

Delaware Volunteer Fire Service

September 2022 Special Report



Kathy McGuinness RPh, CFE
Delaware State Auditor

Photo courtesy of Cheswold VFD



State of Delaware
Office of Auditor of Accounts
Kathleen K. McGuiness, RPh, CFE
Delaware State Auditor

September 30, 2022

Mr. Kenneth Ryder Jr.; President (2022-2023)
Mr. Dan Carrier; President (2021-2022)
Delaware Volunteer Firefighters Association
122 S. Bradford Street
P.O. Box 1849
Dover, DE 19903

Ms. Debra Lawhead; President (2022-2023)
Ms. Pam Ingle; President (2021-2022)
Ladies Auxiliary Association
122 S. Bradford Street
P.O. Box 1849
Dover, DE 19903

Dear Mr. Ryder, Mr. Carrier, Ms. Lawhead & Ms. Ingle,

I am pleased to present the 2022 Delaware Volunteer Fire Service Annual Report. Delaware's volunteer fire service program is, and always has been, a tremendous asset to Delawareans. The program demonstrates the pride and support of many volunteers, both firefighters and auxiliary members.

The Office of Auditor of Accounts (OAOA) presents this report each year to provide Delawareans with the utmost transparency of the state's fire service as it continues to evolve. A century ago, Delaware's fire service relied solely on volunteers, but today the state utilizes a combination system comprising of paid and volunteer firefighters and EMTs. We remain immensely grateful to the firefighters, EMTs and auxiliary members for their service.

This report's goal is to show how much more Delaware taxpayers would pay if the state were to fully take over the fire service and employ a statewide system. The savings calculated in this report translate directly into savings in Delaware's state budget. This year, my office estimates that the current combination system with volunteers saved the State of Delaware more than \$320,000,000 for the fiscal year ended June 30, 2022.

First responders voluntarily put their lives on the line to provide Delawareans with safer, more secure communities. It is our responsibility, in turn, to ensure they have the resources they need to continue serving Delawareans. I continue to extend my deepest appreciation to these volunteers for their dedication and service to Delaware.

Sincerely,

A handwritten signature in blue ink that reads "Kathy McGuiness".

Kathy McGuiness, RPh, CFE
Delaware State Auditor

Terms and Abbreviations

What is a volunteer firefighter?

- Volunteer firefighters are first responders who perform fire suppression and administer first aid for a community or local jurisdiction.

What is a volunteer fire company (VFC) responsible for?

- A VFC is an organization that is responsible for fire, rescue, emergency medical, and other emergency-response-related services for a local jurisdiction. VFCs often have administrative, fire, and auxiliary/support functions. Their operational activities include accounting, equipment purchases, maintenance of vehicles and apparatus, and facility management.
- DPERS: Delaware Public Employees Retirement System
- DVFA: Delaware Volunteer Firefighters Association
- EMT: Emergency Medical Technician
- HB: House Bill
- NFPA: National Fire Protection Agency
- OAOA: Office of Auditor of Accounts
- SB: Senate Bill
- WFD: Wilmington Fire Department



The Delaware State Auditor serves Delawareans by providing independent, objective oversight of the state government's use of taxpayer dollars with the goal of deterring fraud, waste and abuse through unbiased assessments, including the use of various audits, special reports, and investigations of financial operations designed to ensure statutory compliance while enhancing governmental economy, efficiency and effectiveness.

For further information on this release, please contact:
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Background

The State of Delaware has 60 fire companies, 20 substations and 3 ambulance stations, with approximately 6,000 volunteers serving as firefighters, Emergency Medical Technicians (EMTs), and support members (e.g., life, auxiliary, juniors/cadets).

The breakdown within the three counties is as follows: 21 New Castle County fire companies, 18 Kent County fire companies, and 21 Sussex County fire companies.

Members of Delaware's Fire Service are offered a variety of benefits to recognize the sacrifices they make through their services. These benefits include:¹

- Special DE Volunteer Firefighter license plate from DMV;
- Long-term volunteer Pension plan;
- Worker' compensation for injuries received in the line of duty;
- Blood bank membership;
- Competitive college scholarships available;
- A \$500 Delaware State tax credit and
- \$7,000 member funeral expense payment.

In the unfortunate event that a service member dies in the line of duty, further benefits include:

- Life insurance payments of \$200,000 and
- Reimbursement of college tuition expenses for dependent children.

In an effort to further support these brave service members who were Delawareans across the state, the 151st General Assembly passed three pieces of legislation, which Governor Carney signed into law, during Fiscal Year 2021 in relation to firefighters and other emergency service personnel:

- HB249 creates a tuition reimbursement program for volunteer firefighters, enabling them to be reimbursed for tuition for two undergraduate level courses or one master's level course per semester at any Delaware college or university.
- SB 160 allows insurance policies to cover cancer for active firefighters, fire marshals, EMTs and others.
- SB 92 provides a free surf fishing vehicle permit each year for emergency personnel



Photo courtesy of the Claymont VFD

¹ Obtained from the Delaware Volunteer Firefighters website at <https://firefighter.delaware.gov/>.

