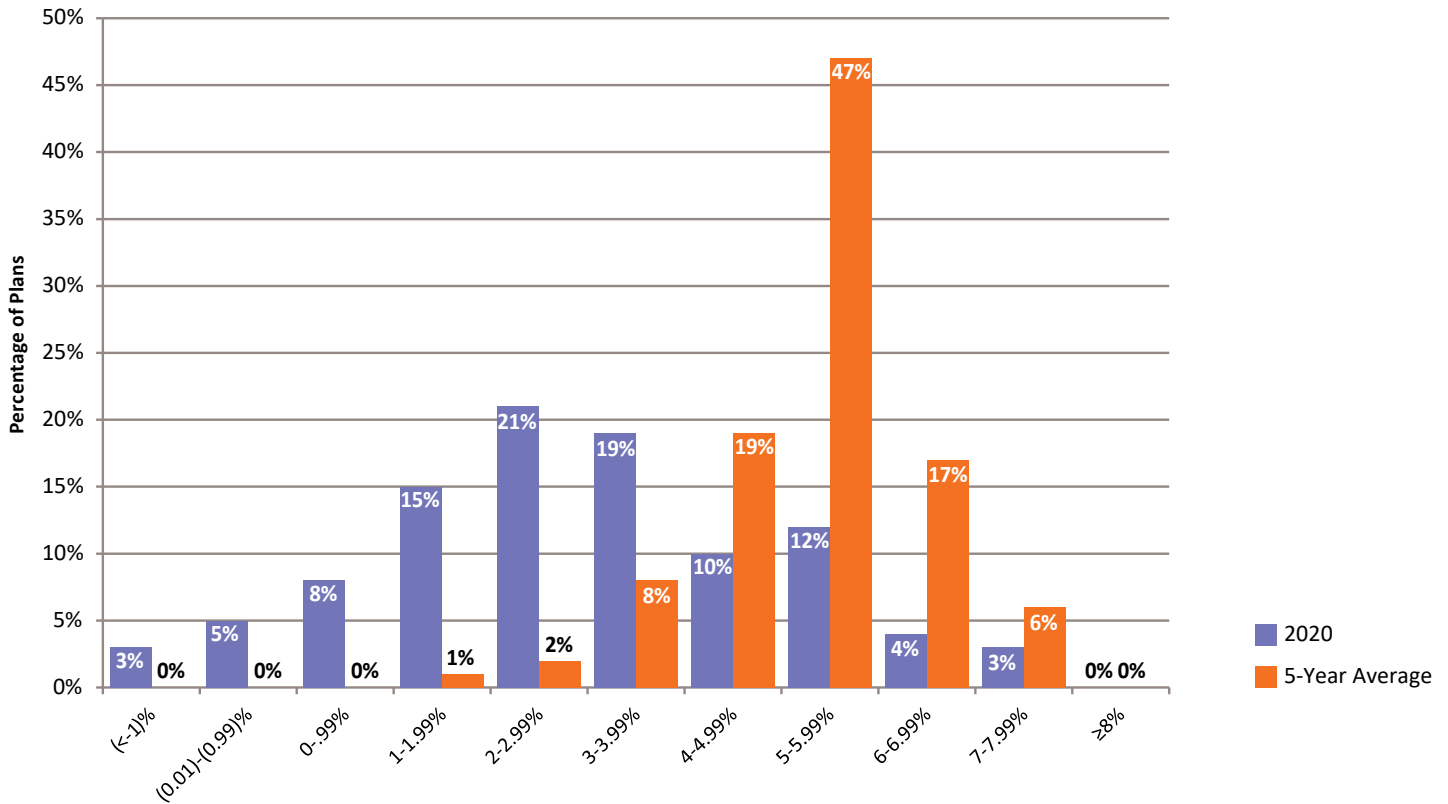
PENSION: AVERAGE FUNDED RATIO BY PLAN SIZE

We also analyzed the average funded ratio based on plan size. Similar to our analysis of the investment return assumption, we classified a plan by asset size (under \$10 million, \$10 to \$49 million, \$50 million plus). The results show that as plan size increases, the average funded ratio tends to increase as well. Interestingly, while the average funded ratio declined on average between 3.0% and 4.2% for the smallest and largest plans, the average increased slightly (by 0.3%) for plans with between \$10 to \$49 million in assets.

