

Town of Simsbury

933 Hopmeadow Street Simsbury, Connecticut 06070

Board of Finance Agenda Submission

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January 14, 2022

Trish Munroe
Town Clerk
Simsbury, CT 06070

Dear Ms. Munroe:

A **Regular Meeting** of the Board of Finance will be held at **5:45 PM**, on **Tuesday, January 18, 2022**, and broadcast live and rebroadcast as noted above.

The Agenda is as follows:

1. Call to Order
2. Pledge of Allegiance
3. Finance Director's Report (Pages 1-3)
4. Special Revenue Fund Close Out (Pages 4-5)
5. Draft Fiscal Year 2022-2023 Budget Decision Points, Goals and Information (Pages 6-13)
6. Capital Review (Pages 14-15)
7. Approval of Minutes
 - December 21, 2021 (Pages 16-18)
8. Communications
 - General Government Pension Valuation Report (Pages 19-55)
 - Police Pension Valuation Report (Pages 56-91)
 - Board of Education Pension Valuation Report (Pages 92-128)
 - Pension Annually Required Contribution (ARC) Budget Worksheet (Pages 129-131)
 - OPEB Annually Required Contribution (ARC) Budget Worksheet (Pages 132-134)

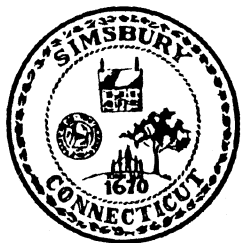
**Board of Finance
January 18, 2022**

9. Adjourn

Lisa Heavner
Vice Chairman

Board of Finance Regular Meeting Schedule:

*2/15/22, 3/8/22, 3/22/22, 4/5/22, 4/6/22, 4/19/22, 4/20/22, 5/17/22, 6/14/22, 7/19/22, 8/16/22,
9/20/22, 10/18/22, 11/15/22, 12/13/22, 1/17/23*



Town of Simsbury

933 HOPMEADOW STREET ~ SIMSBURY, CONNECTICUT 06070

To: Board of Finance
From: Amy Meriwether, Finance Director/Treasurer
CC: Maria Capriola, Town Manager
Date: January 18, 2022
Re: Finance Director's Report

Grants and Donations

Below is a listing of donations and grant applications approved by the Board of Selectmen at their meetings from September 13, 2021 – January 10, 2022:

- Simsbury-Granby Rotary Club Donation - \$3,825 towards the Simsbury Food Closet to help keep the shelves stocked for our residents in need with a focus on “kid friendly” food items.
- Gifts of Love – \$5,500 value for the construction of a multi-use storage building to act as a farm stand to sell produce, or provide produce at no charge for eligible visitors.
- Hartford Foundation of Public Giving - \$10,000 in partnership with the Simsbury First Church of Christ to support the Town's Let's Talk series in providing engagement and educational opportunities for town residents around the areas of housing, diversity, and inclusivity. This grant has been awarded.
- Archdiocese of Hartford Donation - \$1,625 to assist with the purchase of food items for local families in need
- Greater Hartford Transit District Dial-A-Ride Assistance Grant - \$6,660 to support the Town's Dial-A-Ride program. This annual grant has been awarded.
- Communities Challenge Grant – Award range of \$1M-\$10M, with a 50% local match required, for improvements to the Performing Arts Center facility. Application in progress.
- EDA Grant – Award range of up to \$10M, with a 20% local match required, for improvements to the Performing Arts Center facility. Application in progress.
- Hartford Foundation for Public Giving - \$5,000 to assist with the purchase of food items for local families in need.
- Trinity Episcopal Church - \$3,000 to support the Simsbury Community and Social Services Department's Holiday Program, which assists residents in need.

- Healthy Living Collective Grant – Up to \$2,800 for Social Services and the Senior Center to provide a therapeutic movement program which helps participants improve balance, mobility, daily functioning and prevent falls.
- Garrity Asphalt Reclaiming - \$5,000 for support the Simsbury Community and Social Services Department programs that assist residents in need.
- Teresa and Bill Kramer - \$1,500 to the Community and Social Services Department “to help people in town who are less fortunate.”
- Local Violent Crime Prevention Grant - \$15,000 to be used for equipment or technology purchases that are in compliance with the grant award. Grant award guaranteed
- Capitol Region Council of Governments (CRCOG) - \$1,370,000 for the construction of approximately 5,000 linear feet of new sidewalk along Firetown Road. This grant has not been awarded to date. Application in progress.

American Rescue Plan Act (ARPA) – Coronavirus State and Local Fiscal Recovery Funds Update

As previously reported, the U.S. Department of Treasury announced the launch of the Coronavirus State and Local Fiscal Recovery Funds program that was authorized by the American Rescue Plan Act. This program provides \$350 billion in emergency funding for eligible state, local, territorial and Tribal governments to help address the economic fallout related to the pandemic, and layout the foundation for a strong and equitable recovery. Simsbury is anticipated to receive \$7,515,665 in funding.

The Board of Selectmen has formed a workgroup on how they would like to spend these funds. Most recently, at their January 10, 2022 meeting, they scheduled a public hearing for January 24, 2022 to seek input from the public on the needs that have developed as a result of COVID-19, and how the Town should spend the ARPA funds to address those needs.

Lastly, the final guidance has been issued!! The U.S. Department of Treasury has released the Final Rule associated with the Coronavirus State and Local Fiscal Recovery Funds. The CT Conference of Municipalities (CCM) has reported that the Final Rule provides greater clarify and context, and in some categories broadens eligible uses. Staff will review the final guidance over the course of the next couple of weeks and then meet with the ARPA workgroup the week of January 31st to discuss the updated guidance.

Fiscal Year 2020/2021 Audit Report

Blum Shapiro has recently been purchased by Clifton, Larson & Allen, our current auditors. The transition along with labor shortages has posed some challenges for the firm and they need additional time to complete our audit. At their request, the Town has applied and been approved for an extension of the fiscal year 2020/2021 audit. It is anticipated that the financial statements will be issued by the end of January.

Monthly Financial Summary

Revenues

Department	FY20/21 Budget	FY20/21 Balance as of 12/31/20	FY20/21 % Spent	FY21/22 Budget	FY21/22 Balance as of 12/31/21	FY21/22 % Spent
General Government	95,177,516	63,230,721	66%	98,852,667	53,707,619	54%
Public Safety	195,064	70,550	36%	203,765	11,670	6%
Public Works	23,250	20,400	88%	21,750	23,440	108%
Health and Welfare	47,720	-	0%	42,470	-	0%
Culture, Parks & Recreation	247,139	98,455	40%	242,382	49,914	21%
Education	6,426,589	1,627,497	25%	6,463,510	95,401	1%
Intergovernmental Transfers	319,268	319,268	100%	287,373	287,373	100%
Total Revenues	102,436,546	65,366,891	64%	106,113,917	54,175,417	51%

Expenditures

Department	FY20/21 Budget	FY20/21 Balance as of 12/31/20	FY20/21 % Spent	FY21/22 Budget	FY21/22 Balance as of 12/31/21	FY21/22 % Spent
General Government	9,706,437	5,764,319	59%	10,285,364	6,045,662	59%
Public Safety	5,565,650	2,614,883	47%	5,670,815	2,811,890	50%
Public Works	4,606,768	2,134,340	46%	4,692,554	1,767,648	38%
Health & Welfare	775,193	402,317	52%	809,540	349,224	43%
Culture, Parks & Recreation	2,560,778	1,219,142	48%	2,724,666	1,231,986	45%
Education	72,860,444	35,214,757	48%	74,446,580	35,930,637	48%
Intergovernmental Transfers	2,889,811	2,889,811	100%	935,041	935,041	100%
Debt Service	5,471,465	1,706,940	31%	6,549,357	1,086,943	17%
Total Expenditures	104,436,546	51,946,509	50%	106,113,917	50,159,031	47%

Fund Balance

	FY20/21 Fund Balance as of 6/30/2021	Change thru 12/31/21	FY21/22 Fund Balance as of 12/31/2021
Nonspendable	158,914		158,914
Assigned	215,191		215,191
Unassigned	16,879,558	4,016,386	20,895,944
Total Fund Balances	17,253,663	4,016,386	21,270,049



Town of Simsbury

933 Hopmeadow Street Simsbury, Connecticut 06070

Board of Finance Agenda Item Submission Form

1. **Title of Submission:** Special Revenue Fund Close Out
2. **Date of Board Meeting:** January 18, 2022
3. **Individual or Entity Making the Submission:**
Amy Meriwether, Finance Director
4. **Action Requested of the Board of Finance:**
If the Board of Finance supports closing out the three Special Revenue Funds in accordance with the below:

Move, effective December 21, 2021, to close out the Police Vehicles, Incentive Housing and D.A.R.E Program funds in accordance with the recommendations outlined by staff.

5. **Summary of Submission:**
The Board of Finance has requested a review of all Special Revenue Funds to determine if any could potentially be closed. The Director of Finance has identified three funds that can be closed at the discretion of the Board.

Police Vehicles Fund

This fund is utilized to hold funds received from the sale of police vehicles. After funds have built up to an appropriate level, Police administrative vehicles are purchased utilizing these funds. This was their only source of funding for replacement administrative vehicles until recently when they were added to the CNR Plan document during the FY21/22 budget process.

This fund currently has a balance of \$92,132. Staff is recommending this fund be closed out and the balance transferred to the Capital Reserve Fund as assigned funding to offset future police vehicle purchases.

Incentive Housing Fund

This was utilized to track a State grant that was awarded to the Town to study the creation of an Incentive Housing Zone. It was awarded on July 7, 2008 in the amount of \$49,900 for the following period: July 28, 2008 – June 30, 2013. In accordance with the research on this grant, it appears this grant was a reimbursement grant. Therefore, in order to receive the grant funds, expenditure detail and associated documentation of how the grant funds were to be spent has to be submitted to the State in order to receive funding. Since funding was received, we know this occurred. Based on this, it would be appropriate to close out this fund.

This fund currently has a balance of \$8,826. Staff is recommending this fund be closed out and balance transferred to the Capital Reserve Fund for future use.

D.A.R.E (Drug Awareness Resistance Education) Fund

This fund was utilized to track program funding provided by the State for narcotics education and drug prevention for youth. This program ceased in 2007. In researching the D.A.R.E program funding, it was found that these funds were not reimbursement funds and funding was provided to the Town prior to incurring expenditures. The risk in closing out this fund is that the Sate could request these funds back.

This fund current has a balance of \$1,243. Due to the immaterial dollar value of the remaining funds, it would be staff's recommendation that this fund be closed out and remaining funds be transferred to the Narcotics Task Force Fund. This would allow use of these remaining funds in accordance with their intended purpose.

6. Financial Impact:

None – Only Transfer Between Funds

7. Description of Documents Included with Submission:

None



Town of Simsbury

933 Hopmeadow Street Simsbury, Connecticut 06070

Board of Finance Agenda Item Submission Form

1. **Title of Submission:** Draft FY 2022-2023 Budget Decision Points, Goals & Information
2. **Date of Board Meeting:** January 18, 2022
3. **Individual or Entity Making the Submission:**
Lisa Heaver, Board of Finance Chair
4. **Action Requested of the Board of Finance:**
Board feedback and review, adopt with changes at February meeting
5. **Summary of Submission:**
During the budget process part of the Board of Finance role is to use financial best practices to ensure the long-term fiscal health of the Town and to recommend a budget to citizens at referendum that reasonably funds Town needs and services. This draft document is provided for discussion purposes to assist the Board of Finance in determining goals, decision points and requests for information during the FY 2022-2023 process. The submission also includes key dates, charter references and links to long-term planning documents for information.
6. **Financial Impact:**
Board of Finance decision points are part of the process. Decision points have financial implications on the Board of Selectmen and Board of Education budgets and on property taxes needed to fund the budgets.
7. **Description of Documents Included with Submission:**
 - Draft Board of Finance Budget Decision Points, Goals and Information – Fiscal Year 2022-2023

**DRAFT BOARD OF FINANCE BUDGET DECISION POINTS, GOALS and
INFORMATION
FISCAL YEAR 2022-2023**

DECISION POINTS – FINANCIAL POLICY

The Board of Finance serves as the budget making authority for the Town of Simsbury and each year recommends a budget to citizen referendum that responsibly funds Town needs and services and ensures the long-term fiscal health of the Town. In addition to reviewing Board of Selectmen and Board of Education operating and capital budgets, key Board of Finance decision points during the budget process include a number of financial policy determinations that impact the final budgets. For Fiscal year 2022-2023, the Board of Finance will be considering the following financial policy decision points.

Pension Investment Assumption: Adopt a 6.25% Pension and Other Post-Employment Benefits (OPEB) investment assumption for the FY 2023 budget, as recommended by the Town’s Actuary in the October 2021 Valuation report.

General Fund Balance: Maintain a General Fund Unrestricted Reserve of 15.5%, as recommended by the GFOA best practice of maintaining two months of operating expenses in reserves.

Tax Collection Assumption Rate: Continue to assume a conservative 98.5% tax collection rate assumption to accommodate revenue deviations that may occur during the fiscal year. At the end of the fiscal year, and consistent with Town policy, any excess revenues may be applied to one-time capital or operating needs not included in the budget, to the Capital Reserve Fund to pay for future budget needs, towards increasing the Pension or OPEB funding, or to maintain reserves at 15.5%.

Debt Service Percent of Operating Budget Target/Cap: Target debt service at 7% of the operating budget, but not to exceed 8%.

Use of Excess Health Savings Reserves: Town policy is to have 20-25% health saving reserves of expected claims. We currently have an estimated 38% reserves as of 6/30/22 and may be able to use a portion to offset budgetary increases. A Board of Finance decision point is how much of excess reserves to responsibly use for the current budget. (February discussion with Health Benefits Advisor, Lockton).

Use of Capital Reserves: The Town established the Capital Reserve Fund as a future source of cash-for-capital funding for capital projects. It is funded by end of year line-item savings (GF), end of year excess revenues (GF), bond premium, sale of town property, transfers from Special Revenue Funds, and unexpended balances on completed capital projects. The Town currently

has \$3,456,732 unassigned in the Capital Reserve Fund. A Board of Finance decision point is how much from the fund to responsibly utilize for the current budget.

BOARD OF FINANCE BUDGET GOALS

General Goals: *

- Adopt a balanced budget
- Maintain a level of expenditures to support essential services, quality of life for citizens, and respond to the pandemic
- Make every effort to limit the increase in taxes to accomplish Town goals
- Maintain Simsbury's current AAA bond, the highest rating a town can earn
- Promote common-sense frugality and the efficient use of limited resources
- Responsibly fund long-term obligations including Pensions, Other Post Employment Benefits (OPEB), and capital debt
- Adhere to financial best practices and current Town policies
- Transparency and communication
- Strategic use of Reserve Funds

**To be presented at Public Hearing*

Financial Goals:

- Adopt revenue projections that are estimated using an objective and analytic process utilizing trend analysis, econometric analysis and other analysis. In the case of revenue uncertainty, use conservative projections.
- Make all current, ongoing expenditures with current, ongoing revenues, avoiding procedures that balance the current budgets by postponing needed expenditures or borrowing against future revenues.
- Avoid targeting revenues for specific purposes whenever possible, allowing maximum flexibility in funding decisions on an annual basis.
- Use one-time revenues for one-time expenditures only.
- Support transparency and the use of "plain talk" language in communicating budget components and priorities, including the use of fiscal notes to highlight changes in the budget from year-to-year and the avoidance of undefined acronyms.
- Use performance measures and data to drive and inform decision-making processes and deliver reliable results and outcomes for a sustainable and efficient town government.

Process Goals:

- Encourage citizen involvement and welcome stakeholder participation.
- Ensure the budget hearing offers citizens and stakeholders the opportunity to participate in person or virtually, or to submit emails in advance to be read aloud at the budget hearing.
- Work collaboratively with the Boards of Selectmen and Education for the best interests of Simsbury.

- Review Board of Selectmen and Board of Education recommended budgets, as the Town’s Budget-Making Authority (Town Charter, Section 808 Duties of the Board of Finance on the Budget).
- Review current economic conditions including Social Security Cost of Living Adjustments (COLA), inflation – including the Consumer Price Index (CPI) -, unemployment statistics, median income and home values and other relevant economic indicators, and factor these into decisions about the amount of tax increase that is acceptable.
- Review benchmark comparisons with other similar towns, and factor this into the amount of tax increase that is acceptable.
- Review Debt affordability measures in Debt Management Policy:
 - Debt as a % of Net Taxable GL
 - Debt per capita
 - Debt to personal income
 - Debt to taxable property value
 - Debt as a % of GF expenditures
 - Simsbury Debt in comparison to other comparable towns
- Review long-range planning reports and policy board goals.
- Publish all budget documents in a clear and comprehensible form on the Town’s Finance Department page.
- Review the Town Actuary’s recommendations and best practices on investment return assumptions and mortality rates to maintain a prudent funded status for Pension and OPEB.
- Review long-term planning models for the operating and capital budgets, in recognition of the importance of long-term financial planning to assess the implications of current and proposed expenditures, assumptions, and programs and to develop appropriate strategies to achieve Town goals.
- Ensure the Capital Improvement Plan (CIP) for the Town includes detailed descriptions of projects in current and out years, anticipated start and completion dates, total cost of the project including anticipated grants, and operating cost projections.

REQUESTS FOR INFORMATION

The Simsbury Town Charter Section 807 describes the Board of Selectmen duties on the budget and includes a duty to provide “such other information as may be required by the Board of Finance.”

- Rank capital**
- Detailed description page for all bonded CIP projects, including the out years**:
 - Description
 - Start and end dates
 - Costs – total and year-to-year
 - Operating budget impacts

Sources of funding, including bonding, grants, GF contributions and other

** Best practice from Robert Bland, "A Budgeting Guide for Local Government"

- Summarize new programs or positions, adjustments (from one line item to another), and new savings initiatives
- Student numbers for each classroom in each grade
- Highlight performance metrics used for each department
- Benchmark comparisons with other towns
- For new programming or positions, describe the linkages between proposed appropriations and anticipated results; a cost/benefit analysis and describe/provide data analyzed for assessing the need and how the Town/School will be measuring performance
- Additional Grand List information (February, or earlier)
 - Abatement summary
 - List of exemptions for personal property, real estate
 - Updated five-year Grand List projection

KEY BUDGET CALENDAR DATES

Note: See specific Board agendas located on the Town and School websites for updated time and locations.

January 11, 2022 – Board of Education Special Education Program Review

January 25, 2022 – Board of Education discussion on staffing and enrollment. Board of Education to receive budget books.

February 5, 2022 (Saturday) – Board of Education Budget Workshop 9:00-3:00 at Henry James Memorial School Media Center

February 8, 2022 – Board of Education Presentation of Superintendent’s 2022-2023 Budget

February 15, 2022 - Regular meeting of the Board of Finance. Review copies of long-range planning documents and policy board goals.

Board of Finance discussion on potential policy for use of excess health reserves for budgetary relief. Invited guest is the Town’s health advisor, Lockton. Review and discuss Actuary Valuation Report on Pensions and OPEB. Review Board of Finance Budget Goals.

February 23, 2022 – Board of Education Adoption of 2022-2023 Budget

March 8, 2022 – Board of Education Budget Presentation to the Board of Finance

March 10, 2022– Board of Selectmen Budget Workshop Part I

March 12, 2022 (Saturday) – Board of Selectmen Budget Workshop Part II

March 22, 2022 – Board of Selectmen Budget Presentation to the Board of Finance

April 5, 2022 – Budget Hearing at 6:00 pm at Simsbury Public Library

April 6, 2022 – Budget Hearing snow date, if needed.

April 19, 2022 – Budget Hearing continuation, if needed

April 20, 2022 – Budget Hearing continuation snow date, if needed

May 3, 2022 – Tentative date for Budget Referendum

SIMSBURY TOWN CHARTER MANDATED DATES

Section 804 Department Estimates: The head of each department, office or agency of the town, except the Board of Education shall, not later than January 31, file with the Director of Finance an estimate of the expenditures of each department and the revenues, other than tax revenue and any other information required by the Town Manager or Board of Selectmen.

Section 803 (a) Capital Improvement Program Preparation: By February 15, estimates of costs of capital projects ("CIP") shall be submitted by each department to the Town Manager.

Section 805 Duties of the Director of Finance on the Budget: The Director of Finance shall compile departmental estimates. Not later than March 1, the Director of Finance under the direction of the Town Manager, shall present to the Board of Selectmen the completed budgets of all boards, offices and agencies, except the Board of Education.

Section 806 Duties of the Board of Education on the Budget: Not later than March 15 of each year, the Board of Education shall present its budget to the Board of Finance.

Section 807 Duties of the Board of Selectmen on the Budget: Not later than March 31 of each year, the Board of Selectmen shall present to the Board of Finance a budget for all departments, offices and agencies of the town, except the Board of Education. The Board of Education may offer recommendations but may not make adjustments in the budget submitted by the Board of Education. The Board of Selectmen shall recommend to the Board of Finance capital projects to be undertaken and the method of financing.

Section 808 Duties of the Board of Finance on the Budget: The Board of Finance shall hold one or more public hearings, the first of which will be held not later than April 10. At least five days prior to the first public hearing, the Board of Finance shall cause to be published in a newspaper with substantial circulation, a notice of such hearing. After no more than ten days after the last public hearing, the Board of Finance must approve a budget and file with the Town Clerk for submission to automatic referendum.

Section 406 Automatic Referendum: the budget referendum shall be held from 14-21 days following the filing of the budget with the Town Clerk.

LINKS TO LONG-RANGE PLANNING DOCUMENTS AND POLICY GOALS

Board of Selectmen

- [Parks and Recreation Master Plan](#)
- [Simsbury Plan of Conservation and Development \(POCD\)](#)
- [Simsbury Pedestrian and Bicycle Master Plan](#)
- [Simsbury Affordable Housing Plan](#)
- [Simsbury Sidewalk and Curb Assessment](#)
- [Town Facilities Master Plan Presentation](#) (February 2021)
- [Law Enforcement Accreditation Report for the Simsbury Police Department \(CALEA\)](#)

Board of Education

- [Board of Education Five Year Goals and 2019-2024 Strategic Plan](#)
- [Schools Facilities Study Links](#)

“The budget is the guide that determines the direction of government. It is arguably the single most important document routinely prepared by governments. To be usable, it not only must contain the appropriate information, but must also be prepared in a manner that is clear and comprehensible.”

- Government Financial Officers Association (GFOA) -

CAPITAL BUDGETING

<u>Base Capital - Operating Budget</u>		<u>Variable Capital - CNR</u>		<u>Bonded Capital</u>	
Funded by Mill Rate or reliable recurring grants		CNR from Capital Reserves or one-time grants		Over \$250,000	
Capital needed every year		Varies year-to-year		Funded by borrowing, grants, other	
Impacts taxes through line item budget		Does not usually impact taxes in current year		Debt service impacts future budgets	
No tax impact with recurring grants		Can tax for this as an option		<i>Approved</i> Capital Improvement Plan (CIP)	
		CNR Capital Improvement Plan - <i>Wish List</i>		7% Target debt service; 8% cap	
<u>Present</u>		<u>Past</u>		<u>Future</u>	
<u>Operating Budget</u>					
Police Cruisers	148,050	Capital Reserve (Balance: \$3,456,732)			
Police Admin Vehicles	46,000	Golf Equipmenet Fund			
PW Plow Truck	180,000	State and Federal Grants			
Materials Recycling	10,000	Trade in value			
PW Roads Improvements	120,000	Donations/gifts			
PW CNR Roads Improvements	200,000	Sewer Use Fund (SUF)			
BOS operating CNR	416,250	Sewer Assessment Fund (SAF)			
BOE operating CNR	550,300	Eno Trust Fund (ET)			
<u>Sub-Total</u>	1,670,600	Belden Trust			
		Other			
<u>Recurring Grants</u>					
TAR	373,488				
LOCIP	156,500				
<u>Sub-Total</u>	529,988				
Total	2,200,588				

Funds

<u>General Fund</u>	<u>Capital & Non-Recurring Fund</u>	<u>Capital Reserve Fund</u>	<u>Capital Project Fund</u>
The largest fund, is the primary operating fund. It is general because any transaction that isn't recorded elsewhere is recorded here. Holds money that has been appropriated for spending	Provides for small and non-recurring expenditures that would distort the budget year to year. Holds money that has been appropriated for spending	Established as a future source of funding Cash-For-Capital. Projects not yet appropriated.	Accounts for financial resources to be used for the acquisition or construction of facilities, improvements and/or equipment. Capital Projects of greater than one year duration are accounted for here. Projects have been appropriated.
<u>"Checking Fund"</u>	<u>"Checking Fund"</u>	<u>"Savings Fund"</u>	<u>"Checking Fund"</u>
Tax dollars are received into this fund	Transfers from General Fund	Free Cash	
	Transfers from Capital Reserve Fund	End of Year savings (GF)	Bond issuance
	Transfers from Bond purchases	End of Year Excess Revenues (GF)	Grants
		Bond Premium (earmarked)	GF Contribution
		Other: Sale of town buildings and property, transfers from special revenue funds, unexpended balances on completed projects in CNR fund and Capital Projects Fund	

**Board of Finance
TOWN OF SIMSBURY, CONNECTICUT
REGULAR MEETING MINUTES
Tuesday, December 21, 2021, at 5:45 P.M.
Simsbury Community Television Live Stream**

PRESENT:

Lisa Heavner, Mike Doyle, Robert Helfand, Arthur House, Derek Peterson, and Linda Schofield.

ALSO PRESENT:

Amy Meriwether, Director of Finance; Kelsey Chamberlain, Deputy Finance Director; Wendy Mackstutis, First Selectman; and Eric Wellman, Selectman.

1. Call to Order - Establish Quorum

Ms. Heavner called the meeting to order at 5:49 P.M.

2. Pledge of Allegiance

All present stood for the Pledge of Allegiance.

3. Election of Chair/Vice Chair

Ms. Schofield recommended Lisa Heavner for Board of Finance Chair and provided remarks on her recommendation.

MOTION: Ms. Schofield made a motion to elect Ms. Heavner to the position of Board of Finance Chair. Mr. Peterson seconded the motion. Everyone was in favor and the motion carried. Ms. Heavner abstained.

Ms. Heavner recommended Art House for Board of Finance Vice Chair and provided remarks on her recommendation.

MOTION: Ms. Schofield made a motion to elect Mr. House to the position of Vice Chairman of the Board of Finance. Mr. Helfand seconded the motion. Everyone was in favor and the motion carried. Mr. House abstained.

4. Appointment of Retirement Plan Sub-Committee Representative

Mr. Peterson confirmed he would stay on the Retirement Plan Sub-Committee. Ms. Heavner provided some remarks on the Retirement Plan Sub-Committee and commented on Mr. Helfand's experience with pensions. Mr. Helfand provided an overview of his current role with pensions for the Office of the State Comptroller.

MOTION: Ms. Heavner made a motion to elect Mr. Peterson and Mr. Helfand to serve on the Retirement Plan Sub-Committee. Mr. House seconded the motion. All were in favor and the motion carried.

5. Proposed Meeting Dates

Ms. Heavner reviewed the proposed dates and there were no concerns or issues.

MOTION: Mr. Doyle made a motion to approve the meeting dates of the Board of Finance for calendar year 2022. Mr. House seconded the motion. All were in favor and the motion carried.

6. Agenda Planning

Ms. Heavner presented monthly proposed agenda items based on past meeting agendas and requests from members of the board. Ms. Heavner reminded everyone that if they need anything added just to let her and Ms. Meriwether know in advance.

7. Quarterly Budget Status Report Content Discussion

Ms. Meriwether went over what the Budget Status Report normally looks like. Ms. Heavner mentioned how detailed the narrative is that Ms. Meriwether provides at the beginning of the report. She added that it helps make the financial statements understandable to both the policy boards and members of the public. She added her appreciation to Ms. Meriwether saying this narrative is far superior to the work submitted by other towns.

Ms. Heavner presented ideas for change to the financial statements going forward and requested Board feedback. Discussion ensued. The board all weighed in with their feedback and they came to an agreement for report modifications going forward.

8. Annual Report Review

Ms. Heavner thanked the Town Managers office for their work on the Annual report. Discussion ensued on proposed changes for next year's report. Mr. Helfand proposed that all acronyms be defined in a glossary or an appendix. Ms. Heavner suggested that all the elected and appointed boards be included with a summary of what they have accomplished. Mr. Helfand suggested including all departments and what they do. Mr. House commented that the report looked nice and commended the people responsible for putting it together.

9. Special Revenue Fund Close Out

Ms. Meriwether reviewed a list of funds being proposed for closure. Ms. Heavner mentioned these requested changes are accounting updates only, reclassifying where the money is held, which is still available for spending. No changes are being made to who has access to it. Ms. Heavner recommended that the voting on these funds be held in January to give other boards an opportunity to comment if they so choose.

10. Budget Modeling

Ms. Meriwether presented the budget modeling worksheet which provided the board with a jumping off point to see what moves the mill rate, She reviewed the various tabs on the report including the assumptions, the projected expenditures, the capital investment plan, capital financing, pension scenarios, grand list projections, and levy calc.

Ms. Heaver had Ms. Meriwether update the model to show the impact of certain changes in assumptions. Discussion ensued around possible operating challenges such as inflation, and potential use of the Capital Reserve to help fund upcoming capital needs.

11. Approval of Minutes

- November 16, 2021 - Update on Item 3. To “\$29,971”
- December 1, 2021 – No updates

The minutes from the November 16 2021, Regular Finance Meeting were approved with the edit noted above.

The minutes from the December 1 2021, Special Finance Meeting were approved as submitted. Mr. House moved and Mr. Peterson seconded.

12. Communications: December 2021 Building Department Report

Ms. Meriwether provided a brief overview of the building department receipts to date which totaled \$43,202.

13. Adjourn

MOTION: Mr. Helfand made a motion to adjourn the meeting at 7:20 P.M. Mr. Doyle seconded the motion. All were in favor and the motion passed unanimously.

Respectfully submitted,
Marion Lynott
Commission Clerk



TOWN OF SIMSBURY GENERAL GOVERNMENT EMPLOYEES' RETIREMENT INCOME PLAN

**Actuarial Valuation as of July 1, 2020
To Determine Funding for Fiscal Year 2021-22**

Prepared by

Jennifer M. Castelhana, FSA
Consulting Actuary

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Certification

We have performed an actuarial valuation of the Plan as of July 1, 2020 to determine funding for fiscal year 2021-22. This report presents the results of our valuation.

The ultimate cost of a pension plan is the total amount needed to provide benefits for plan members and beneficiaries and to pay the expenses of administering the plan. Pension costs are met by contributions and by investment return on plan assets. The principal purpose of this report is to set forth an actuarial recommendation of the contribution, or range of contributions, which will properly fund the plan, in accordance with applicable government regulations. In addition, this report provides:

- A valuation of plan assets and liabilities to review the year-to-year progress of funding.
- Information needed to meet disclosure requirements.
- Review of plan experience for the previous year to ascertain whether the assumptions and methods employed for valuation purposes are reflective of actual events and remain appropriate for prospective application.
- Assessment of the relative funded position of the plan, i.e., through a comparison of plan assets and projected plan liabilities.
- Comments on any other matters which may be of assistance in the funding and operation of the plan.

This report may not be used for purposes other than those listed above without Milliman's prior written consent. If this report is distributed to other parties, it must be copied in its entirety, including this certification section.

Milliman's work is prepared solely for the internal business use of the Town of Simsbury ("Town"). To the extent that Milliman's work is not subject to disclosure under applicable public records laws, Milliman's work may not be provided to third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of its work product. Milliman's consent to release its work product to any third party may be conditioned on the third party signing a Release, subject to the following exceptions: (a) the Town may provide a copy of Milliman's work, in its entirety, to the Town's professional service advisors who are subject to a duty of confidentiality and who agree to not use Milliman's work for any purpose other than to benefit the Town; and (b) the Town may provide a copy of Milliman's work, in its entirety, to other governmental entities, as required by law. No third party recipient of Milliman's work product should rely upon Milliman's work product. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

In preparing this report, we relied on employee census data and financial information as of the valuation date, furnished by the Town. We performed a limited review of the data used directly in our analysis for reasonableness and consistency and have found them to be reasonably consistent and comparable with data used for other purposes. If the underlying data or information is inaccurate or incomplete, the results of our analysis may likewise be inaccurate or incomplete and our calculations may need to be revised. If there are material defects in the data, it is possible that they would be uncovered by a detailed, systematic review and comparison of the data to search for data values that are questionable or for relationships that are materially inconsistent. Such a review was beyond the scope of our assignment.

