

Terre Haute Competes Project Recommendation Form

The purpose of this Project Recommendation Form is to provide a summary of our research regarding a specific cost savings or service improvement project and to recommend next steps, if any.

1. Cost Savings or Service Improvement Project Name

Fire and EMS Billing Services

2. Study Team Members

Chair

Jeff Fisher

Mary Ann Conroy (December-March)

Other Team Members

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Project Support Lead

Nick Weber and Skip Stitt

3. Brief Description of the Project

Across the country, public safety (police and fire) spending is the largest operational expenditure for local governments. In Terre Haute, spending on Fire Services accounts for approximately 36% of the city's general fund budget. This figure is fairly typical, and it is important to note that there is no "right" number to spend on public safety. All communities must take into account geographic issues (e.g., rivers, railroad tracks) and the nature of their populations (e.g., percentage of older residents), factors that impact public safety funding and priorities (the issue of railroads crisscrossing Terre Haute was raised numerous times during the review process). While there are some Department of Labor issues associated with workplace safety, and professional trade associations suggest "minimum" staffing for various aspects of the Fire Service, the level of funding devoted to public safety is the purview of the community. As such, communities are able to make decisions about the public safety services they wish to have, and the costs they wish to bear for those services.

The manner in which Fire Services are delivered may appear unusual for people not associated with the service. From scheduling, to training, to working 24-hour shifts, to holding multiple certifications that impact wages, the world of the Fire Service has a degree of complexity not found in all other professions.

The Study Team was tasked with drilling through the issues unique to the Fire Service to 1) find and evaluate facts associated with spending relative to peer cities and 2) analyze costs for EMS services so that the Steering Committee and the larger community can evaluate the City's investment in Fire and EMS services.

4. Key Research Findings

At the outset of this project, the Study Team determined that Anderson, Bloomington, Lafayette, Kokomo, Muncie, and South Bend would be the peer cities used for comparison purposes.

Spending

Within these peer cities, we gathered various high-level operational and fiscal data points in order to draw comparisons to Terre Haute. Those areas include:

- Number of Career Firefighters per 1,000 Citizens
- Fire and EMS Budgets
- Percentage of Total General Fund Budget Devoted to Fire (2017)
- Fire Budget Per Capita (2017)
- Fire Spending per Firefighter

Across all surveyed areas, Terre Haute was at or above the median for peer cities, and in some cases it was the leading (i.e., highest) city within the cohort. However, within all categories, Terre Haute was never substantially out of line with the peer cities reviewed. As it was described at one point, "Terre Haute Fire spending isn't Walmart, but it isn't Saks Fifth Avenue either."

It appears Terre Haute benefits in this analysis because Indiana cities have relatively high Fire Service costs as contrasted to communities in other states. When reviewing the number of firefighters per 1,000 citizens in Terre Haute and peer Indiana cities, every Indiana city was above the average number for Midwestern communities of similar size (50,000-99,999¹) and all but one was above the national average for similarly sized cities. Terre Haute has a policy goal that the Fire Service should be able to fight two fires in the community simultaneously and that policy drives staffing.

Nationally, the bulk of all Fire Services costs are for personnel. In Terre Haute, personal services account for 97% of the entire Fire Service budget.² In Terre Haute, Fire Service spending per firefighter (total 2017 department budget/number of firefighters (145³)) equals \$90,845 per firefighter.

¹ Since current South Bend population estimates (100,590) are less than 1% higher than the population parameters for the national cohort, it was included in the same group as other comparable Indiana cities.

² There was some discussion about how the City accounts for the impact of THFD capital expenditures, which ebb and flow over time.

³ Headcount identified in THFD report to City Council.

A key component of the fire department spending is overtime. Overtime costs are driven by many factors, including overall active headcount due to retirements, terminations, and injuries as well as calling additional personnel to deal with significant fire situations within the community. From 2012-2016, overtime spending within the Terre Haute Fire Department (THFD) decreased from a high of \$1,482,000 to \$813,302. In 2012, overtime spending accounted for more than 10% of all Fire Service spending. By 2016, that was reduced to 6.3%.

Because Terre Haute is the largest city in Vigo County, its Fire Service is, at times, called upon to help other departments in the vicinity. Those departments also help THFD when needed. No statistical data was available to determine the relative frequency of THFD assisting other departments, versus those departments helping THFD. However, anecdotally it was suggested that the THFD serves as a countywide safety net for some services more often than it receives assistance.

EMS

The Terre Haute Fire Department also provides EMS services within the City via three Advanced Life Support (ALS) ambulances. There is a separate, non-reverting budget line item for EMS services over and above the Fire Service budget. Because EMS services can charge some users for services rendered, the funds collected are allocated to EMS via that fund. Those funds are then used to provide elements of EMS services. The vast majority of personnel required to deliver EMS services (i.e., firefighter paramedics on ambulances), however, are not funded from EMS revenue, but rather from the Fire Service budget.

It has been suggested that EMS service either pays for itself or breaks even. It does not do so when the firefighter personnel costs are included.

Using macro factors such as:

Average spending per firefighter⁴	\$ 90,845	\$ 90,845
Multiplied by 24 firefighters serving in an EMS capacity⁵	\$2,180,280	
Multiplied by 18 firefighters serving in an EMS capacity		\$1,635,210
Added to non-debt spending for EMS services	\$1,411,476	\$1,411,476
Added to a portion (1/4) of the debt services funded from the EMS services	\$ 196,250	\$ 196,250
TOTAL	\$3,788,006	\$3,242,936

In 2017, the City predicts an increase in EMS revenue to \$2,450,000. If that sum is actually realized, the City will still subsidize EMS services between \$790,000 and nearly \$1.3 million. On a per capita basis, that is between \$13 and \$22 for every resident of Terre Haute.⁶

EMS currently uses a third-party billing services company (AccuMed) that was engaged via a competitive bidding process. The use of third-party billing companies for this specialized work is common. AccuMed is a national provider of EMS billing services and currently charges the City a fee equal to 7.99% of billings. Transitioning from internal billing to third-party billing moved a complex, regulated task to an entity that specializes in the function. This move allowed for the internal redeployment of staff, as well as alleviating the need for City staff to track increasingly complicated regulations regarding medical billing. Some have suggested that this process could be performed more effectively via a different arrangement, but it is unclear if that would be the case. There is, however, a robust marketplace in this industry and the City could re-bid the contract at the end of the current term to objectively compare vendors and secure the best service and rates for taxpayers.

Staffing

Fire departments are tradition-bound organizations. Terre Haute has had a paid fire department since 1894, replacing a volunteer department that was in place for the 40 preceding years. The current platoon staffing model (i.e., a full complement of firefighters works for 24 hours a day, then is replaced by the next complement) began in Terre Haute 96 years ago. The staffing model of “24 on/48 off” is a result of three platoons in Terre Haute.

⁴ This figure is determined by dividing total fire budget by number of firefighters.

⁵ For THFD to operate three ambulances across three shifts, 18 firefighters are required (2 firefighters x 3 ambulances x 3 shifts= 18). However, a factor of 24 firefighters to staff the EMS operation was used in the calculation. Two more were added per shift to cover scheduled and unscheduled absences. Every day, THFD needs 45 firefighters on duty: 35 on equipment (including six on ambulances) and 10 to cover absences. Because the Department factors in approximately a 30% coverage ratio, the same ratio was applied to the subset of EMS. For comparative purposes, the calculations are also presented using the baseline of 18 firefighters.

⁶ As noted, these are high-level numbers and it is possible that factors outside of this analysis could impact final figures. For example, the spending per firefighter is a department-wide number. However, it is possible that lower cost, more junior firefighters disproportionately serve as paramedics.

Firefighter staffing and scheduling is a complicated area to understand, particularly for those who do not utilize such a schedule. For example, the Fair Labor Standards Act established specific regulations for Fire Service professionals relating to the maximum number of hours that can be worked before overtime is required. For firefighters, that number is 53 hours a week. However, the scheduling model of “24 on/48 off” results in a firefighter being scheduled for more than 150 hours of overtime each year, excluding any instances when he/she might be called in to fill in for another firefighter.⁷

Certain staffing policies relating to the Fire Service’s EMS function also add to the cost of service delivery. Beginning in 2007, the City started requiring all new firefighters to obtain their paramedic certification within five years of starting on the job, and to maintain that for at least 10 years. Of the firefighters in the department during the period of review, approximately 65 were paramedics, or more than 40%. This high concentration of paramedics has allowed the Fire Service to include paramedics on fire engines, as well as ambulances, which allows paramedic-level services to be delivered to patients sooner, due to fire trucks generally arriving more rapidly to the scene of an emergency.

In addition to staffing fire engines with paramedics, the Fire Service places two paramedics on each ambulance. To provide ALS EMS services, a provider needs at least one paramedic on an ambulance. Often ALS ambulances are staffed with a paramedic and an Emergency Medical Technician (EMT), which can lower overall labor costs. In some cases, the EMT is a civilian, rather than a sworn member of the Fire Service, further reducing costs. It is estimated that the Terre Haute Fire Department could save approximately \$300,000 per year if it moved to this one paramedic/one civilian EMT model⁸, however, such a change would require amending the existing negotiated labor agreements. Retaining two firefighters on an ambulance, but reducing the overall number of paramedics so that staffing on each ambulance became one EMT and one paramedic, would also reduce departmental costs, albeit to a lesser degree.

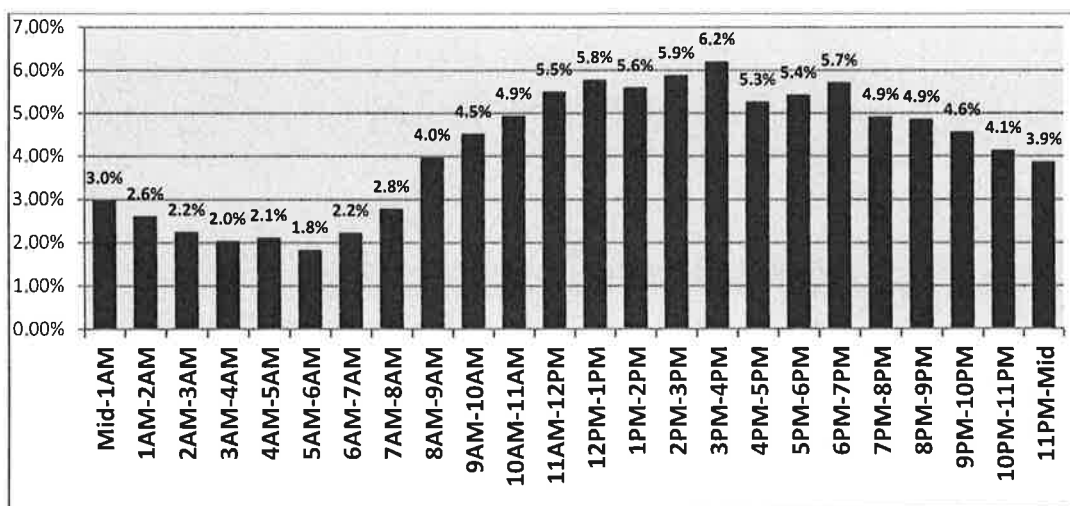
The Fire Service tracks a number of key input data points, but does not use all of them to develop management decisions. For example, the Fire Service produced a chart showing 2016 Fire Service calls catalogued by hour of the day. That Terre Haute-specific data aligned very closely with national data from more than a decade ago (i.e., Fire Service runs have a stable and largely predictable frequency). However, despite a swing of more than 300% between the lowest and highest utilized hours of the day, the department maintains

⁷ Some departments address this issue by awarding firefighters Kelly Days, which essentially are extra days off during a work period to keep work hours below the mandatory overtime level. Terre Haute Fire Department does not use Kelly Days.