Plan assets (\$ millions)	% of plans	Average Funded Ratio			
		2020	2019	2018	% Change
< \$10	36%	66.2%	65.9%	67.3%	+0.3%
\$10 – 49	37%	76.0%	79.0%	78.8%	-3.0%
\$50+	27%	75.1%	79.3%	80.4%	-4.2%
All plans	100%	72.2%	74.2%	74.9%	-2.0%



PENSION: FYE 2020 RETURN VS. 5-YEAR AVERAGE RETURN

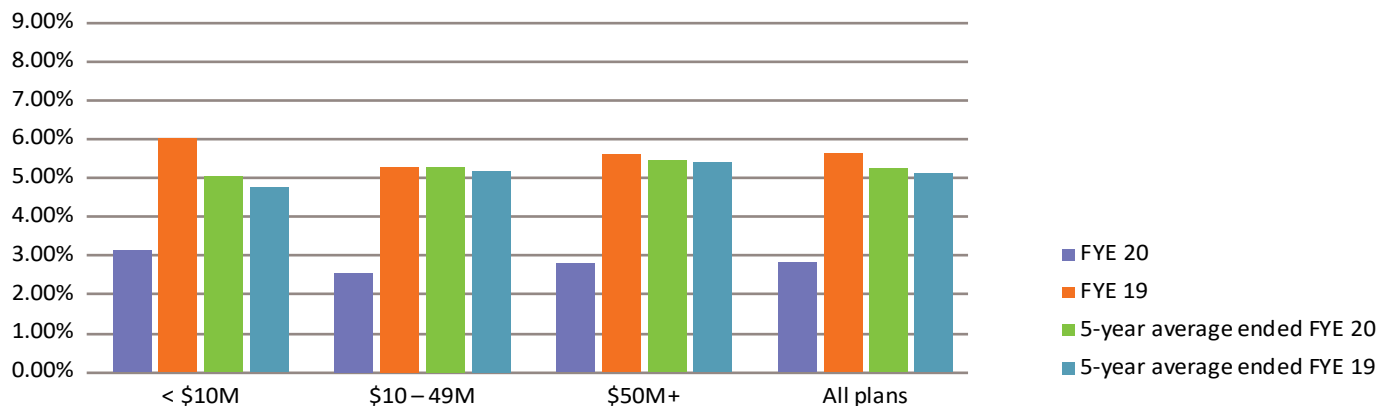
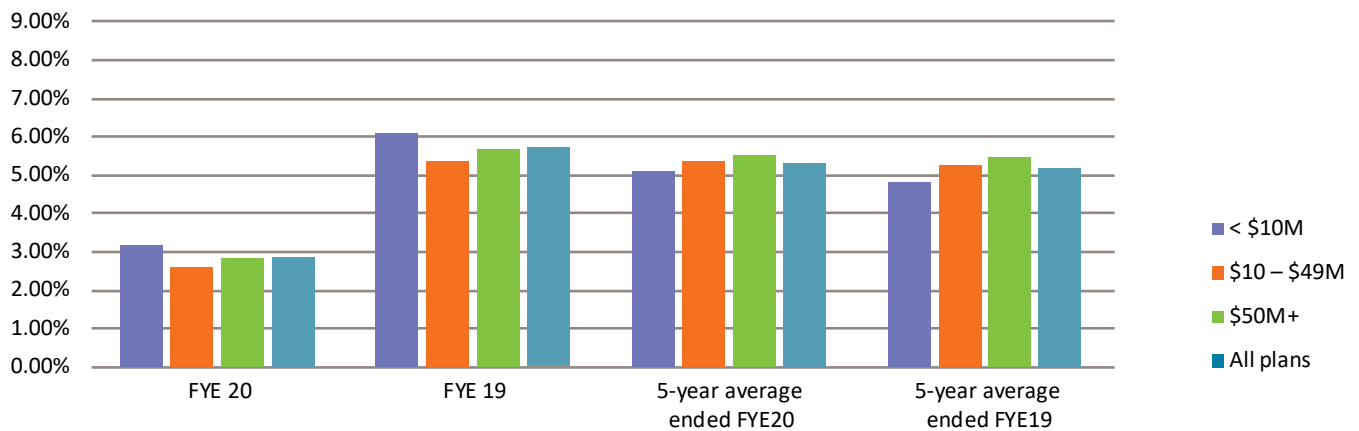


The average money-weighted rate of return for FYE 2020 was 2.87% (median of 2.81%). This rate was compared to the most recent 5-year compounded average money-weighted rate of return (5.32% average and 5.47% median).

