Does Teamwork Make the Dream Work? Fire Service Consolidation in Minnesota’s Eighth Congressional District

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Abstract: Local governments consider consolidation as an answer to providing more cost-efficient services. Since 1815 when New Orleans merged with Orleans Parish, Louisiana, many different governments have experimented with consolidation. The research shows that consolidation does not lead to lower costs or higher efficiency. This study applies this framework to Minnesota’s Eighth Congressional District’s 180 fire departments, some of which are consolidated, to determine if the consolidated districts spend less while also improving efficiency. Minnesota’s Eighth Congressional District is selected to provide a large sample size for data analysis. It also provides opportunities for comparative analysis between urban and rural departments and differences in budget size and response time. Departments are evaluated based on their reported budgets and average response time. The departments which are not consolidated serve as a control and are used to compare the figures collected from the consolidated departments. The findings allow decision-makers to determine if consolidating fire services is a better option for communities within Minnesota’s Eighth Congressional District.

Research Question and Variables: Do consolidated fire districts within Minnesota’s Eighth Congressional District perform better than non-consolidated departments? The independent variable is consolidation, meaning a department was recently merged with another department. One dependent variable is average response times for each department in minutes. This will be compared with the square mileage covered by each service and rated 1-10 according to the recommendations provided by NFPA 1710. The other dependent variable will be each departments 2018 final budget. That will be compared with the population covered by each service and rated 1-10 according to recommendations provided by the Office of the Legislative Auditor for Minnesota.

Hypothesis:
H1: Consolidated fire districts perform better than non-consolidated departments.
H0: Consolidated fire districts have no significant effect on performance metrics when compared to non-consolidated departments.

Findings: After analyzing the results we failed to reject the null hypothesis according to response time ratings. However, we can reject the null hypothesis according to budget ratings per capita. The charts below help illustrate the ratings based on response time, (top chart), and budget per capita, (bottom chart). Each department received a score of 1-10 based on the best practices provided for both respective area of measurement.

Data and Methods: I started the data collection process by calling each station. In situations where I could not find a phone number for the department I contacted the municipality in which it was located. I left a message if they did not pick up. A week after the initial call I emailed each department/municipality requesting the information needed for my study. Response rates were underwhelming but there may be good reason for that. Many of these departments have no full-time staff and are rarely checking messages. I contacted all 180 departments within Minnesota’s Eighth Congressional District and received responses from 36. As of now, multiple departments and cities are still collecting information to send in. These late responses will still be entered in and recalculated for the final paper. After calling and emailing each department or municipality, I reached out to the State Fire Marshal Office requesting average time response data, as of now I have no response. The State Fire Marshal’s Office referred me to the Minnesota Board of Firefighter Training and Education regarding consolidation data for the area included in my study. They provided me with all recent consolidations within Minnesota’s Eighth Congressional District.

Conclusion: While my research has shown that there is a significant relationship between consolidated fire districts in Mn CD-8 and lower costs, it has also shown that there is not a significant relationship between the same departments and average time responses. As of now I think more time is necessary to collect data on more departments to truly have a definitive answer. I think that this study has helped prove the point that consolidation should not always be considered the answer to improving response times while at the same time lowering costs. The reality of the situation is much more complex and communities may have reasoning other than those addressed while considering if consolidation is for them.

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Works Cited: