The Economic Benefits of Cost Savings Associated with Emergency Services Districts:

An Analysis Including Specific Regions Across Texas

September 2022



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Introduction

Emergency Services Districts (ESDs) are local political subdivisions of the State of Texas that may provide fire, rescue, emergency medical services, and other emergency services in the area where they are established. ESDs are designed to ensure adequate and stable funding for local emergency services for all residents in the district. In Texas, there are approximately 334 ESDs in counties across the state, with new districts formed every year.

ESDs are primarily funded by ad valorem taxes and, in accordance with the State Constitution, cannot implement a tax rate exceeding \$0.10 per \$100 of property valuation. ESDs may also levy a sales and use tax

ESDs are designed to ensure adequate and stable funding for local emergency services for all residents in the district. for additional funding, although many are in counties in which such levies are constrained by the overall maximum rate allowed in a county. ESDs are governed by a board of five commissioners typically

appointed by the County Commissioners Court in their service areas. In some areas, the ESD Commissioners are elected by residents of the district.

The establishment of an ESD may also result in better Insurance Services Office (ISO) ratings for the ESD service area which many insurance companies use as part of their criteria in setting insurance premiums. A better ISO rating could lead to lower insurance premiums for businesses and homeowners in the district.

The Perryman Group (TPG) was recently asked to estimate the economic benefits of the cost savings associated with ESDs compared to other options such as outsourcing to a municipality. This analysis expands on prior work by the firm to include savings in specific areas and an update of the overall impact of the state to account for subsequent developments. A brief overview of methods used is presented on the following page, with additional detail in Appendix A.

Measuring Economic Impacts

Any economic stimulus, whether positive or negative, generates multiplier effects throughout the economy. In this case, The Perryman Group estimated the savings to taxpayers provided by ESDs compared to other options such as outsourcing to a municipality and then quantified the economic benefits of these savings. These savings are based on a comparison of tax collections by the ESDs to publicly available budget data from the nearby municipalities.

The Perryman Group's input-output assessment system (the US Multi-Regional Impact Assessment System, which is described in further detail in Appendix A to this report) was used to measure the total effects including not only direct, but also indirect and induced. The system was developed by the firm about 40 years ago and has been consistently maintained and updated since that time. The model has been used in hundreds of analyses for clients ranging from major corporations to government agencies and has been peer reviewed on multiple occasions. The impact system uses a variety of data (from surveys, industry information, and other sources) to describe the various goods and services (known as resources or inputs) required to produce another good/service. This process allows for estimation of total economic impacts (including multiplier effects).

Total economic effects are quantified for key measures of business activity:

- **Total expenditures** (or total spending) measures the dollars changing hands as a result of the economic stimulus.
- **Gross product** (or output) is production of goods and services that will come about in each area as a result of the activity. This measure is parallel to the gross domestic product numbers commonly reported by various media outlets and is a subset of total expenditures.
- Personal income is dollars that end up in the hands of people in the area; the vast
 majority of this aggregate derives from the earnings of employees, but payments such
 as interest and rents are also included.
- **Job gains** are expressed as "jobs" for ongoing effects or "job-years" for transitory effects such as construction or for cumulative measures. A job-year is one person working for one year, though it could be multiple persons working partial years.

Monetary values were quantified on a constant (2022) basis to eliminate the effects of inflation. Additional detail regarding the methods used is provided in Appendix A.

Economic Benefits of ESDs

The Perryman Group analyzed specific information related to 22 ESDs located across the state, comparing tax revenues collected by the ESDs to budget data related to emergency services in nearby municipalities. While the ultimate budgets spent by ESDs in some areas may exceed tax collections due to other sources of income such as fundraising and grants, by focusing only on the taxes collected, this study measures the relative effects on taxpayers on an "apples-to-apples" basis. Any spending beyond these tax collections represents additional value added by the ESDs, and hence these results are a conservative representation of their economic benefits. The ESDs were found to be more cost effective than the municipalities in 19 of the 22 areas.