It would cost \$320,330,245 to replace Delaware's Volunteer Fire Service with an Employed Statewide Fire Service

Projected Costs of State Employed Fire Service:

Salaries and Fringe Benefits plus DPERS Employer Contribution	\$ 265,340,755.00
Equipment Purchases and Maintenance	\$ 27,786,771.46
Building Purchases and Maintenance	\$ 69,312,109.78
Fuel and Utilities	\$ 4,496,023.68
Insurance Premiums	\$ 5,917,553.89
Employee Apparatus	\$ <u>4,795,740.00</u>
 Total Projected Cost	 \$ 377,648,954.00

Less Current Revenue Sources:

Grant-In-Aid ²	\$ 807,590
Fire Insurance ³	\$ 34,217,345
Ambulance Tax and Levies ⁴	\$ 10,214,615
County Subsidies ⁵	\$ 10,179,159
State Contribution to DVFA fund (pension) ⁶	\$ <u>1,900,000</u>
 Total Revenue Sources	 \$ 57,318,709

Total Cost Avoidance	\$320,330,245
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² Obtained from Fiscal Year 2022 Grant-In-Aid Bill, HB 265

³ Obtained from the Office of the State Treasurer

⁴ Obtained from the Office of the State Treasurer and the Delaware Fire Prevention Commission

⁵ Obtained from the budget for each county in Delaware

⁶ Obtained from the DE Public Employees' Retirement System Annual Report Fiscal Year 2021, Volunteer Fire Fund Employer Contribution

Property taxes would increase \$13.17 per \$1,000 of assessed property value for an entirely state-employed fire service

Projected Costs of State-Employed Fire Service per \$1,000 of assessed property value:

Salaries and Fringe Benefits plus DPERS Employer Contribution	\$ 10.92
Equipment Purchases and Maintenance	\$ 1.14
Building Purchases and Maintenance	\$ 2.85
Fuel and Utilities	\$ 0.18
Insurance Premiums	\$ 0.24
Employee Apparatus	\$ 0.20
Total Projected Cost	\$15.53

Less Current Revenue Sources:

Grant-In-Aid ⁷	\$ 0.03
Fire Insurance ⁸	\$ 1.41
Ambulance Tax and Levies ⁹	\$ 0.42
County Subsidies ¹⁰	\$ 0.42
State Contribution to DVFA fund (pension) ¹¹	\$ 0.08
Total Revenue Sources	\$ 2.36

Total Cost Avoidance	\$13.17
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⁷ Obtained from Fiscal Year 2022 Grant-In-Aid Bill, HB 265

⁸ Obtained from the Office of the State Treasurer

⁹ Obtained from the Office of the State Treasurer and the Delaware Fire Prevention Commission

¹⁰ Obtained from the budget for each county in Delaware

¹¹ Obtained from the DE Public Employees' Retirement System Annual Report Fiscal Year 2021, Volunteer Fire Fund Employer Contribution

Detailed Cost Savings Calculation

Cost for a Non-Volunteer Fire Department

The basis for this analysis is the paid City of Wilmington Fire Department (WFD).¹²
The following statistics were used in the analysis:

Population of the City of Wilmington	70,750
Current number of Wilmington fire stations	6
Population served per Station	11,792
Current number of paid firefighters	160
Estimated employees per Station	27
(Number of firefighters divided by Number of fire stations)	
Average salary and fringe benefits for current WFD employees	\$ 117,555

State Demographics:

State population (excluding Wilmington) ¹³	932,634
Assessed property value (excluding Wilmington) ¹⁴	\$24,303,540,648
Number of volunteer stations	83
Total employees needed (27 per station)	2,241

Salary and Fringe Benefits:

Salary and fringe benefits were calculated by multiplying the average salary and fringe benefits for current WFD employees, \$117,555 by the total employees needed, 2,241. DVFA Employer Pension Contributions of \$1,900,000 were then added to this amount. The total estimate is \$265,340,755.

¹² Data provided by City of Wilmington.

¹³ Obtained from US Census at www.census.gov/quickfacts

¹⁴ Obtained from Delaware Department of Education

Detailed Cost Savings Calculation

Buildings and Maintenance:

Building purchases and annual maintenance were estimated at \$69,312,110 per year. Buildings were estimated to have a life expectancy of 20 years. Building purchase costs were calculated by multiplying the average building cost by the total number of fire departments (83) and then dividing by the average life expectancy of a building (20 years). The average maintenance cost per year was calculated by using a detailed listing provided by each fire company. The average cost per company, \$42,817.66, is multiplied by 83 (number of stations within the state) to gather a total statewide estimated maintenance cost of \$3,553,866.

Estimated
maintenance cost of
\$3,553,866

Fuel and Utilities:

Based on annual reports submitted by the fire companies that participated in this report, the total estimated cost for fuel and utilities was \$4,496,024.