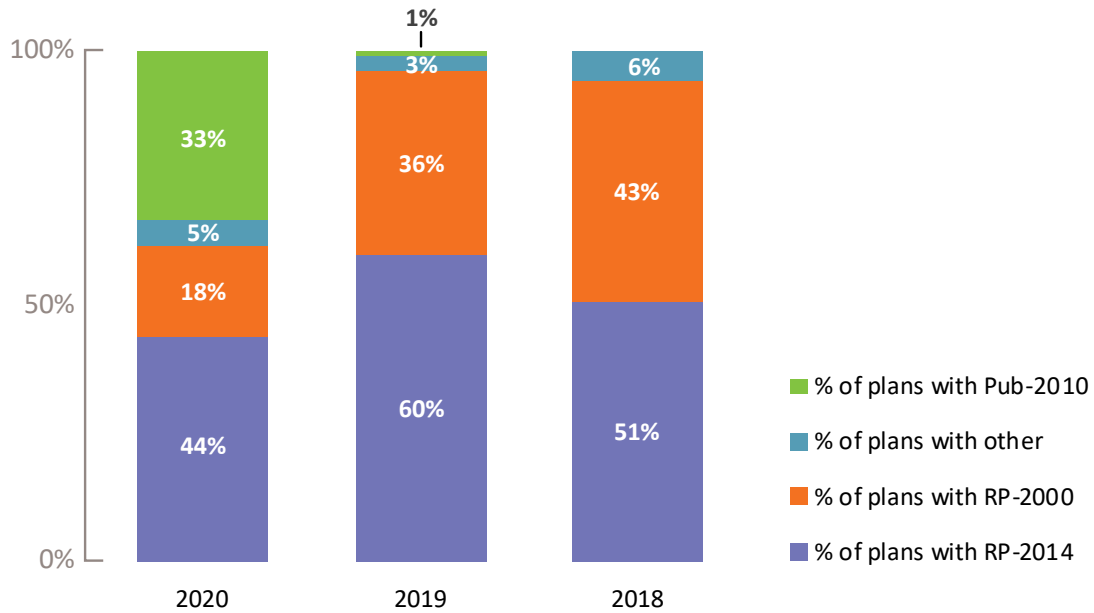
PENSION: MONEY-WEIGHTED RATE OF RETURN BY PLAN SIZE

We also reviewed the money-weighted rate of return by plan size (under \$10 million, \$10 to \$49 million, \$50 million plus), both for FYE 2020 and for the 5-year period ending on that same date. Consistent with the results of our analysis of the investment return assumption, we found that larger plans generally achieved higher average money-weighted rates of return versus smaller plans. In addition, on average the smallest plans outperformed larger plans for FYE 2020 (3.17% rate of return for plans under \$10 million, vs. 2.62% to 2.82% on average for larger plans).

Plan assets (\$ millions)	FYE 20	FYE 19	5-year average ended FYE 20	5-year average ended FYE 19
< \$10	3.17%	6.11%	5.09%	4.81%
\$10 – 49	2.62%	5.37%	5.36%	5.26%
\$50+	2.82%	5.67%	5.52%	5.47%
All plans	2.87%	5.72%	5.32%	5.17%

