# Delaware Volunteer Fire Service
## Special Report

Delaware State Auditor Kathy McGuiness RPh, CFE

DECEMBER 2021

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

December 6, 2021

Mr. Dan Carrier
President
Delaware Volunteer Firefighters Association
122 S Bradford Street
P.O. Box 1849
Dover, DE 19903

Ms. Pam Ingle
President
Ladies Auxiliary Association
122 S. Bradford Street
P.O. Box 1849
Dover, DE 19903

**Dear Mr. Carrier & Ms. Ingle:**

I am pleased to present the 2021 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 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 $255,690,911.00 for the fiscal year ended June 30, 2021.

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,

Kathy McGuiness, RPh, CFE
Delaware State Auditor

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

**Dear fellow Delawareans,**

This past year, Delaware's Volunteer Fire Service has dealt with the lingering effects of the COVID-19 pandemic and the challenges it has posed for first responders. Over a year into the pandemic, volunteer firefighters and personnel still face a higher likelihood of exposure to the virus, in addition to monetary losses as a result of postponing fundraisers and events, and additional expenses for protective and sanitizing equipment.

With the passing of the Coronavirus Aid, Relief, and Economic Security (CARES) Act in March of 2020, fire departments across the country received aid though the Assistance to Firefighters Grant. In Delaware, Governor Carney allocated a portion of CARES Act funds to ensure volunteer fire companies had the funding they needed to continue providing necessary services to the public.

Most recently, in March 2021, the American Rescue Plan Act (ARPA) appropriated $1.8 billion to Delaware's counties, cities, towns, and school districts. While it is the decision of individual entities how these funds are spent, I recommend that entities look into the possibility of spending a portion of their ARPA funds on volunteer fire departments. Given the parameters set for ARPA spending, fire departments may be an eligible use for these funds ***if*** they were impacted by the pandemic. As an example, the fire department may have spent funds on additional protective and sanitizing equipment that was not budgeted for as a result of the pandemic. Additionally, the cancellation of events and fundraisers due to gathering limitations may have directly caused a loss of revenue.

Last year's report encouraged volunteer fire companies to provide my office with electronic versions of their financial statements to streamline efforts. I am pleased to report all companies followed our recommendation, allowing my office to dedicate more time focusing on ensuring our volunteer fire service not only receives the recognition they deserve, but also the funding and resources necessary to continue their critical work throughout the State of Delaware.

As always, thank you for the opportunity to serve you.

Sincerely,

Kathy McGuiness, RPh, CFE
Delaware State Auditor

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# 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, 21 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.[1] These benefits include:

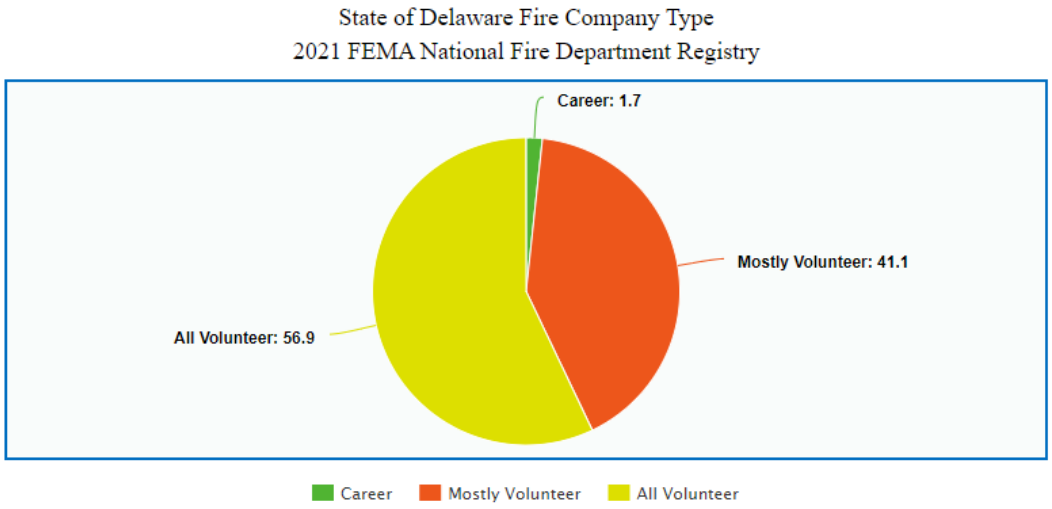
- A $500 tax credit on state personal income taxes each year;[2]
- Membership to the Delaware Blood Bank;
- Participation in a pension plan;[3]
- Worker's compensation for injuries received in the line of duty;
- A "Delaware Volunteer Firefighter's License Plate" for personal vehicles; and
- Membership to the Delaware Federal Credit Union.