The Perryman Group utilized data from the Texas Office of the Comptroller related to tax collections by ESDs in this analysis. These total costs were then converted to a per-capita basis using population estimates. For the municipalities, publicly available budget data related to emergency services was compiled and also converted to a per-capita cost. Savings associated with services through ESDs were then compiled and the related multiplier effects were calculated. (For additional detail, see Appendix A.)

The per-capita costs for ESDs and comparison municipalities are presented in the following table.

Emergency Services Districts (ESDs) and Comparison Municipalities Per Capita Costs of Emergency Services

ESD	Per Capita Costs	Municipalities	Per Capita Costs
Jefferson County ESD #3	\$92.29	Port Neches	\$147.29
Jefferson County ESD #4	\$49.42	Nederland, Groves	\$101.70
Orange County ESD #2	\$148.13	Orange	\$231.79
Orange County ESD #1	\$174.76	Orange	\$231.79
Jasper County ESD #1	\$17.56	Jasper	\$27.69
Parker County ESD #1	\$100.65	Weatherford, Mansfield, North Richland Hills	\$218.74
Travis County ESD#2	\$108.19	Round Rock	\$205.35
Williamson County ESD #3	\$95.64	Cedar Park, Georgetown	\$244.72
Williamson County ESD #2	\$135.14	Leander	\$168.50
Harris County ESD #13	\$109.77	Jersey Village	\$302.72
Harris County ESD #48	\$94.01	Katy	\$333.01
Bexar County ESD #4	\$82.55	Converse	\$136.22
Bexar County ESD #7	\$80.20	Schertz	\$147.94
Bexar County ESD #2	\$80.44	New Braunfels	\$223.91
Denton County ESD #1	\$164.74	The Colony, Little Elm, Prosper	\$170.90
Fort Bend County ESD #4	\$109.17	Sugar Land	\$151.75
Fort Bend County ESD #2	\$96.59	Missouri City	\$125.20
Smith County ESD #2	\$45.84	Tyler	\$185.86
Harrison County ESD #3	\$110.95	Marshall	\$182.46

Note: For ESDs with multiple nearby municipalities, a weighted average of the costs for the municipalities was used for comparison purposes.

Sources: Texas Comptroller of Public Accounts, City Budgets, US Census Bureau, SAFE-D the Texas State Association of Fire and Emergency Districts, and The Perryman Group.



Because of the significant variations in size and relative cost differentials, the direct savings range from less that \$100,000 to more than \$30 million.

The statewide savings associated with the ESDs were estimated by applying a weighted average of typical per-capita cost differentials between acquiring service through ESDs to those for municipalities to the statewide population (see Appendix A for more detail). The statewide savings are estimated to generate almost \$1.2 billion in annual gross product and 12,081 jobs as they flow through the economy.

Results for the specific ESDs studied are presented in the following table. All results include multiplier effects. Results by industry can be found in Appendix B. Note that the results in each area reflect its unique industrial composition and resulting tax incidence.

The Estimated Annual Impact of Cost Savings Achieved by Using Emergency Services Districts (ESDs) Relative to Nearby Municipalities for Fire Protection and Associated Services on Business Activity in the Relevant Local Areas and Texas

	Total Expenditures	Gross Product	Personal Income	Jobs
Jefferson County ESD #3	\$558,921	\$278,452	\$187,213	3
Jefferson County ESD #4	\$1,726,521	\$860,146	\$578,305	10
Orange County ESD #2	\$1,772,640	\$834,193	\$510,757	9
Orange County ESD #1	\$1,208,392	\$568,661	\$348,178	6
Jasper County ESD #1	\$145,354	\$71,923	\$43,285	1
Parker County ESD #1	\$19,437,113	\$9,523,698	\$5,839,170	104
Travis County ESD#2	\$29,698,613	\$15,553,971	\$9,641,065	165
Williamson County ESD #3	\$15,798,324	\$8,217,053	\$5,158,346	90
Williamson County ESD #2	\$1,868,029	\$971,603	\$609,934	11
Harris County ESD #13	\$38,773,118	\$18,447,802	\$11,344,111	189
Harris County ESD #48	\$90,053,906	\$42,846,610	\$26,347,675	440
Bexar County ESD #4	\$3,310,391	\$1,679,522	\$1,035,065	18
Bexar County ESD #7	\$9,208,250	\$4,671,791	\$2,879,158	50
Bexar County ESD #2	\$50,563,893	\$25,653,513	\$15,809,894	275
Denton County ESD #1	\$462,479	\$229,892	\$140,953	2
Fort Bend County ESD #4	\$9,944,257	\$4,622,497	\$2,848,831	50
Fort Bend County ESD #2	\$5,627,428	\$2,615,859	\$1,612,146	28
Smith County ESD #2	\$76,418,856	\$37,790,111	\$23,093,396	412
Harrison County ESD #3	\$1,026,073	\$468,915	\$288,602	5
STATEWIDE	+\$2,483,960,912	+\$1,175,701,598	+\$716,524,266	+12,081