Certification

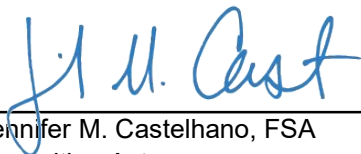
The calculations reported herein have been made on a basis consistent with our understanding of ERISA and the related sections of the tax code. Additional determinations may be needed for purposes other than meeting funding requirements, such as judging benefit security at plan termination or meeting employer accounting requirements. On the basis of the foregoing, we hereby certify that, to the best of our knowledge, this report is complete and accurate and all costs and liabilities were determined in conformance with generally accepted actuarial principles and practices.

The valuation results were developed using models intended for valuations that use standard actuarial techniques. In addition to the models described previously, Milliman has developed certain models to develop the expected long term rate of return on assets used in this analysis. We have reviewed the models, including their inputs, calculations, and outputs for consistency, reasonableness, and appropriateness to the intended purpose and in compliance with generally accepted actuarial practice and relevant actuarial standards of practice (ASOP). The models, including all input, calculations, and output may not be appropriate for any other purpose.

We further certify that, in our opinion, each actuarial assumption, method and technique used is reasonable taking into account the experience of the Plan and reasonable expectations. Future actuarial measurements may differ significantly from the current measurements presented in this report due to factors such as, but not limited to, the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Due to the limited scope of the actuarial assignment, we did not perform an analysis of the potential range of such future measurement.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

We are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.



Jennifer M. Castelhana, FSA
Consulting Actuary

Section I - Executive Summary Changes Since the Prior Valuation

Plan Changes

None.

Changes in Actuarial Methods and Assumptions

The Mortality Table was changed from RP-2000 Combined Healthy Mortality Tables with separate tables for Males and Females with generational projection of future mortality improvements per Scale AA to the PubG-2010 Mortality Table with generational projection per the MP-2019 ultimate scale, with employee rates before benefit commencement and healthy or disabled annuitant rates after benefit commencement.

In order to better anticipate future plan experience, we lowered the investment return assumption from 6.75% to 6.625%. Additionally, we reset the amortization period to 17 years.

These changes in combination caused the Unfunded Accrued Liability to increase by about \$2.46 million and the Actuarially Determined Contribution to increase by about \$60,000.

Other Significant Changes

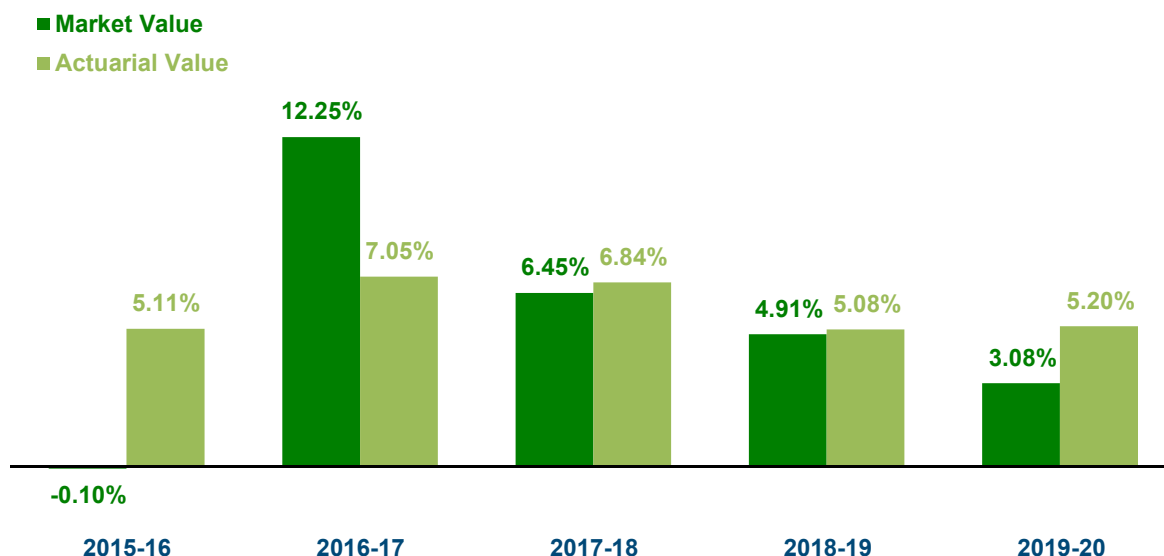
None.

Section I - Executive Summary Assets

There are two different measures of the plan's assets that are used throughout this report. The Market Value is a snapshot of the plan's investments as of the valuation date. The Actuarial Value is a smoothed asset value designed to temper the volatile fluctuations in the market by recognizing investment gains or losses non-asymptotically over five years.

	Market	Actuarial
Value as of July 1, 2019	\$24,955,570	\$25,236,776
Town and Member Contributions	1,357,619	1,357,619
Investment Income	755,523	1,291,783
Benefit Payments and Administrative Expenses	<u>(2,153,991)</u>	<u>(2,153,991)</u>
Value as of July 1, 2020	24,914,721	25,732,187

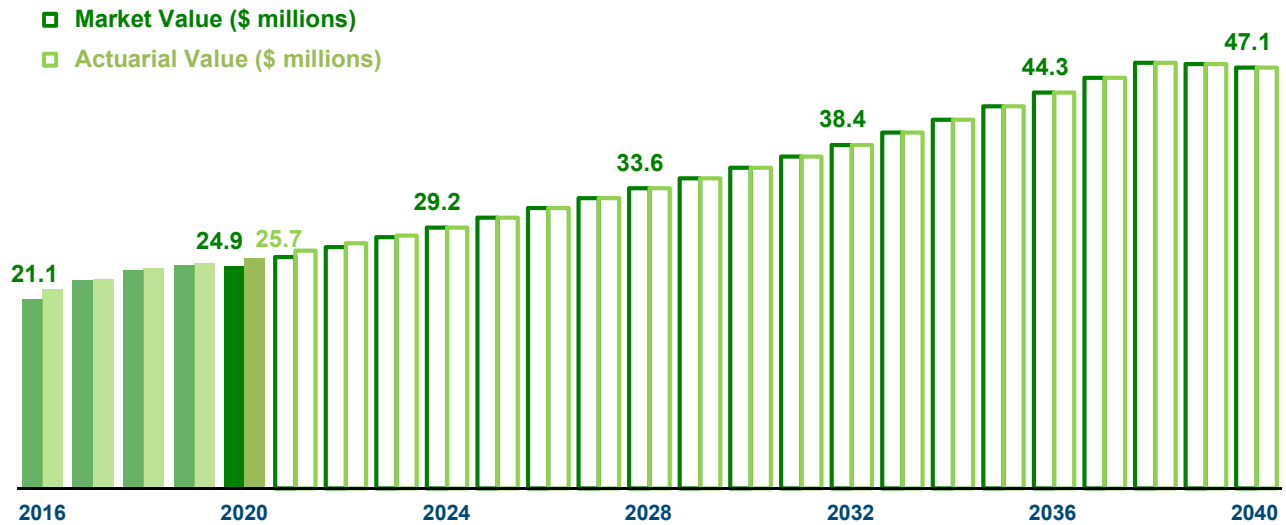
For fiscal year 2019-20, the plan's assets earned 3.08% on a Market Value basis and 5.20% on an Actuarial Value basis. The actuarial assumption for this period was 6.75%; the result is an asset loss of about \$900,000 million on a Market Value basis and a loss of about \$385,000 million on an Actuarial Value basis. Historical rates of return are shown in the graph below.



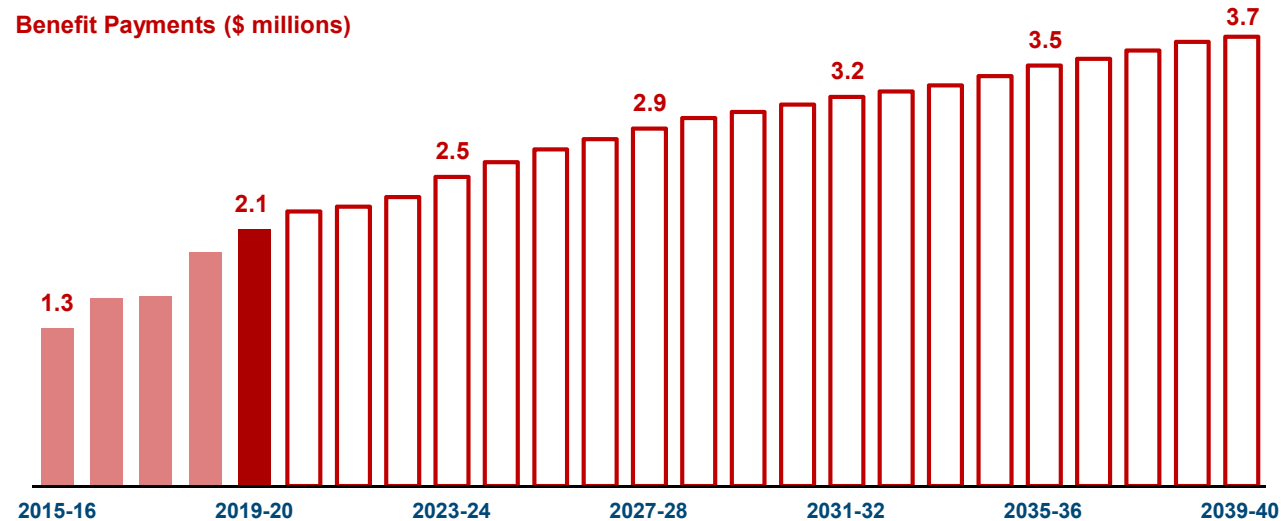
Please note that the Actuarial Value currently exceeds the Market Value by \$817,000. This figure represents investment losses that will be gradually recognized in future years. This process will exert upward pressure on the Town's contribution, unless there are offsetting market gains.

Section I - Executive Summary Assets (continued)

The graph below shows how this year's asset values compare to where the plan's assets have been over the past several years and how they are projected to change over the next 20 years. For purposes of this projection, we have assumed that the Town always contributes the Actuarially Determined Contribution and the investments always earn the assumed interest rate each year.

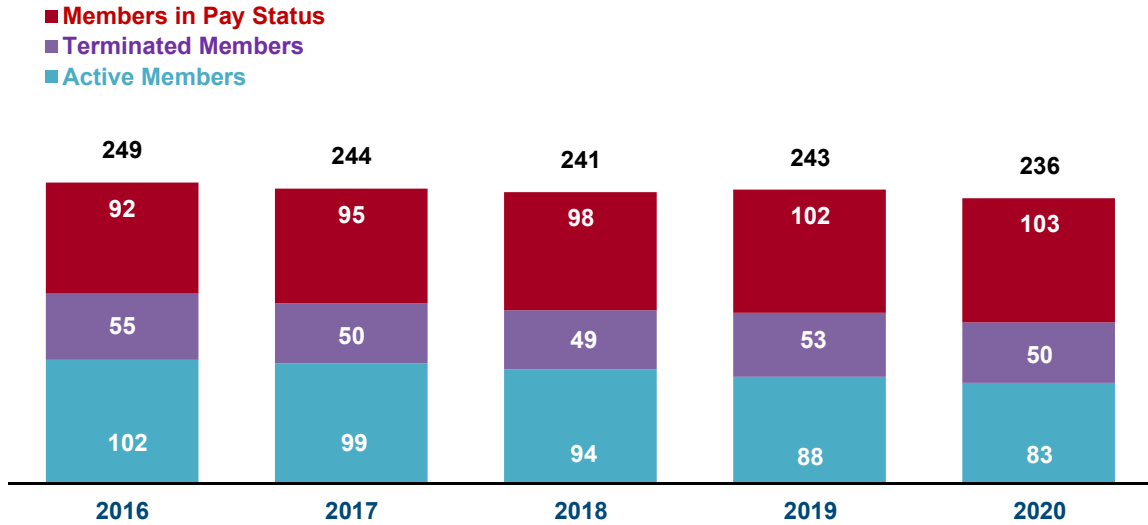


In 2019-20, the plan paid out \$2.10 million in benefits to members. Over the next 20 years, the plan is projected to pay out a total of \$61 million in benefits to members.



Section I - Executive Summary Membership

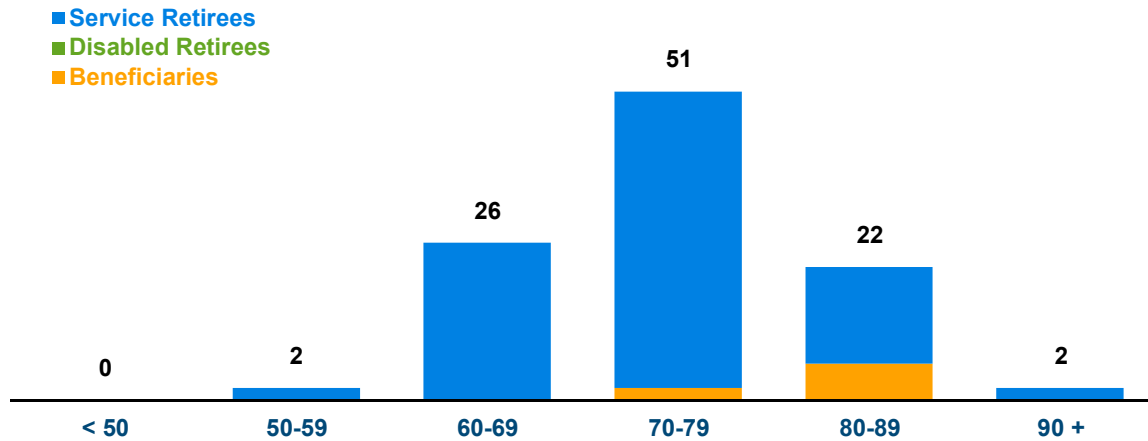
There are three basic categories of plan members included in the valuation: (1) members who are receiving monthly pension benefits, (2) former employees who have a vested right to benefits but have not yet started collecting, and (3) active employees who have met the eligibility requirements for membership.



Members in Pay Status on July 1, 2020

Service Retirees	95	Average Age	74.4
Disabled Retirees	0	Total Annual Benefit	\$2,042,471
Beneficiaries	8	Average Annual Benefit	19,830
Total	103		

The members in pay status fall across a wide distribution of ages:



Section I - Executive Summary Membership (continued)

Terminated Vested Members on July 1, 2020

Count	41
Average Age	54.6
Total Annual Benefit	\$472,412
Average Annual Benefit	11,522

Nonvested Members Due Refunds on July 1, 2020

Count	9
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Active Members on July 1, 2020

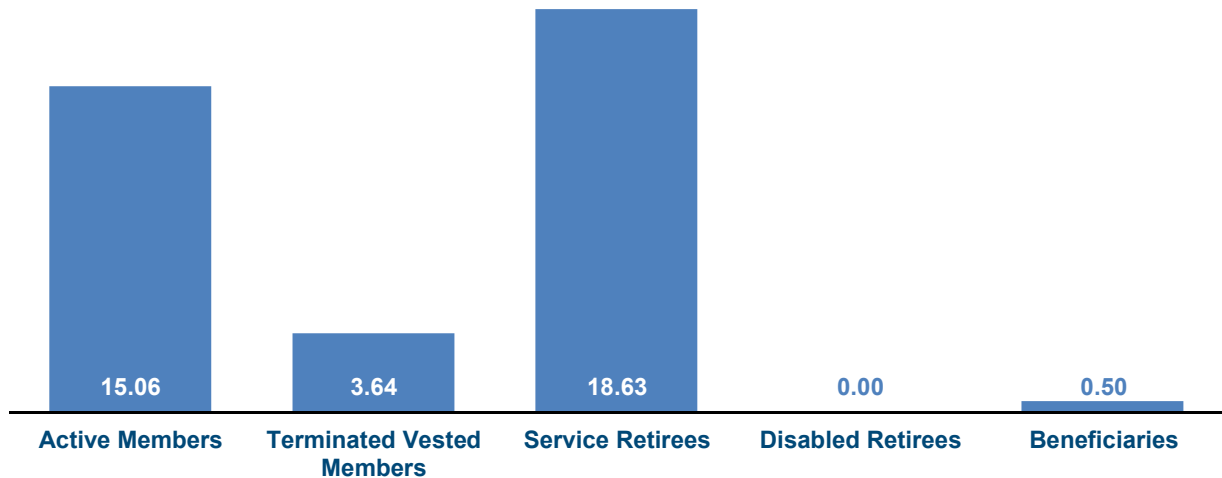
Count	83
Average Age	51.1
Average Service	15.0
Payroll	\$6,597,800
Average Payroll	79,492

The table below illustrates the age and years of service of the active membership:

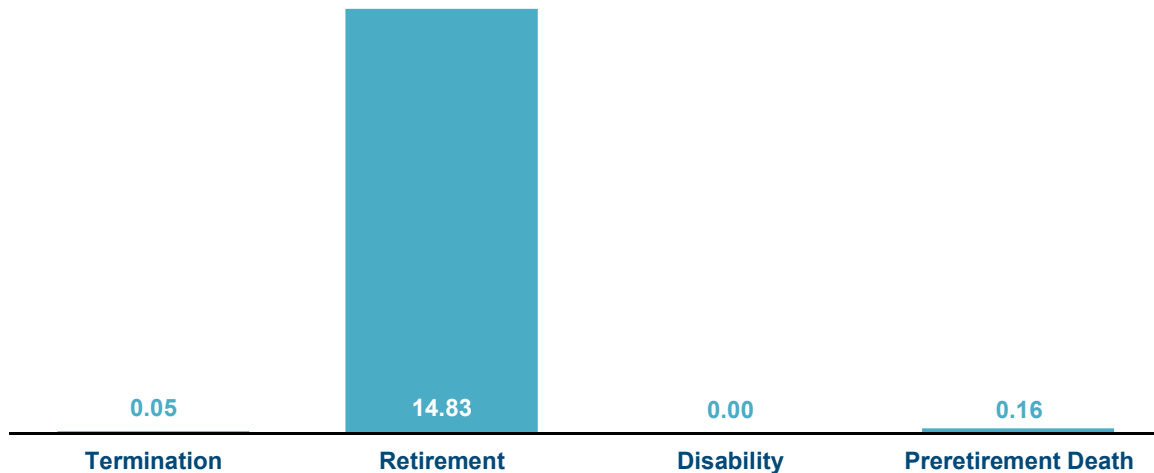
Age	Years of Service							Total
	0-4	5-9	10-14	15-19	20-24	25-29	30+	
< 25								0
25-29	2							2
30-34	5	2						7
35-39	3	2	1					6
40-44	1	1	1					3
45-49	1	4	6	1	1			13
50-54		7	4	3	1	2		17
55-59	1	2	3	3	1		5	15
60-64			3	2	2	3	5	15
65+		1		2	2			5
Total	13	19	18	11	7	5	10	83

Section I - Executive Summary Accrued Liability

The Accrued Liability as of July 1, 2020 equals \$37,822,556, which consists of the following pieces:



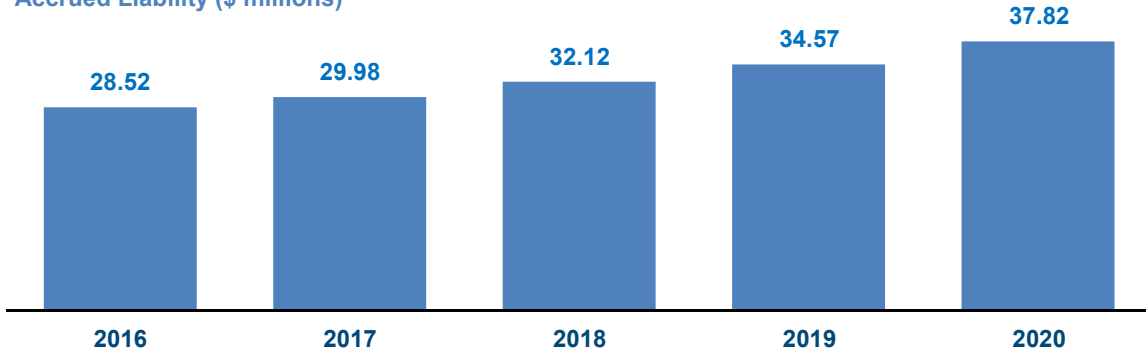
The Accrued Liability for active members can be broken down further by the different types of benefits provided by the plan:



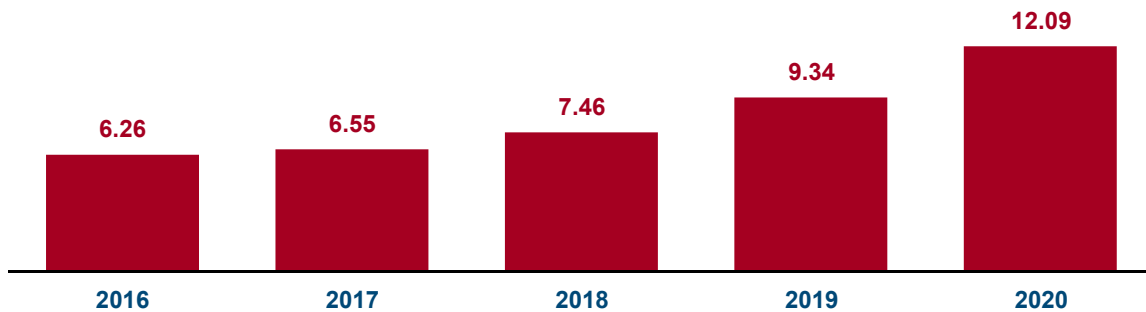
Section I - Executive Summary Funded Status

The Accrued Liability grows over time as active members earn additional benefits, and goes down over time as members receive benefits; it may also change when there are changes to the plan provisions or changes in the actuarial assumptions. The Unfunded Accrued Liability is the dollar difference between the Accrued Liability and the Actuarial Value of Assets; the Funded Ratio is the ratio of the two.

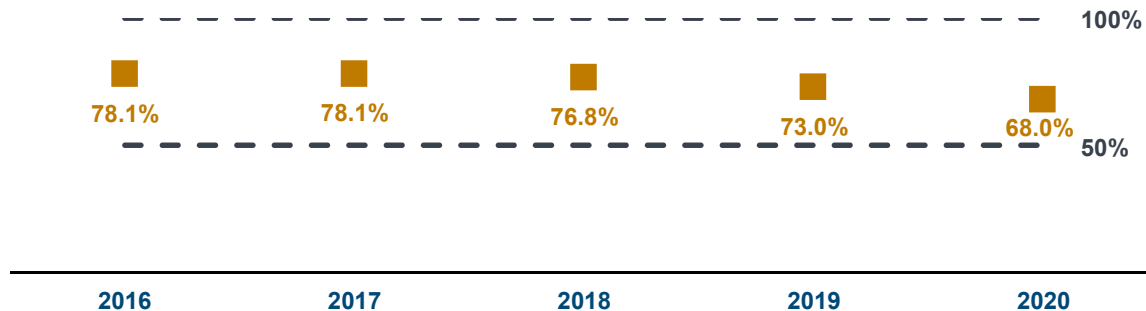
Accrued Liability (\$ millions)



Unfunded Accrued Liability (\$ millions)



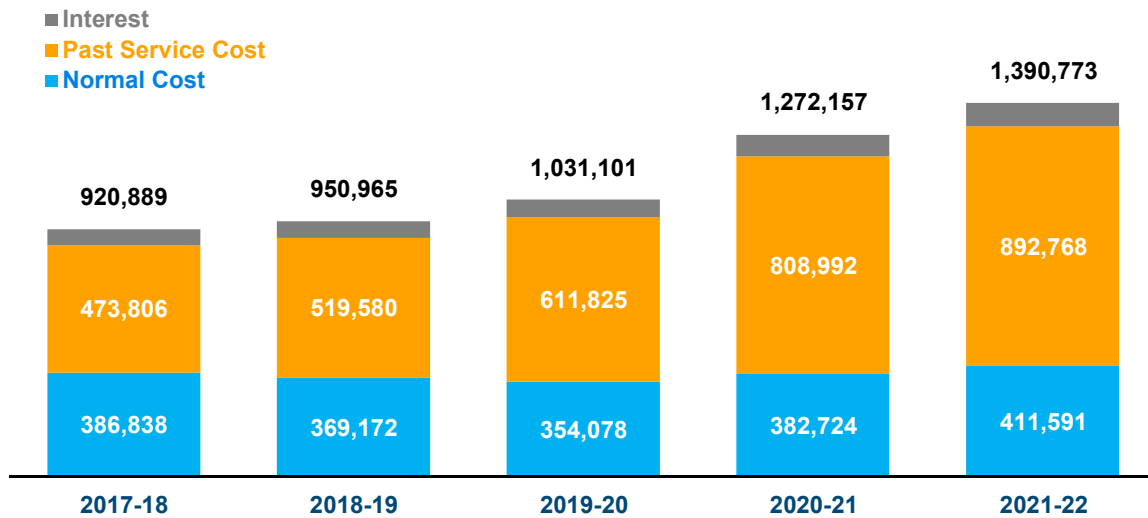
Funded Ratio



Section I - Executive Summary Actuarially Determined Contribution

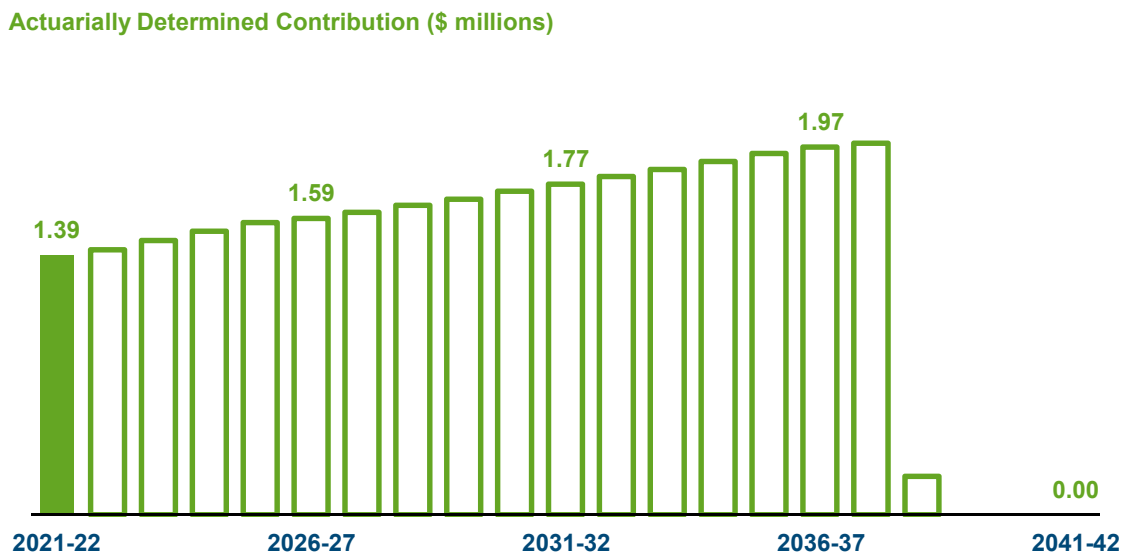
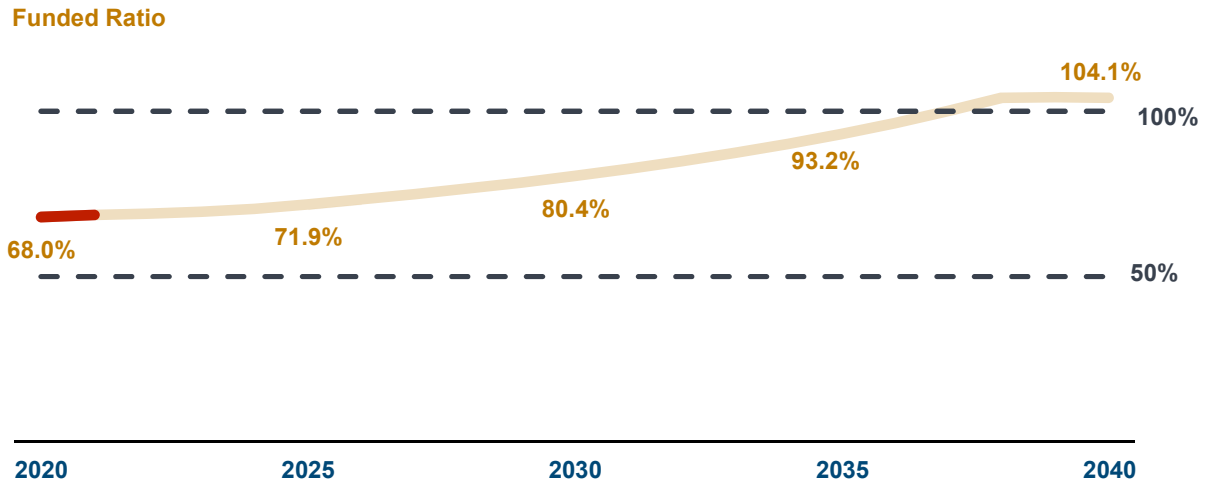
The Actuarially Determined Contribution consists of three pieces: a Normal Cost payment to fund the benefits earned each year, a Past Service Cost to gradually reduce any unfunded or surplus liability, and Interest to reflect the timing of the contribution relative to the valuation date.

The Actuarially Determined Contribution for fiscal year 2021-22 is shown graphically below, along with the comparable figures for the preceding four fiscal years. Note that the Normal Cost is relatively consistent from year to year, whereas the Past Service Cost tends to be more volatile since it reflects the impact of asset performance.



Section I - Executive Summary Long-Range Forecast

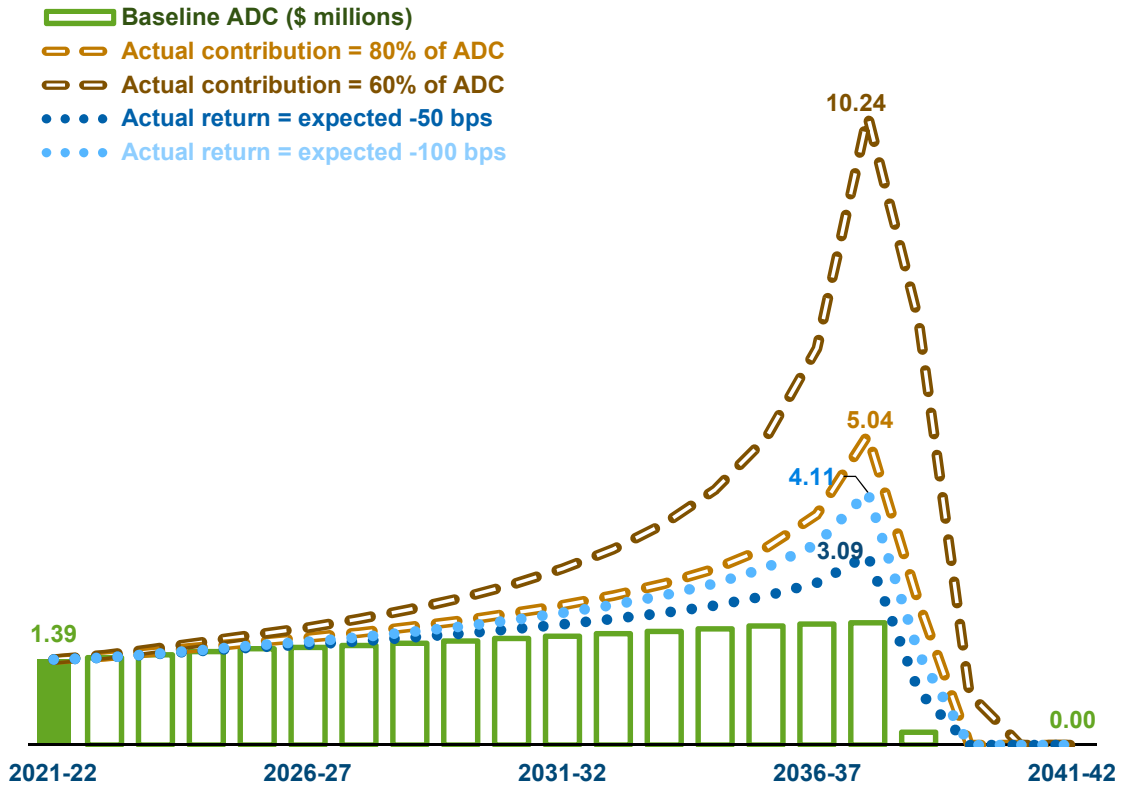
If the Town pays the Actuarially Determined Contribution each year, the investments earn exactly the assumed interest rate each year, and there are no changes in the plan provisions or in the actuarial methods and assumptions, then we project the following changes in the plan's funded status and the long-range contribution levels:



To the extent that there are future investment or liability gains or losses, changes in the actuarial assumptions or methods, or plan changes, the actual valuation results will differ from these forecasts. Please see Section III C for more details of the long range forecast.

