

2016 EMS and Fire Service Financial Study

Delaware County Commissioner Jeff Benton

October 24, 2016

Report Outline

PART ONE

- A. Proposal**
- B. Background**
- C. Goal of the Study**
- D. Methodology**
- E. Conclusion**

PART TWO

- A. Supporting Discussion**
- B. Additional Issues to Consider**
- C. Restructuring and Consolidating: Analyses and Precedents**

PART THREE: APPENDIX

- A. Methodology:**
 - 1. Overview**
 - 2. The Fire and EMS Survey**
 - 3. The Six Alternative Scenarios**
- B. Raw Data:**
 - 1. Summary of All Scenarios**
 - 2. Scenario Details**
 - a. Scenario 1**
 - b. Scenario 2**
 - c. Scenario 3**
 - d. Scenario 4**
 - e. Scenario 5**
 - f. Scenario 6**
 - 3. Key Ratios for Scenarios 1 through 6**
 - 4. Fire District and EMS Data Summary**
 - 5. Fire District Data**
 - 6. Fire District Expenses**
 - 7. Delaware County EMS Data**
 - 8. Delaware County EMS Expenses**
 - 9. Fire District Revenue and Expense Comparison**

PART ONE

A. Proposal

In spring 2016, four Delaware County townships (Harlem, Genoa, Orange and Liberty) and the City of Delaware approached the Delaware County Commissioners with a request to annually receive \$6,787,055 from the County's general fund in compensation for the EMS services they provide their residents. This compensation would be reimbursement for part of the costs their Fire Districts incur in providing EMS service.

B. Background

The basis for this request is a countywide half-percent sales tax passed by Delaware County Commissioners on Nov. 15, 1971 "for the preservation of the public peace, health and safety." Countywide EMS services subsequently have been funded by this tax. At the same time the tax was created, an agreement was forged with Liberty Township and the City of Delaware — the only jurisdictions also providing EMS service at the time — to reimburse them for the EMS services they provided, using funds generated by this sales tax. Based on a recent conversation with Don Fisher, one of the Commissioners who approved the 1971 tax, no other jurisdictions were interested in providing EMS service at that time and they were relying on the County to provide that service.

In the ensuing decades, fire service successfully evolved from primarily performing fire suppression to concentrating on fire prevention through code improvement, sprinkler-systems proliferation, improved building material, inspections, education, etc. As that occurred, larger fire districts transitioned to also providing EMS services: EMS has now become their primary service, making up more than 90 percent of their activity. Smaller fire districts in the County have continued to provide fire-only services and do not provide EMS services.

Based on research as well as local knowledge, it should be acknowledged that **fire service in Delaware County is excellent, both in coverage of the entire County as well as in quality of service. Similarly, EMS service is excellent for the entire County, whether provided by the fire districts (EMS Fire Districts) or the Delaware County EMS (DCEMS).**

C. Goal of the Study

The request for reimbursement for EMS services provided by the EMS Fire Districts is strictly a financial issue. Therefore the question to be analyzed is:

What is the most cost-effective and efficient way to provide fire and EMS services to the residents of Delaware County?

Six financial scenarios were considered in order to answer this question (additional information about these scenarios is included in the Appendix):

1. **Maintain status quo.** No change to current funding or operations. The request for reimbursement would not be granted.
2. **Accept the reimbursement proposal.** Enact the approximately \$6.8 million annual reimbursement to the EMS Fire Districts, which would replace the existing Liberty Township and City of Delaware reimbursements, but make no changes to operations for the EMS Fire Districts or Delaware County EMS. This is the proposal from the townships and city.

3. **Adopt true countywide EMS.** Delaware County EMS assumes responsibility for all EMS service in the County. The fire districts would no longer provide EMS service. The reimbursement proposal would not be enacted and the Liberty/Delaware reimbursements would cease, but there would be no change to the fire districts' revenue streams or structure (i.e., headcount).
4. **Adopt true countywide EMS with restructured fire districts.** Delaware County EMS assumes responsibility for all EMS service in the County. The fire districts that previously provided EMS services would be restructured to provide fire-only service, similar to the existing non-EMS fire districts in Delaware County. The reimbursement proposal is not adopted and the Liberty/Delaware reimbursements would cease. Costs would significantly decrease in the restructured fire districts (any additional cost savings and efficiencies from the potential consolidation from 13 fire districts to as few as one are not considered in this analysis). It also would be up to the individual fire districts to reduce their supporting revenue streams (since excess levy funds could not be spent on anything else).
5. **Status quo EMS with select EMS fire district mergers.** Leave EMS services as is, adopt the reimbursement proposal, merge the six EMS fire districts and eliminate five fire chiefs. No other expense savings were considered.
6. **Close overlapping Delaware County EMS stations.** Close the Harlem, Genoa and Orange Township DCEMS stations with those fire districts assuming complete EMS responsibility for those townships. Adopt the reimbursement proposal.