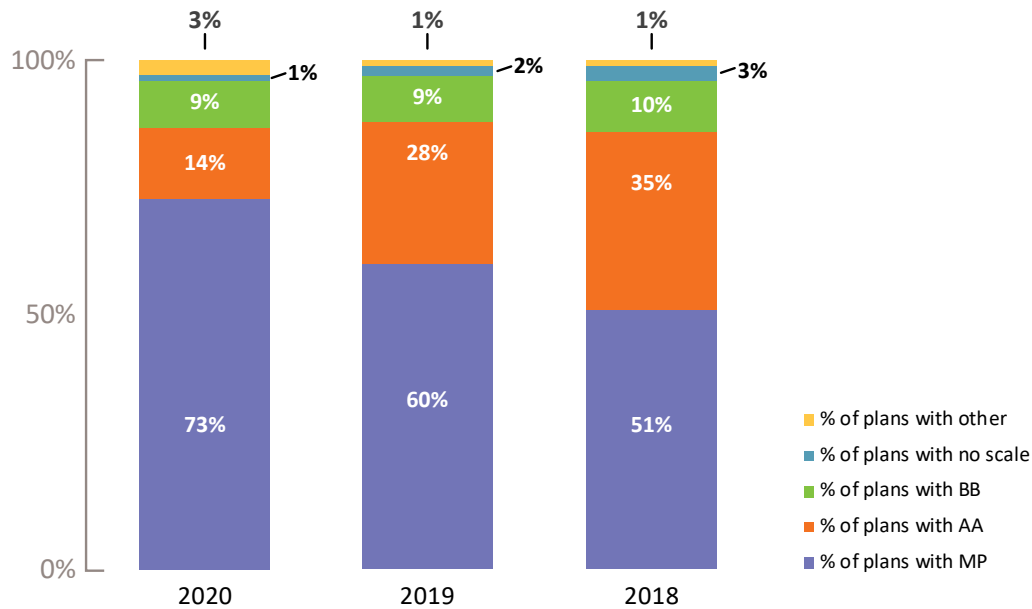


PENSION: MORTALITY TABLE ASSUMPTION



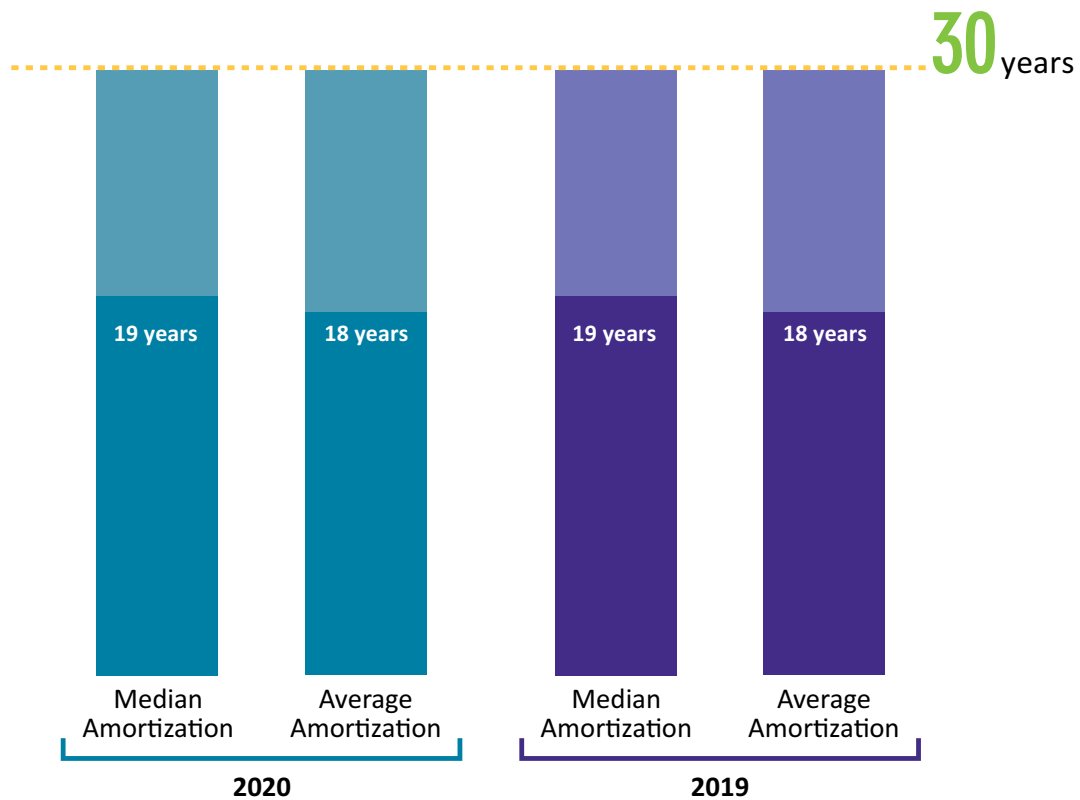
Over time, life expectancies have generally increased. The Society of Actuaries (SOA) periodically publishes mortality studies reflecting updated life expectancies based on large databases of pensioner mortality experience. As of the June 30, 2020 CAFRs, the two most common mortality tables in use by Connecticut public pension plans were the RP-2014 Mortality Table (44% of plans) and the Pub-2010 public sector-specific mortality table (33% of plans). Use of the RP-2000 Mortality Table continues to decline, with 18% of plans moving away from this table versus the previous study. A mere 5% of plans were using an assumption reflecting some other mortality basis.

PENSION: MORTALITY IMPROVEMENT SCALE ASSUMPTION



Because actuarial valuations involve calculating liability associated with providing benefits to participants, both today and for many years into the future, actuaries also consider the potential effect of future improvements in life expectancies. This effect is captured most often by way of a mortality improvement scale assumption, with the most common scale (73% of plans, versus 60% in our 2020 report) being Scale MP which is updated annually by the SOA. The next most common scales, which are most often used in conjunction with the RP-2000 Mortality Table, are Scale AA (14% of plans, versus 28% in our 2020 report) and Scale BB (9% of plans, unchanged from last year). Only 4% of plans in the study are using some other approach for the mortality improvement scale assumption.