Section I - Executive Summary Long-Range Forecast (continued)

Pension benefits are paid for through a combination of contributions from the Town and from employees, and from investment income. If the Town pays less than the Actuarially Determined Contribution each year, or if the investments persistently earn less than the assumed interest rate, then the plan's funded status would suffer, and to compensate, the Town's contribution levels would be pushed higher. The risks of underfunding and underearning are illustrated in the hypothetical scenarios below:



The scenarios illustrated above are based on deterministic projections that assume emerging plan experience always exactly matches the actuarial assumptions; in particular that actual asset returns will be constant in every year of the projection period. Variation in asset returns, contribution amounts, and many other factors may have a significant impact on the long-term financial health of the plan, the liquidity constraints on plan assets, and the Town's future contribution levels. Stochastic projections could be prepared that would enable the Town to understand the potential range of future results based on the expected variability in asset returns and other factors. Such analysis was beyond the scope of this engagement.

Section I - Executive Summary Summary of Principal Results

Membership as of	July 1, 2019	July 1, 2020
Active Members	88	83
Terminated Members	53	50
Members in Pay Status	<u>102</u>	<u>103</u>
Total Count	243	236
Payroll	\$6,859,123	\$6,597,800
Assets and Liabilities as of	July 1, 2019	July 1, 2020
Market Value of Assets	\$24,955,570	\$24,914,721
Actuarial Value of Assets	25,236,776	25,732,187
Accrued Liability for Active Members	13,608,401	15,055,941
Accrued Liability for Terminated Members	3,420,982	3,638,595
Accrued Liability for Members in Pay Status	<u>17,543,395</u>	<u>19,128,020</u>
Total Accrued Liability	34,572,778	37,822,556
Unfunded Accrued Liability	9,336,002	12,090,369
Funded Ratio	73.0%	68.0%
Actuarially Determined Contribution for Fiscal Year	2020-21	2021-22
Normal Cost	\$382,724	\$411,591
Past Service Cost	808,992	892,768
Interest	<u>80,441</u>	<u>86,414</u>
Actuarially Determined Contribution	1,272,157	1,390,773
Actuarially Determined Contribution by Group		
WPCA	\$131,352	\$153,006
Parks and Recreation	240,673	263,768
All Others	<u>900,132</u>	<u>973,999</u>
Total	1,272,157	1,390,773

Section II - Plan Assets

A. Summary of Fund Transactions

Market Value as of July 1, 2019 \$24,955,570

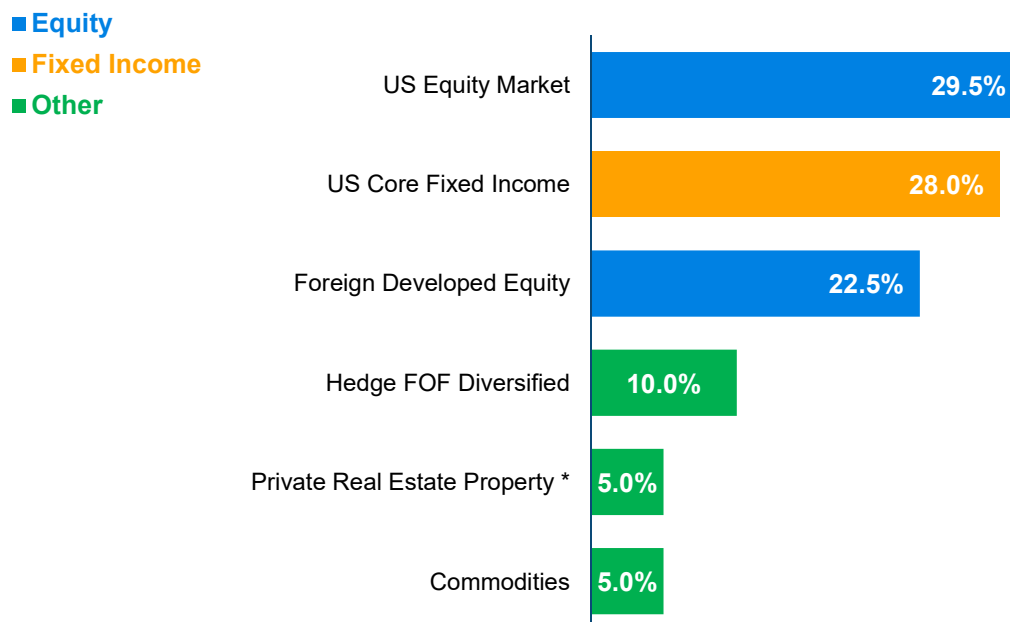
Town Contributions	1,031,101
Member Contributions	326,518
Net Investment Income	755,523
Benefit Payments	(2,104,246)
Administrative Expenses	(49,745)

Market Value as of June 30, 2020 24,914,721

Expected Return on Market Value of Assets	1,655,773
Market Value (Gain)/Loss	900,250
Approximate Rate of Return *	3.08%

* The rate shown here is not the dollar or time weighted investment yield rate which measures investment performance. It is an approximate net return assuming all activity occurred on average midway through the fiscal year.

Target Asset Allocation as of June 30, 2020



Section II - Plan Assets

B. Development of Actuarial Value of Assets

In order to minimize the impact of market fluctuations on the contribution level, we use an Actuarial Value of Assets that recognizes gains and losses in equal installments ('non-asymptotically') over a five year period. The Actuarial Value of Assets as of July 1, 2020 is determined below.

1.	Expected Market Value of Assets:		
	a. Market Value of Assets as of July 1, 2019		\$24,955,570
	b. Town and Member Contributions		1,357,619
	c. Benefit Payments and Administrative Expenses		(2,153,991)
	d. Expected Earnings Based on 6.75% Interest		<u>1,655,773</u>
	e. Expected Market Value of Assets as of July 1, 2020		25,814,971
2.	Actual Market Value of Assets as of July 1, 2020		24,914,721
3.	Market Value (Gain)/Loss: (1e) - (2)		900,250
4.	Delayed Recognition of Market (Gains)/Losses		
		Percent Not	Amount Not
	Plan Year End	(Gain)/Loss	Recognized
	06/30/2020	\$900,250	80%
	06/30/2019	443,560	60%
	06/30/2018	127,211	40%
	06/30/2017	(1,098,768)	20%
			<u>(219,754)</u>
			817,466
5.	Actuarial Value of Assets as of July 1, 2020: (2) + (4)		25,732,187
6.	Return on Actuarial Value of Assets		1,291,783
7.	Approximate Rate of Return on Actuarial Value of Assets		5.20%
8.	Actuarial Value (Gain)/Loss		385,051

Section III - Development of Contribution

A. Past Service Cost

In determining the Past Service Cost, the Unfunded Accrued Liability is amortized as a level percent over a closed 17 year period starting on July 1, 2020.

	July 1, 2019	July 1, 2020
1. Accrued Liability		
Active Members	\$13,608,401	\$15,055,941
Terminated Members	3,420,982	3,638,595
Service Retirees	17,135,378	18,627,117
Disabled Retirees	0	0
Beneficiaries	<u>408,017</u>	<u>500,903</u>
Total Accrued Liability	34,572,778	37,822,556
2. Actuarial Value of Assets (see Section IIB)	25,236,776	25,732,187
3. Unfunded Accrued Liability: (1) - (2)	9,336,002	12,090,369
4. Funded Ratio: (2) / (1)	73.0%	68.0%
5. Amortization Period	14	17
6. Amortization Growth Rate	3.50%	3.50%
7. Past Service Cost: (3) amortized over (5)	808,992	892,768

Section III - Development of Contribution

B. Actuarially Determined Contribution

	2020-21	2021-22
1. Total Normal Cost	\$700,538	\$720,470
2. Expected Member Contributions	378,214	360,079
3. Expected Administrative Expenses	60,400	51,200
4. Net Normal Cost: (1) - (2) + (3)	382,724	411,591
5. Past Service Cost (see Section IIIA)	808,992	892,768
6. Interest on (4) + (5) to the start of the fiscal year	80,441	86,414
7. Actuarially Determined Contribution: (4) + (5) + (6)	1,272,157	1,390,773
8. Payroll		
WPCA	\$708,215	\$725,857
Parks and Recreation	1,297,641	1,251,309
All Others	<u>4,853,267</u>	<u>4,620,633</u>
Total	6,859,123	6,597,800
9. (7) allocated in proportion to (8)		
WPCA	\$131,352	\$153,006
Parks and Recreation	240,673	263,768
All Others	<u>900,132</u>	<u>973,999</u>
Total	1,272,157	1,390,773

Section III - Development of Contribution C. Long Range Forecast

This forecast is based on the results of the July 1, 2020 actuarial valuation and assumes that the Town will pay the Actuarially Determined Contribution each year, the assets will return the assumed interest rate on a market value basis each year, and there are no future changes in the actuarial methods or assumptions or in the plan provisions. For purposes of this forecast the amortization period declines to 1 year to illustrate the progress of the plan towards becoming fully funded; in actual practice the amortization period will not be less than 10 years in order to shield the Town from contribution volatility. Actual results at each point in time will yield different values, reflecting the actual experience of the plan membership and assets.

Valuation Date	Values as of the Valuation Date				Fiscal Year	Cash Flows Projected to the Following Fiscal Year			
	Accrued Liability	Actuarial Value of Assets	Unfunded Accrued Liability	Funded Ratio		Town Contributions	Member Contributions	Benefit Payments	Net Cash Flows
7/1/2020	\$37,822,556	\$25,732,187	\$12,090,369	68.0%	2021-22	\$1,390,773	\$370,644	(\$2,293,485)	(\$532,068)
7/1/2021	38,770,000	26,615,000	12,155,000	68.6%	2022-23	1,419,000	371,000	(2,372,000)	(582,000)
7/1/2022	39,722,000	27,429,000	12,293,000	69.1%	2023-24	1,469,000	371,000	(2,537,000)	(697,000)
7/1/2023	40,637,000	28,291,000	12,346,000	69.6%	2024-25	1,519,000	371,000	(2,659,000)	(769,000)
7/1/2024	41,424,000	29,196,000	12,228,000	70.5%	2025-26	1,565,000	370,000	(2,763,000)	(828,000)
7/1/2025	42,121,000	30,276,000	11,845,000	71.9%	2026-27	1,588,000	370,000	(2,847,000)	(889,000)
7/1/2026	42,736,000	31,365,000	11,371,000	73.4%	2027-28	1,620,000	370,000	(2,933,000)	(943,000)
7/1/2027	43,294,000	32,461,000	10,833,000	75.0%	2028-29	1,658,000	370,000	(3,019,000)	(991,000)
7/1/2028	43,794,000	33,572,000	10,222,000	76.7%	2029-30	1,691,000	370,000	(3,070,000)	(1,009,000)
7/1/2029	44,224,000	34,701,000	9,523,000	78.5%	2030-31	1,732,000	369,000	(3,132,000)	(1,031,000)
7/1/2030	44,624,000	35,890,000	8,734,000	80.4%	2031-32	1,771,000	367,000	(3,194,000)	(1,056,000)
7/1/2031	44,976,000	37,132,000	7,844,000	82.6%	2032-33	1,811,000	366,000	(3,238,000)	(1,061,000)
7/1/2032	45,276,000	38,428,000	6,848,000	84.9%	2033-34	1,849,000	364,000	(3,288,000)	(1,075,000)
7/1/2033	45,537,000	39,801,000	5,736,000	87.4%	2034-35	1,892,000	361,000	(3,365,000)	(1,112,000)
7/1/2034	45,752,000	41,251,000	4,501,000	90.2%	2035-36	1,935,000	356,000	(3,450,000)	(1,159,000)
7/1/2035	45,888,000	42,752,000	3,136,000	93.2%	2036-37	1,969,000	354,000	(3,507,000)	(1,184,000)
7/1/2036	45,923,000	44,302,000	1,621,000	96.5%	2037-38	1,989,000	352,000	(3,575,000)	(1,234,000)
7/1/2037	45,885,000	45,929,000	(44,000)	100.1%	2038-39	205,000	349,000	(3,645,000)	(3,091,000)
7/1/2038	45,759,000	47,613,000	(1,854,000)	104.1%	2039-40	0	349,000	(3,689,000)	(3,340,000)
7/1/2039	45,538,000	47,487,000	(1,949,000)	104.3%	2040-41	0	351,000	(3,704,000)	(3,353,000)

Section III - Development of Contribution
D. History of Funded Status

Valuation Date	Actuarial Value of Assets	Accrued Liability	Unfunded Accrued Liability	Funded Ratio
July 1, 2011	\$16,473,527	\$21,036,448	\$4,562,921	78.3%
July 1, 2012	16,705,634	23,104,691	6,399,057	72.3%
July 1, 2013	17,308,917	24,507,050	7,198,133	70.6%
July 1, 2014	19,467,950	25,670,287	6,202,337	75.8%
July 1, 2015	21,055,298	26,622,799	5,567,501	79.1%
July 1, 2016	22,269,090	28,524,429	6,255,339	78.1%
July 1, 2017	23,425,550	29,980,033	6,554,483	78.1%
July 1, 2018	24,659,243	32,116,754	7,457,511	76.8%
July 1, 2019	25,236,776	34,572,778	9,336,002	73.0%
July 1, 2020	25,732,187	37,822,556	12,090,369	68.0%

Section III - Development of Contribution

E. History of Town Contributions

Fiscal Year	Actuarially Determined Contribution	Actual Town Contribution	Payroll	Actual Contribution as a Percent of Payroll
2012-13	\$714,779	\$779,972	\$5,797,979	13.5%
2013-14	985,089	985,089	6,490,784	15.2%
2014-15 *	1,013,590	1,013,590	6,477,448	15.6%
2015-16	888,277	1,023,393	6,476,467	15.8%
2016-17	877,663	877,664	6,870,896	12.8%
2017-18	920,889	920,889	7,124,309	12.9%
2018-19	950,965	950,965	7,110,117	13.4%
2019-20	1,031,101	1,031,101	6,832,071	15.1%
2020-21	1,272,157	TBD	6,859,123	TBD
2021-22	1,390,773	TBD	6,597,800	TBD

* \$101,337 was held as an accrued contribution at July 1, 2014 and is shown above as a contribution for FYE 2015.

Section IV - Membership Data

A. Reconciliation of Membership from Prior Valuation

Details of the changes in the Plan membership since the last valuation are shown below. Additional details on the Plan membership are provided in the remainder of Section IV.

	Active Members	Terminated Vested Members	Nonvested Members Due Refunds	Service Retirees	Disabled Retirees	Beneficiaries	Total
Count July 1, 2019	88	42	11	94	0	8	243
Terminated							
- no benefits due	-	-	-	-	-	-	0
- paid refund	(2)	-	(2)	-	-	-	(4)
- vested benefits due	(4)	4	-	-	-	-	0
Retired	(1)	(4)	-	5	-	-	0
Died							
- with beneficiary	-	-	-	(1)	-	1	0
- no beneficiary	-	-	-	(3)	-	(1)	(4)
Benefits expired	-	-	-	-	-	-	0
New member	2	-	-	-	-	-	2
Rehired	-	-	-	-	-	-	0
New Alternate Payee	-	-	-	-	-	-	0
Correction	-	(1)	-	-	-	-	(1)
Count July 1, 2020	83	41	9	95	0	8	236

Section IV - Membership Data
B. Statistics of Active Membership

	As of July 1, 2019	As of July 1, 2020
Number of Active Members	88	83
Average Age	49.9	51.1
Average Service	14.0	15.0
Total Payroll	\$6,859,123	\$6,597,800
Average Payroll	77,945	79,492

Section IV - Membership Data

C. Statistics of Inactive Membership

	As of July 1, 2019	As of July 1, 2020
Terminated Vested Members		
Number	42	41
Total Annual Benefit	\$468,189	\$472,412
Average Annual Benefit	11,147	11,522
Average Age	53.1	54.6
Nonvested Members Due Refunds		
Number	11	9
Service Retirees		
Number	94	95
Total Annual Benefit	\$1,915,782	\$1,964,240
Average Annual Benefit	20,381	20,676
Average Age	73.6	73.7
Disabled Retirees		
Number	0	0
Total Annual Benefit	\$0	\$0
Average Annual Benefit	0	0
Average Age	0.0	0.0
Beneficiaries		
Number	8	8
Total Annual Benefit	\$65,530	\$78,231
Average Annual Benefit	8,191	9,779
Average Age	79.9	82.3

Section IV - Membership Data
D. Distribution of Inactive Members as of July 1, 2020

	Age	Number	Annual Benefits
Terminated Vested Members /	< 50	15	\$93,659
Nonvested Members Due Refunds	50 - 59	19	134,322
	60 - 69	14	241,304
	70 - 79	2	3,126
	80 - 89	0	0
	90 +	<u>0</u>	<u>0</u>
	Total	50	472,412
 Service Retirees	< 50	0	\$0
	50 - 59	2	71,724
	60 - 69	26	583,470
	70 - 79	49	834,867
	80 - 89	16	458,844
	90 +	<u>2</u>	<u>15,335</u>
	Total	95	1,964,240
 Disabled Retirees	< 50	0	\$0
	50 - 59	0	0
	60 - 69	0	0
	70 - 79	0	0
	80 - 89	0	0
	90 +	<u>0</u>	<u>0</u>
	Total	0	0
 Beneficiaries	< 50	0	\$0
	50 - 59	0	0
	60 - 69	0	0
	70 - 79	2	12,971
	80 - 89	6	65,260
	90 +	<u>0</u>	<u>0</u>
	Total	8	78,231

Section V - Analysis of Risk

A. Introduction

The results of this actuarial valuation are based on one set of reasonable assumptions. However, it is almost certain that future experience will not exactly match these assumptions. As an example, the plan's investments may perform better or worse than assumed in any single year and over any longer time horizon. It is therefore important to consider the potential impacts of these likely differences when making decisions that may affect the future financial health of the plan, or of the plan's members.

In addition, as plans mature they accumulate larger pools of assets and liabilities. The increase in size in turn increases the potential magnitude of adverse experience. As an example, the dollar impact of a 10% investment loss on a plan with \$1 billion in assets and liabilities is much greater than the dollar impact for a plan with \$1 million in assets and liabilities. Since pension plans make long-term promises and rely on long-term funding, it is important to consider how mature the plan is today, and how mature it may become in the future.

Actuarial Standard of Practice No. 51 (ASOP 51) directs actuaries to provide pension plan sponsors with information concerning the risks associated with the plan:

- Identify risks that may be significant to the plan.
- Assess the risks identified as significant to the plan. The assessment does not need to include numerical calculations.
- Disclose plan maturity measures and historical information that are significant to understanding the plan's risks.

This section of the report uses the framework of ASOP 51 to communicate important information about significant risks to the plan, the plan's maturity, and relevant historical plan data.

Please see Section III C for more information on the basis for the projected results shown on the following pages.

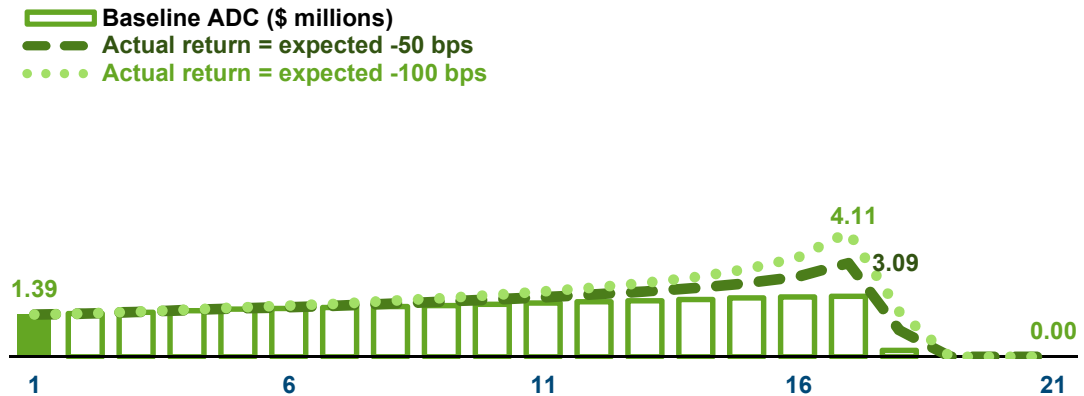
Section V - Analysis of Risk

B. Risk Identification and Assessment

Investment Risk

Definition: This is the potential that investment returns will be different than expected.

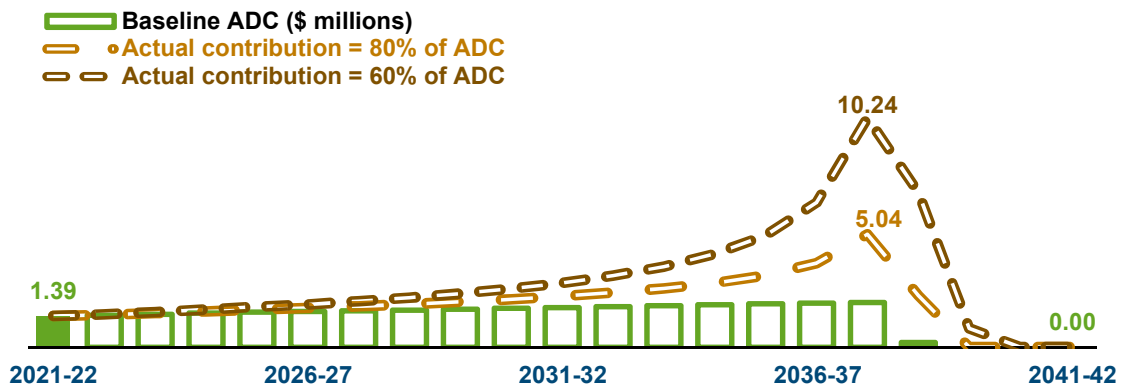
Identification: To the extent that actual investment returns differ from the assumed investment return, the plan's future assets, Actuarially Determined Contributions, and funded status may differ significantly from those presented in this valuation. The consequences of persistent underperformance on future Actuarially Determined Contribution levels are illustrated below:



Contribution Risk

Definition: This is the potential that actual future contributions will be less than the Actuarially Determined Contribution.

Identification: Over the past 8 years, actual contributions have been 102.7% of the Actuarially Determined Contribution in total. The consequences of persistent underfunding on future Actuarially Determined Contribution levels are illustrated below:



Section V - Analysis of Risk

B. Risk Identification and Assessment

Liquidity Risk

Definition: This is the potential that assets must be liquidated at a loss earlier than planned in order to pay for the plan's benefits and operating costs. This risk is heightened for plans with negative cash flows, in which contributions are not sufficient to cover benefit payments plus expenses.

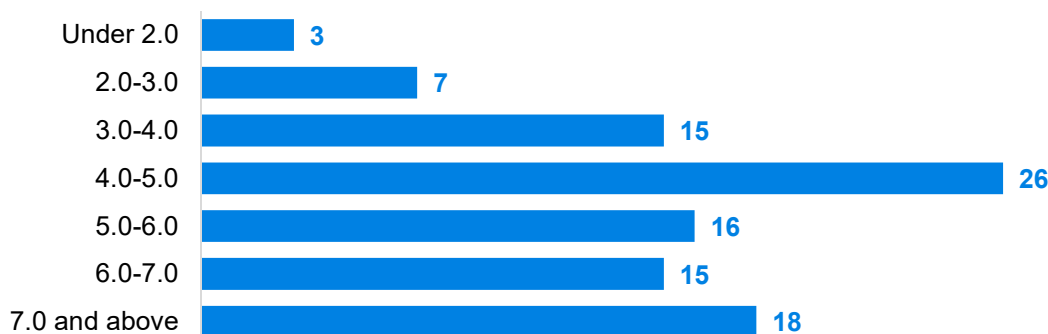
Identification: In 2019-20, the plan had negative cash flow, with town and member contributions to the plan of \$1,357,619 compared to \$2,153,991 of benefit payments and administrative expenses paid out of the plan. We suggest that you consult with your investment advisors with respect to the liquidity characteristics of the plan's investment holdings.

Maturity Risk

Definition: This is the potential for total plan liabilities to become more heavily weighted toward inactive liabilities over time, and for plan assets and/or liabilities to become larger relative to the active member liability.

Identification: The plan is subject to maturity risk because as plan assets and liabilities continue to grow, the dollar impact of any gains or losses on the assets or liabilities also becomes larger.

Assessment: As of July 1, 2020, the plan's Asset Volatility Ratio (the ratio of the market value of plan assets to payroll) is 3.8. According to Milliman's 2020 Public Pension Funding Study, the 100 largest US public pension plans have the following range of Asset Volatility Ratios:



Inflation Risk

Definition: This is the potential for a pension to lose purchasing power over time due to inflation.

Identification: The members of pension plans without fully inflation-indexed benefits are subject to the risk that their purchasing power will be reduced over time due to inflation.

Assessment: This plan does not contain a mechanism to regularly increase benefits after retirement, so members bear all of the inflation risk.

Section V - Analysis of Risk

B. Risk Identification and Assessment

Insolvency Risk

Definition: This is the potential that a plan will become insolvent; that is, assets will be fully depleted.

Identification: If a plan becomes insolvent, contractually required benefits must be paid from the plan sponsor's other remaining assets.

Assessment: Under the GASB 68 depletion date methodology, the plan is not projected to become insolvent. Please see the GASB 68 report for more details on the underlying analysis.

Demographic Risks

Definition: This is the potential that mortality, turnover, retirement, or other demographic experience will be different than expected.

Identification: The pension liabilities reported herein have been calculated by assuming that members will follow patterns of demographic experience as described in Appendix B. If actual demographic experience or future demographic assumptions are different from what is assumed to occur in this valuation, future pension liabilities, Actuarially Determined Contributions, and funded status may differ significantly from those presented in this valuation. Formal Experience Studies performed on a regular basis are helpful in ensuring that the demographic assumptions reflect emerging plan experience.

Retirement Risk

Definition: This is the potential for members to retire and receive subsidized benefits that are more valuable than expected.

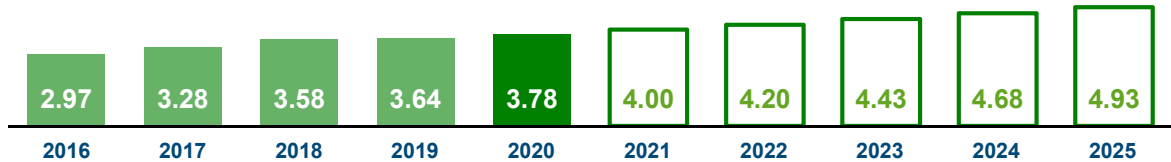
Identification: This plan permits some members to retire with unreduced benefits after 25 years of service. If members retire at earlier ages than are anticipated by the actuarial assumptions, this will put upward pressure on subsequent Actuarially Determined Contributions.

Section V - Analysis of Risk

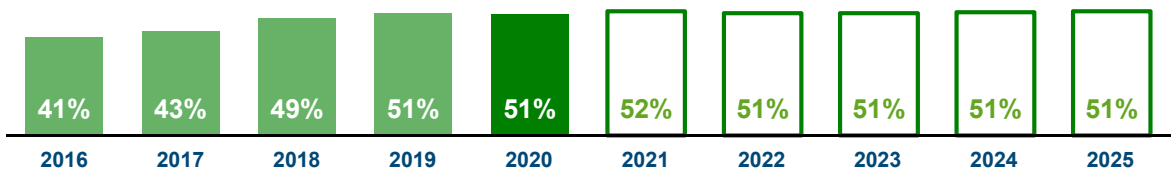
C. Maturity Measures

The metrics presented below are different ways of understanding the plan's maturity level, both in the past and as it is expected to change in the coming years.

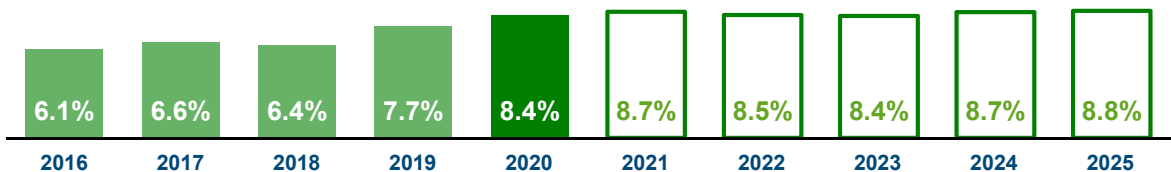
Asset Volatility Ratio: Market Value of Assets compared to Payroll



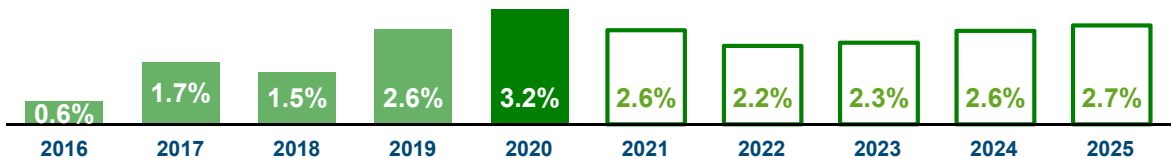
Accrued Liability for members in pay status compared to total Accrued Liability



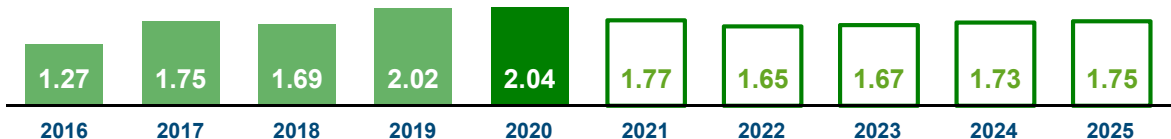
Benefit Payments compared to Market Value of Assets



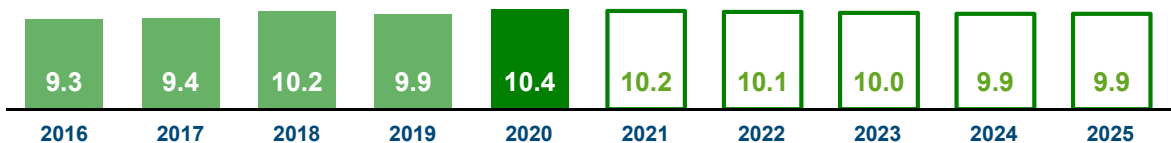
Net Cash Flows compared to Market Value of Assets



Benefit Payments compared to Town Contributions



Duration of Accrued Liability (based on GASB 68 sensitivity disclosures)



Appendix A - Actuarial Funding Method

The actuarial funding method used in the valuation of this Plan is known as the Entry Age Normal Method. The Actuarially Determined Contribution consists of three pieces: Normal Cost plus a Past Service Cost payment to gradually eliminate the Unfunded Accrued Liability plus Interest to reflect the timing of the contribution relative to the valuation date.

The Normal Cost is determined by calculating the present value of future benefits for present active Members that will become payable as the result of death, disability, retirement or termination. This cost is then spread as a level percentage of earnings from entry age to termination as an Active Member. If Normal Costs had been paid at this level for all prior years, a fund would have accumulated. Because this fund represents the portion of benefits that would have been funded to date, it is termed the Accrued Liability. In fact, it is calculated by adding the present value of benefits for Retired Members and Terminated Vested Members to the present value of benefits for Active Members and subtracting the present value of future Normal Cost contributions.

The funding cost of the Plan is derived by making certain specific assumptions as to rates of interest, mortality, turnover, etc. which are assumed to hold for many years into the future. Since actual experience may differ somewhat from the assumptions, the costs determined by the valuation must be regarded as estimates of the true costs of the Plan.

The Unfunded Accrued Liability is the excess of the Accrued Liability over the assets which have been accumulated for the plan. This Unfunded Accrued Liability is amortized as a level percent over a closed 17 year period starting on July 1, 2020. The amortization period will decrease each year until it reaches 10 years, after which point it will remain at 10 years.

The Actuarial Value of Assets is determined by recognizing market gains and losses non-asymptotically over a five year period.