D. Methodology

To perform these analyses, the Fire Districts and DCEMS submitted detailed expense information and activity data for calendar year 2015. To ensure that the information was accurate and complete, the submitted expense information was compared to independent sources for each Fire District and DCEMS. The large urban fire districts that provide EMS and fire service to the very southern edges of Delaware County (Westerville, Columbus and Dublin/Washington Township) were not included, nor was Elm Valley (Ashley) because of its small size and multi-county coverage. A more in-depth presentation of the methodology is included in the Appendix.

E. Conclusion

These were the estimated annual costs computed for each scenario (in millions of \$):

Scenario 1:	\$41.7	Status Quo (no changes and no reimbursement)
Scenario 2:	\$47.7	Accept Proposal and provide reimbursement
Scenario 3:	\$47.3	Countywide EMS but no restructure and no reimbursement
Scenario 4:	\$24.3	Countywide EMS with restructured fire districts and no reimbursement
Scenario 5:	\$47.0	Status quo EMS with merged southern fire districts and reimbursement
Scenario 6:	\$45.1	Close overlapping DCEMS stations, provide reimbursement

Therefore, it is very clear that the most cost-effective and efficient way to provide fire and EMS services to the residents of Delaware County is Scenario 4: Adopt true countywide EMS through the DCEMS and restructure the EMS fire districts to be similar to the non-EMS fire districts in the County. By adopting this scenario, County taxpayers could potentially save more than \$17 million per year.

All the other scenarios that were analyzed actually increased total EMS and fire spending in the County over what is currently spent each year. The most costly of the six scenarios studied was the adoption of the reimbursement proposal presented by the four townships and the City of Delaware (Scenario 2).

PART TWO

A. Supporting Discussion

Cost Factors Driving This Recommendation:

The significantly lower costs in Scenario 4 are possible because of the following factors (copies of all worksheets that produced these findings are included in the Appendix):

- 1) **DCEMS has a significantly lower cost structure for EMS services than the EMS Fire Districts.**
Assuming 90 percent of the EMS Fire District costs can be attributed to EMS service because 90 percent of their activities are EMS-related, then the average cost per EMS Fire District transport is \$5,495 compared to the cost per DCEMS transport of \$2,968.
- 2) **The EMS Fire Districts average compensation is 35 percent higher than DCEMS compensation.**
The average compensation of a full-time staff person in an EMS Fire District is \$117,100 per year while DCEMS average full-time staff compensation is \$86,800 per year.
- 3) **The EMS Fire District average compensation is 66 percent higher than non-EMS Fire District compensation.** The \$117,100 full-time staff compensation of an EMS Fire District compares to \$70,500 average full time staff compensation of non-EMS Fire Districts.
- 4) **The cost for pensions in EMS Fire Districts personnel is significantly higher than for DCEMS personnel.** In the DCEMS system, the employer (Delaware County) contributes 14 percent of the DCEMS employee's wages to their pension fund, and the employee can retire after 32 years of service. In the EMS Fire Districts, the employer (in these cases, the townships or municipalities) contributes 24 percent of an employee's wages to their pension fund, and the employee can retire after 26 years of service.
- 5) **There are significant overall cost factors that invite scrutiny.**
 - a. The 13 fire districts included in the study spend more than \$31 million in annual operating expenses while the DCEMS spends \$10.6 million per year.
 - b. Full countywide EMS coverage can be implemented for an additional \$5.5 million, eliminating the current reimbursement to Liberty Township and the City of Delaware, bringing the projected total annual cost of countywide EMS to \$16.1 million.
 - c. Converting the EMS-providing Fire Districts to fire-only service based on the cost structure of the non-EMS Fire Districts in the County would then reduce annual fire-service costs in the County to \$8.1 million, without changing the number or location of any fire stations in the County.
 - d. Total fire and EMS service in the County would cost an estimated \$24.3 million per year versus the current annual spending rate of \$41.7 million.
- 6) **There are significant annual differences in taxpayer costs.** The EMS Fire Districts currently cost each resident \$272 per year while the non-EMS Fire Districts cost their residents \$89 per year. DCEMS costs the residents that it currently serves in Delaware County \$94 per year.
- 7) **The Fire Districts that provide fire-only services have a significantly lower cost structure than those that also provide EMS.** The average annual operating cost per non-EMS fire station is \$439,000 compared to the EMS Fire Districts' average cost of \$2.8 million. Because the number of fires has declined dramatically in the last few decades, the fire-only Fire District model works well, as demonstrated by those districts in the County with that structure. Numerous fire districts around the U.S. have restructured to become fire-only districts: Examples follow in Section C.
- 8) **Currently, there is significant redundancy in EMS services in the County that would be eliminated by the adoption of Scenario 4.** According to the DCEMS chief's assessment of