PENSION: AMORTIZATION PERIOD

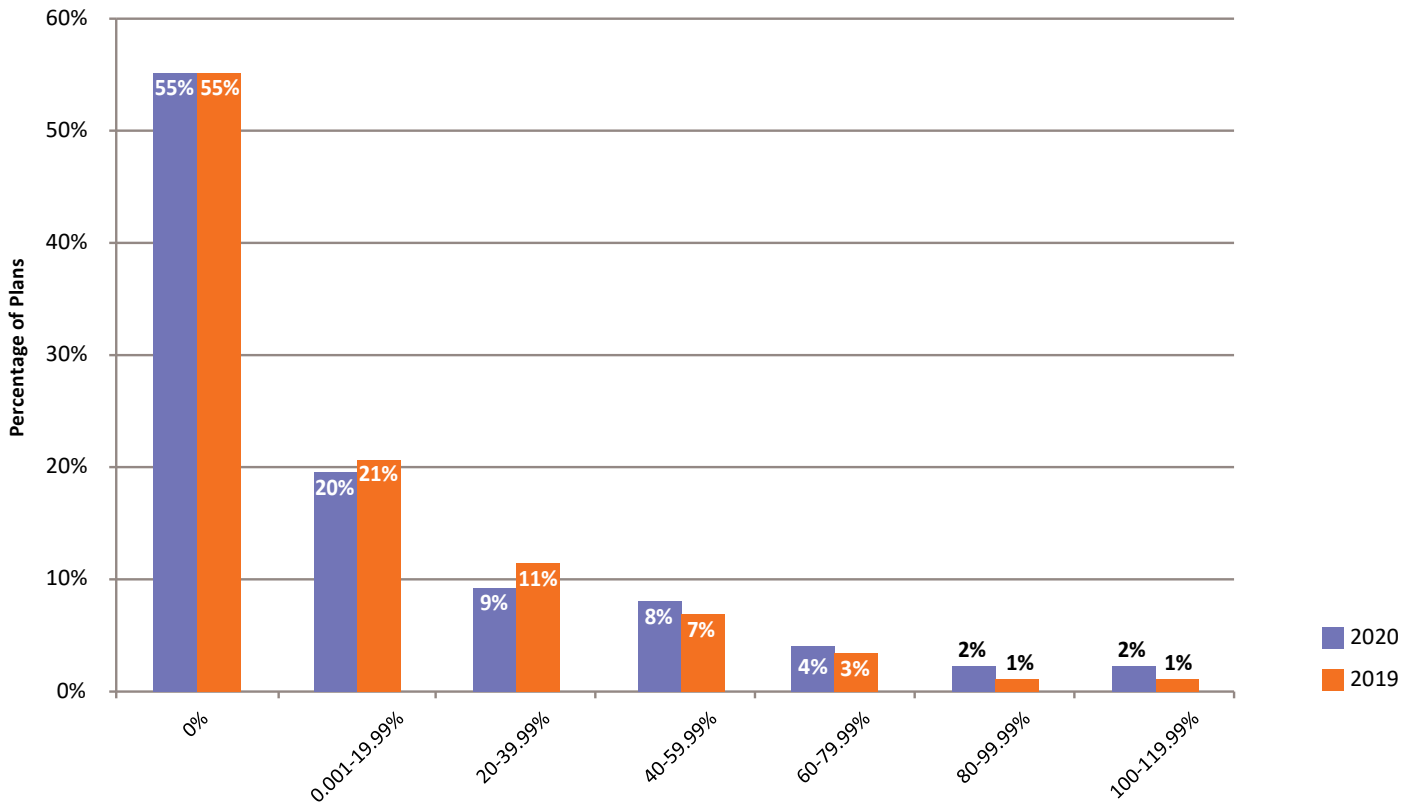


The ADEC most commonly reflects two components: 1) the normal cost, which is the value of benefits expected to be earned by active participants during the upcoming year, and 2) an amortization payment, which is a contribution towards eliminating the pension plan's unfunded actuarial liability (or surplus, if applicable) over time.

Since a pension plan's unfunded actuarial liability is generally considered a long-term expense, the amortization payment, similar to making a payment against a home mortgage, is recognized over time.

Connecticut public sector pension plans' amortization periods (average of 18 years, median 19 years) are reasonably consistent with findings nationwide, and compare favorably with the 30-year period that is generally considered to be the maximum for public sector plans. Both the average and median period for Connecticut public sector plans remain unchanged when compared with the results of our 2020 report.

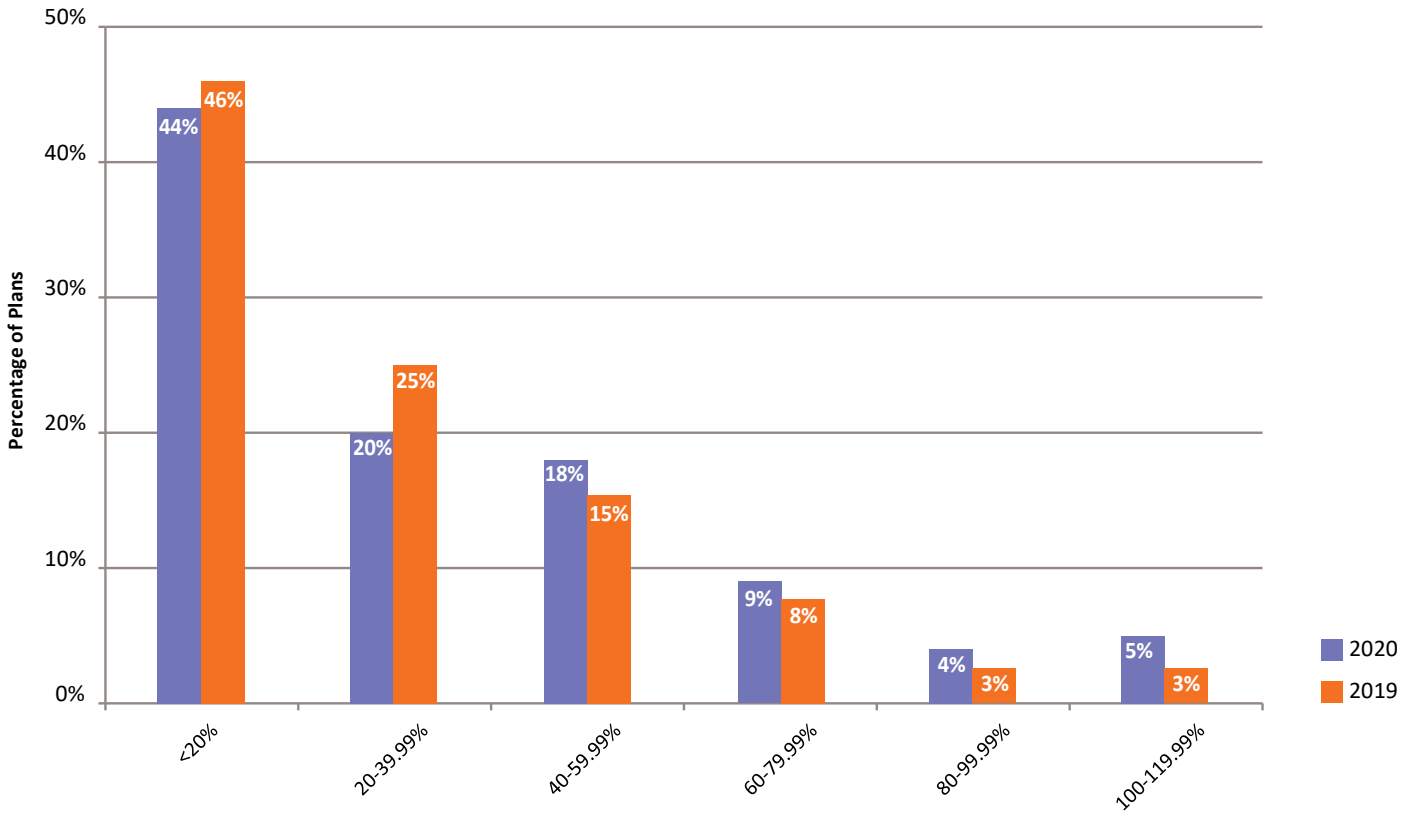
OPEB: FUNDED RATIO FOR ALL PLANS



Many public sector OPEB plans continue to be unfunded arrangements, as the Government Accounting Standards Board (GASB) did not require actuarial measurements of the liabilities until about a decade ago.

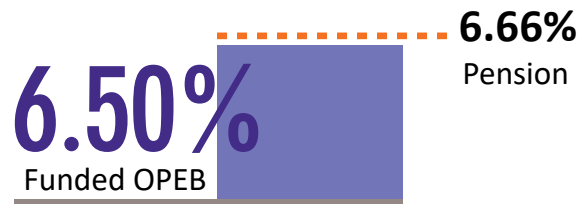
As of FYE 2020, approximately 55% of the OPEB plans in Connecticut are unfunded, with the remaining 45% of plans funded via an OPEB trust. These statistics remain unchanged from our 2020 report.

OPEB: FUNDED RATIO FOR FUNDED PLANS ONLY



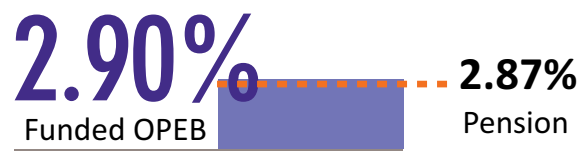
When looking only at the OPEB plans funded via a trust, the average funded ratio as of FYE 2020 is 31.7% (median of 27.7%), versus an average of 27.9% (22.9% median) in the 2019 CAFRs. Forty-four percent of the plans have a funded ratio of less than 20%, while 5% of plans are at least 100% funded. These results indicate a favorable short-term trend versus our 2020 report (46% of plans with a funded ratio less than 20%, and 3% of plans at least 100% funded).

OPEB: INVESTMENT RETURN ASSUMPTION



As of FYE 2020, the median investment return assumption for funded OPEB plans is 6.50%, unchanged from our 2020 report. This assumption is 16 basis points lower than the 6.66% average assumption for pension plans.