The long-range forecasts included in this report have been developed by assuming that members will terminate, retire, become disabled, and die according to the actuarial assumptions with respect to these causes of decrement, and that pay increases, cost of living adjustments, and so forth will likewise occur according to the actuarial assumptions. For those unions whose new employees are eligible to participate in this plan, members who are projected to leave active employment are assumed to be replaced by new active members with the same age, service, gender, and pay characteristics as those hired in the past few years.

Appendix B - Actuarial Assumptions

Each of the assumptions used in this valuation was set based on industry standard published tables and data, the particular characteristics of the plan, relevant information from the plan sponsor or other sources about future expectations, and our professional judgment regarding future plan experience. We believe the assumptions are reasonable for the contingencies they are measuring, and are not anticipated to produce significant cumulative actuarial gains or losses over the measurement period.

Interest Rate	6.625% (prior: 6.75%)	
Inflation	2.75%	
Amortization Growth Rate	3.50%	
Salary Scale	3.50%	
Pay Adjustments for Open Contracts	Pay amounts for employees covered by bargaining agreements that have expired have been adjusted to reflect the anticipated contractual pay increase using pay rates supplied by the Town.	
Expenses	Administrative expenses paid in the prior year, increased by 3% and rounded to the nearest \$100.	
Turnover	Service	Rate
	0-4	4.25%
	5-8	3.25%
	9-11	3.00%
	>11	2.50%
Mortality	<p>Current: PubG-2010 Mortality Table with generational projection per the MP-2019 ultimate scale, with employee rates before benefit commencement and healthy or disabled annuitant rates after benefit commencement. This assumption includes a margin for improvements in longevity beyond the valuation date.</p> <p>Prior: RP-2000 Mortality Tables for employees, healthy annuitants and disabled annuitants, with generational projection of future mortality improvements per Scale AA. This assumption includes a margin for improvements in longevity beyond the valuation date.</p>	
Marital Status	90% of male members and 60% of female members are assumed to be married with wives 3 years younger than husbands.	

Appendix B - Actuarial Assumptions

Retirement	Age	Rate
	55-61	2.5%
	62	20%
	63	8%
	64	15%
	65	25%
	66-69	40%
	70	100%

Appendix C - Summary of Plan Provisions

This exhibit summarizes the major provisions of the Plan. It is not intended to be, nor should it be interpreted as a complete statement of all plan provisions. All eligibility requirements and benefit amounts shall be determined in strict accordance with the plan document itself. To the extent that this summary does not accurately reflect the plan provisions, then the results of this valuation may not be accurate.

Eligibility	Any individual in the employ of the Town of Simsbury whose customary employment is at least 32½ hours per week on a regular schedule, excluding police, those individuals covered by the State Teachers Retirement Plan or the Town of Simsbury Board of Education Retirement Income Plan. Public Works employees hired after October 18, 2016 and Dispatchers hired after December 12, 2016 will not be covered by this plan.
Credited Service	Whole years and full months from date of participation, but not greater than 30 years.
Compensation	Basic Compensation excluding overtime, commissions, bonuses, and any other form of additional compensation.
Final Average Compensation	Average Earnings paid to a member during the highest 5 consecutive years out of the last 10 years of active employment.
Normal Retirement Date	Age 62 or 25 years of Credited Service for Dispatchers. Age 65 with 5 years of Credited Service for employees other than Dispatchers.
Normal Retirement Benefit	2% of Final Average Compensation times Credited Service for union members. 2.5% of Final Average Compensation times Credited Service for unaffiliated members.
Early Retirement Date	Earlier of age 55 and 5 years of Credited Service. Dispatchers may retire without an early retirement penalty at age 62 or when their age plus service are equal to 85.
Early Retirement Benefit	Benefit is based on Credited Service and Final Average Compensation to actual retirement date reduced by ⅓ of 1% for each month by which the participant's retirement date precedes Normal Retirement Date.
Deferred Retirement Date	Members may continue to work beyond Normal Retirement.

Appendix C - Summary of Plan Provisions

Deferred Retirement Benefit	Benefit based on Credited Service and Final Average Compensation to actual date of retirement.
Death Benefits Before Retirement	A monthly survivors benefit payable on behalf of an employee who has attained age 55 and completed 5 years of Credited Service, and who has a surviving spouse to whom he has been married at least one year. The benefit will be 100% of the monthly retirement benefit which such employee would have received had he retired on the day before he died and elected a 50% Joint & Survivor Annuity. The benefit is reduced by 50% after 5 years.
Death Benefits After Retirement	Based on form of benefit elected at retirement.
Vesting	100% vested after completion of 5 years of Credited Service.
Termination Benefit Pre-Retirement	Refund of Employee Contributions with interest to date of termination.
Termination Benefit Post-Retirement	On or after Normal Retirement Date but prior to annuity commencement date: Annuity payments to the beneficiary for the five year period commencing on the first of the month following the member's death.
Employee Contributions	Dispatchers and CSEA hired before 8/12/2013: Prior to 7/1/2013: 2.0% 7/1/2013: 2.5% 7/1/2014: 3.0% 7/1/2015: 3.5% 7/1/2016: 4.0% 7/1/2017: 4.5% 7/1/2018: 5.0% Public Works hired before 8/12/2013: Prior to 9/1/2013: 2.0% 9/1/2013: 2.5% 9/1/2014: 3.0% 9/1/2015: 3.5% 7/1/2016: 4.0% 7/1/2017: 4.5% 7/1/2018: 5.0% Unaffiliated employees hired before 8/12/2013: 5.0% All employees hired on or after 8/12/2013: 10.0% No contributions after Normal Retirement Date. Interest is credited at 5% per year.

Appendix D - Glossary

Actuarial Cost Method - This is a procedure for determining the Actuarial Present Value of Benefits and allocating it to time periods to produce the Actuarial Accrued Liability and the Normal Cost.

Accrued Liability - This is the portion of the Actuarial Present Value of Benefits attributable to periods prior to the valuation date by the Actuarial Cost Method (i.e., that portion not provided by future Normal Costs).

Actuarial Assumptions - With any valuation of future benefits, assumptions of anticipated future events are required. If actual events differ from the assumptions made, the actual cost of the plan will vary as well. Some examples of key assumptions include the interest rate, salary scale, and rates of mortality, turnover and retirement.

Actuarial Present Value of Benefits - This is the present value, as of the valuation date, of future payments for benefits and expenses under the Plan, where each payment is: a) multiplied by the probability of the event occurring on which the payment is conditioned, such as the probability of survival, death, disability, termination of employment, etc.; and b) discounted at the assumed interest rate.

Actuarial Value of Assets - This is the value of cash, investments and other property belonging to the plan, typically adjusted to recognize investment gains or losses over a period of years to dampen the impact of market volatility on the Actuarially Determined Contribution.

Actuarially Determined Contribution (“ADC”) - This is the employer’s periodic contributions to a defined benefit plan, calculated in accordance with actuarial standards of practice.

Attribution Period - The period of an employee’s service to which the expected benefit obligation for that employee is assigned. The beginning of the attribution period is the employee’s date of hire and costs are spread across all employment.

Interest Rate - This is the long-term expected rate of return on any investments set aside to pay for the benefits. In a financial reporting context (e.g., GASB 68) this is termed the Discount Rate.

Normal Cost - This is the portion of the Actuarial Present Value of Benefits allocated to a valuation year by the Actuarial Cost Method.

Past Service Cost - This is a catch-up payment to fund the Unfunded Accrued Liability over time (generally 10 to 30 years). A closed amortization period is a specific number of years counted from one date and reducing to zero with the passage of time; an open amortization period is one that begins again or is recalculated at each valuation date. Also known as the Amortization Payment.

Return on Plan Assets - This is the actual investment return on plan assets during the fiscal year.

Unfunded Accrued Liability - This is the excess of the Accrued Liability over the Actuarial Value of Assets.



**TOWN OF SIMSBURY
POLICE RETIREMENT INCOME PLAN**

**Actuarial Valuation as of July 1, 2020
To Determine Funding for Fiscal Year 2021-22**

Prepared by

Jennifer M. Castelhana, FSA
Consulting Actuary

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Certification

We have performed an actuarial valuation of the Plan as of July 1, 2020 to determine funding for fiscal year 2021-22. This report presents the results of our valuation.

The ultimate cost of a pension plan is the total amount needed to provide benefits for plan members and beneficiaries and to pay the expenses of administering the plan. Pension costs are met by contributions and by investment return on plan assets. The principal purpose of this report is to set forth an actuarial recommendation of the contribution, or range of contributions, which will properly fund the plan, in accordance with applicable government regulations. In addition, this report provides:

- A valuation of plan assets and liabilities to review the year-to-year progress of funding.
- Information needed to meet disclosure requirements.
- Review of plan experience for the previous year to ascertain whether the assumptions and methods employed for valuation purposes are reflective of actual events and remain appropriate for prospective application.
- Assessment of the relative funded position of the plan, i.e., through a comparison of plan assets and projected plan liabilities.
- Comments on any other matters which may be of assistance in the funding and operation of the plan.

This report may not be used for purposes other than those listed above without Milliman's prior written consent. If this report is distributed to other parties, it must be copied in its entirety, including this certification section.

Milliman's work is prepared solely for the internal business use of the Town of Simsbury ("Town"). To the extent that Milliman's work is not subject to disclosure under applicable public records laws, Milliman's work may not be provided to third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of its work product. Milliman's consent to release its work product to any third party may be conditioned on the third party signing a Release, subject to the following exceptions: (a) the Town may provide a copy of Milliman's work, in its entirety, to the Town's professional service advisors who are subject to a duty of confidentiality and who agree to not use Milliman's work for any purpose other than to benefit the Town; and (b) the Town may provide a copy of Milliman's work, in its entirety, to other governmental entities, as required by law. No third party recipient of Milliman's work product should rely upon Milliman's work product. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

In preparing this report, we relied on employee census data and financial information as of the valuation date, furnished by the Town. We performed a limited review of the data used directly in our analysis for reasonableness and consistency and have found them to be reasonably consistent and comparable with data used for other purposes. If the underlying data or information is inaccurate or incomplete, the results of our analysis may likewise be inaccurate or incomplete and our calculations may need to be revised. If there are material defects in the data, it is possible that they would be uncovered by a detailed, systematic review and comparison of the data to search for data values that are questionable or for relationships that are materially inconsistent. Such a review was beyond the scope of our assignment.

Certification


The calculations reported herein have been made on a basis consistent with our understanding of ERISA and the related sections of the tax code. Additional determinations may be needed for purposes other than meeting funding requirements, such as judging benefit security at plan termination or meeting employer accounting requirements. On the basis of the foregoing, we hereby certify that, to the best of our knowledge, this report is complete and accurate and all costs and liabilities were determined in conformance with generally accepted actuarial principles and practices.

The valuation results were developed using models intended for valuations that use standard actuarial techniques. In addition to the models described previously, Milliman has developed certain models to develop the expected long term rate of return on assets used in this analysis. We have reviewed the models, including their inputs, calculations, and outputs for consistency, reasonableness, and appropriateness to the intended purpose and in compliance with generally accepted actuarial practice and relevant actuarial standards of practice (ASOP). The models, including all input, calculations, and output may not be appropriate for any other purpose.

We further certify that, in our opinion, each actuarial assumption, method and technique used is reasonable taking into account the experience of the Plan and reasonable expectations. Future actuarial measurements may differ significantly from the current measurements presented in this report due to factors such as, but not limited to, the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Due to the limited scope of the actuarial assignment, we did not perform an analysis of the potential range of such future measurement.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

We are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.



Jennifer M. Castelhana, FSA
Consulting Actuary

Section I - Executive Summary Changes Since the Prior Valuation

Plan Changes

None.

Changes in Actuarial Methods and Assumptions

The Mortality Table was changed from RP-2000 Combined Healthy Mortality Tables with separate tables for Males and Females with generational projection of future mortality improvements per Scale AA to the PubS-2010 Mortality Table with generational projection per the MP-2019 ultimate scale, with employee rates before benefit commencement and healthy or disabled annuitant rates after benefit commencement.

In order to better anticipate future plan experience, we lowered the investment return assumption from 6.75% to 6.625%. Additionally, we reset the amortization period to 17 years.

These changes in combination increased the Unfunded Accrued Liability by about \$958,000 and increased the Actuarially Determined Contribution by about \$31,000.

Other Significant Changes

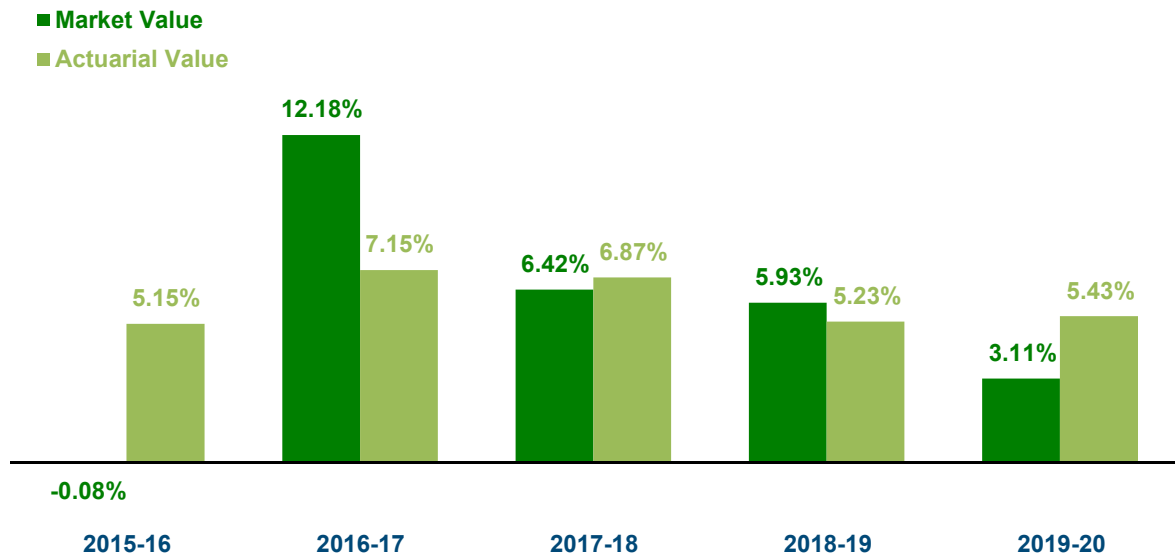
Non

Section I - Executive Summary Assets

There are two different measures of the plan's assets that are used throughout this report. The Market Value is a snapshot of the plan's investments as of the valuation date. The Actuarial Value is a smoothed asset value designed to temper the volatile fluctuations in the market by recognizing investment gains or losses non-asymptotically over five years.

	Market	Actuarial
Value as of July 1, 2019	\$17,688,088	\$17,758,277
Town and Member Contributions	946,476	946,476
Investment Income	547,467	959,662
Benefit Payments and Administrative Expenses	(1,144,872)	(1,144,872)
Value as of July 1, 2020	18,037,159	18,519,543

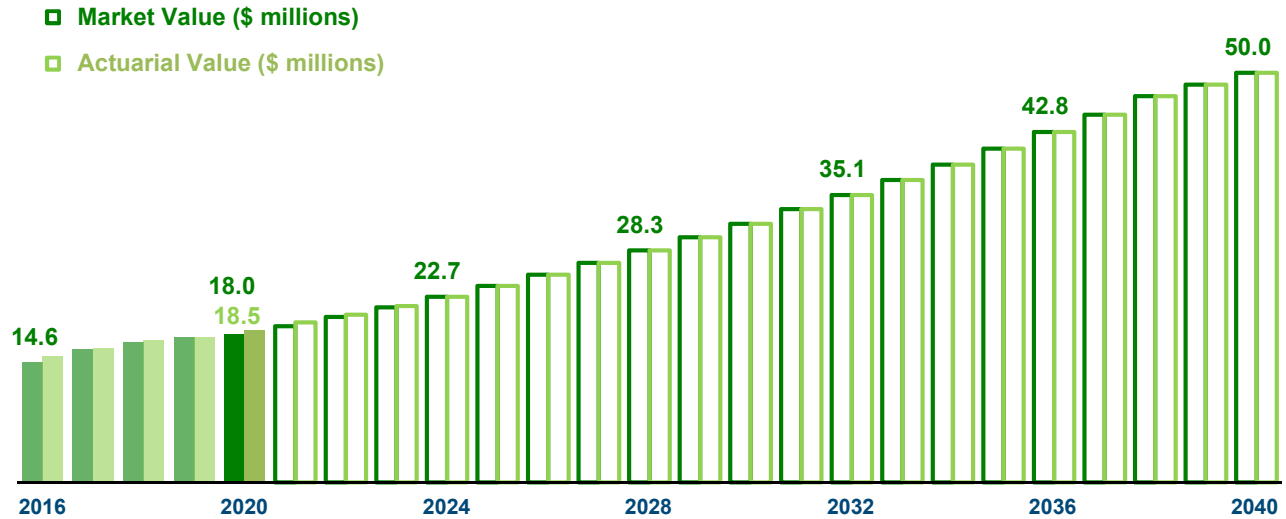
For fiscal year 2019-20, the plan's assets earned 3.11% on a Market Value basis and 5.43% on an Actuarial Value basis. The actuarial assumption for this period was 6.75%; the result is an asset loss of about \$641,000 on a Market Value basis and a loss of about \$233,000 on an Actuarial Value basis. Historical rates of return are shown in the graph below.



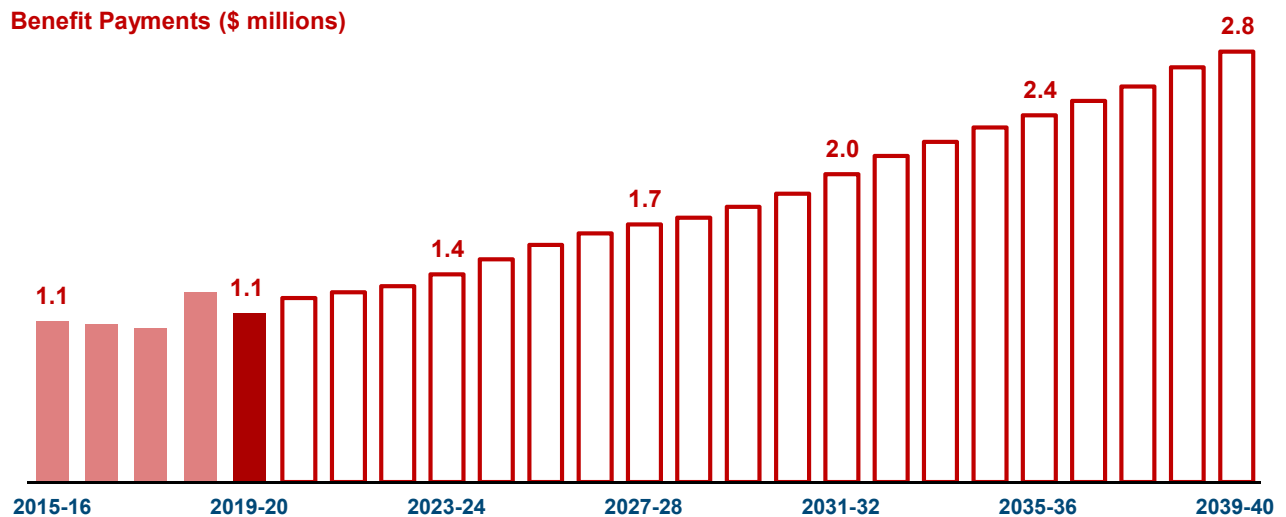
Please note that the Actuarial Value currently exceeds the Market Value by \$482,000. This figure represents investment losses that will be gradually recognized in future years. This process will exert upward pressure on the Town's contribution, unless there are offsetting market gains.

Section I - Executive Summary Assets (continued)

The graph below shows how this year's asset values compare to where the plan's assets have been over the past several years and how they are projected to change over the next 20 years. For purposes of this projection, we have assumed that the Town always contributes the Actuarially Determined Contribution and the investments always earn the assumed interest rate each year.

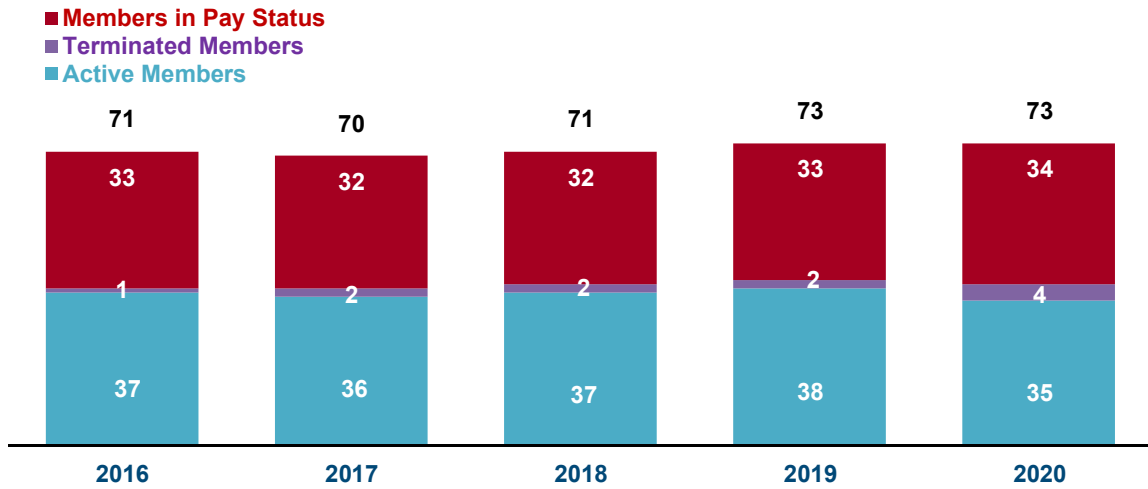


In 2019-20, the plan paid out \$1.1 million in benefits to members. Over the next 20 years, the plan is projected to pay out a total of \$39 million in benefits to members.



Section I - Executive Summary Membership

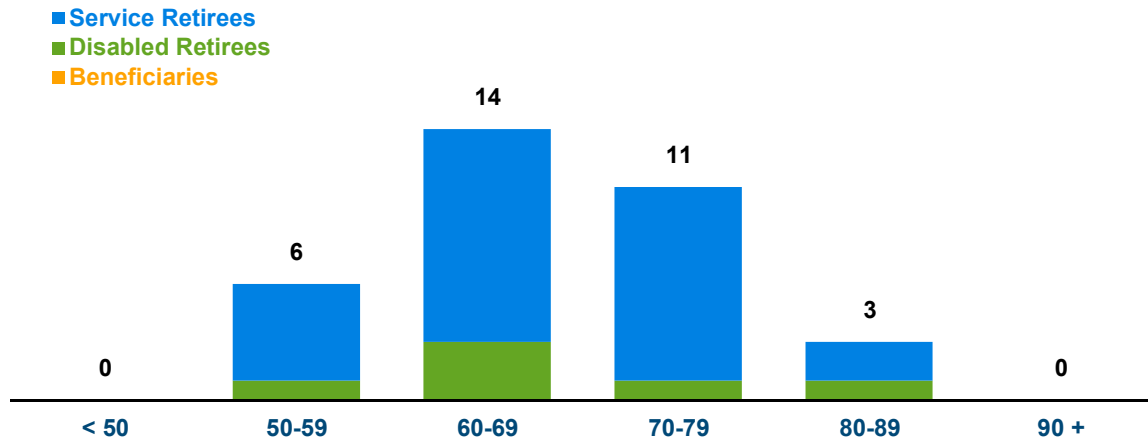
There are three basic categories of plan members included in the valuation: (1) members who are receiving monthly pension benefits, (2) former employees who have a vested right to benefits but have not yet started collecting, and (3) active employees who have met the eligibility requirements for membership.



Members in Pay Status on July 1, 2020

Service Retirees	28	Average Age	68.3
Disabled Retirees	0	Total Annual Benefit	\$1,125,751
Beneficiaries	<u>6</u>	Average Annual Benefit	33,110
Total	34		

The members in pay status fall across a wide distribution of ages:



Section I - Executive Summary Membership (continued)

Terminated Vested Members on July 1, 2020

Count	3
Average Age	38.4
Total Annual Benefit	\$85,958
Average Annual Benefit	28,653

Nonvested Members Due Refunds on July 1, 2020

Count	1
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Active Members on July 1, 2020

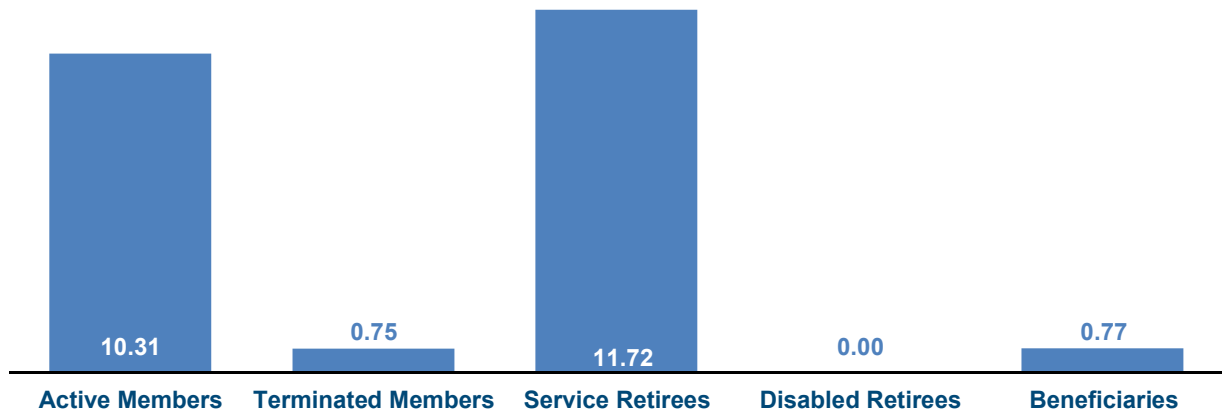
Count	35
Average Age	41.8
Average Service	12.1
Payroll	\$3,834,513
Average Payroll	109,558

The table below illustrates the age and years of service of the active membership:

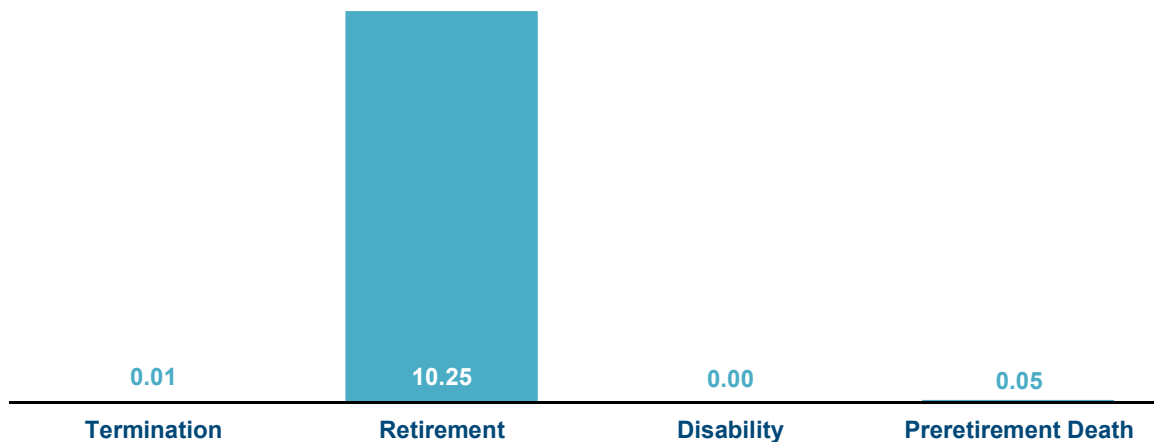
Age	Years of Service							Total
	0-4	5-9	10-14	15-19	20-24	25-29	30+	
< 25								0
25-29	3	1						4
30-34	1	2						3
35-39	2	3	3	1				9
40-44	1	3	1	1	1			7
45-49				1	3	1		5
50-54			2	1	3			6
55-59								0
60-64								0
65+				1				1
Total	7	9	6	5	7	1	0	35

Section I - Executive Summary Accrued Liability

The Accrued Liability as of July 1, 2020 equals \$23,551,191, which consists of the following pieces (in \$ millions):



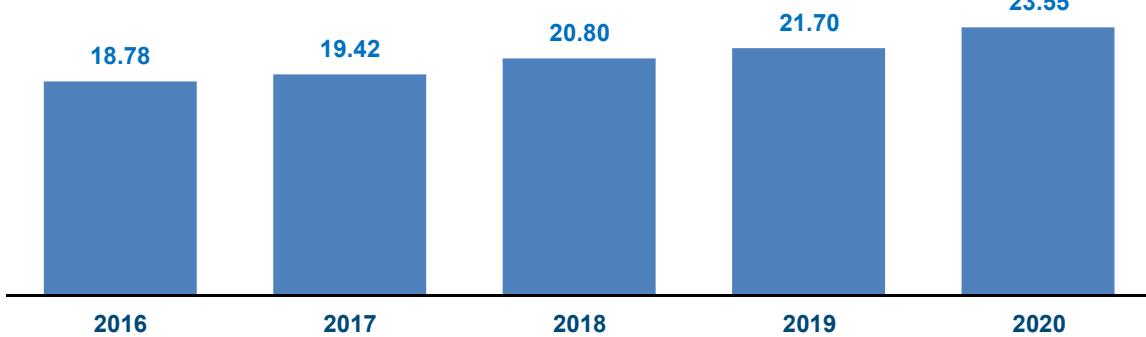
The Accrued Liability for active members can be broken down further by the different types of benefits provided by the plan:



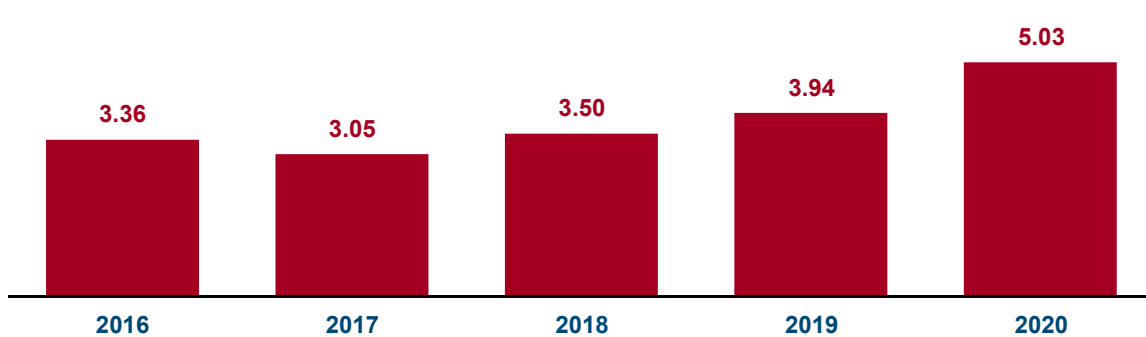
Section I - Executive Summary Funded Status

The Accrued Liability grows over time as active members earn additional benefits, and goes down over time as members receive benefits; it may also change when there are changes to the plan provisions or changes in the actuarial assumptions. The Unfunded Accrued Liability is the dollar difference between the Accrued Liability and the Actuarial Value of Assets; the Funded Ratio is the ratio of the two.