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 servicemembers who serve 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:

- HB 249 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.




1: Obtained from Delaware Volunteer Firefighter Recruitment Website. https://firefighter.delaware.gov/
2: HB229 increased the non-refundable tax credit from $400 to $500 for active members
3: To receive a pension, the individual must have reached age 60 and have a minimum of 10 years in the pension plan.

# Cost Savings Overview

### Cost Savings-Personal Time

The personal time donated by members of Delaware VFCs holds a monetary value. According to the National Volunteer Fire Council, the time donated by volunteer firefighters saves localities across the country an estimated $46.9 billion per year.

**$46.9 billion**

### Cost Savings

OAOA performed several types of financial analysis to demonstrate cost savings from the perspective of annual replacement costs and property tax increases to support the benefits the volunteer firefighters program provides to Delaware.

### Projected Financial Costs

OAOA performed a cost analysis to provide an estimate of how much it would cost Delawareans to replace the combination  fire service with a statewide employee paid fire service. We estimated a cost avoidance (savings) of $255,690,911.00 if Delaware continues to utilize volunteer firefighters.

**More than $255 million**

### Projected Costs per Assessed Property Value

OAOA's cost analysis of the employed statewide volunteer fire and ambulance services was used to determine an estimate of the true cost and to provide an estimate of what the potential additional property tax increase (per $1,000 of assessed value) would be if Delaware's fire service was entirely state-employed. The analysis estimated it would cost taxpayers an additional $10.51 for every $1,000 in assessed property value annually.

**$10.51 per $1,000**

# Replacing Delaware's combination fire service with an entirely state-employed fire service would cost Delawareans $255,690,911

| *Projected Costs of State-Employed Fire Service* | |
|---|---|
| Salaries and Benefits plus DPERS Employer Contribution | $257,151,128.00 |
| Equipment Purchases and Maintenance | $20,180,750.00 |
| Building Purchases and Maintenance | $20,929,553.00 |
| Fuel and Utilities | $4,119,489.00 |
| Insurance Premiums | $6,066,471.00 |
| Employee Apparatus | $4,853,520.00 |
| Total Projected Cost | $313,300,911.00 |

| *Current Revenue Sources* | |
|---|---|
| Grant-In-Aid[4] | $6,739,337.00 |
| Fire Insurance[5] | $30,752,667.00 |
| Ambulance Taxes and Levies[6] | $8,297,871.00 |
| County Subsidies[7] | $9,923,325.00 |
| State Contribution to DVFA fund (pension)[8] | $1,896,800.00 |
| Total Cost Avoidance | $57,610,000.00 |

| | |
|---|---|
| Total Cost Avoidance | $255,690,911.00 |

4: Obtained from the Fiscal Year 2021 Grant-In-Aid Bill, SB 260
5: Obtained from the Office of the State Treasurer
6: Obtained from the Office of the State Treasurer and the Delaware Fire Prevention Commission
7: Obtained from the budget for each county
8: Obtained from the Delaware Public Employees' Retirement System Annual Report Fiscal Year 2020, Volunteer Fire Fund Employer Contributions

# Property taxes would increase $10.51 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 Benefits plus DPERS Employer Contribution | $10.58 |
| Equipment Purchases and Maintenance | $0.83 |
| Building Purchases and Maintenance | $0.86 |
| Fuel and Utilities | $0.17 |
| Insurance Premiums | $0.25 |
| Employee Apparatus | $0.20 |
| Total Projected Cost | $12.89 |

*Current Revenue Sources*

| | |
|---|---|
| Grant-In-Aid | $0.28 |
| Fire Insurance | $1.27 |
| Ambulance Taxes and Levies | $0.34 |
| County Subsidies | $0.41 |
| State Contribution to DVFA fund (pension) | $0.08 |
| Total Current Support | $2.38 |
| **Total Cost Avoidance*** | **$10.51** |

1

*Note: This means that for every $100,000 of a home's value, Delawareans would pay an additional $1,051 in taxes for a fully state-run and state-employed fire service.