current operations, there are 10 stations in EMS Fire Districts providing EMS services whose work could be done by seven additional DCEMS stations.

Additional Factors Driving This Recommendation:

There are other, operational factors that make Scenario 4 more attractive:

- 1) **The ratio of response types has become very disproportionate.** In 2015, all of the County's Fire Districts (EMS and non-EMS) responded to 440 actual fires (4.7 percent of all responses) and to 1,046 HazMat or rescue calls (11.2 percent). The EMS Fire Districts and DCEMS logged a total of 7,877 EMS transports (84.1 percent). Across the 17 Fire Stations in operation in the County, this equates to an average of 2.2 actual fires per month per station and to 5.1 HazMat or rescue calls per month per station.
- 2) **DCEMS uses a 3-person crew in its EMS model versus a 2-person crew generally used by the EMS Fire Districts.** While the additional expense of a 3-person crew should be studied for financial justification, it clearly provides a better level of care than a 2-person crew.
- 3) **Today there is widespread confusion over who goes on the calls.** Because of the extensive overlap that exists today between DCEMS and the EMS Fire Districts, multiple jurisdictions often respond to the same EMS call and this ties up valuable resources and wastes money.
- 4) **Standards, training, communication and cost efficiencies would be enhanced with a single countywide EMS operation.**

B. Additional Issues to Consider

This analysis has demonstrated that Fire District funding is more than adequate for the current expense loads. Some additional questions to consider may be:

- 1) **Should the current level of funding be reduced?** In Delaware County, the Fire Districts that are funded with property-tax levies had a 21.4 percent surplus of operating levy revenues over operating expenses: The non-EMS Fire Districts had a 27.1 percent surplus on average while the EMS Fire Districts had a 20.5 percent surplus. For example, Orange Township Fire District had an operating surplus in excess of \$1.8 million (22.7 percent of levy revenues) in 2015 and ended the year with a cash balance of \$3.2 million.
- 2) **Should a surplus limit be implemented?** Currently there is no mandated maximum limit for the surplus that a Fire District carries.
- 3) **Should fire districts be consolidated?** Reducing the number of Fire Districts from 13 to as few as one intuitively makes sense, regardless of whether EMS is truly consolidated at the County level. Sharing equipment, improved buying power, lower overhead, lower administrative workload, consistent training, streamlined operations, more stable funding, etc., are just some of the benefits that would occur.
- 4) **Should the introduction of "soft billing" be linked to this reimbursement proposal?** The proceeds from "soft billing" could be a significant source of new revenue.
 - a. DCEMS recently started the process to begin "Soft Billing" (billing Medicare, Medicaid and insurance carriers for the cost of providing EMS services). A third-party servicer has been selected and the administrative process to become eligible to bill the various insurance companies is underway. Billing proceeds should start being collected within a few months.
 - b. Most of the EMS Fire Districts have opted to join in the process and should start receiving their own reimbursements in a few months. Estimates of annual proceeds county-wide range from \$1 to \$2 million.

C. Restructuring and Consolidating: Analyses and Precedents

It is also instructive to note that restructuring EMS fire districts to become fire-only districts and to consolidate multiple districts into one has been studied throughout the country, as well as implemented. Research has yielded these examples (links to full reports are provided below):