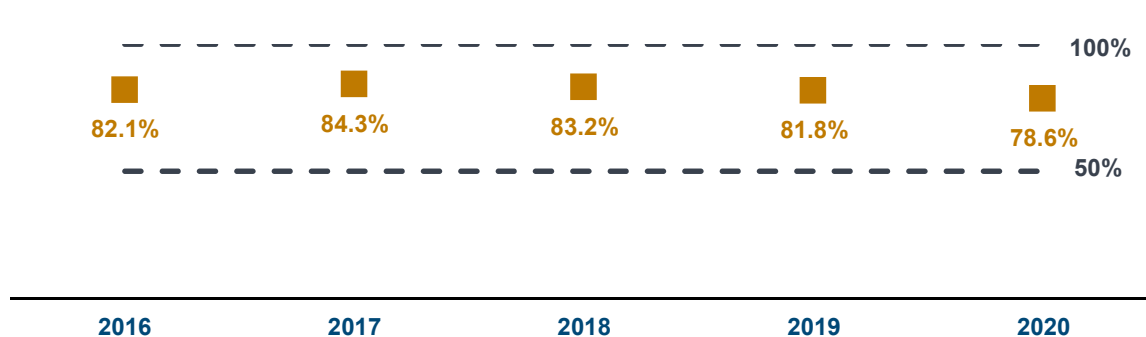
Accrued Liability (\$ millions)



Unfunded Accrued Liability (\$ millions)



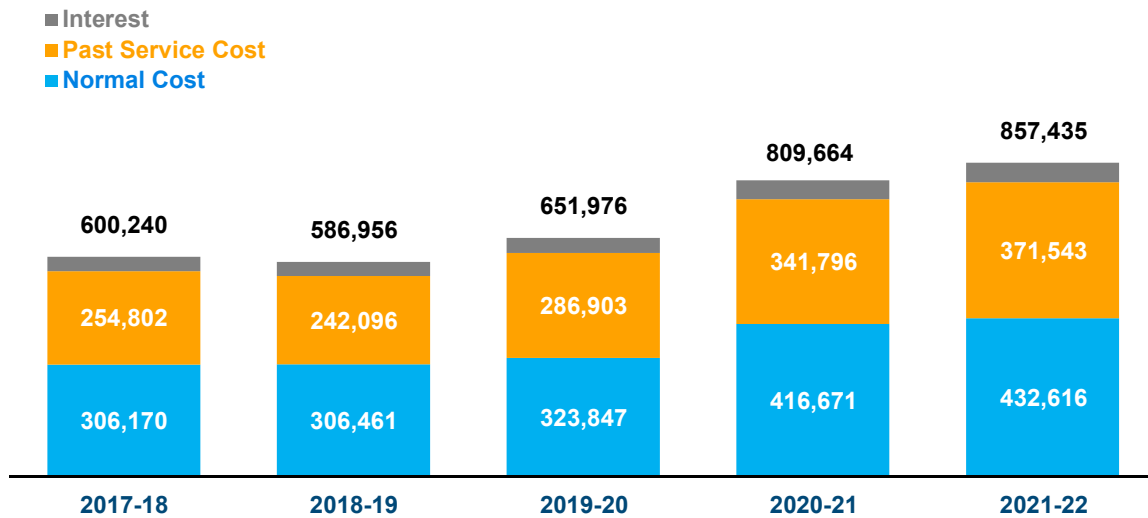
Funded Ratio



Section I - Executive Summary Actuarially Determined Contribution

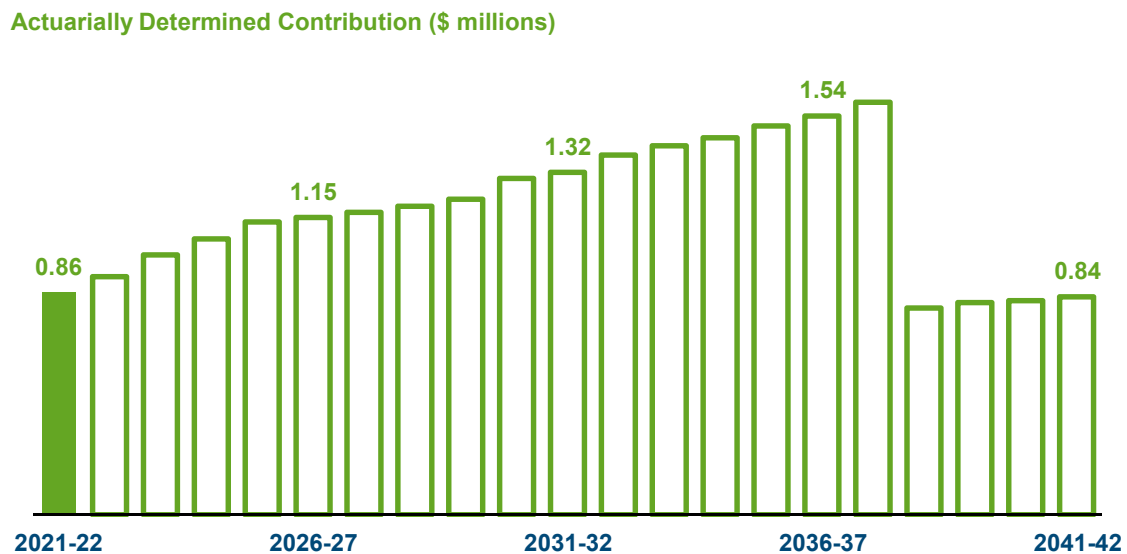
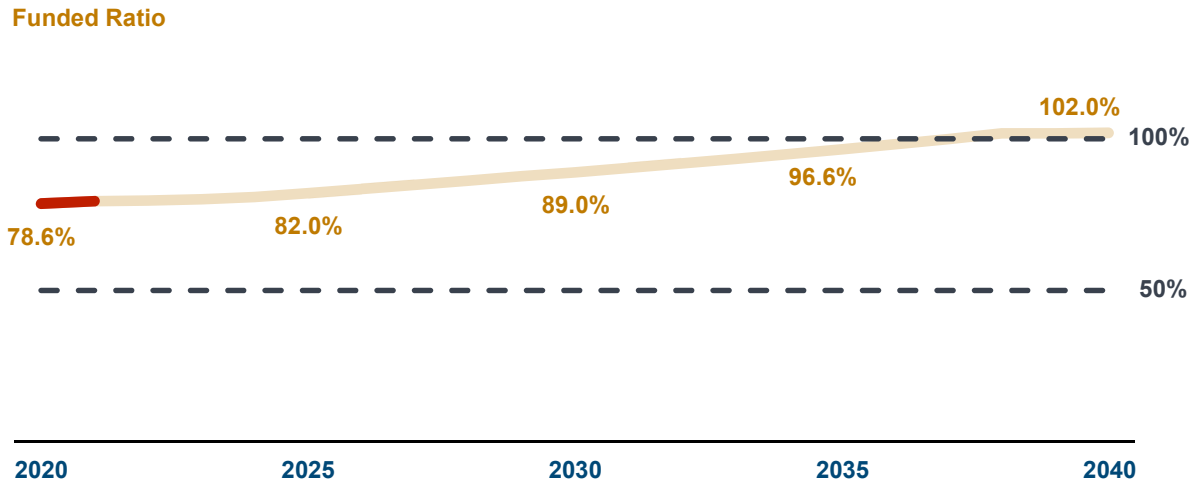
The Actuarially Determined Contribution consists of three pieces: a Normal Cost payment to fund the benefits earned each year, a Past Service Cost to gradually reduce any unfunded or surplus liability, and Interest to reflect the timing of the contribution relative to the valuation date.

The Actuarially Determined Contribution for fiscal year 2021-22 is shown graphically below, along with the comparable figures for the preceding four fiscal years. Note that the Normal Cost is relatively consistent from year to year, whereas the Past Service Cost tends to be more volatile since it reflects the impact of asset performance.



Section I - Executive Summary Long-Range Forecast

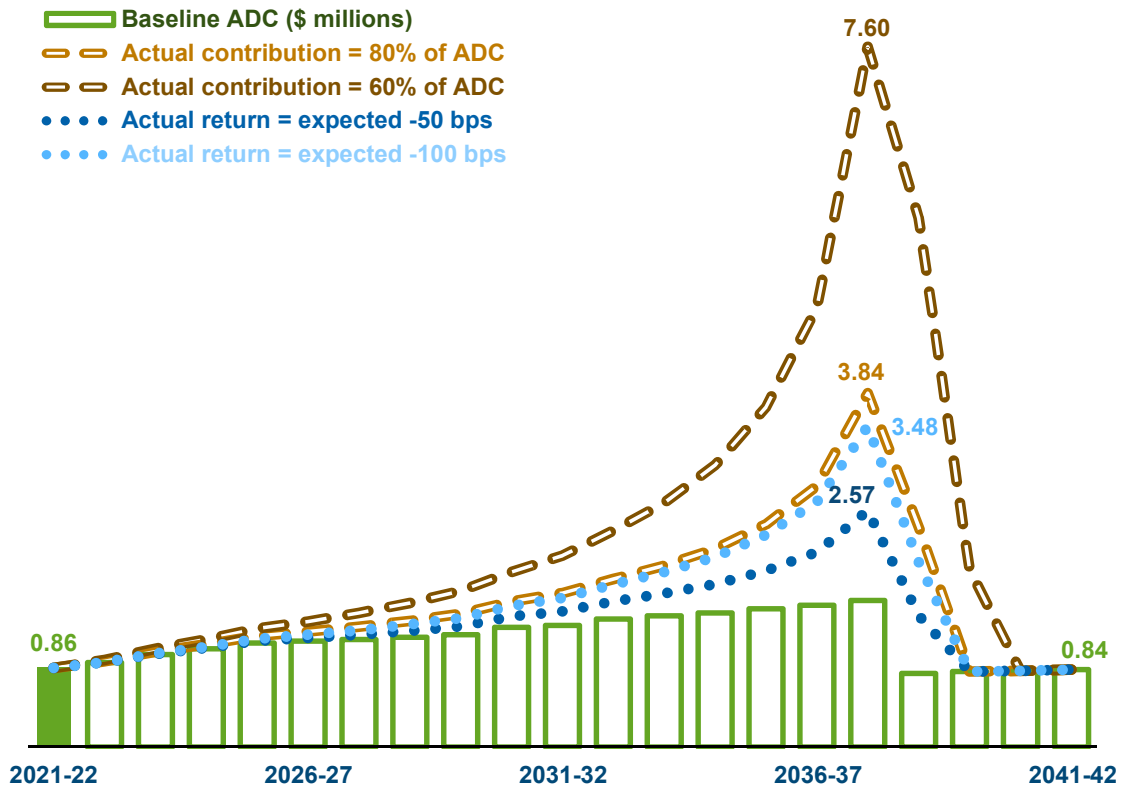
If the Town pays the Actuarially Determined Contribution each year, the investments earn exactly the assumed interest rate each year, and there are no changes in the plan provisions or in the actuarial methods and assumptions, then we project the following changes in the plan's funded status and the long-range contribution levels:



To the extent that there are future investment or liability gains or losses, changes in the actuarial assumptions or methods, or plan changes, the actual valuation results will differ from these forecasts. Please see Section III C for more details of the long range forecast.

Section I - Executive Summary Long-Range Forecast (continued)

Pension benefits are paid for through a combination of contributions from the Town and from employees, and from investment income. If the Town pays less than the Actuarially Determined Contribution each year, or if the investments persistently earn less than the assumed interest rate, then the plan's funded status would suffer, and to compensate, the Town's contribution levels would be pushed higher. The risks of underfunding and underearning are illustrated in the hypothetical scenarios below:



The scenarios illustrated above are based on deterministic projections that assume emerging plan experience always exactly matches the actuarial assumptions; in particular that actual asset returns will be constant in every year of the projection period. Variation in asset returns, contribution amounts, and many other factors may have a significant impact on the long-term financial health of the plan, the liquidity constraints on plan assets, and the Town's future contribution levels. Stochastic projections could be prepared that would enable the Town to understand the potential range of future results based on the expected variability in asset returns and other factors. Such analysis was beyond the scope of this engagement.

Section I - Executive Summary Summary of Principal Results

Membership as of	July 1, 2019	July 1, 2020
Active Members	38	35
Terminated Members	2	4
Members in Pay Status	<u>33</u>	<u>34</u>
Total Count	73	73
Payroll	\$3,932,170	\$3,834,513
Assets and Liabilities as of	July 1, 2019	July 1, 2020
Market Value of Assets	\$17,688,088	\$18,037,159
Actuarial Value of Assets	17,758,277	18,519,543
Accrued Liability for Active Members	9,762,847	10,307,530
Accrued Liability for Terminated Members	544,317	754,498
Accrued Liability for Members in Pay Status	<u>11,395,536</u>	<u>12,489,163</u>
Total Accrued Liability	21,702,700	23,551,191
Unfunded Accrued Liability	3,944,423	5,031,648
Funded Ratio	81.8%	78.6%
Actuarially Determined Contribution for Fiscal Year	2020-21	2021-22
Normal Cost	\$416,671	\$432,616
Past Service Cost	341,796	371,543
Interest	<u>51,197</u>	<u>53,276</u>
Actuarially Determined Contribution	809,664	857,435

Section II - Plan Assets

A. Summary of Fund Transactions

Market Value as of July 1, 2019 \$17,688,088

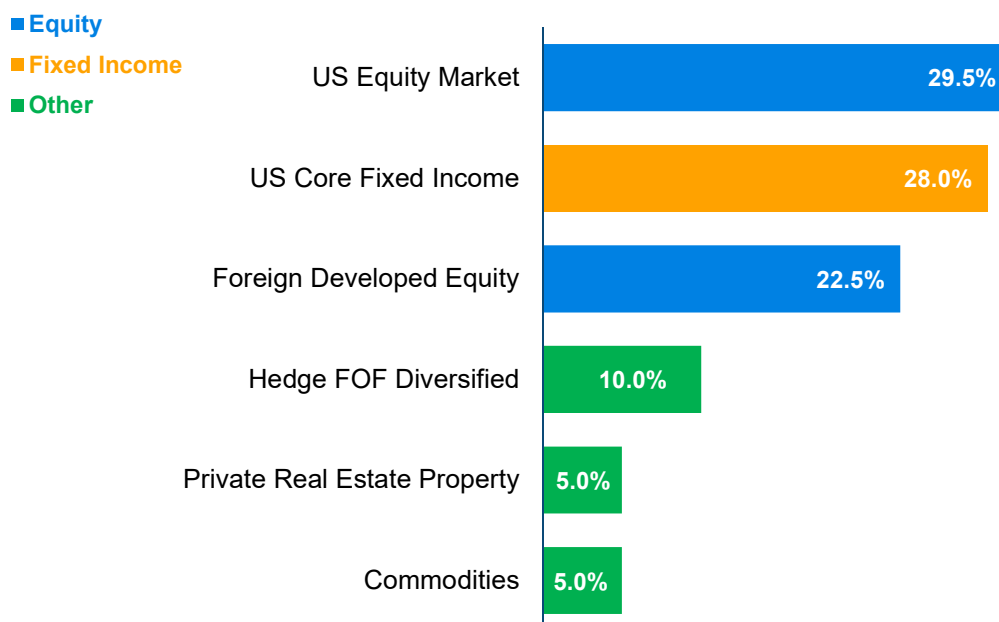
Town Contributions	651,976
Member Contributions	294,500
Net Investment Income	547,467
Benefit Payments	(1,110,746)
Administrative Expenses	(34,126)

Market Value as of June 30, 2020 18,037,159

Expected Return on Market Value of Assets	1,188,232
Market Value (Gain)/Loss	640,765
Approximate Rate of Return *	3.11%

* The rate shown here is not the dollar or time weighted investment yield rate which measures investment performance. It is an approximate net return assuming all activity occurred on average midway through the fiscal year.

Target Asset Allocation as of June 30, 2020



Section II - Plan Assets

B. Development of Actuarial Value of Assets

In order to minimize the impact of market fluctuations on the contribution level, we use an Actuarial Value of Assets that recognizes gains and losses in equal installments ('non-asymptotically') over a five year period. The Actuarial Value of Assets as of July 1, 2020 is determined below.

1.	Expected Market Value of Assets:		
	a. Market Value of Assets as of July 1, 2019		\$17,688,088
	b. Town and Member Contributions		946,476
	c. Benefit Payments and Administrative Expenses		(1,144,872)
	d. Expected Earnings Based on 6.75% Interest		<u>1,188,232</u>
	e. Expected Market Value of Assets as of July 1, 2020		18,677,924
2.	Actual Market Value of Assets as of July 1, 2020		18,037,159
3.	Market Value (Gain)/Loss: (1e) - (2)		640,765
4.	Delayed Recognition of Market (Gains)/Losses		
		Percent Not	Amount Not
	Plan Year End	(Gain)/Loss	Recognized
	06/30/2020	\$640,765	80%
	06/30/2019	138,551	60%
	06/30/2018	93,879	40%
	06/30/2017	(754,553)	20%
			<u>(150,911)</u>
			482,384
5.	Actuarial Value of Assets as of July 1, 2020: (2) + (4)		18,519,543
6.	Return on Actuarial Value of Assets		959,662
7.	Approximate Rate of Return on Actuarial Value of Assets		5.43%
8.	Actuarial Value (Gain)/Loss		233,288

Section III - Development of Contribution

A. Past Service Cost

In determining the Past Service Cost, the Unfunded Accrued Liability is amortized as a level percent over a period of 17 years starting on July 1, 2020.

	July 1, 2019	July 1, 2020
1. Accrued Liability		
Active Members	\$9,762,847	\$10,307,530
Terminated Members	544,317	754,498
Service Retirees	10,655,916	11,721,383
Disabled Retirees	0	0
Beneficiaries	<u>739,620</u>	<u>767,780</u>
Total Accrued Liability	21,702,700	23,551,191
2. Actuarial Value of Assets (see Section IIB)	17,758,277	18,519,543
3. Unfunded Accrued Liability: (1) - (2)	3,944,423	5,031,648
4. Funded Ratio: (2) / (1)	81.8%	78.6%
5. Amortization Period	14	17
6. Amortization Growth Rate	3.50%	3.50%
7. Past Service Cost: (3) amortized over (5)	341,796	371,543

Section III - Development of Contribution B. Actuarially Determined Contribution

	2020-21	2021-22
1. Total Normal Cost	\$650,296	\$675,717
2. Expected Member Contributions	286,625	278,201
3. Expected Administrative Expenses	53,000	35,100
4. Net Normal Cost: (1) - (2) + (3)	416,671	432,616
5. Past Service Cost (see Section IIIA)	341,796	371,543
6. Interest on (4) + (5) to the start of the fiscal year	51,197	53,276
7. Actuarially Determined Contribution: (4) + (5) + (6)	809,664	857,435

Section III - Development of Contribution C. Long Range Forecast

This forecast is based on the results of the July 1, 2020 actuarial valuation and assumes that the Town will pay the Actuarially Determined Contribution each year, the assets will return the assumed interest rate on a market value basis each year, and there are no future changes in the actuarial methods or assumptions or in the plan provisions. For purposes of this forecast the amortization period declines to 1 year to illustrate the progress of the plan towards becoming fully funded; in actual practice the amortization period will not be less than 10 years in order to shield the Town from contribution volatility. Actual results at each point in time will yield different values, reflecting the actual experience of the plan membership and assets.

Valuation Date	Values as of the Valuation Date				Fiscal Year	Cash Flows Projected to the Following Fiscal Year			
	Accrued Liability	Actuarial Value of Assets	Unfunded Accrued Liability	Funded Ratio		Town Contributions	Member Contributions	Benefit Payments	Net Cash Flows
7/1/2020	\$23,551,191	\$18,519,543	\$5,031,648	78.6%	2021-22	\$857,435	\$281,013	(\$1,246,840)	(\$108,392)
7/1/2021	24,583,000	19,530,000	5,053,000	79.4%	2022-23	918,000	269,000	(1,286,000)	(99,000)
7/1/2022	25,685,000	20,469,000	5,216,000	79.7%	2023-24	1,002,000	268,000	(1,364,000)	(94,000)
7/1/2023	26,854,000	21,509,000	5,345,000	80.1%	2024-25	1,064,000	255,000	(1,463,000)	(144,000)
7/1/2024	28,043,000	22,661,000	5,382,000	80.8%	2025-26	1,130,000	277,000	(1,558,000)	(151,000)
7/1/2025	29,225,000	23,973,000	5,252,000	82.0%	2026-27	1,147,000	297,000	(1,634,000)	(190,000)
7/1/2026	30,404,000	25,363,000	5,041,000	83.4%	2027-28	1,167,000	317,000	(1,692,000)	(208,000)
7/1/2027	31,603,000	26,804,000	4,799,000	84.8%	2028-29	1,190,000	335,000	(1,735,000)	(210,000)
7/1/2028	32,846,000	28,320,000	4,526,000	86.2%	2029-30	1,217,000	304,000	(1,807,000)	(286,000)
7/1/2029	34,151,000	29,934,000	4,217,000	87.7%	2030-31	1,298,000	326,000	(1,893,000)	(269,000)
7/1/2030	35,495,000	31,573,000	3,922,000	89.0%	2031-32	1,320,000	296,000	(2,022,000)	(406,000)
7/1/2031	36,855,000	33,339,000	3,516,000	90.5%	2032-33	1,387,000	310,000	(2,142,000)	(445,000)
7/1/2032	38,187,000	35,079,000	3,108,000	91.9%	2033-34	1,423,000	325,000	(2,233,000)	(485,000)
7/1/2033	39,500,000	36,891,000	2,609,000	93.4%	2034-35	1,454,000	322,000	(2,328,000)	(552,000)
7/1/2034	40,826,000	38,782,000	2,044,000	95.0%	2035-36	1,500,000	335,000	(2,408,000)	(573,000)
7/1/2035	42,162,000	40,726,000	1,436,000	96.6%	2036-37	1,538,000	325,000	(2,502,000)	(639,000)
7/1/2036	43,524,000	42,776,000	748,000	98.3%	2037-38	1,591,000	351,000	(2,598,000)	(656,000)
7/1/2037	44,900,000	44,891,000	9,000	100.0%	2038-39	797,000	340,000	(2,723,000)	(1,586,000)
7/1/2038	46,287,000	47,128,000	(841,000)	101.8%	2039-40	819,000	364,000	(2,827,000)	(1,644,000)
7/1/2039	47,654,000	48,550,000	(896,000)	101.9%	2040-41	826,000	369,000	(2,962,000)	(1,767,000)

Section III - Development of Contribution

D. History of Funded Status

Valuation Date	Actuarial Value of Assets	Accrued Liability	Unfunded Accrued Liability	Funded Ratio
July 1, 2011	\$13,214,956	\$14,384,919	\$1,169,963	91.9%
July 1, 2012	13,162,518	16,826,819	3,664,301	78.2%
July 1, 2013	13,441,812	17,214,202	3,772,390	78.1%
July 1, 2014	13,862,224	18,114,145	4,251,921	76.5%
July 1, 2015	14,807,158	18,991,042	4,183,884	78.0%
July 1, 2016	15,411,042	18,775,019	3,363,977	82.1%
July 1, 2017	16,366,441	19,420,468	3,054,027	84.3%
July 1, 2018	17,305,660	20,802,711	3,497,051	83.2%
July 1, 2019	17,758,277	21,702,700	3,944,423	81.8%
July 1, 2020	18,519,543	23,551,191	5,031,648	78.6%

Section III - Development of Contribution

E. History of Town Contributions

Fiscal Year	Actuarially Determined Contribution	Actual Town Contribution	Payroll	Actual Contribution as a Percent of Payroll
2012-13	\$465,641	\$465,641	\$2,362,484	19.7%
2013-14	562,233	634,223	2,687,341	23.6%
2014-15	632,679	561,010	2,866,183	19.6%
2015-16	631,023	727,009	2,918,053	24.9%
2016-17	677,434	677,434	3,143,684	21.5%
2017-18	600,240	600,240	3,400,310	17.7%
2018-19	586,956	586,956	3,400,678	17.3%
2019-20	651,976	651,976	3,589,830	18.2%
2020-21	809,664	TBD	3,932,170	TBD
2021-22	857,435	TBD	3,834,513	TBD

\$71,990 was held as an accrued contribution at July 1, 2014 and is shown above as a contribution for FYE 2015.

Section IV - Membership Data

A. Reconciliation of Membership from Prior Valuation

Details of the changes in the Plan membership since the last valuation are shown below. Additional details on the Plan membership are provided in the remainder of Section IV.

	Active Members	Terminated Vested Members	Nonvested Members Due Refunds	Service Retirees	Disabled Retirees	Beneficiaries	Total
Count July 1, 2019	38	1	1	27	0	6	73
Terminated							
- no benefits due	-	-	-	-	-	-	0
- paid refund	-	-	-	-	-	-	0
- vested benefits due	(2)	2	-	-	-	-	0
Retired	(1)	-	-	1	-	-	0
Died							
- with beneficiary	-	-	-	-	-	-	0
- no beneficiary	-	-	-	-	-	-	0
Benefits expired	-	-	-	-	-	-	0
New member	-	-	-	-	-	-	0
Rehired	-	-	-	-	-	-	0
New Alternate Payee	-	-	-	-	-	-	0
Correction	-	-	-	-	-	-	0
Count July 1, 2020	35	3	1	28	0	6	73

Section IV - Membership Data
B. Statistics of Active Membership

	As of July 1, 2019	As of July 1, 2020
Number of Active Members	38	35
Average Age	40.6	41.8
Average Service	11.3	12.1
Total Payroll	\$3,932,170	\$3,834,513
Average Payroll	103,478	109,558

Section IV - Membership Data

D. Statistics of Inactive Membership

	As of July 1, 2019	As of July 1, 2020
Terminated Vested Members		
Number	1	3
Total Annual Benefit	\$46,915	\$85,958
Average Annual Benefit	46,915	28,653
Average Age	51.3	38.4
Nonvested Members Due Refunds		
Number	1	1
Service Retirees		
Number	27	28
Total Annual Benefit	\$984,871	\$1,044,892
Average Annual Benefit	36,477	37,318
Average Age	67.2	67.8
Disabled Retirees		
Number	0	0
Total Annual Benefit	\$0	\$0
Average Annual Benefit	0	0
Average Age	0.0	0.0
Beneficiaries		
Number	6	6
Total Annual Benefit	\$80,859	\$80,859
Average Annual Benefit	13,477	13,477
Average Age	69.3	70.2

Section IV - Membership Data
E. Distribution of Inactive Members as of July 1, 2020

	Age	Number	Annual Benefits
Terminated Vested Members /	< 50	2	\$39,043
Nonvested Members Due Refunds	50 - 59	2	46,915
	60 - 69	0	0
	70 - 79	0	0
	80 - 89	0	0
	90 +	<u>0</u>	<u>0</u>
	Total	4	85,958
 Service Retirees	< 50	0	\$0
	50 - 59	5	233,536
	60 - 69	11	485,617
	70 - 79	10	316,885
	80 - 89	2	8,854
	90 +	<u>0</u>	<u>0</u>
	Total	28	1,044,892
 Beneficiaries and Alternate Payees	< 50	0	\$0
	50 - 59	1	5,305
	60 - 69	3	44,601
	70 - 79	1	12,648
	80 - 89	1	18,304
	90 +	0	<u>0</u>
	Total	6	80,859

Section V - Analysis of Risk

A. Introduction

The results of this actuarial valuation are based on one set of reasonable assumptions. However, it is almost certain that future experience will not exactly match these assumptions. As an example, the plan's investments may perform better or worse than assumed in any single year and over any longer time horizon. It is therefore important to consider the potential impacts of these likely differences when making decisions that may affect the future financial health of the plan, or of the plan's members.

In addition, as plans mature they accumulate larger pools of assets and liabilities. The increase in size in turn increases the potential magnitude of adverse experience. As an example, the dollar impact of a 10% investment loss on a plan with \$1 billion in assets and liabilities is much greater than the dollar impact for a plan with \$1 million in assets and liabilities. Since pension plans make long-term promises and rely on long-term funding, it is important to consider how mature the plan is today, and how mature it may become in the future.

Actuarial Standard of Practice No. 51 (ASOP 51) directs actuaries to provide pension plan sponsors with information concerning the risks associated with the plan:

- Identify risks that may be significant to the plan.
- Assess the risks identified as significant to the plan. The assessment does not need to include numerical calculations.
- Disclose plan maturity measures and historical information that are significant to understanding the plan's risks.

This section of the report uses the framework of ASOP 51 to communicate important information about significant risks to the plan, the plan's maturity, and relevant historical plan data.

Please see Section III C for more information on the basis for the projected results shown on the following pages.

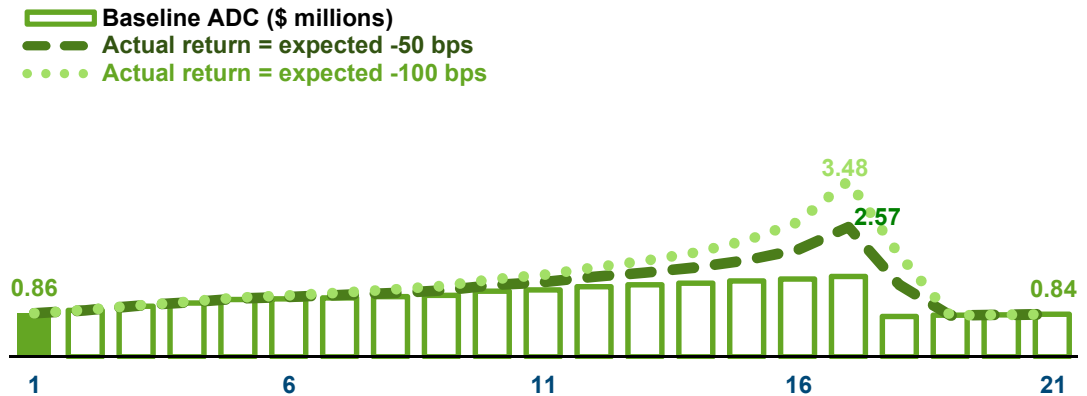
Section V - Analysis of Risk

B. Risk Identification and Assessment

Investment Risk

Definition: This is the potential that investment returns will be different than expected.

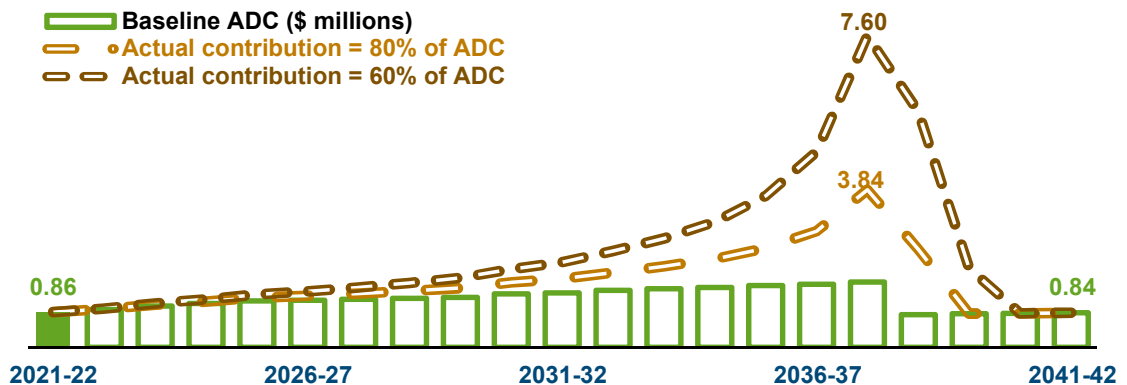
Identification: To the extent that actual investment returns differ from the assumed investment return, the plan's future assets, Actuarially Determined Contributions, and funded status may differ significantly from those presented in this valuation. The consequences of persistent underperformance on future Actuarially Determined Contribution levels are illustrated below:



Contribution Risk

Definition: This is the potential that actual future contributions will be less than the Actuarially Determined Contribution.

Identification: Over the past 8 years, actual contributions have been 102.0% of the Actuarially Determined Contribution in total. The consequences of persistent underfunding on future Actuarially Determined Contribution levels are illustrated below:



Section V - Analysis of Risk

B. Risk Identification and Assessment

Liquidity Risk

Definition: This is the potential that assets must be liquidated at a loss earlier than planned in order to pay for the plan's benefits and operating costs. This risk is heightened for plans with negative cash flows, in which contributions are not sufficient to cover benefit payments plus expenses.

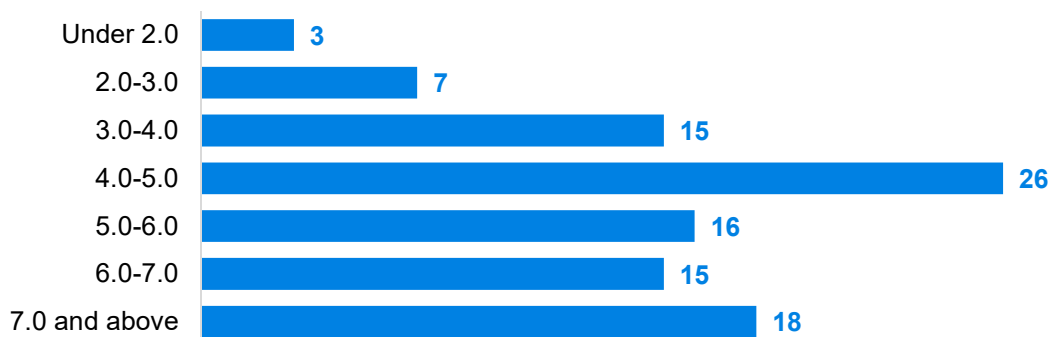
Identification: In 2019-20, the plan had negative cash flow, with town and member contributions to the plan of \$946,476 compared to \$1,144,872 of benefit payments and administrative expenses paid out of the plan. We suggest that you consult with your investment advisors with respect to the liquidity characteristics of the plan's investment holdings.