Note: Based on The Perryman Group's estimates of savings associated with ESDs compared to other options such as outsourcing to a municipality and the related economic benefits of those savings. Impacts are on the counties where the ESDs are located. Additional explanation of methods and assumptions may be found elsewhere in this report and Appendix A. Results by industry are in Appendix B. Source: US Multi-Regional Impact Assessment System, The Perryman Group



Conclusion

Emergency Services Districts provide a stable source of funds for fire protection and other protective services. They also provide notable

Emergency Services Districts provide a stable source of funds for fire protection and other protective services, cost savings, and economic benefits.

cost savings compared to other options such as contracting with a municipality. These savings generate significant economic benefits of an estimated \$1.2 billion in annual gross product and 12,081 jobs across Texas.

Without the resources provided by ESDs, many areas would be faced with inadequate protective services. In some areas, it is difficult to retain sufficient numbers of volunteers (in fact, there has been an ongoing, long-term pattern of reduction in volunteers). These trends increase the need for more formal funding structures and stable systems such as those provided by ESDs.

Appendix A: Methods Used

The US Multi-Regional Impact Assessment System (USMRIAS) measures multiplier effects of economic stimuli. The basic modeling technique employed in this study is known as dynamic input-output analysis, which essentially uses extensive survey data, industry information, and a variety of corroborative source materials to create a matrix describing the various goods and services (known as resources or inputs) required to produce one unit (a dollar's worth) of output for a given sector. Once the base information is compiled, it can be mathematically simulated to generate evaluations of the magnitude of successive rounds of activity involved in the overall production process.

There are two essential steps in conducting an input-output analysis once the system is operational. The first major endeavor is to accurately define the levels of direct activity to be evaluated. In this instance, in order to assess the potential cost savings associated with ESDs, TPG selected a sample of 23 to evaluate. One area was eliminated due to a lack of sufficient information to quantify the relative costs. These ESDs varied significantly with respect to size and geographic location. For each of the 22 usable locations, information was compiled regarding the revenues for the districts as well as the budgets for comparable services in the most adjacent cities (in instances where the district boundaries were equally distant from two communities, a weighted average was utilized). Using this information, it was possible to examine the relative costs on a per capita and aggregate basis.

For 19 of the 22 areas, some level of relative cost savings was achieved by the ESDs. Because of differences in the relative magnitude of the savings and the sizes of the areas, these direct benefits ranged from less than \$100,000 to tens of millions of dollars. The ESDs and municipalities analyzed are described in the report.

To determine the total net benefits (including multiplier effects) in each area, the savings are allocated based on property tax incidence using information obtained from the Comptroller of Public Accounts. These funds, which become available to circulate through the economy, are segmented between business and residential levies. The business portion is apportioned based on a detailed examination of the specific composition of each area examined. The residential segment reflects household spending patterns.