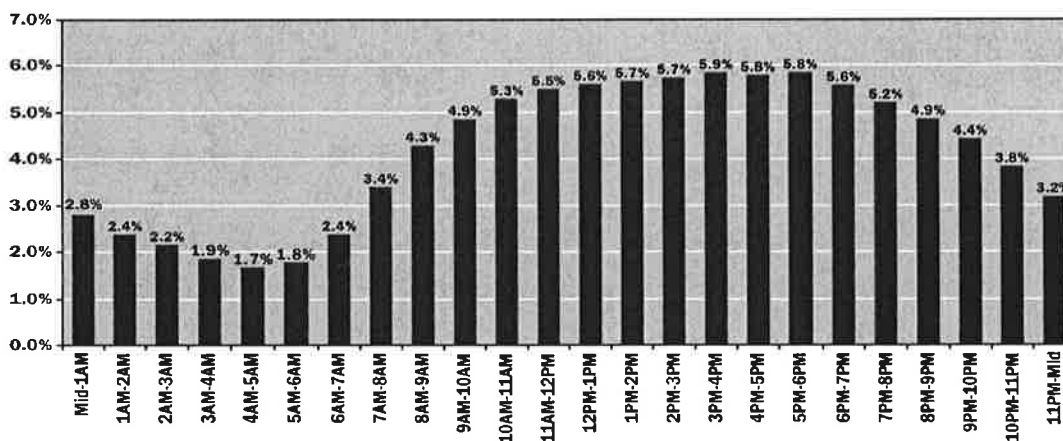
⁸ THFD average cost of firefighters includes wages, benefits, retirement, overtime, longevity, certification awards, clothing allowance, etc., three ambulances with a staff of 12 EMT and 12 paramedics, EMT cost based on 2015 BLS data in Indiana for median EMT and paramedic salaries, with FTE individuals working same 24 on, 48 off shift as firefighters, inclusive of overtime and with 30% benefit load. If just EMT-only salary data were available, it would likely be lower than the blended median and additional savings could be generated. Additional costs savings (\$1,100 per firefighter in certification pay) could be realized if the City altered its mandatory paramedic policy and allowed the total number of paramedics in the department to be reduced to the level of peer cities.

static staffing levels. Industries that have predictable swings in utilization (e.g., hospitals, etc.) do not staff with static models.

THFD Runs by Hour 2016



U.S. Fire Department Overall Runs by Hour (2004)



Historic data can be a predictive indicator regarding not only when calls will come into the Fire Service, but where the runs will be and for what issues. Predictive staffing and deployment (e.g., moving ambulances out of stations to “hot spots” during peak demand) can be used to shorten response times and potentially alleviate the need for both fire engine and ambulance deployment on all EMS runs.

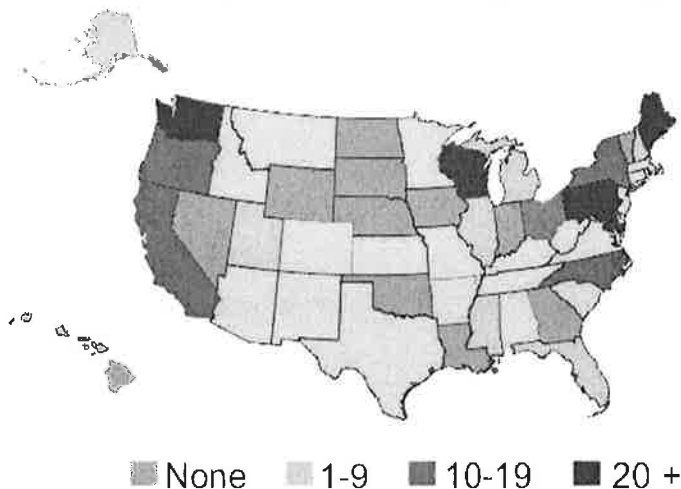
With personnel-related costs consuming so much of the spending in the Fire Service, some departments have tried innovative ways to control those costs. One model used in over 300 communities is dubbed the “Military Model.” The military model accepts college-age individuals into the Fire Service ranks on a full-time, but temporary basis (usually a 2-6 year

⁹ Terre Haute Fire Department Data, 1/23/17

¹⁰ *Topical Fire Report Series*, Volume 7, Issue 4/Fire Department Overall Fire Run Profile

commitment), in exchange for a stipend, benefits and free college tuition. These individuals are fully trained as new firefighters, but do not have the expectation of making the job a career (unless they re-enter the Fire Service following their enlistment) and do not assume leadership roles in the department. As such, they (a) do not accumulate the same number of certifications over their “career”, (b) do not accrue significant longevity or PTO benefits, and (c) do not generate a future pension obligation (all existing practices that drive long-term costs). Indiana is surrounded by states that have departments using the military model.