Maturity Risk

Definition: This is the potential for total plan liabilities to become more heavily weighted toward inactive liabilities over time, and for plan assets and/or liabilities to become larger relative to the active member liability.

Identification: The plan is subject to maturity risk because as plan assets and liabilities continue to grow, the dollar impact of any gains or losses on the assets or liabilities also becomes larger.

Assessment: As of July 1, 2020, the plan's Asset Volatility Ratio (the ratio of the market value of plan assets to payroll) is 4.7. According to Milliman's 2020 Public Pension Funding Study, the 100 largest US public pension plans have the following range of Asset Volatility Ratios:



Inflation Risk

Definition: This is the potential for a pension to lose purchasing power over time due to inflation.

Identification: The members of pension plans without fully inflation-indexed benefits are subject to the risk that their purchasing power will be reduced over time due to inflation.

Assessment: This plan does not contain a mechanism to regularly increase benefits after retirement, so members bear all of the inflation risk.

Section V - Analysis of Risk

B. Risk Identification and Assessment

Insolvency Risk

Definition: This is the potential that a plan will become insolvent; that is, assets will be fully depleted.

Identification: If a plan becomes insolvent, contractually required benefits must be paid from the plan sponsor's other remaining assets.

Assessment: Under the GASB 68 depletion date methodology, the plan is not projected to become insolvent. Please see the GASB 68 report for more details on the underlying analysis.

Demographic Risks

Definition: This is the potential that mortality, turnover, retirement, or other demographic experience will be different than expected.

Identification: The pension liabilities reported herein have been calculated by assuming that members will follow patterns of demographic experience as described in Appendix B. If actual demographic experience or future demographic assumptions are different from what is assumed to occur in this valuation, future pension liabilities, Actuarially Determined Contributions, and funded status may differ significantly from those presented in this valuation. Formal Experience Studies performed on a regular basis are helpful in ensuring that the demographic assumptions reflect emerging plan experience.

Retirement Risk

Definition: This is the potential for members to retire and receive subsidized benefits that are more valuable than expected.

Identification: This plan has moderate early retirement benefits. If members retire at earlier ages than are anticipated by the actuarial assumptions, this will put upward pressure on subsequent Actuarially Determined Contributions.

Pensionable Earnings Risk

Definition: This is the potential for active members to add items to their pensionable earnings and receive pension benefits that are higher than expected.

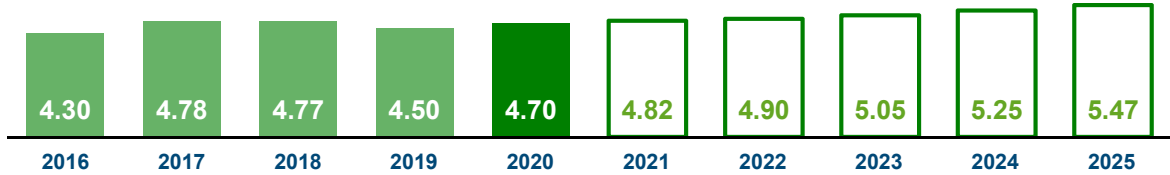
Identification: This plan uses basic compensation plus additional earnings up to 10% over base pay.

Section V - Analysis of Risk

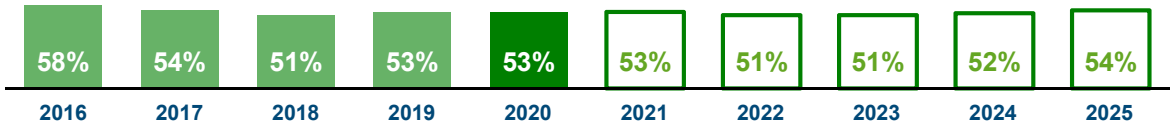
C. Maturity Measures

The metrics presented below are different ways of understanding the plan's maturity level, both in the past and as it is expected to change in the coming years.

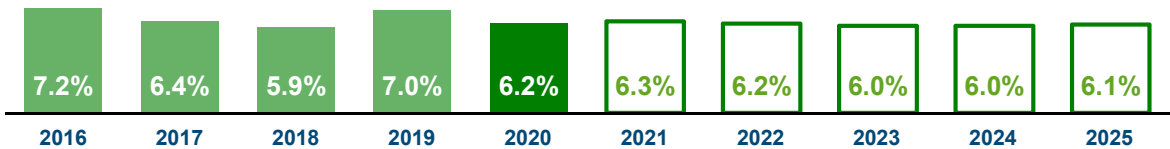
Asset Volatility Ratio: Market Value of Assets compared to Payroll



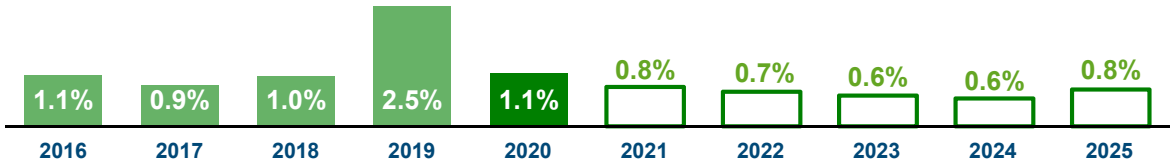
Accrued Liability for members in pay status compared to total Accrued Liability



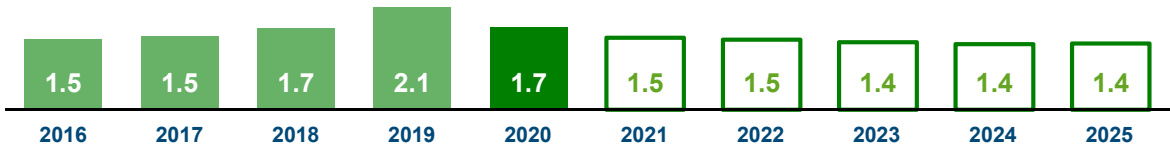
Benefit Payments compared to Market Value of Assets



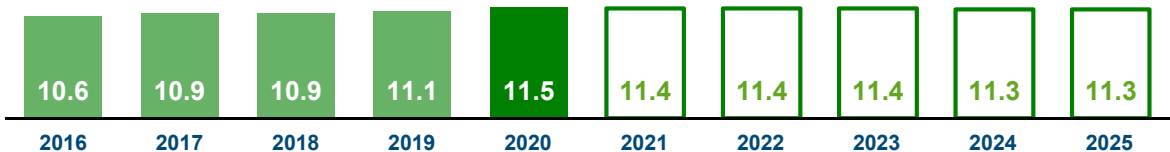
Net Cash Flows compared to Market Value of Assets



Benefit Payments compared to Town Contributions



Duration of Accrued Liability (based on GASB 68 sensitivity disclosures)



Appendix A - Actuarial Funding Method

The actuarial funding method used in the valuation of this Plan is known as the Entry Age Normal Method. The Actuarially Determined Contribution consists of three pieces: Normal Cost plus a Past Service Cost payment to gradually eliminate the Unfunded Accrued Liability plus Interest to reflect the timing of the contribution relative to the valuation date.

The Normal Cost is determined by calculating the present value of future benefits for present active Members that will become payable as the result of death, disability, retirement or termination. This cost is then spread as a level percentage of earnings from entry age to termination as an Active Member. If Normal Costs had been paid at this level for all prior years, a fund would have accumulated. Because this fund represents the portion of benefits that would have been funded to date, it is termed the Accrued Liability. In fact, it is calculated by adding the present value of benefits for Retired Members and Terminated Vested Members to the present value of benefits for Active Members and subtracting the present value of future Normal Cost contributions.

The funding cost of the Plan is derived by making certain specific assumptions as to rates of interest, mortality, turnover, etc. which are assumed to hold for many years into the future. Since actual experience may differ somewhat from the assumptions, the costs determined by the valuation must be regarded as estimates of the true costs of the Plan.

The Unfunded Accrued Liability is the excess of the Accrued Liability over the assets which have been accumulated for the plan. This Unfunded Accrued Liability is amortized as a level percent over a period of 17 years starting on July 1, 2020. The amortization period will decrease each year until it reaches 10 years, after which point it will remain at 10 years.

The Actuarial Value of Assets is determined by recognizing market gains and losses non-asymptotically over a five year period.

The long-range forecasts included in this report have been developed by assuming that members will terminate, retire, become disabled, and die according to the actuarial assumptions with respect to these causes of decrement, and that pay increases, cost of living adjustments, and so forth will likewise occur according to the actuarial assumptions. For those unions whose new employees are eligible to participate in this plan, members who are projected to leave active employment are assumed to be replaced by new active members with the same age, service, gender, and pay characteristics as those hired in the past few years.

Appendix B - Actuarial Assumptions

Each of the assumptions used in this valuation was set based on industry standard published tables and data, the particular characteristics of the plan, relevant information from the plan sponsor or other sources about future expectations, and our professional judgment regarding future plan experience. We believe the assumptions are reasonable for the contingencies they are measuring, and are not anticipated to produce significant cumulative actuarial gains or losses over the measurement period.

Interest Rate	6.625% (prior: 6.75%)
Inflation	2.75%
Amortization Growth Rate	3.50%
Salary Scale	8.25% for first 7 years and 3.00% thereafter
Expenses	Administrative expenses paid in the prior year, increased by 3% and rounded to the nearest \$100.
Turnover	None.
Mortality	<p>Current: PubS-2010 Mortality Table with generational projection per the MP-2019 ultimate scale, with employee rates before benefit commencement and healthy or disabled annuitant rates after benefit commencement. This assumption includes a margin for improvements in longevity beyond the valuation date.</p> <p>Prior: RP-2000 Mortality Tables for employees, healthy annuitants and disabled annuitants, with generational projection of future mortality improvements per Scale AA. This assumption includes a margin for improvements in longevity beyond the valuation date.</p>
Marital Status	90% of male members and 60% of female members are assumed to be married with wives 3 years younger than husbands.
Retirement	20% per year starting at Normal Retirement Date; 100% at age 62.

Appendix C - Summary of Plan Provisions

This exhibit summarizes the major provisions of the Plan. It is not intended to be, nor should it be interpreted as a complete statement of all plan provisions. All eligibility requirements and benefit amounts shall be determined in strict accordance with the plan document itself. To the extent that this summary does not accurately reflect the plan provisions, then the results of this valuation may not be accurate.

Eligibility	All full time Police Officers in the employ of the Town of Simsbury whose customary employment is at least 32½ hours per week on a regular schedule.
Employee Contributions	8% of Earnings as of July 1, 2016. Interest is credited at 5% per annum. No contributions are required after Normal Retirement Date.
Credited Service	Whole years and full months from date of participation, but not greater than 25 years.
Compensation	Basic Compensation excluding overtime, commissions, bonuses, and any other form of additional compensation, plus additional earnings up to an additional 10% over the base pay rate.
Final Average Compensation	Average Earnings paid to a member during the highest 5 consecutive years out of the last 10 years of active employment.
Normal Retirement Date	Earlier of age 53 or 25 years of service.
Normal Retirement Benefit	2.5% of Final Average Compensation times Credited Service.
Early Retirement Date	Earlier of 5 years early with 10 years of service or 20 years of Credited Service.
Early Retirement Benefit	Benefit is based on Credited Service and Final Average Compensation as of the actual retirement date, then actuarially reduced for each month by which the participant's retirement date precedes Normal Retirement Date.
Normal Form of Annuity	5 Year Certain & Life Annuity.
Deferred Retirement Date	Members may continue to work beyond Normal Retirement.
Deferred Retirement Benefit	Benefit based on Credited Service and Final Average Compensation to actual date of retirement.
Death Benefits Before Retirement	Refund of Employee Contributions with interest to date of death.

Appendix C - Summary of Plan Provisions

**Death Benefits
After Retirement**

Based on form of benefit elected at retirement.

Vesting

Vested according to the following table.

Years of Service	Vesting Percentage
Less than 5 years	0%
5 years	50%
6 years	60%
7 years	70%
8 years	80%
9 years	90%
10 years and over	100%

**Termination Benefit
Pre-Retirement**

Refund of Employee Contributions with interest to date of termination.

**Termination Benefit
Post-Retirement**

On or after Normal Retirement Date but prior to annuity commencement date: Annuity payments to the beneficiary for the five year period commencing on the first of the month following the member's death.

Appendix D - Glossary

Actuarial Cost Method - This is a procedure for determining the Actuarial Present Value of Benefits and allocating it to time periods to produce the Actuarial Accrued Liability and the Normal Cost.

Accrued Liability - This is the portion of the Actuarial Present Value of Benefits attributable to periods prior to the valuation date by the Actuarial Cost Method (i.e., that portion not provided by future Normal Costs).

Actuarial Assumptions - With any valuation of future benefits, assumptions of anticipated future events are required. If actual events differ from the assumptions made, the actual cost of the plan will vary as well. Some examples of key assumptions include the interest rate, salary scale, and rates of mortality, turnover and retirement.

Actuarial Present Value of Benefits - This is the present value, as of the valuation date, of future payments for benefits and expenses under the Plan, where each payment is: a) multiplied by the probability of the event occurring on which the payment is conditioned, such as the probability of survival, death, disability, termination of employment, etc.; and b) discounted at the assumed interest rate.

Actuarial Value of Assets - This is the value of cash, investments and other property belonging to the plan, typically adjusted to recognize investment gains or losses over a period of years to dampen the impact of market volatility on the Actuarially Determined Contribution.

Actuarially Determined Contribution (“ADC”) - This is the employer’s periodic contributions to a defined benefit plan, calculated in accordance with actuarial standards of practice.

Attribution Period - The period of an employee’s service to which the expected benefit obligation for that employee is assigned. The beginning of the attribution period is the employee’s date of hire and costs are spread across all employment.

Interest Rate - This is the long-term expected rate of return on any investments set aside to pay for the benefits. In a financial reporting context (e.g., GASB 68) this is termed the Discount Rate.

Normal Cost - This is the portion of the Actuarial Present Value of Benefits allocated to a valuation year by the Actuarial Cost Method.

Past Service Cost - This is a catch-up payment to fund the Unfunded Accrued Liability over time (generally 10 to 30 years). A closed amortization period is a specific number of years counted from one date and reducing to zero with the passage of time; an open amortization period is one that begins again or is recalculated at each valuation date. Also known as the Amortization Payment.

Return on Plan Assets - This is the actual investment return on plan assets during the fiscal year.

Unfunded Accrued Liability - This is the excess of the Accrued Liability over the Actuarial Value of Assets.



**TOWN OF SIMSBURY
BOARD OF EDUCATION RETIREMENT INCOME PLAN**

**Actuarial Valuation as of July 1, 2020
To Determine Funding for Fiscal Year 2021-22**

Prepared by

Jennifer M. Castelhana, FSA
Consulting Actuary

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Certification

We have performed an actuarial valuation of the Plan as of July 1, 2020 to determine funding for fiscal year 2021-22. This report presents the results of our valuation.

The ultimate cost of a pension plan is the total amount needed to provide benefits for plan members and beneficiaries and to pay the expenses of administering the plan. Pension costs are met by contributions and by investment return on plan assets. The principal purpose of this report is to set forth an actuarial recommendation of the contribution, or range of contributions, which will properly fund the plan, in accordance with applicable government regulations. In addition, this report provides:

- A valuation of plan assets and liabilities to review the year-to-year progress of funding.
- Information needed to meet disclosure requirements.
- Review of plan experience for the previous year to ascertain whether the assumptions and methods employed for valuation purposes are reflective of actual events and remain appropriate for prospective application.
- Assessment of the relative funded position of the plan, i.e., through a comparison of plan assets and projected plan liabilities.
- Comments on any other matters which may be of assistance in the funding and operation of the plan.

This report may not be used for purposes other than those listed above without Milliman's prior written consent. If this report is distributed to other parties, it must be copied in its entirety, including this certification section.

Milliman's work is prepared solely for the internal business use of the Town of Simsbury ("Town"). To the extent that Milliman's work is not subject to disclosure under applicable public records laws, Milliman's work may not be provided to third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of its work product. Milliman's consent to release its work product to any third party may be conditioned on the third party signing a Release, subject to the following exceptions: (a) the Town may provide a copy of Milliman's work, in its entirety, to the Town's professional service advisors who are subject to a duty of confidentiality and who agree to not use Milliman's work for any purpose other than to benefit the Town; and (b) the Town may provide a copy of Milliman's work, in its entirety, to other governmental entities, as required by law. No third party recipient of Milliman's work product should rely upon Milliman's work product. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

In preparing this report, we relied on employee census data and financial information as of the valuation date, furnished by the Town. We performed a limited review of the data used directly in our analysis for reasonableness and consistency and have found them to be reasonably consistent and comparable with data used for other purposes. If the underlying data or information is inaccurate or incomplete, the results of our analysis may likewise be inaccurate or incomplete and our calculations may need to be revised. If there are material defects in the data, it is possible that they would be uncovered by a detailed, systematic review and comparison of the data to search for data values that are questionable or for relationships that are materially inconsistent. Such a review was beyond the scope of our assignment.

Certification

The valuation results were developed using models employing standard actuarial techniques. In addition to the models described previously, Milliman has developed certain models to develop the expected long term rate of return on assets used in this analysis. We have reviewed the models, including their inputs, calculations, and outputs for consistency, reasonableness, and appropriateness to the intended purpose and in compliance with generally accepted actuarial practice and relevant actuarial standards of practice. The models, including all input, calculations, and output, may not be appropriate for any other purpose.

The calculations reported herein have been made on a basis consistent with our understanding of ERISA and the related sections of the tax code. Additional determinations may be needed for purposes other than meeting funding requirements, such as judging benefit security at plan termination or meeting employer accounting requirements. On the basis of the foregoing, we hereby certify that, to the best of our knowledge, this report is complete and accurate and all costs and liabilities were determined in conformance with generally accepted actuarial principles and practices.

We further certify that, in our opinion, each actuarial assumption, method and technique used is reasonable taking into account the experience of the Plan and reasonable expectations. Future actuarial measurements may differ significantly from the current measurements presented in this report due to factors such as, but not limited to, the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Due to the limited scope of the actuarial assignment, we did not perform an analysis of the potential range of such future measurement.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

We are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.



Jennifer M. Castelhana, FSA
Consulting Actuary

Section I - Executive Summary Changes Since the Prior Valuation

Plan Changes

The plan was amended to allow SFEP members aged 62 or older (but not yet 65) with 25 years of service to retire with an unreduced early retirement benefit.

This change caused the Unfunded Accrued Liability to increase by about \$8,000 and the Actuarially Determined Contribution to increase by about \$1,000.

Changes in Actuarial Methods and Assumptions

We updated the mortality assumption from RP-2000 Mortality Tables with generational projection of future mortality improvements per Scale AA to the PubG-2010 Mortality Table with generational projection per the MP-Ultimate scale.

In order to better anticipate future plan experience, we lowered the investment return assumption from 6.75% to 6.625%.

We reset the amortization period to 17 years.

These changes in combination caused the Unfunded Accrued Liability to increase by about \$2.65 million and the Actuarially Determined Contribution to increase by about \$112,000.

Other Significant Changes

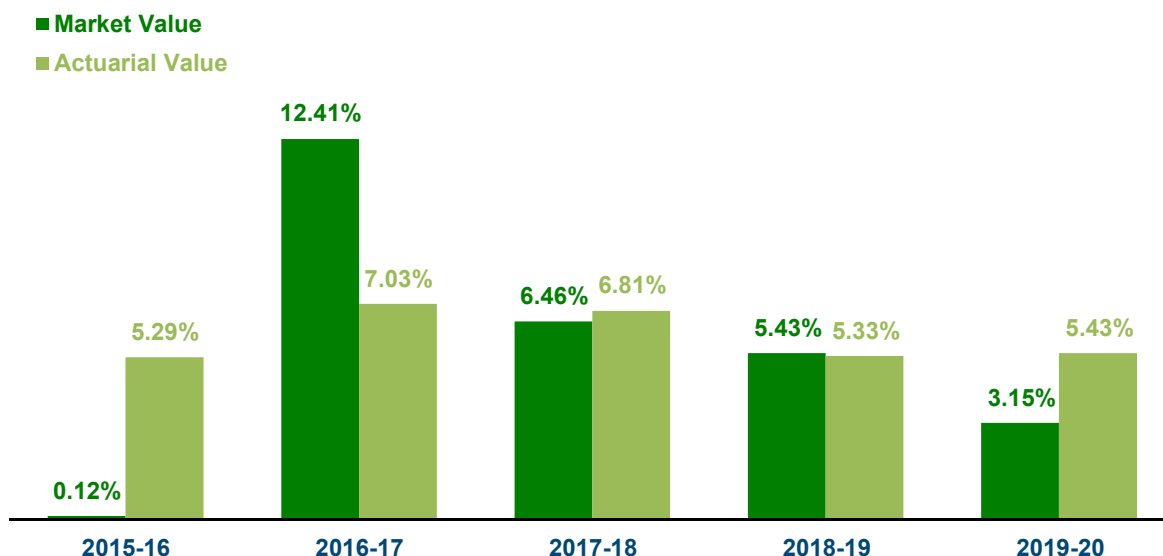
None.

Section I - Executive Summary Assets

There are two different measures of the plan's assets that are used throughout this report. The Market Value is a snapshot of the plan's investments as of the valuation date. The Actuarial Value is a smoothed asset value designed to temper the volatile fluctuations in the market by recognizing investment gains or losses non-asymptotically over five years.

	Market	Actuarial
Value as of July 1, 2019	\$23,749,717	\$23,903,390
Town and Member Contributions	1,454,798	1,454,798
Investment Income	745,321	1,294,701
Benefit Payments and Administrative Expenses	<u>(1,577,707)</u>	<u>(1,577,707)</u>
Value as of July 1, 2020	24,372,129	25,075,182

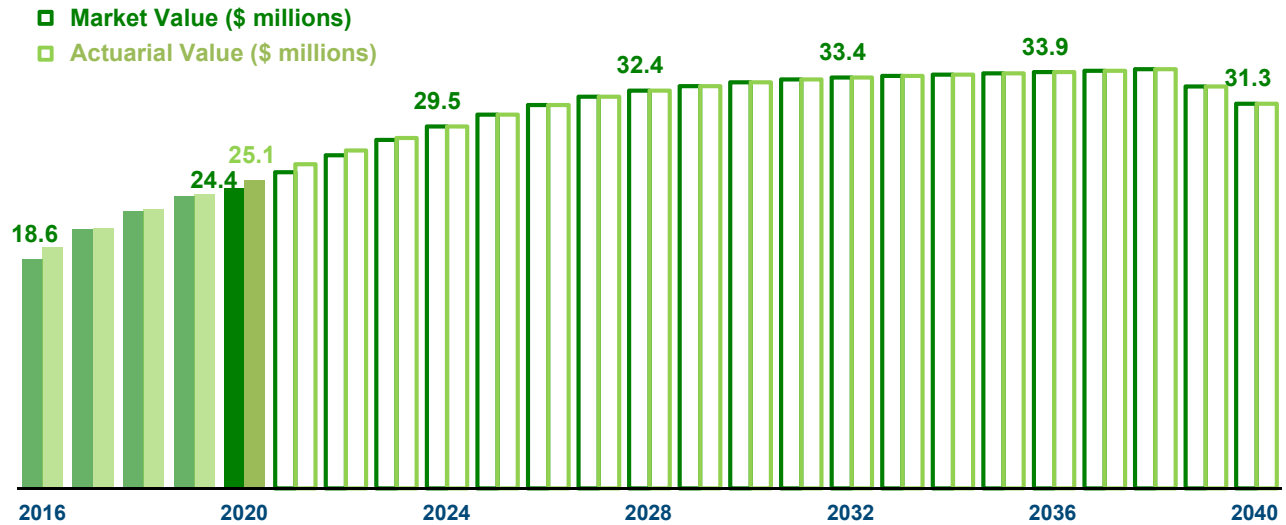
For fiscal year 2019-20, the plan's assets earned 3.15% on a Market Value basis and 5.43% on an Actuarial Value basis. The actuarial assumption for this period was 6.75%; the result is an asset loss of about \$852,000 million on a Market Value basis and a loss of about \$315,000 million on an Actuarial Value basis. Historical rates of return are shown in the graph below.



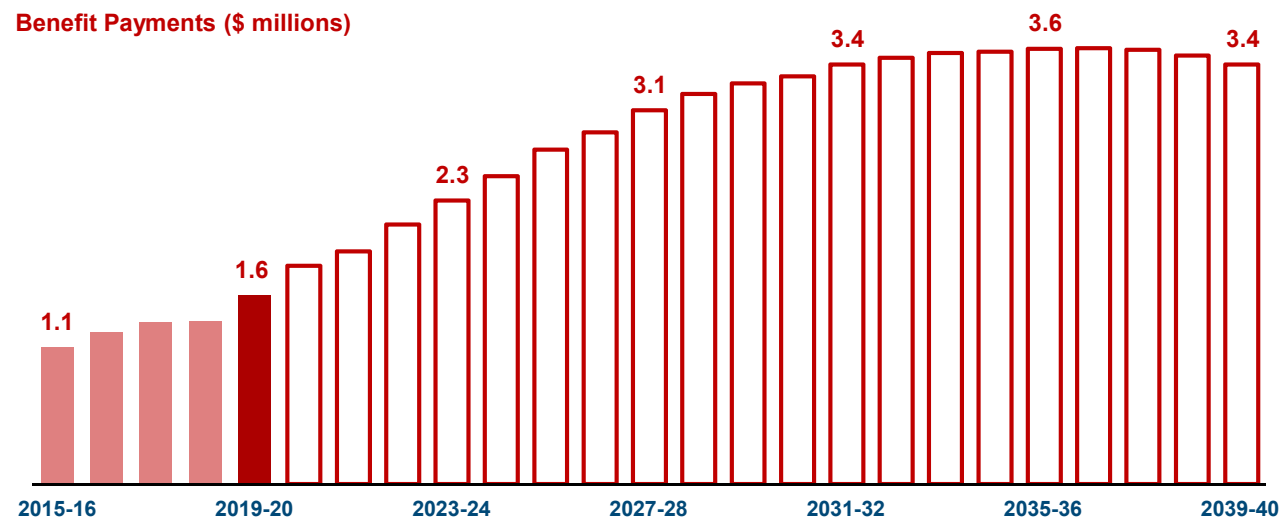
Please note that the Actuarial Value currently exceeds the Market Value by \$703,000. This figure represents investment losses that will be gradually recognized in future years. This process will exert upward pressure on the Town's contribution, unless there are offsetting market gains.

Section I - Executive Summary Assets (continued)

The graph below shows how this year's asset values compare to where the plan's assets have been over the past several years and how they are projected to change over the next 20 years. For purposes of this projection, we have assumed that the Town always contributes the Actuarially Determined Contribution and the investments always earn the assumed interest rate each year.

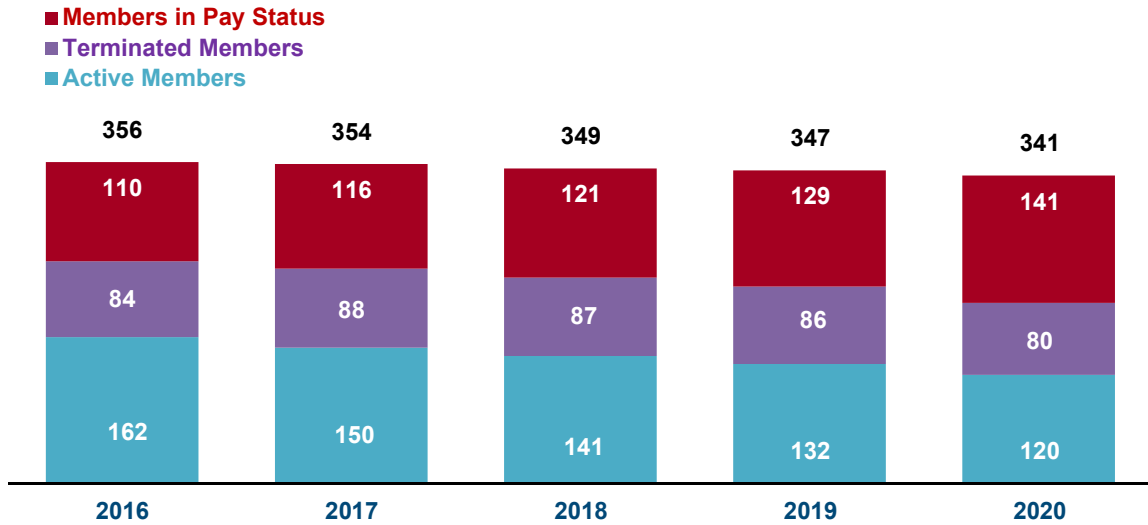


In 2019-20, the plan paid out \$1.552 million in benefits to members. Over the next 20 years, the plan is projected to pay out a total of \$61 million in benefits to members.



Section I - Executive Summary Membership

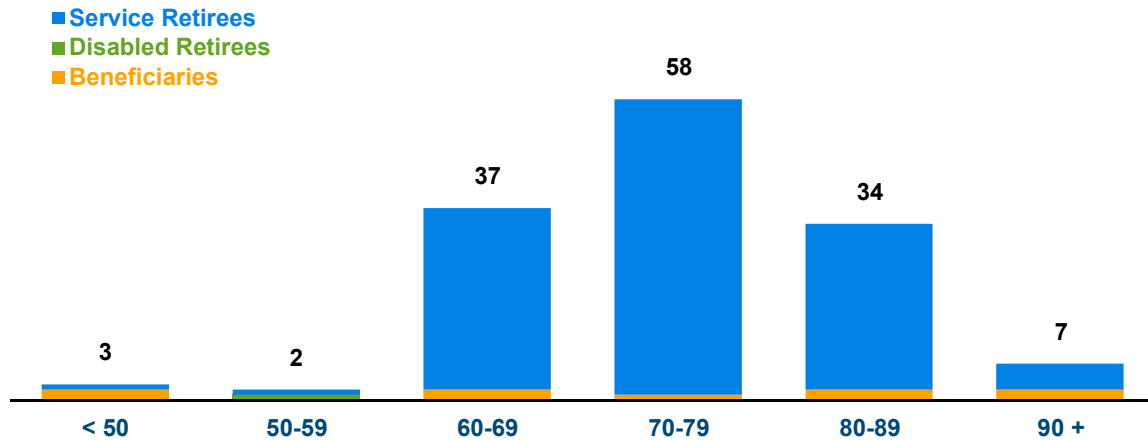
There are three basic categories of plan members included in the valuation: (1) members who are receiving monthly pension benefits, (2) former employees who have a vested right to benefits but have not yet started collecting, and (3) active employees who have met the eligibility requirements for membership.