OPEB: MONEY-WEIGHTED RATE OF RETURN



Similarly, the average money-weighted rate of return for FYE 2020 for funded OPEB plans is 2.90%, which is quite close to the comparable statistic for pension plans.

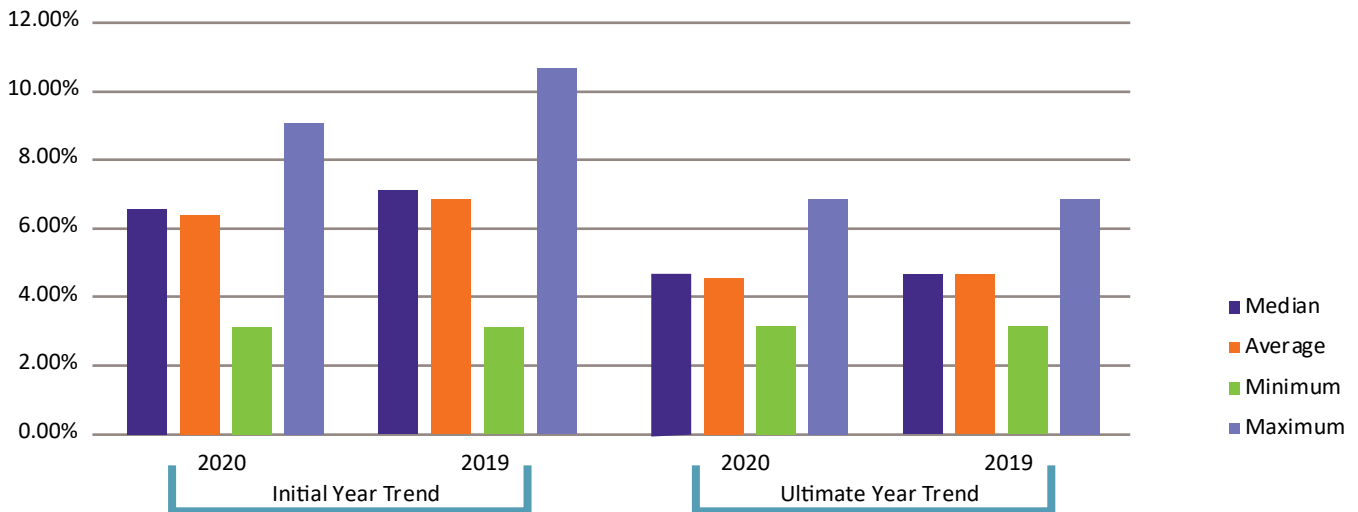
OPEB: HEALTH CARE COST TREND ASSUMPTION

OPEB actuarial valuations include assumptions about future expected rates of growth in the annual cost of providing health care to retirees (i.e. annual premiums for medical, dental, and vision, etc.). Most actuaries agree that the current higher expected rates of growth will gradually decline over some period of time to an “ultimate” constant expected rate of growth for all subsequent years.

The average health care cost trend assumption is 6.44% (median of 6.50%) for the initial year and is 4.57% (median 4.60%) for the ultimate year, with a median period of 7 years (average of 19 years) from the initial to the ultimate year. There is a relatively large difference in the median and average number of years to the ultimate health care cost trend assumptions, due to a difference in the two most common approaches regarding this assumption. One approach generally assumes that the ultimate year is reached within 10 years or less, while the other approach (known as the “Getzen model”) assumes that there is a much more gradual and longer period (typically 50 years or more) needed to reach the ultimate rate.