Estimated
cost for utilities
\$4,496,024

Insurance Premiums:

Insurance premiums were estimated at \$5,917,554 based on annual reports submitted by the fire companies.

Estimated cost for
insurance premiums
\$5,917,554

Employee Apparatus:

Employee apparatus was estimated to be \$21,400 per firefighter, with an estimated life expectancy of 10 years. The statewide equivalent for 2,241 firefighters is \$4,795,740 annually.

Estimated cost for
employee apparatus per
firefighter
\$21,400

Detailed Cost Savings Calculation



Photo Courtesy of the Dagsboro Community VFD

Equipment:

Estimated costs for equipment purchases were calculated using the following information:

Equipment Type	Estimated Cost Equipment	Est. Life (Years)	Replacement Per Year*	Annual Replacement Cost
Engine	\$ 100,000.00	18 years	4	\$ 4,000,000
Ambulance	\$ 360,000.00	9 years	9	\$ 3,240,000
Brush Truck	\$ 125,000.00	15 years	5	\$ 625,000
Rescue Truck	\$ 1,500,000.00	20 years	4	\$ 6,000,000
Aerial Truck**	\$ 2,050,000.00	20 years	2	\$ 4,100,000
Tanker Truck**	\$ 580,000.00	23 years	1.5	\$ 870,000
Utility Vehicle	\$ 80,000.00	13 years	6	\$ 480,000
Pumper-Tanker**	\$ 1,130,000.00	19 years	2	\$ 2,260,000
Equipment Total				\$ 21,575,000
Plus: Maintenance				\$ 6,211,771
Equipment Grand Total				\$ 27,786,71

* Averages were truncated to whole numbers

** Aerial trucks, tankers, and pumper tankers are required by approximately half of the companies for specialized needs.



Photo Courtesy of the Felton Community VFD

Volunteer Fire Service and Ambulance Training

The Delaware State Fire School, under the auspices of the State Fire Prevention Commission, provides Fire, Rescue, Emergency Medical Training, and Public Fire Safety Education to the Fire and Rescue service, as well as to Industry and Citizens of our state. Instructors conduct training sessions in classroom settings as well as simulation activities at the three training centers in Kent, Sussex, and New Castle counties.¹⁵

During Fiscal Year 2022, the Delaware State Fire School trained 7,758 students in Fire and Rescue and 2,638 in Emergency Medical Services.¹⁶

Unfortunately, emergency responders must sometimes make the ultimate sacrifice in the performance of their job. It is with deepest sadness that Delaware has lost one emergency responder in the line of duty through June 30, 2022.



Photo courtesy of the Christiana VFD

¹⁵ Obtained from Delaware State Fire School website at <https://statefireschol.delaware.gov/about/>.

¹⁶ Obtained from the Delaware State Fire School.

Methodology



Calculations for this report were derived using (1) an estimation for the increase in property tax for each individual Delaware property owner based on every \$1,000 of assessed property value and (2) the existing costs for the City of Wilmington Fire Department. These calculations were used as the basis for determining the projected cost for each expense and revenue line item in this report. Cost categories and revenue sources were combined to estimate a total cost and total revenue. The \$2.36 in total revenue was subtracted from the \$15.53 total projected cost to get an estimated net increase in property value of \$13.17.

Several resources were used to prepare the different calculation inputs and assumptions in this report. Data from the City of Wilmington, which has an entirely paid fire service, was excluded when performing calculations, and as such, the City of Wilmington's population was subtracted from the state population obtained from the U.S. Census Bureau. Additionally, assessed property values (after subtracting the City of Wilmington) were obtained from the Delaware Department of Education and the City of Wilmington. The total number of existing station units was derived from the Grant-In-Aid bill, while the total number of employees needed per individual fire station was calculated based on the total amount of employees at all six of the City of Wilmington's fire stations.

Costs and revenues were derived directly from the annual financial statements of participating fire companies, while pension costs came from the Delaware Volunteer Firefighters Employer Contributions Fiscal Year 2021 DPERS ACFR report. All data pertaining to the employee apparatus information came from Atlantic Emergency Solutions, detailing the specific costs to outfit each firefighter with breathing apparatus and safety gear. Information on replacing this gear was obtained from NFPA.

The methodology in this report shows that a substantial tax increase would be needed to sustain the cost of an entirely state employed fire system. While the State of Delaware has no current plan to transform Delaware's combination system into an entirely state employed one, the Auditor's Office performs these calculations annually to show the value of the current system.

Recommendations

After performing the detailed cost analysis of the fire companies' annual financial statements, the Delaware State Auditor continues to recommend that the Delaware Legislature create a fund independent of Grant-In-Aid to fund Delaware's fire service. Delaware fire and emergency medical services have intricate challenges and necessities that merit the organizations having their own line item in the state budget to ensure Delawareans are provided these necessary resources in a safe and efficient manner.



Photo Courtesy of the Christiana VFD