1. Coventry, Rhode Island: An evaluative research project conducted in 2004 by the Central Coventry Fire District's fire chief to identify successful fire-district consolidations in other communities. Such consolidations were identified in: Ada County, Idaho; Carrie Furnace Fire and Rescue, Maryland; Central Penobscot County, Maine; Sterling, Virginia; Tualatin Valley, Oregon; Lexington, Missouri; Fernridge Rural F.D., Veneta, Oregon; Collier, Lee and Manatee counties, Florida; Adams County, Pennsylvania; Contra Costa County, California; Orange County, Florida; Poudre Fire Authority, Fort Collins, Colorado; Crystal and New Hope, Minnesota; Fort Lauderdale, Florida; Cobb County, Georgia; Hutchinson/Reno County, Nevada; Orlando, Florida; Miami Valley, Ohio; Pasco County, Florida; Florence Township, New Jersey; Livermore-Pleasanton, California; Menlo Park/Redwood City, California. Cost reduction was the driving factor in many of these. Two unsuccessful attempts at consolidation also were found and attributed to "local interests and egos": Downey/Santa Fe Springs, California; Columbia/Boone County, Missouri. http://www.dccwf.org/main/download.php?pdf=bench/Sample-Benchmarking-Report-No-1_COVFD
2. Township of Monroe, New Jersey: A fire district consolidation study was conducted in 2011 by an outside consulting firm. It analyzed current operations; interviewed a wide variety of stakeholders on all sides of the issue; considered obstacles to consolidation; considered several alternatives; provided a comprehensive action plan for the most favorable alternative; calculated costs and cost savings. <http://www.monroetwp.com/Files/1552.pdf>
3. Santa Clara County, California: This was a report prepared in 2011 as a Civil Grand Jury report. Though it's not clear what prompted the involvement of the county's courts, economic crisis in the county was cited as the impetus for the comprehensive review of current operations and future alternatives. The report found that restructuring and consolidating fire departments in their area to become fire-only and to operate as one fire district was the best alternative. <https://www.sanjoseca.gov/DocumentCenter/View/4149>

PART THREE: APPENDIX

A. Methodology

1. Overview

In May of 2016, Delaware County Commissioners' staff commenced the 2016 EMS and Fire Service Financial Study. The purpose was to determine the most cost-effective and efficient method of providing EMS and fire protection to the residents of Delaware County.

To start this task, a comprehensive information request was sent to 13 Fire District chiefs (covering the vast majority of Delaware County residents), and to Chief Mike Schuiling of Delaware County EMS. The 13 Fire District chiefs were: John Donahue (City of Delaware), Dale Lipps¹ (Elm Valley), Jeff Wilson (B. S. T. & G.), Craig Hall (Berlin), Todd Copper (Concord), Gary Honeycutt (Genoa), Dale Fling (Harlem), Tim Jensen (Liberty), Matt Noble (Orange Township), Mike Thompson (Porter-Kingston), Randy Butts (Radnor), Marv McIntire (Scioto Township) and Troy Morris (Tri-Township).

Once the spreadsheets were returned, the data and expense information was used to develop and analyze six alternative scenarios to provide and fund fire and EMS service in Delaware County.

2. The Fire and EMS Survey

The information request sent out to the parties was split into two categories: data and expenses.

The data section asked for information on each station under the control of the Fire District or Delaware County EMS:

- a) The first section on the data spreadsheet requested the number and rank of each employee, categorized by the type of employment (full-time, part-time, volunteer).
- b) The next section requested the usual shift structure for the rank of each employee, once again categorized by the level of employment.
- c) The third category in the data section included information on unions, including how many employees of each rank were members of a firefighters union and the name of the union.
- d) Next came questions on the retirement benefits and healthcare costs for Fire District and Delaware County EMS employees. The purpose of these questions was to determine if there were any major differences among the Fire Districts and Delaware County EMS.
- e) After healthcare and retirement data, chiefs were asked to include miscellaneous information about each station, including the size and value of each station, the population served, and the estimated annual fire loss. This data helped analyze statistics on a per-capita basis.
- f) The final sections of the data spreadsheet asked the fire chiefs to report the number of runs each station made and separate them into categories: total runs, transports, actual fires, multiple unit runs, rescue/hazmat runs, and false alarms; and provide information on fire and EMS equipment.

¹ Elm Valley (Ashley Township) did not submit the requested materials in time to include in the analysis. Based on minimal levy funding and spending, Elm Valley was excluded in the financial models.

The expenses spreadsheet also had separate worksheets for each station, and a total tab at the end of the section that calculated total operating expenditures for each Fire District and Delaware County EMS. All of the reported expenses were carefully reconciled to independent and published expenses or State of Ohio audit reports.

- a) The first expense category requested was the compensation of each category of employee. Compensation was broken down by salary, overtime, other pay, pension, healthcare, workers compensation, and other benefits.
- b) The next section asked for the facilities expenses, vehicle expenses, training expenses and supply expenses. "Other" included minor expenses such as dues, Medicare, and tools.
- c) The final expense category was Reimbursement Cost. This only applies to Delaware County EMS, as they paid \$870,384 in 2015 in reimbursement to the City of Delaware and Liberty Township for the EMS services they provided as per a 1971 agreement.

3. The Six Alternative Scenarios

Six alternative scenarios were developed for Fire and EMS structure in Delaware County using the data and expenses as submitted and verified. A description² of the scenarios and their annual cost estimates are listed below:

Scenario 1 – Maintain status quo

Description: The current EMS and Fire structure stays the same. The reimbursement proposal is not adopted by the Commissioners.

Annual Cost Estimate: This was calculated by adding all of the 2015 expenses for the Fire Districts and Delaware County EMS.

Scenario 2 – Accept the 2016 EMS reimbursement proposal

Description: The current Fire and EMS structure stays the same, but the reimbursement proposal, which would replace the Liberty Township and City of Delaware reimbursements, is adopted by the Commissioners.

Annual Cost Estimate: The 2015 \$870,384 reimbursement to Liberty Township and The City of Delaware is subtracted from the 2015 Delaware County EMS total, but the newly adopted \$6,787,055 reimbursement is added. This new Delaware County EMS total is added to the existing 2015 Fire District total to equal Scenario 2 Total Expenses.

Scenario 3 – Adopt true countywide EMS

Description: Delaware County begins handling all EMS duties throughout the county. They add single stations in Genoa, Orange and Concord Townships, and two stations each in Liberty Township and the City of Delaware for a total of 7 new stations. The fire structure does not significantly change. No further EMS reimbursement is paid to any Fire District.

Annual Cost Estimate: The new Delaware County EMS expenses were calculated by estimating the expenses for the 7 additional stations. The estimates were based on averages and direct input from Delaware County EMS. The additional expenses from the new stations were then added to the 2015 Delaware County EMS costs minus the 2015 \$870,384 of reimbursement to determine the Total Scenario 3 Delaware County EMS expense. The Scenario 3 Delaware County EMS expense is added to the existing 2015 Fire District Expense total to reach the Scenario 3 Total Expenditure.

² Detailed descriptions of calculations can be found in the individual models.

Scenario 4 – Adopt true countywide EMS with restructured fire districts

Description: Delaware County EMS begins handling all EMS duties throughout the county. They add stations in Genoa, Orange and Concord Townships in current Fire District stations. Two new stations are created in both Liberty Township and the City of Delaware in current Fire District stations for a total of 7 additional stations. Fire Districts that currently provide EMS services adopt the fire-only structure of the northern townships. EMS is discontinued by all Fire Districts in Delaware County. No further EMS reimbursement is paid to any Fire District.

Annual Cost Estimate: The new Delaware County EMS expenses were calculated by estimating the additional expenses for the 7 additional stations. The estimates were based on averages and direct input from Delaware County EMS. The additional expenses from the new stations were then added to the 2015 Delaware County EMS costs minus the \$870,384 reimbursement from 2015 to determine the Total Scenario 4 Delaware County EMS expenses. The restructured Fire District expense is calculated by finding an average expense per station for non-EMS Fire Districts³, and then applying that average to the number of stations in each EMS Fire District. The number of fire stations in the County does not change.

Scenario 5 – Status quo EMS with select EMS fire district mergers

Description: The Delaware County EMS structure remains the same. Concord, Orange, Genoa, Liberty and Harlem Townships and the City of Delaware merge into one Fire District. The chief positions for the five Fire Districts are eliminated with one chief remaining. The 2016 EMS Reimbursement Proposal is adopted.

Annual Cost Estimate: The compensation of the 5 chiefs from Concord, Orange, Genoa, Liberty and Harlem Townships are subtracted from the 2015 Fire District total to calculate the Scenario 5 Fire District total expenditure. The 2015 \$870,384 reimbursement is subtracted from the 2015 Delaware County EMS total, but the \$6,787,055 in the reimbursement proposal is added.

Scenario 6 – Close overlapping Delaware County EMS stations

Description: Delaware County EMS stations in Genoa, Orange, and Harlem Townships are closed. These townships assume full EMS responsibilities. The 2016 EMS Reimbursement Proposal is adopted by the Commissioners.

Annual Cost Estimate: The expenses from the three closed EMS stations are subtracted from the Delaware County EMS total. The reimbursement total of \$6,787,055 is added to the County expenses. The \$870,384 reimbursement from 2015 is discontinued. Fire District expense totals do not change.

³ Radnor was not included in the average because its small size would have skewed the average.