Members in Pay Status on July 1, 2020

Service Retirees	131	Average Age	74.9
Disabled Retirees	1	Total Annual Benefit	\$1,670,648
Beneficiaries	<u>9</u>	Average Annual Benefit	11,849
Total	141		

The members in pay status fall across a wide distribution of ages:



Section I - Executive Summary Membership (continued)

Terminated Members on July 1, 2020

Count	53
Average Age	58.5
Total Annual Benefit	\$253,680
Average Annual Benefit	4,786

Nonvested Members Due Refunds on July 1, 2020

Count	27
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Active Members on July 1, 2020

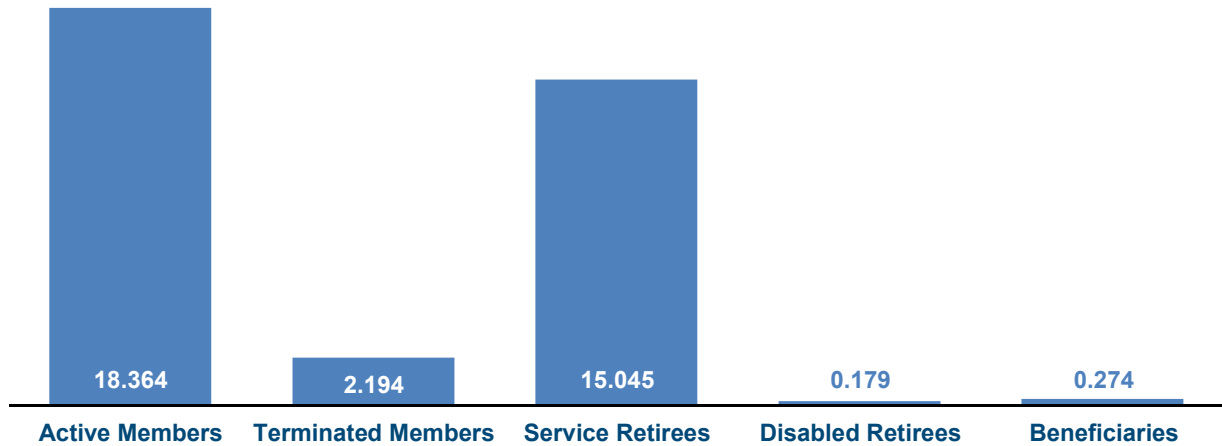
Count	120
Average Age	58.6
Average Service	18.7
Payroll	\$6,391,476
Average Payroll	53,262

The table below illustrates the age and years of service of the active membership:

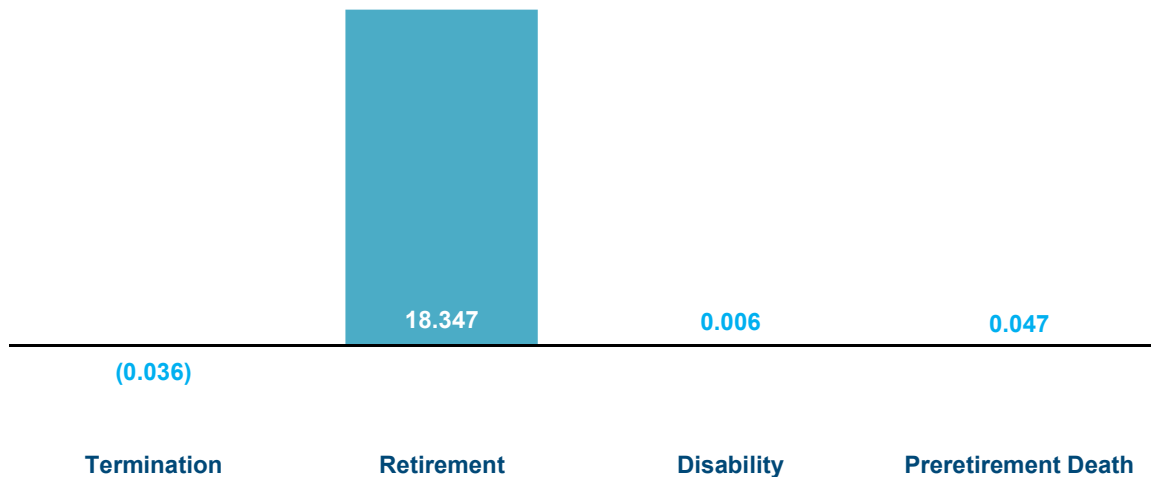
Age	Years of Service							Total
	0-4	5-9	10-14	15-19	20-24	25-29	30+	
< 25								0
25-29								0
30-34	1							1
35-39	1	1						2
40-44			2					2
45-49	2	2	2					6
50-54	4	3	3	4				14
55-59	12	12	10	1	1		1	37
60-64	3	13	10	12	1	1	1	41
65+	1	4	5	3	2	1	1	17
Total	24	35	32	20	4	2	3	120

Section I - Executive Summary Accrued Liability

The Accrued Liability as of July 1, 2020 equals \$36,056,258, which consists of the following pieces:



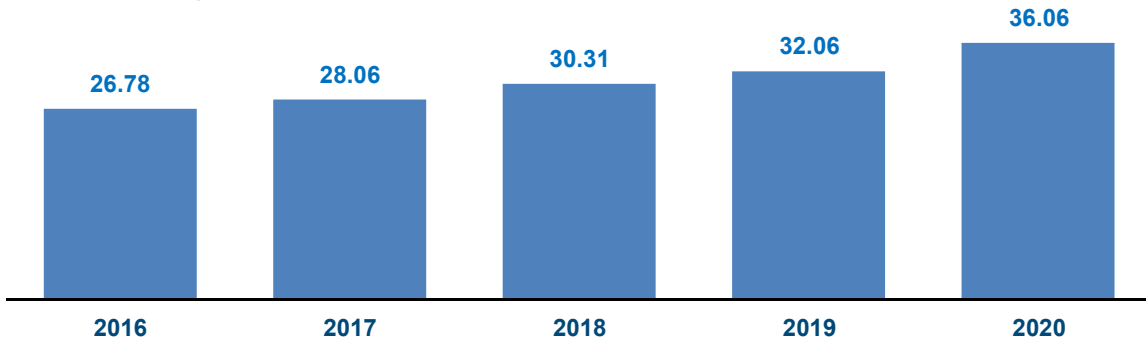
The Accrued Liability for active members can be broken down further by the different types of benefits provided by the plan:



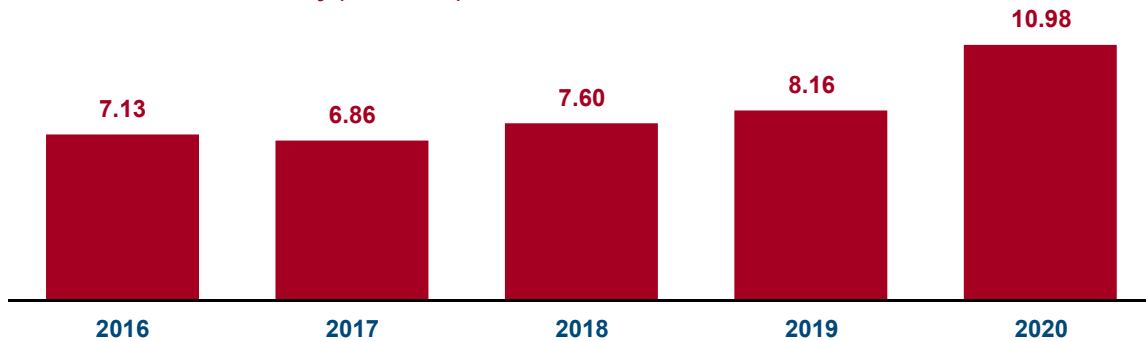
Section I - Executive Summary Funded Status

The Accrued Liability grows over time as active members earn additional benefits, and goes down over time as members receive benefits; it may also change when there are changes to the plan provisions or changes in the actuarial assumptions. The Unfunded Accrued Liability is the dollar difference between the Accrued Liability and the Actuarial Value of Assets; the Funded Ratio is the ratio of the two.

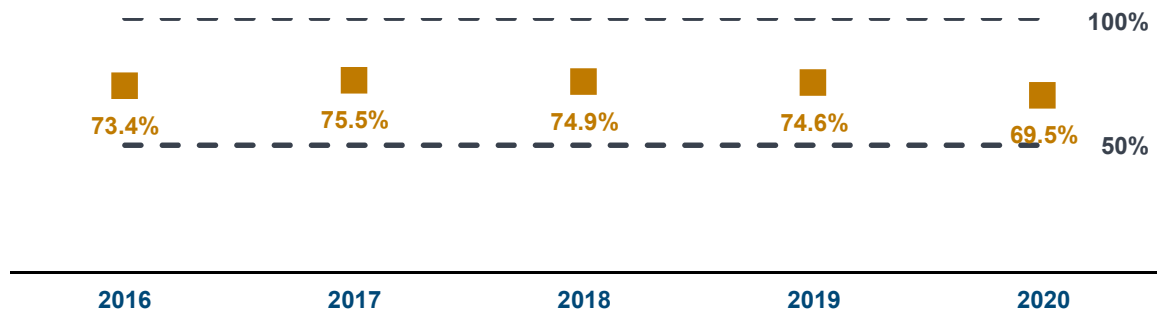
Accrued Liability (\$ millions)



Unfunded Accrued Liability (\$ millions)



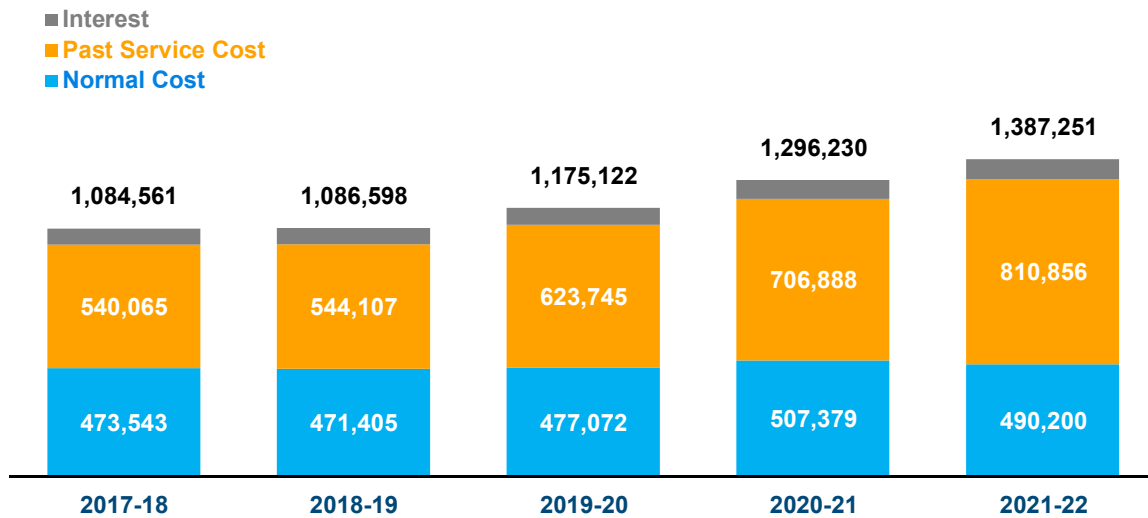
Funded Ratio



Section I - Executive Summary Actuarially Determined Contribution

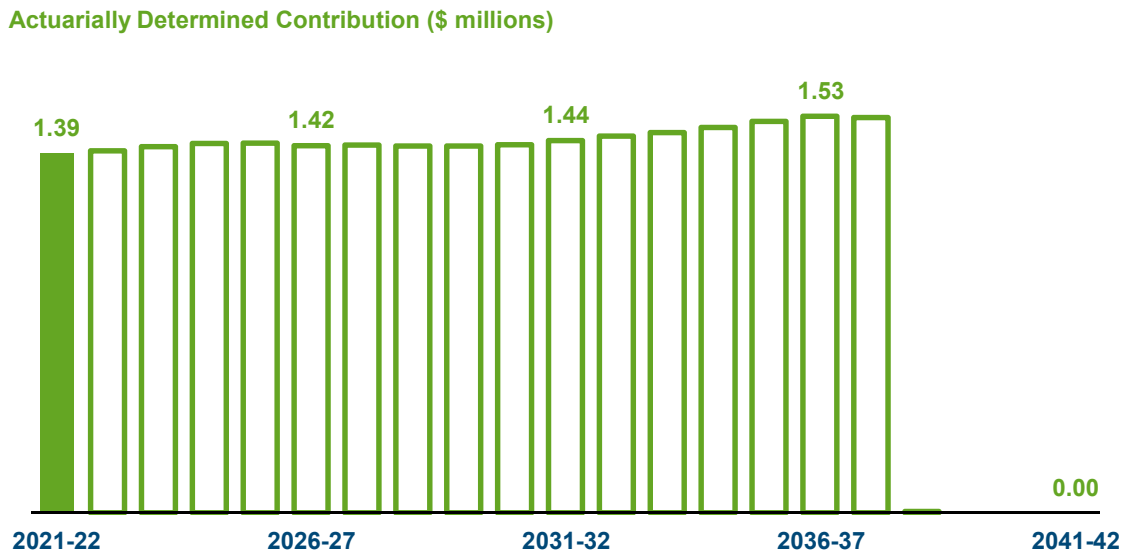
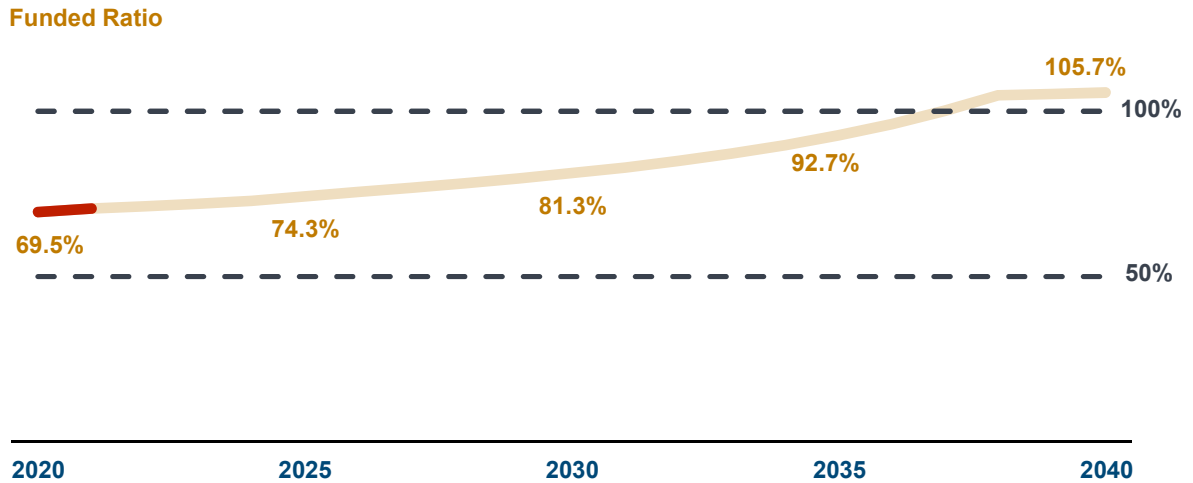
The Actuarially Determined Contribution consists of three pieces: a Normal Cost payment to fund the benefits earned each year, a Past Service Cost to gradually reduce any unfunded or surplus liability, and Interest to reflect the timing of the contribution relative to the valuation date.

The Actuarially Determined Contribution for fiscal year 2021-22 is shown graphically below, along with the comparable figures for the preceding four fiscal years. Note that the Normal Cost is relatively consistent from year to year, whereas the Past Service Cost tends to be more volatile since it reflects the impact of asset performance.



Section I - Executive Summary Long-Range Forecast

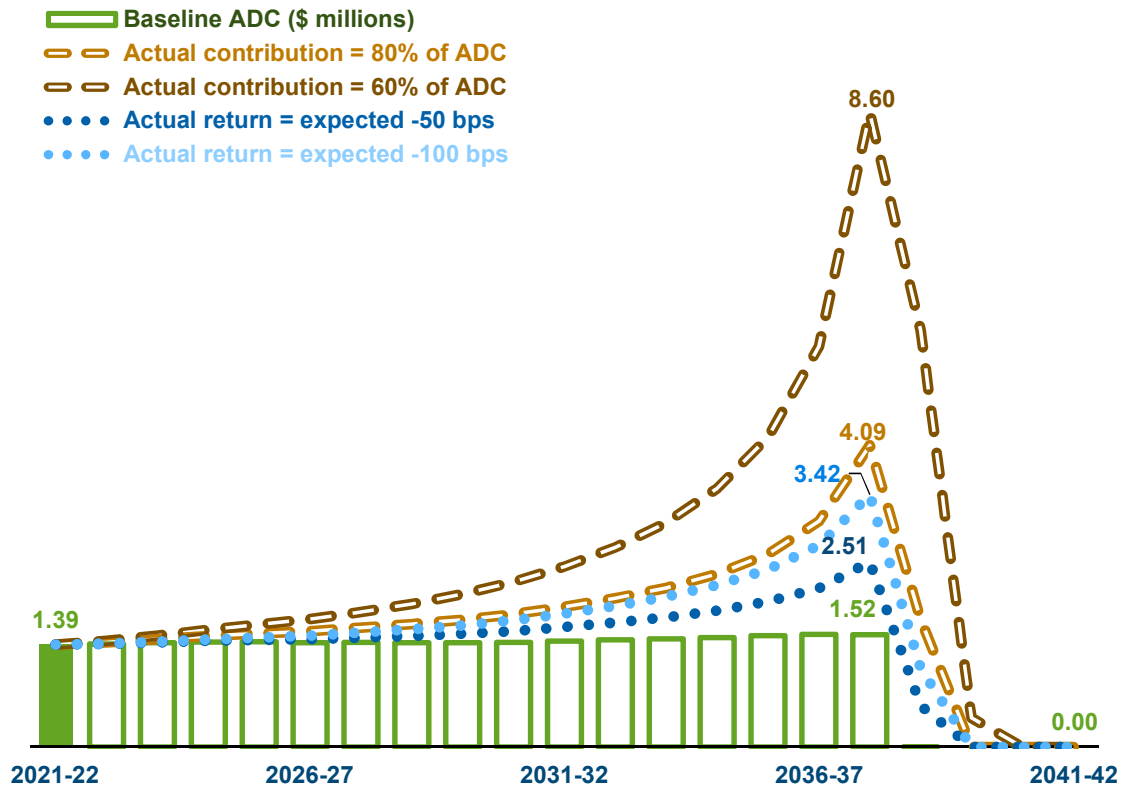
If the Town pays the Actuarially Determined Contribution each year, the investments earn exactly the assumed interest rate each year, and there are no changes in the plan provisions or in the actuarial methods and assumptions, then we project the following changes in the plan's funded status and the long-range contribution levels:



To the extent that there are future investment or liability gains or losses, changes in the actuarial assumptions or methods, or plan changes, the actual valuation results will differ from these forecasts. Please see Section III C for more details of the long range forecast.

Section I - Executive Summary Long-Range Forecast (continued)

Pension benefits are paid for through a combination of contributions from the Town and from employees, and from investment income. If the Town pays less than the Actuarially Determined Contribution each year, or if the investments persistently earn less than the assumed interest rate, then the plan's funded status would suffer, and to compensate, the Town's contribution levels would be pushed higher. The risks of underfunding and underearning are illustrated in the hypothetical scenarios below:



The scenarios illustrated above are based on deterministic projections that assume emerging plan experience always exactly matches the actuarial assumptions; in particular that actual asset returns will be constant in every year of the projection period. Variation in asset returns, contribution amounts, and many other factors may have a significant impact on the long-term financial health of the plan, the liquidity constraints on plan assets, and the Town's future contribution levels. Stochastic projections could be prepared that would enable the Town to understand the potential range of future results based on the expected variability in asset returns and other factors. Such analysis was beyond the scope of this engagement.

Section I - Executive Summary Summary of Principal Results

Membership as of	July 1, 2019	July 1, 2020
Active Members	132	120
Terminated Members	86	80
Members in Pay Status	<u>129</u>	<u>141</u>
Total Count	347	341
 Payroll	 \$7,050,585	 \$6,391,476
 Assets and Liabilities as of	 July 1, 2019	 July 1, 2020
Market Value of Assets	\$23,749,717	\$24,372,129
Actuarial Value of Assets	23,903,390	25,075,182
 Accrued Liability for Active Members	 17,784,354	 18,364,381
Accrued Liability for Terminated Members	2,379,846	2,194,122
Accrued Liability for Members in Pay Status	<u>11,896,881</u>	<u>15,497,755</u>
Total Accrued Liability	32,061,081	36,056,258
 Unfunded Accrued Liability	 8,157,691	 10,981,076
 Funded Ratio	 74.6%	 69.5%
 Actuarially Determined Contribution for Fiscal Year	 2020-21	 2021-22
Normal Cost	\$507,379	\$490,200
Past Service Cost	706,888	810,856
Interest	<u>81,963</u>	<u>86,195</u>
Actuarially Determined Contribution	1,296,230	1,387,251

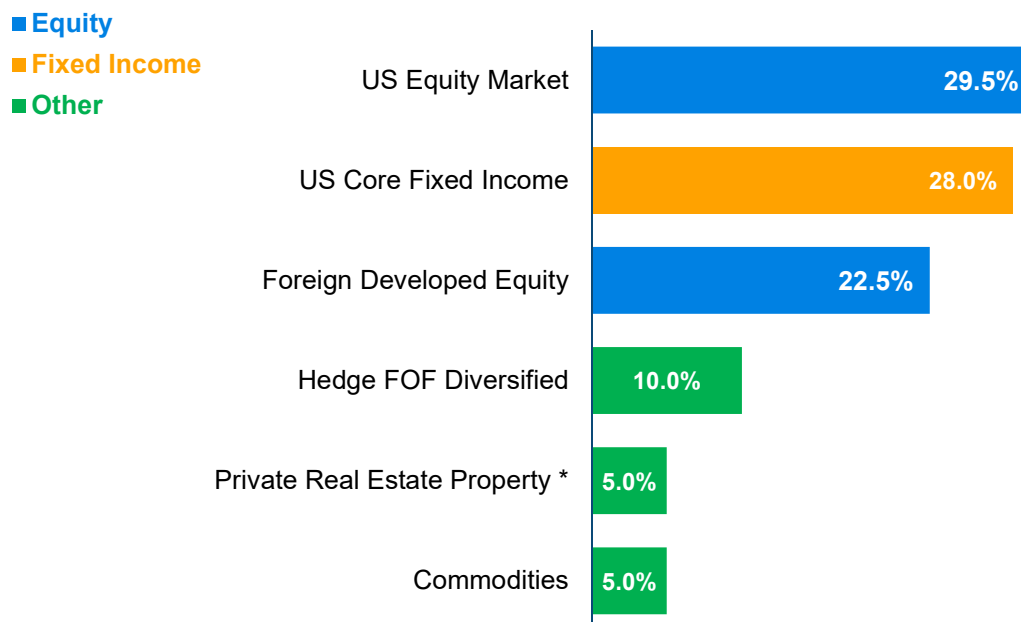
Section II - Plan Assets

A. Summary of Fund Transactions

Market Value as of July 1, 2019	\$23,749,717
Town Contributions	1,175,122
Member Contributions	279,676
Net Investment Income	745,321
Benefit Payments	(1,551,554)
Administrative Expenses	(26,153)
 Market Value as of June 30, 2020	 24,372,129
Expected Return on Market Value of Assets	1,597,116
Market Value (Gain)/Loss	851,795
Approximate Rate of Return *	3.15%

* The rate shown here is not the dollar or time weighted investment yield rate which measures investment performance. It is an approximate net return assuming all activity occurred on average midway through the fiscal year.

Target Asset Allocation as of June 30, 2020



Section II - Plan Assets

B. Development of Actuarial Value of Assets

In order to minimize the impact of market fluctuations on the contribution level, we use an Actuarial Value of Assets that recognizes gains and losses in equal installments ('non-asymptotically') over a five year period. The Actuarial Value of Assets as of July 1, 2020 is determined below.

1.	Expected Market Value of Assets:		
	a. Market Value of Assets as of July 1, 2019		\$23,749,717
	b. Town and Member Contributions		1,454,798
	c. Benefit Payments and Administrative Expenses		(1,577,707)
	d. Expected Earnings Based on 6.75% Interest		<u>1,597,116</u>
	e. Expected Market Value of Assets as of July 1, 2020		25,223,924
2.	Actual Market Value of Assets as of July 1, 2020		24,372,129
3.	Market Value (Gain)/Loss: (1e) - (2)		851,795
4.	Delayed Recognition of Market (Gains)/Losses		
		Percent Not	Amount Not
	Plan Year End	(Gain)/Loss	Recognized
	06/30/2020	\$851,795	80%
	06/30/2019	297,455	60%
	06/30/2018	114,066	40%
	06/30/2017	(1,012,408)	20%
			<u>(202,482)</u>
			703,053
5.	Actuarial Value of Assets as of July 1, 2020: (2) + (4)		25,075,182
6.	Return on Actuarial Value of Assets		1,294,701
7.	Approximate Rate of Return on Actuarial Value of Assets		5.43%
8.	Actuarial Value (Gain)/Loss		314,734

Section III - Development of Contribution

A. Past Service Cost

In determining the Past Service Cost, the Unfunded Accrued Liability is amortized as a level percent over a closed period of 17 years starting on July 1, 2020.

	July 1, 2019	July 1, 2020
1. Accrued Liability		
Active Members	\$17,784,354	\$18,364,381
Terminated Members	2,379,846	2,194,122
Service Retirees	11,821,252	15,045,199
Disabled Retirees	0	179,023
Beneficiaries	<u>75,629</u>	<u>273,533</u>
Total Accrued Liability	32,061,081	36,056,258
2. Actuarial Value of Assets (see Section IIB)	23,903,390	25,075,182
3. Unfunded Accrued Liability: (1) - (2)	8,157,691	10,981,076
4. Funded Ratio: (2) / (1)	74.6%	69.5%
5. Amortization Period	14	17
6. Amortization Growth Rate	3.50%	3.50%
7. Past Service Cost: (3) amortized over (5)	706,888	810,856

Section III - Development of Contribution
B. Actuarially Determined Contribution

	2020-21	2021-22
1. Total Normal Cost	\$740,945	\$727,698
2. Expected Member Contributions	289,566	264,398
3. Expected Administrative Expenses	56,000	26,900
4. Net Normal Cost: (1) - (2) + (3)	507,379	490,200
5. Past Service Cost (see Section IIIA)	706,888	810,856
6. Interest on (4) + (5) to the start of the fiscal year	81,963	86,195
7. Actuarially Determined Contribution: (4) + (5) + (6)	1,296,230	1,387,251

Section III - Development of Contribution C. Long Range Forecast

This forecast is based on the results of the July 1, 2020 actuarial valuation and assumes that the Town will pay the Actuarially Determined Contribution each year, the assets will return the assumed interest rate on a market value basis each year, and there are no future changes in the actuarial methods or assumptions or in the plan provisions. For purposes of this forecast the amortization period declines to 1 year to illustrate the progress of the plan towards becoming fully funded; in actual practice the amortization period will not be less than 10 years in order to shield the Town from contribution volatility. Actual results at each point in time will yield different values, reflecting the actual experience of the plan membership and assets.

Valuation Date	Values as of the Valuation Date				Fiscal Year	Cash Flows Projected to the Following Fiscal Year			
	Accrued Liability	Actuarial Value of Assets	Unfunded Accrued Liability	Funded Ratio		Town Contributions	Member Contributions	Benefit Payments	Net Cash Flows
7/1/2020	\$36,056,258	\$25,075,182	\$10,981,076	69.5%	2021-22	\$1,387,251	\$245,261	(\$1,910,288)	(\$277,776)
7/1/2021	37,361,000	26,372,000	10,989,000	70.6%	2022-23	1,395,000	224,000	(2,130,000)	(511,000)
7/1/2022	38,577,000	27,508,000	11,069,000	71.3%	2023-24	1,412,000	202,000	(2,327,000)	(713,000)
7/1/2023	39,585,000	28,517,000	11,068,000	72.0%	2024-25	1,424,000	180,000	(2,528,000)	(924,000)
7/1/2024	40,389,000	29,458,000	10,931,000	72.9%	2025-26	1,425,000	159,000	(2,746,000)	(1,162,000)
7/1/2025	40,965,000	30,425,000	10,540,000	74.3%	2026-27	1,416,000	142,000	(2,887,000)	(1,329,000)
7/1/2026	41,289,000	31,209,000	10,080,000	75.6%	2027-28	1,417,000	123,000	(3,068,000)	(1,528,000)
7/1/2027	41,438,000	31,870,000	9,568,000	76.9%	2028-29	1,414,000	106,000	(3,201,000)	(1,681,000)
7/1/2028	41,351,000	32,368,000	8,983,000	78.3%	2029-30	1,414,000	93,000	(3,288,000)	(1,781,000)
7/1/2029	41,068,000	32,741,000	8,327,000	79.7%	2030-31	1,420,000	82,000	(3,345,000)	(1,843,000)
7/1/2030	40,634,000	33,034,000	7,600,000	81.3%	2031-32	1,435,000	71,000	(3,443,000)	(1,937,000)
7/1/2031	40,080,000	33,280,000	6,800,000	83.0%	2032-33	1,452,000	60,000	(3,498,000)	(1,986,000)
7/1/2032	39,356,000	33,446,000	5,910,000	85.0%	2033-34	1,466,000	52,000	(3,539,000)	(2,021,000)
7/1/2033	38,490,000	33,571,000	4,919,000	87.2%	2034-35	1,485,000	45,000	(3,548,000)	(2,018,000)
7/1/2034	37,500,000	33,665,000	3,835,000	89.8%	2035-36	1,509,000	38,000	(3,573,000)	(2,026,000)
7/1/2035	36,416,000	33,768,000	2,648,000	92.7%	2036-37	1,529,000	31,000	(3,576,000)	(2,016,000)
7/1/2036	35,217,000	33,869,000	1,348,000	96.2%	2037-38	1,524,000	25,000	(3,565,000)	(2,016,000)
7/1/2037	33,917,000	33,984,000	(67,000)	100.2%	2038-39	5,000	20,000	(3,518,000)	(3,493,000)
7/1/2038	32,525,000	34,106,000	(1,581,000)	104.9%	2039-40	0	17,000	(3,445,000)	(3,428,000)
7/1/2039	31,077,000	32,710,000	(1,633,000)	105.3%	2040-41	0	15,000	(3,369,000)	(3,354,000)

Section III - Development of Contribution

D. History of Funded Status

Valuation Date	Actuarial Value of Assets	Accrued Liability	Unfunded Accrued Liability	Funded Ratio
July 1, 2011	\$12,792,846	\$18,939,318	\$6,146,472	67.5%
July 1, 2012	13,482,404	21,305,007	7,822,603	63.3%
July 1, 2013	14,261,995	23,172,761	8,910,766	61.5%
July 1, 2014	16,482,594	24,773,671	8,291,077	66.5%
July 1, 2015	18,208,133	25,689,450	7,481,317	70.9%
July 1, 2016	19,652,847	26,782,964	7,130,117	73.4%
July 1, 2017	21,193,924	28,057,807	6,863,883	75.5%
July 1, 2018	22,704,702	30,307,500	7,602,798	74.9%
July 1, 2019	23,903,390	32,061,081	8,157,691	74.6%
July 1, 2020	25,075,182	36,056,258	10,981,076	69.5%

Section III - Development of Contribution

E. History of Town Contributions

Fiscal Year	Actuarially Determined Contribution	Actual Town Contribution	Payroll	Actual Contribution as a Percent of Payroll
2012-13	\$1,012,381	\$1,012,381	\$7,740,314	13.1%
2013-14	1,231,124	1,323,461	7,911,823	16.7%
2014-15	1,236,631	1,236,631	7,916,465	15.6%
2015-16	1,110,353	1,288,982	7,864,597	16.4%
2016-17	1,112,035	1,112,035	7,737,228	14.4%
2017-18	1,084,561	1,084,561	7,614,963	14.2%
2018-19	1,086,598	1,086,598	7,235,501	15.0%
2019-20	1,175,122	1,175,122	7,011,899	16.8%
2020-21	1,296,230	TBD	7,050,585	TBD
2021-22	1,387,251	TBD	6,391,476	TBD

Section IV - Membership Data

A. Reconciliation of Membership from Prior Valuation

Details of the changes in the Plan membership since the last valuation are shown below. Additional details on the Plan membership are provided in the remainder of Section IV.