# Detailed Cost Savings Calculation

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

## *City of Wilmington Demographics*

| | |
|---|---|
| Population of the City of Wilmington[9] | 70,898 |
| Current number of Wilmington fire stations[10] | 6 |
| Average population served per station | 11,816 |
| Number of paid firefighters[11] | 161 |
| Estimated employees per station | 27 |
| Average salary and benefits for current WFD employees[12] | $112,546.00 |

## *State Demographics*

| | |
|---|---|
| State population[13] | 919,050 |
| Assessed property value[14] | $24,303,464,248.00 |
| Number of stations | 84 |
| Estimated personnel needed per station | 27 |

## *Equipment*

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

| Equipment | Cost | Avg. Life Expectancy (Rounded Up) | Estimated # of Equipment/Year (84 stations/avg. life expectancy) | Total Cost/Year |
|---|---|---|---|---|
| Engine | $700,000.00 | 18 years | 4 | $2,800,000.00 |
| Ambulance | $215,000.00 | 7 years | 12 | $2,580,000.00 |
| Brush Truck | $100,000.00 | 13 years | 6 | $600,000.00 |
| Rescue Truck | $850,000.00 | 20 years | 4 | $3,400,000.00 |
| Aerial Truck** | $1,000,000.00 | 20 years | 2 | $2,000,000.00 |
| Tanker Truck** | $400,000.00 | 20 years | 2 | $800,000.00 |
| Utility Vehicle | $50,000.00 | 9 years | 9 | $450,000.00 |
| Pumper-Tanker** | $600,000.00 | 18 years | 2 | $1,200,000.00 |

| | |
|---|---|
| Equipment Total | $13,830,000.00 |
| + Maintenance | $6,350,750.00 |
| Equipment Grand Total | $20,180,750.00 |
| + Fuel and Utilities | $4,119,489.00 |
| + Insurance Premiums | $6,066,471.00 |
| Grand Total | $30,366,709.56 |

9: Obtained from the U.S. Census website https://www.census.gov/
10: Obtained from the City of Wilmington
11: Obtained from the City of Wilmington
12: Total Salary and Benefit information provided by the City of Wilmington
13: Obtained from the U.S. Census website https://www.census.gov/
14: Obtained from the State Department of Education

# Detailed Cost Savings Calculation

## *Buildings and Maintenance*

Building purchases and maintenance were estimated at $20,929,553.00 per year with buildings 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 (84) 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, $43,781.20, is multiplied by 84 (number of stations within the state) to gather a total statewide maintenance cost.

## *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 $4,119,489.00.

## *Insurance Premiums*

Insurance premiums were estimated at $6,066,471.00 based on annual reports submitted by the fire companies.

## *Delaware Fire and EMS Training*

The Delaware State Fire School, under the guidance 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 workers and citizens of our state. Instructors conduct training sessions in classroom settings as well as simulation activities at one of the three training centers in Kent, Sussex, and New Castle counties. During Fiscal Year 2021, the Delaware State Fire School trained 7,992 students in fire and rescue and 4,291 in emergency medical services.[15]

## *Salary and Benefits*

The total amount for salary and benefits was calculated by multiplying the average salary and benefits for current WFD employees ($112,546.00) by the estimated number of personnel needed to staff all 84 stations (2,268). The Delaware Volunteer Firefighters Association Employer Pension Contributions totaling $1,896,800 were then added to this amount for a final estimate of $257,151,128.

15: Obtained from the Delaware State Fire School 2021 Annual Report

# 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 $2.38 in total revenue was subtracted from the $12.89 total projected cost to get an estimated net increase in property tax of $10.51 per $1,000.

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 6 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 CAFR 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 clearly shows that an increase in property taxes (or an equivalent amount in funds) would be needed to sustain the costs of an entirely-state employed fire system. While the State of Delaware's government has no current plans 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

Delaware's fire servicemembers continue to adapt to new procedures and regulations to keep members safe during the pandemic. Additionally, many revenue-generating events and fundraisers were postponed last year, leaving the fire service to face monetary losses.

After performing the detailed cost analysis of the fire companies' annual financial statements, the Delaware State Auditor continues to recommend that the Delaware General Assembly create a fund independent of Grant-In-Aid to assist 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 with necessary resources in a safe and efficient manner.

Additionally, last year's "Delaware Volunteer Fire Service Special Report" included a list of recommendations to help volunteer fire companies strengthen their internal controls. It is the opinion of the audit staff that reviewing, updating, and enhancing internal controls whether or not a volunteer fire company responded to this survey is recommended.