States with Fire Departments Using Military Model



Terre Haute could develop a program that, over time, replaced some number of retiring career firefighters with military model firefighters. Further, with several higher education institutions in Vigo County, the City could work with local institutions to encourage college-aged people from the community who lack the means to pay for post-secondary education to consider enlisting in the Fire Service to fund their education. If agreements can be struck with local institutors, the cost of tuition can be underwritten by partners outside of the Fire Service budget, driving additional savings. It is estimated that the Terre Haute Fire Department could save approximately \$1 million per year once 25% of its staff converted to this model.¹¹ Such a change would require amending the existing negotiated labor agreements. **This approach would have NO impact on the compensation or benefits of existing staff.**

Future

During this process, the Fire Service identified areas where it has an interest in making additional investments to improve services and capabilities, including:

¹¹ Assumptions include: 35 firefighters once fully deployed (25% of total force – Auburn, AL is at 60%), phased in as attrition naturally occurs over a period of years, standardized enlistment is a 4-year term of service, \$9.00/hour stipend, work full time (2,756 regular time hours and 165 overtime hours), \$10,000/individual/year for college tuition and fees, include benefits, eligible for longevity pay, no significant additional certifications or the accompanying stipends, all THFD leadership positions remain held by full-time, career firefighters.

- Adding additional ambulance(s) (new staff would also be required)
- Meeting minimum staffing requirements for apparatus set by National Fire Protection Association (NFPA) 1710
- Updating the fire department study to examine the possible need to relocate two fire stations to meet the growing demands of the east side of town
- Upgrading to automated dispatching to reduce the amount of time it takes to dispatch emergency calls, so responses happen faster

Each area outlined will require funding, although a method for paying for these investments was not discussed.

5. Recommendation

While the Study Team has delved into the operation and organization of the Fire Service and believes that there are several opportunities to save money that do not negatively impact health and safety or the existing staff, the Study Team was not prepared to suggest that the Fire Service make specific changes. That is not to say, however, that specific changes are not required.

During the study we learned that Terre Haute funds Fire Services at an amount commensurate with (or above) most peer Indiana cities. We also learned that the Fire Service has future goals that involve spending more money.

Therefore, following lengthy deliberation, the Study Team recommends that the City and the Fire Service agree to a “top line” spending figure (i.e., budget) for the Fire Service that holds spending at current levels. This spending cap, if held in place for multiple years, will lower spending levels relative to other important City priorities.

To provide best-in-class fire and EMS services and address emerging needs, the City should work with Fire Service management to find and implement cost saving ideas (including those described herein) to fund any additional spending the Fire Service wishes to do. Working collaboratively, with support to document cost savings and service improvements, the City has the opportunity to manage fire spending while facilitating the desired departmental improvements. Those efforts to **select and implement** specific cost saving elements in the Fire Service should be the focus of the next iteration of work.

Following this course allows citizens to know that they are spending an amount on Fire Services that is consistent with other Indiana communities, and it empowers the Fire Service to take the leadership role in implementing cost savings that balance the long-term fiscal needs of the community with the desires of the department. This is the same discipline that other city departments have undertaken in recent years, and it is consistent with what local families and business owners deal with each year.

6. Next Steps

If the Steering Committee supports the recommendation, it should be forwarded to the City. If the City agrees with the recommendation, it can inform the Fire Service that it should

anticipate a budget freeze going forward and that the City will work with the leadership of the department to find operational savings. In exchange, the Fire Service will be allowed to retain funds saved through its efficiency efforts to reinvest into mutually agreed-upon department priorities.

7. Timeline

This will largely be an internal process within the Fire Service beginning in 2018 and continuing thereafter. The scale of the Fire Service's goals will dictate the intensity with which leadership will seek to implement cost saving initiatives.

8. Other Issues

Given the tradition-bound nature of the fire service, we know that firefighters will have concern about this process. It is important to note, however, that this process **protects the jobs and compensation levels of all existing staff**. Any future changes related to the military model, the EMS ALS staffing model (i.e., one EMT and one paramedic per ambulance), or any other cost saving strategy would only occur as natural attrition happens in the future. Given the long-term fiscal challenges facing Terre Haute and its residents, this concept of methodical, long-term financial discipline seems like a responsible approach. That said, the ongoing reduction in fire threats and the increasing demand for emergency medical services will likely drive a continuing evolution in how Terre Haute delivers these services. That will likely entail an ongoing transition to an increasingly customized delivery model.

9. Acknowledgments

It is important to note that many individuals, both inside and outside the Fire/EMS Billing Study Team, assisted with the effort to collect and evaluate data in support of this project. Additionally, THFD Chief Jeff Fisher and his leadership team were instrumental in providing critical data for this endeavor.