	Active Members	Terminated Members	Nonvested Members Due Refunds	Service Retirees	Disabled Retirees	Beneficiaries	Total
Count July 1, 2019	132	57	29	123	0	6	347
Terminated							
- no benefits due	-	-	-	-	-	-	0
- paid refund	-	-	(2)	-	-	-	(2)
- vested benefits due	-	-	-	-	-	-	0
Retired	(12)	(4)	-	15	1	-	0
Died							
- with beneficiary	-	-	-	(3)	-	3	0
- no beneficiary	-	-	-	(4)	-	-	(4)
Benefits expired	-	-	-	-	-	-	0
New member	-	-	-	-	-	-	0
Rehired	-	-	-	-	-	-	0
New Alternate Payee	-	-	-	-	-	-	0
Correction	-	-	-	-	-	-	0
Count July 1, 2020	120	53	27	131	1	9	341

Section IV - Membership Data
B. Statistics of Active Membership

	As of July 1, 2019	As of July 1, 2020
Number of Active Members	132	120
Average Age	58.2	58.6
Average Service	17.8	18.7
Total Payroll	\$7,050,585	\$6,391,476
Average Payroll	53,414	53,262

Section IV - Membership Data

C. Statistics of Inactive Membership

	As of July 1, 2019	As of July 1, 2020
Terminated Members		
Number	57	53
Total Annual Benefit	\$247,254	\$253,680
Average Annual Benefit	4,338	4,786
Average Age	53.1	58.5
Nonvested Members Due Refunds		
Number	29	27
Service Retirees		
Number	123	131
Total Annual Benefit	\$1,342,091	\$1,558,396
Average Annual Benefit	10,911	11,896
Average Age	75.3	75.0
Disabled Retirees		
Number	0	1
Total Annual Benefit	\$0	\$44,160
Average Annual Benefit	0	44,160
Average Age	0.0	54.2
Beneficiaries		
Number	6	9
Total Annual Benefit	\$32,381	\$68,092
Average Annual Benefit	5,397	7,566
Average Age	72.0	76.0

Section IV - Membership Data
D. Distribution of Inactive Members as of July 1, 2020

	Age	Number	Annual Benefits
Terminated Members	< 50	7	\$31,082
	50 - 59	9	39,769
	60 - 69	28	164,990
	70 - 79	7	16,358
	80 - 89	2	1,481
	90 +	<u>0</u>	<u>0</u>
	Total	53	253,680
Service Retirees	< 50	1	\$8,889
	50 - 59	1	8,435
	60 - 69	35	514,445
	70 - 79	57	700,341
	80 - 89	32	304,271
	90 +	<u>5</u>	<u>22,014</u>
	Total	131	1,558,396
Disabled Retirees	< 50	0	\$0
	50 - 59	1	44,160
	60 - 69	0	0
	70 - 79	0	0
	80 - 89	0	0
	90 +	<u>0</u>	<u>0</u>
	Total	1	44,160
Beneficiaries	< 50	2	\$19,521
	50 - 59	0	0
	60 - 69	2	28,478
	70 - 79	1	7,232
	80 - 89	2	6,345
	90 +	<u>2</u>	<u>6,515</u>
	Total	9	68,092

Section V - Analysis of Risk

A. Introduction

The results of this actuarial valuation are based on one set of reasonable assumptions. However, it is almost certain that future experience will not exactly match these assumptions. As an example, the plan's investments may perform better or worse than assumed in any single year and over any longer time horizon. It is therefore important to consider the potential impacts of these likely differences when making decisions that may affect the future financial health of the plan, or of the plan's members.

In addition, as plans mature they accumulate larger pools of assets and liabilities. The increase in size in turn increases the potential magnitude of adverse experience. As an example, the dollar impact of a 10% investment loss on a plan with \$1 billion in assets and liabilities is much greater than the dollar impact for a plan with \$1 million in assets and liabilities. Since pension plans make long-term promises and rely on long-term funding, it is important to consider how mature the plan is today, and how mature it may become in the future.

Actuarial Standard of Practice No. 51 (ASOP 51) directs actuaries to provide pension plan sponsors with information concerning the risks associated with the plan:

- Identify risks that may be significant to the plan.
- Assess the risks identified as significant to the plan. The assessment does not need to include numerical calculations.
- Disclose plan maturity measures and historical information that are significant to understanding the plan's risks.

This section of the report uses the framework of ASOP 51 to communicate important information about significant risks to the plan, the plan's maturity, and relevant historical plan data.

Please see Section III C for more information on the basis for the projected results shown on the following pages.

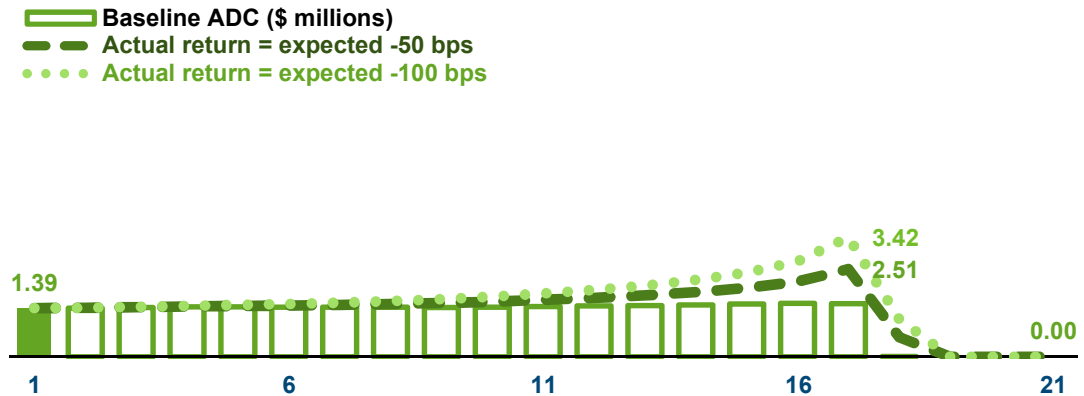
Section V - Analysis of Risk

B. Risk Identification and Assessment

Investment Risk

Definition: This is the potential that investment returns will be different than expected.

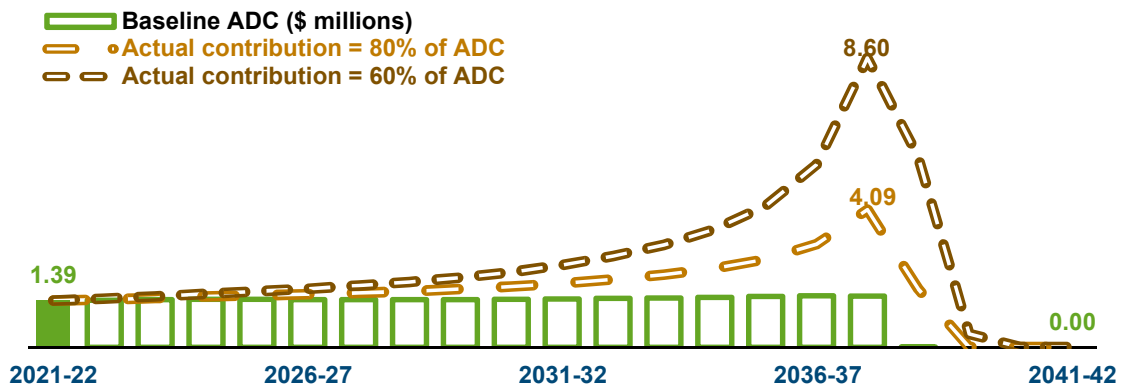
Identification: To the extent that actual investment returns differ from the assumed investment return, the plan's future assets, Actuarially Determined Contributions, and funded status may differ significantly from those presented in this valuation. The consequences of persistent underperformance on future Actuarially Determined Contribution levels are illustrated below:



Contribution Risk

Definition: This is the potential that actual future contributions will be less than the Actuarially Determined Contribution.

Identification: Over the past 8 years, actual contributions have been 103.0% of the Actuarially Determined Contribution in total. The consequences of persistent underfunding on future Actuarially Determined Contribution levels are illustrated below:



Section V - Analysis of Risk

B. Risk Identification and Assessment

Liquidity Risk

Definition: This is the potential that assets must be liquidated at a loss earlier than planned in order to pay for the plan's benefits and operating costs. This risk is heightened for plans with negative cash flows, in which contributions are not sufficient to cover benefit payments plus expenses.

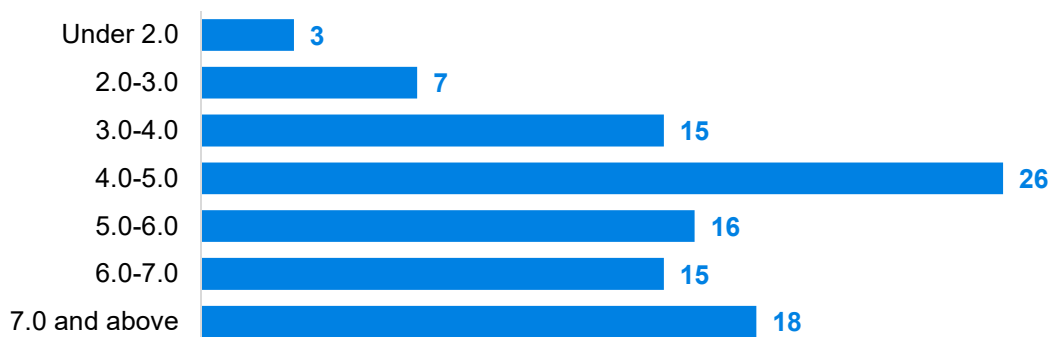
Identification: In 2019-20, the plan had negative cash flow, with town and member contributions to the plan of \$1,454,798 compared to \$1,577,707 of benefit payments and administrative expenses paid out of the plan. We suggest that you consult with your investment advisors with respect to the liquidity characteristics of the plan's investment holdings.

Maturity Risk

Definition: This is the potential for total plan liabilities to become more heavily weighted toward inactive liabilities over time, and for plan assets and/or liabilities to become larger relative to the active member liability.

Identification: The plan is subject to maturity risk because as plan assets and liabilities continue to grow, the dollar impact of any gains or losses on the assets or liabilities also becomes larger.

Assessment: As of July 1, 2020, the plan's Asset Volatility Ratio (the ratio of the market value of plan assets to payroll) is 3.8. According to Milliman's 2020 Public Pension Funding Study, the 100 largest US public pension plans have the following range of Asset Volatility Ratios:



Inflation Risk

Definition: This is the potential for a pension to lose purchasing power over time due to inflation.

Identification: The members of pension plans without fully inflation-indexed benefits are subject to the risk that their purchasing power will be reduced over time due to inflation.

Assessment: This plan does not contain a mechanism to regularly increase benefits after retirement, so members bear all of the inflation risk.

Section V - Analysis of Risk

B. Risk Identification and Assessment

Insolvency Risk

Definition: This is the potential that a plan will become insolvent; that is, assets will be fully depleted.

Identification: If a plan becomes insolvent, contractually required benefits must be paid from the plan sponsor's other remaining assets.

Assessment: Under the GASB 68 depletion date methodology, the plan is not projected to become insolvent. Please see the GASB 68 report for more details on the underlying analysis.

Demographic Risks

Definition: This is the potential that mortality, turnover, retirement, or other demographic experience will be different than expected.

Identification: The pension liabilities reported herein have been calculated by assuming that members will follow patterns of demographic experience as described in Appendix B. If actual demographic experience or future demographic assumptions are different from what is assumed to occur in this valuation, future pension liabilities, Actuarially Determined Contributions, and funded status may differ significantly from those presented in this valuation. Formal Experience Studies performed on a regular basis are helpful in ensuring that the demographic assumptions reflect emerging plan experience.

Retirement Risk

Definition: This is the potential for members to retire and receive subsidized benefits that are more valuable than expected.

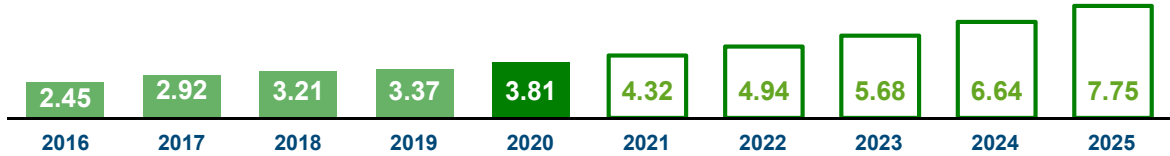
Identification: This plan provides unreduced early retirement benefits for certain members with long service. If members retire at earlier ages than are anticipated by the actuarial assumptions, this will put upward pressure on subsequent Actuarially Determined Contributions.

Section V - Analysis of Risk

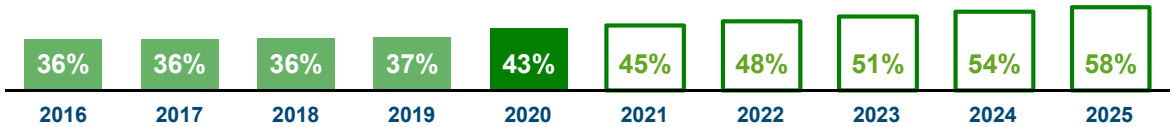
C. Maturity Measures

The metrics presented below are different ways of understanding the plan's maturity level, both in the past and as it is expected to change in the coming years.

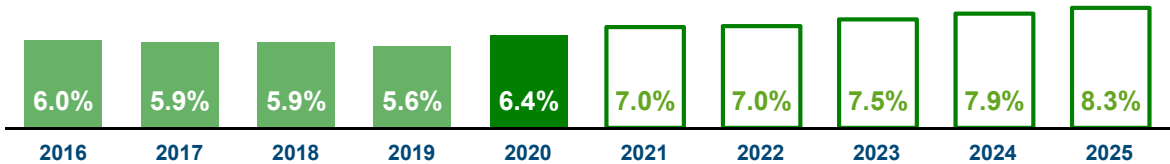
Asset Volatility Ratio: Market Value of Assets compared to Payroll



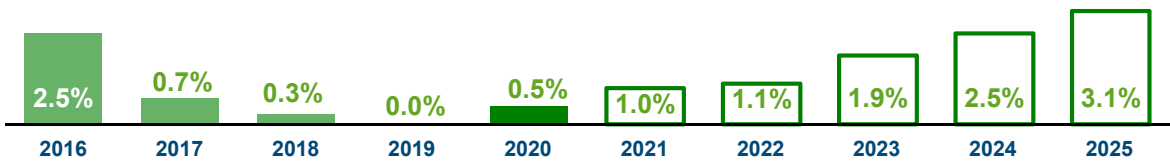
Accrued Liability for members in pay status compared to total Accrued Liability



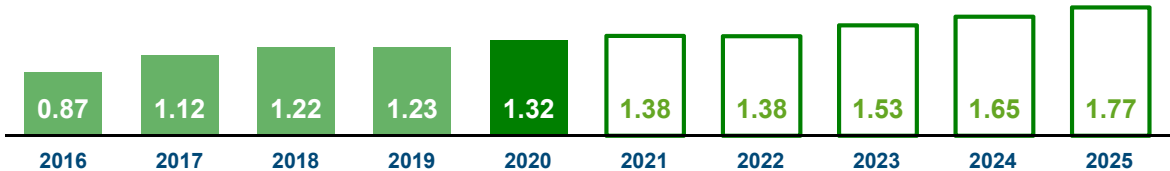
Benefit Payments compared to Market Value of Assets



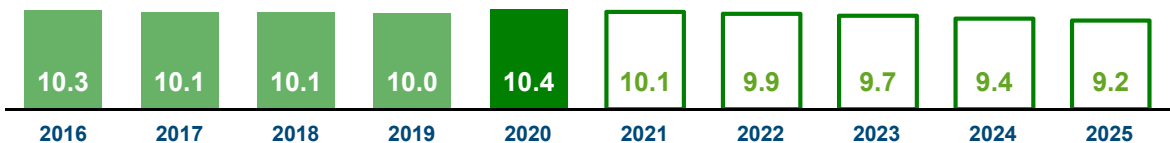
Net Cash Flows compared to Market Value of Assets



Benefit Payments compared to Town Contributions



Duration of Accrued Liability (based on GASB 68 sensitivity disclosures)



Appendix A - Actuarial Funding Method

The actuarial funding method used in the valuation of this Plan is known as the Entry Age Normal Method. The Actuarially Determined Contribution consists of three pieces: Normal Cost plus a Past Service Cost payment to gradually eliminate the Unfunded Accrued Liability plus Interest to reflect the timing of the contribution relative to the valuation date.

The Normal Cost is determined by calculating the present value of future benefits for present active Members that will become payable as the result of death, disability, retirement or termination. This cost is then spread as a level percentage of earnings from entry age to termination as an Active Member. If Normal Costs had been paid at this level for all prior years, a fund would have accumulated. Because this fund represents the portion of benefits that would have been funded to date, it is termed the Accrued Liability. In fact, it is calculated by adding the present value of benefits for Retired Members and Terminated Vested Members to the present value of benefits for Active Members and subtracting the present value of future Normal Cost contributions.

The funding cost of the Plan is derived by making certain specific assumptions as to rates of interest, mortality, turnover, etc. which are assumed to hold for many years into the future. Since actual experience may differ somewhat from the assumptions, the costs determined by the valuation must be regarded as estimates of the true costs of the Plan.

The Unfunded Accrued Liability is the excess of the Accrued Liability over the assets which have been accumulated for the plan. This Unfunded Accrued Liability is amortized as a level percent over a closed period of 17 years starting on July 1, 2020. The amortization period will decrease each year until it reaches 10 years, after which point it will remain at 10 years.

The Actuarial Value of Assets is determined by recognizing market gains and losses non-asymptotically over a five year period.

The long-range forecasts included in this report have been developed by assuming that members will terminate, retire, become disabled, and die according to the actuarial assumptions with respect to these causes of decrement, and that pay increases, cost of living adjustments, and so forth will likewise occur according to the actuarial assumptions.

Appendix B - Actuarial Assumptions

Each of the assumptions used in this valuation was set based on industry standard published tables and data, the particular characteristics of the plan, relevant information from the plan sponsor or other sources about future expectations, and our professional judgment regarding future plan experience. We believe the assumptions are reasonable for the contingencies they are measuring, and are not anticipated to produce significant cumulative actuarial gains or losses over the measurement period.

Interest Rate	6.625% (prior: 6.75%)	
Inflation	2.75%	
Amortization Growth Rate	3.50%	
Salary Scale	3.50%	
Expenses	Administrative expenses paid in the prior year, increased by 3% and rounded to the nearest \$100.	
Turnover	Age	Rate
	<30	14.0%
	30-34	11.5%
	35-39	7.0%
	40+	4.0%
Mortality	<p>Current - PubG-2010 Mortality Table with generational projection per the MP-2019 ultimate scale, with employee rates before benefit commencement and healthy or disabled annuitant rates after benefit commencement. This assumption includes a margin for improvements in longevity beyond the valuation date.</p> <p>Prior - RP-2000 Mortality Tables for employees, healthy annuitants and disabled annuitants, with generational projection of future mortality improvements per Scale AA. This assumption includes a margin for improvements in longevity beyond the valuation date.</p>	
Marital Status	90% of male members and 60% of female members are assumed to be married with wives 3 years younger than husbands.	
Retirement	Age	Rate
	55-64	10%
	65-66	35%
	67-74	15%
	75	100%
Disability	The 1952 Disability Study of the Society of Actuaries, Period 4, Benefit Rates.	

Appendix C - Summary of Plan Provisions

This exhibit summarizes the major provisions of the Plan. It is not intended to be, nor should it be interpreted as a complete statement of all plan provisions. All eligibility requirements and benefit amounts shall be determined in strict accordance with the plan document itself. To the extent that this summary does not accurately reflect the plan provisions, then the results of this valuation may not be accurate.

Eligibility	<p>Any individual in the employ of the Town of Simsbury whose customary employment is at least 32½ hours per week on a regular schedule, excluding all individuals covered by the State Teachers Retirement Plan or the Town of Simsbury Police or General Government Retirement Income Plans. The plan is closed to employees hired after the following dates:</p> <p>NAGE: December 10, 2013.</p> <p>SFEP, SSNA and Unaffiliated: July 1, 2013.</p>
Employee Contributions	<p>Prior to 7/1/13, 2.0% of compensation for NAGE, SFEP and SSNA; 2.5% for Unaffiliated.</p> <p>NAGE: 2.5% effective 7/1/13, increasing to 3.5% effective 7/1/14 and 4.5% effective 7/1/15.</p> <p>SFEP and SSNA: 3.0% effective 7/1/13, increasing to 4.0% effective 7/1/14 and 4.5% effective 7/1/15.</p> <p>Unaffiliated: 3.0% effective 7/1/13, increasing to 3.5% effective 7/1/14 and 4.0% effective 7/1/15.</p> <p>No contributions after Normal Retirement Date. Interest is credited at 5% per year.</p>
Credited Service	<p>Whole years and full months from date of participation.</p>
Compensation	<p>Basic Compensation excluding overtime, commissions, bonuses, and any other form of additional compensation.</p>
Final Average Compensation Compensation	<p>NAGE: average of Compensation paid during the last three July 1's before retirement.</p> <p>SFEP: average of Compensation paid during the last three completed years of employment.</p> <p>SSNA and Unaffiliated: average of Compensation during the highest three consecutive July 1's out of the last ten years before retirement.</p>

Appendix C - Summary of Plan Provisions

Normal Retirement Date	NAGE and SFEP: age 65. SSNA and Unaffiliated: age 65 with 10 years of Credited Service.
Normal Retirement Benefit	1½% of Final Average Compensation times Credited Service through July 1, 1996, plus 2% of Final Average Compensation times Credited Service after July 1, 1996. For certain Unaffiliated members: 2% of Final Average Compensation times Credited Service.
Early Retirement Date	Age 55 with 10 years of Credited Service.
Early Retirement Benefit	Benefit is based on Credited Service and Final Average Compensation to actual retirement date reduced by 4% for each year by which the participant's retirement date precedes Normal Retirement Date. There is no reduction in benefit for NAGE employees after age 62 and 29 years of service, for Unaffiliated employees after age 62 and 20 years of service or for SFEP employees after age 62 and 25 years of service.
Deferred Retirement Date	Members may continue to work beyond Normal Retirement.
Deferred Retirement Benefit	Benefit based on Credited Service and Final Average Compensation to actual date of retirement.
Death Benefits Before Retirement	For Unaffiliated, SFEP, and SSNA only, must be eligible for early retirement and married one full year prior to death. Benefit is 100% of the pension benefit accrued to date of death reduced by the appropriate early retirement and joint and survivor factors reduced to 50% after the first 5 years.
Death Benefits After Retirement	Based on form of benefit elected at retirement.
Disability Retirement Date	Ten years of Credited Service and not eligible for early retirement.
Disability Retirement Benefit	NAGE: \$500 per month. SFEP: \$200 per month. Unaffiliated: \$300 per month.
Vesting	100% vested after completion of 5 years of Credited Service.
Termination Benefit Pre-Retirement	Refund of Employee Contributions with interest to date of termination.

Appendix C - Summary of Plan Provisions

Termination Benefit Post-Retirement

On or after Normal Retirement Date but prior to annuity commencement date: Annuity payments to the beneficiary for the five year period commencing on the first of the month following the member's death.

Normal Form of Annuity

5 Year Certain and Life Annuity.

Appendix D - Glossary

Actuarial Cost Method - This is a procedure for determining the Actuarial Present Value of Benefits and allocating it to time periods to produce the Actuarial Accrued Liability and the Normal Cost.

Accrued Liability - This is the portion of the Actuarial Present Value of Benefits attributable to periods prior to the valuation date by the Actuarial Cost Method (i.e., that portion not provided by future Normal Costs).

Actuarial Assumptions - With any valuation of future benefits, assumptions of anticipated future events are required. If actual events differ from the assumptions made, the actual cost of the plan will vary as well. Some examples of key assumptions include the interest rate, salary scale, and rates of mortality, turnover and retirement.

Actuarial Present Value of Benefits - This is the present value, as of the valuation date, of future payments for benefits and expenses under the Plan, where each payment is: a) multiplied by the probability of the event occurring on which the payment is conditioned, such as the probability of survival, death, disability, termination of employment, etc.; and b) discounted at the assumed interest rate.

Actuarial Value of Assets - This is the value of cash, investments and other property belonging to the plan, typically adjusted to recognize investment gains or losses over a period of years to dampen the impact of market volatility on the Actuarially Determined Contribution.

Actuarially Determined Contribution (“ADC”) - This is the employer’s periodic contributions to a defined benefit plan, calculated in accordance with actuarial standards of practice.

Attribution Period - The period of an employee’s service to which the expected benefit obligation for that employee is assigned. The beginning of the attribution period is the employee’s date of hire and costs are spread across all employment.

Interest Rate - This is the long-term expected rate of return on any investments set aside to pay for the benefits. In a financial reporting context (e.g., GASB 68) this is termed the Discount Rate.

Normal Cost - This is the portion of the Actuarial Present Value of Benefits allocated to a valuation year by the Actuarial Cost Method.

Past Service Cost - This is a catch-up payment to fund the Unfunded Accrued Liability over time (generally 10 to 30 years). A closed amortization period is a specific number of years counted from one date and reducing to zero with the passage of time; an open amortization period is one that begins again or is recalculated at each valuation date. Also known as the Amortization Payment.

Return on Plan Assets - This is the actual investment return on plan assets during the fiscal year.

Unfunded Accrued Liability - This is the excess of the Accrued Liability over the Actuarial Value of Assets.

TOWN OF SIMSBURY PENSION PLANS**Estimated Actuarially Determined Contribution for FY 2022-23**

Based on July 1, 2020 Valuations and July 1, 2021 Assets

	Projected from 2020 Valuation, No Changes	Reflecting Actual 2020-21 Asset Performance	Lower Interest Rate	Lower Interest Rate More
Interest rate assumption	6.625%	6.625%	6.50%	6.25%
Government Employees				
Actuarial Value of Assets	\$26,614,000	\$27,563,000	\$27,563,000	\$27,563,000
Estimated July 1, 2021 Accrued Liability	38,771,000	38,771,000	39,313,000	40,403,000
Unfunded Accrued Liability	12,157,000	11,207,000	11,750,000	12,840,000
Funded Ratio	68.6%	71.1%	70.1%	68.2%
Amortization Period	16	16	16	16
Amortization Growth Rate	3.50%	3.50%	3.50%	3.50%
Amortization Payment	941,000	868,000	902,000	970,000
Total Normal Cost	710,000	710,000	730,000	770,000
Employee Contributions	371,000	371,000	371,000	371,000
Expenses	51,000	51,000	51,000	51,000
Net Normal Cost	390,000	390,000	410,000	450,000
Interest	88,000	83,000	85,000	89,000
Actuarially Determined Contribution	1,419,000	1,341,000	1,397,000	1,509,000

This work product was prepared solely for the Town for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product. Except as otherwise indicated above, the explanatory notes contained in the July 1, 2020 valuation report dated September 20, 2021, including statements of reliance and limitations on use, continue to apply.

TOWN OF SIMSBURY PENSION PLANS**Estimated Actuarially Determined Contribution for FY 2022-23**

Based on July 1, 2020 Valuations and July 1, 2021 Assets

	Projected from 2020 Valuation, No Changes	Reflecting Actual 2020-21 Asset Performance	Lower Interest Rate	Lower Interest Rate More
Interest rate assumption	6.625%	6.625%	6.50%	6.25%
Police Employees				
Actuarial Value of Assets	\$19,530,000	\$20,158,000	\$20,158,000	\$20,158,000
Estimated July 1, 2021 Accrued Liability	24,583,000	24,583,000	24,966,000	25,738,000
Unfunded Accrued Liability	5,053,000	4,425,000	4,808,000	5,580,000
Funded Ratio	79.4%	82.0%	80.7%	78.3%
Amortization Period	16	16	16	16
Amortization Growth Rate	3.50%	3.50%	3.50%	3.50%
Amortization Payment	391,000	342,000	369,000	421,000
Total Normal Cost	716,000	716,000	738,000	783,000
Employee Contributions	281,000	281,000	281,000	281,000
Expenses	35,000	35,000	35,000	35,000
Net Normal Cost	470,000	470,000	492,000	537,000
Interest	57,000	54,000	56,000	59,000
Actuarially Determined Contribution	918,000	866,000	917,000	1,017,000

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TOWN OF SIMSBURY PENSION PLANS**Estimated Actuarially Determined Contribution for FY 2022-23**

Based on July 1, 2020 Valuations and July 1, 2021 Assets

	Projected from 2020 Valuation, No Changes	Reflecting Actual 2020-21 Asset Performance	Lower Interest Rate	Lower Interest Rate More
Interest rate assumption	6.625%	6.625%	6.50%	6.25%
BOE Employees				
Actuarial Value of Assets	\$26,372,000	\$27,401,000	\$27,401,000	\$27,401,000
Estimated July 1, 2021 Accrued Liability	37,361,000	37,361,000	37,884,000	38,930,000
Unfunded Accrued Liability	10,989,000	9,960,000	10,483,000	11,529,000
Funded Ratio	70.6%	73.3%	72.3%	70.4%
Amortization Period	16	16	16	16
Amortization Growth Rate	3.50%	3.50%	3.50%	3.50%
Amortization Payment	850,000	771,000	805,000	871,000
Total Normal Cost	675,000	675,000	694,000	732,000
Employee Contributions	245,000	245,000	245,000	245,000
Expenses	28,000	28,000	28,000	28,000
Net Normal Cost	458,000	458,000	477,000	515,000
Interest	87,000	82,000	83,000	87,000
Actuarially Determined Contribution	1,395,000	1,311,000	1,365,000	1,473,000

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TOWN OF SIMSBURY OTHER POST-EMPLOYMENT BENEFITS PROGRAM

Estimated Actuarially Determined Contribution for FY 2022-23

Based on July 1, 2019 Valuation and July 1, 2021 Assets

	Projected from 2019 Valuation, No Changes	Reflecting Actual 2020-21 Asset Performance	Lower Interest Rate	Lower Interest Rate More
Interest rate assumption	6.625%	6.625%	6.50%	6.25%
Government Employees				
Actuarial Value of Assets	\$6,786,000	\$8,108,000	\$8,108,000	\$8,108,000
Estimated July 1, 2021 Accrued Liability	7,396,000	7,396,000	7,506,000	7,728,000
Unfunded Accrued Liability	609,000	(713,000)	(602,000)	(380,000)
Funded Ratio	91.8%	109.6%	108.0%	104.9%
Amortization Period	16	16	16	16
Amortization Growth Rate	3.50%	3.50%	3.50%	3.50%
Amortization Payment	47,000	(55,000)	(46,000)	(29,000)
Total Normal Cost	284,000	284,000	293,000	310,000
Employee Contributions	149,000	149,000	149,000	149,000
Expenses	0	0	0	0
Net Normal Cost	135,000	135,000	144,000	161,000
Interest	12,000	5,000	6,000	8,000
Actuarially Determined Contribution	194,000	85,000	104,000	140,000
Expected Benefit Payouts	(369,000)	(369,000)	(369,000)	(369,000)
Net Budget Impact	(175,000)	(284,000)	(265,000)	(229,000)

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TOWN OF SIMSBURY OTHER POST-EMPLOYMENT BENEFITS PROGRAM

Estimated Actuarially Determined Contribution for FY 2022-23

Based on July 1, 2019 Valuation and July 1, 2021 Assets

	Projected from 2019 Valuation, No Changes	Reflecting Actual 2020-21 Asset Performance	Lower Interest Rate	Lower Interest Rate More
Interest rate assumption	6.625%	6.625%	6.50%	6.25%
Police Employees				
Actuarial Value of Assets	\$3,720,000	\$4,285,000	\$4,285,000	\$4,285,000
Estimated July 1, 2021 Accrued Liability	5,377,000	5,377,000	5,457,000	5,619,000
Unfunded Accrued Liability	1,657,000	1,091,000	1,172,000	1,334,000
Funded Ratio	69.2%	79.7%	78.5%	76.3%
Amortization Period	16	16	16	16
Amortization Growth Rate	3.50%	3.50%	3.50%	3.50%
Amortization Payment	128,000	84,000	90,000	101,000
Total Normal Cost	338,000	338,000	348,000	368,000
Employee Contributions	56,000	56,000	56,000	56,000
Expenses	0	0	0	0
Net Normal Cost	282,000	282,000	292,000	312,000
Interest	27,000	24,000	24,000	26,000
Actuarially Determined Contribution	437,000	390,000	406,000	439,000
Expected Benefit Payouts	(250,000)	(250,000)	(250,000)	(250,000)
Net Budget Impact	187,000	140,000	156,000	189,000

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TOWN OF SIMSBURY OTHER POST-EMPLOYMENT BENEFITS PROGRAM

Estimated Actuarially Determined Contribution for FY 2022-23

Based on July 1, 2019 Valuation and July 1, 2021 Assets

	Projected from 2019 Valuation, No Changes	Reflecting Actual 2020-21 Asset Performance	Lower Interest Rate	Lower Interest Rate More
Interest rate assumption	6.625%	6.625%	6.50%	6.25%
BOE Employees				
Actuarial Value of Assets	\$8,744,000	\$10,273,000	\$10,273,000	\$10,273,000
Estimated July 1, 2021 Accrued Liability	12,769,000	12,769,000	12,961,000	13,344,000
Unfunded Accrued Liability	4,025,000	2,496,000	2,688,000	3,071,000
Funded Ratio	68.5%	80.5%	79.3%	77.0%
Amortization Period	16	16	16	16
Amortization Growth Rate	3.50%	3.50%	3.50%	3.50%
Amortization Payment	311,000	193,000	206,000	232,000
Total Normal Cost	506,000	506,000	521,000	551,000
Employee Contributions	0	0	0	0
Expenses	0	0	0	0
Net Normal Cost	506,000	506,000	521,000	551,000
Interest	55,000	47,000	48,000	49,000
Actuarially Determined Contribution	872,000	746,000	775,000	832,000
Expected Benefit Payouts	(737,000)	(737,000)	(737,000)	(737,000)
Net Budget Impact	135,000	9,000	38,000	95,000

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