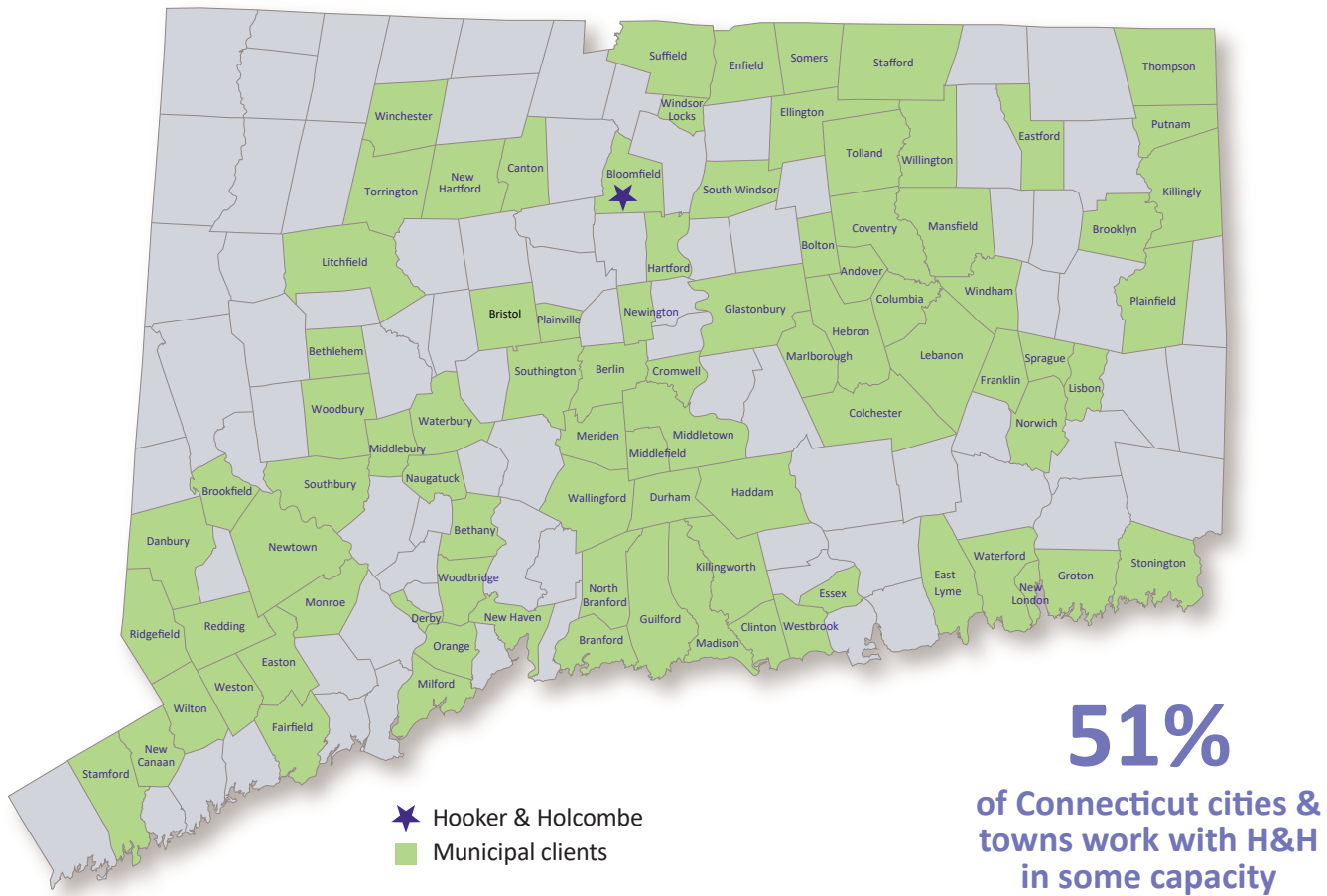
These statistics compare with the 2019 average initial year health care trend assumption of 6.72% (median 7.00%), and an average ultimate year health care assumption of 4.60% (median also 4.60%).

The average number of years to reach the ultimate trend assumption is 19 (down from 22 last year) with a median of 7 years (up from 6 last year).



	Initial Year Trend		Ultimate Year Trend		Years to Ultimate	
	2020	2019	2020	2019	2020	2019
Median	6.50%	7.00%	4.60%	4.60%	7	6
Average	6.44%	6.72%	4.57%	4.60%	19	22
Minimum	3.00%	3.00%	3.00%	3.00%	1	1
Maximum	9.00%	10.65%	6.75%	6.75%	78	83

ABOUT HOOKER & HOLCOMBE



Hooker & Holcombe has strong ties to Connecticut municipalities. For more than 65 years, our actuarial consultants have been working with cities and towns across the state to consult, design, and administer their pension and OPEB plans.

Whether we're guiding a municipality through the creation of a new plan, modernizing a plan to deliver online participant access, or terminating an existing plan, our years of hands-on experience have supported municipalities throughout the Northeast in helping their employees realize a secure retirement.

We also offer recordkeeping and TPA services for all types of employer-sponsored 401(k) and 403(b) plans through our Retirement Services Group.

Our Investment Advisory Group delivers independent investment advisory consulting services for all types of employer-sponsored retirement plans. Their education professionals also provide investment and financial wellness education for employees, as well as Committee Fiduciary Training sessions to help our clients better understand their fiduciary responsibilities and how they relate to their plans.

To learn more about our services, visit hhconsultants.com.

If you would like additional details about this report, please contact:

Steve Lemanski, FSA, FCA, MAAA

860.856.2073

SLemanski@hhconsultants.com

Since 1956, Hooker & Holcombe has delivered the solutions needed to identify, achieve and exceed our clients' retirement plan goals.

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- Benefit calculations
- Plan terminations
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- De-risking strategies
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- Union negotiation planning
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- Management reports
- Daily or periodic valuations
- Loan, transfer, rollover & withdrawal determinations
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hhconsultants.com

P: 860.521.8400

800.457.1245