With respect to the state as a whole, TPG used the entire sample of 22 ESDs, including those where the municipal option was found to be more cost effective. This sample should be highly representative of overall relative performance in the state. As noted, the areas differ significantly in size and geographic distribution. Moreover, the aggregate service areas encompass approximately 1.4 million persons with services provided by municipalities and about 1.4 million served by ESDs. It should also be noted that the relative differential derived from this sample was virtually identical (about 0.1% lower) than that determined in a relatively recent analysis based on a different sample.¹

The relative net savings from this sample was then applied to the total revenue base of ESDs in Texas as determined by recent filings with the Texas Division of Emergency Management (to the extent that some areas have not provided current information, this estimate will be modestly understated). In addition to encompassing some 2.8 million persons, the sample represents about 12.7% of all ESD revenues, which is well above the levels required for valid statistical inferences.

These estimates understate the actual cost to the extent that various overhead expenses which would be incurred by ESDs are not assigned at the departmental level within the cities. It should be noted that the revenue has increased since the prior study due to factors such as changes in tax levies, additional property development, and appreciation in values.

Once direct effects were estimated, total economic impacts were quantified through simulations of the input-output system to measure overall economic effects of savings. In each case, the submodel used reflects the unique characteristics of the county in which the ESD is located.

The present study was conducted within the context of the US Multi-Regional Impact Assessment System (USMRIAS) which was developed and is maintained by The Perryman Group. This model has been used in hundreds of diverse applications across the country and has an excellent reputation for accuracy and credibility; it has also been peer reviewed on multiple occasions.

The USMRIAS is somewhat similar in format to the Input-Output Model of the United States which is maintained by the US Department of Commerce. The

¹ The Perryman Group, "The Economic Benefits of Potential Cost Savings Associated with Emergency Services Districts," July 2020.



model developed by TPG, however, incorporates several important enhancements and refinements. Specifically, the expanded system includes (1) comprehensive 500-sector coverage for any county, multi-county, or urban region; (2) calculation of both total expenditures and value-added by industry and region; (3) direct estimation of expenditures for multiple basic input choices (expenditures, output, income, or employment); (4) extensive parameter localization; (5) price adjustments for real and nominal assessments by sectors and areas; (6) measurement of the induced impacts associated with payrolls and consumer spending; (7) embedded modules to estimate multi-sectoral direct spending effects; (8) estimation of retail spending activity by consumers; and (9) comprehensive linkage and integration capabilities with a wide variety of econometric, real estate, occupational, and fiscal impact models.

The impact assessment (input-output) process essentially estimates the amounts of all types of goods and services required to produce one unit (a dollar's worth) of a specific type of output. For purposes of illustrating the nature of the system, it is useful to think of inputs and outputs in dollar (rather than physical) terms. As an example, the construction of a new building will require specific dollar amounts of lumber, glass, concrete, hand tools, architectural services, interior design services, paint, plumbing, and numerous other elements. Each of these suppliers must, in turn, purchase additional dollar amounts of inputs. This process continues through multiple rounds of production, thus generating subsequent increments to business activity. The initial process of building the facility is known as the direct effect. The ensuing transactions in the output chain constitute the indirect effect.

Another pattern that arises in response to any direct economic activity comes from the payroll dollars received by employees at each stage of the production cycle. As workers are compensated, they use some of their income for taxes, savings, and purchases from external markets. A substantial portion, however, is spent locally on food, clothing, health care services, utilities, housing, recreation, and other items. Typical purchasing patterns in the relevant areas are obtained from the Center for Community and Economic Research Cost of Living Index, a privately compiled inter-regional measure which has been widely used for several decades, and the Consumer Expenditure Survey of the US Department of Labor. These initial outlays by area residents generate further secondary activity as local providers acquire inputs to meet this consumer demand. These consumer spending impacts are known as the

induced effect. The USMRIAS is designed to provide realistic, yet conservative, estimates of these phenomena.

Sources for information used in this process include the Bureau of the Census, the Bureau of Labor Statistics, the Regional Economic Information System of the US Department of Commerce, and other public and private sources. The pricing data are compiled from the US Department of Labor and the US Department of Commerce. The verification and testing procedures make use of extensive public and private sources.

Impacts were measured in constant 2022 dollars to eliminate the effects of inflation.

The USMRIAS generates estimates of the effect on several measures of business activity. The most comprehensive measure of economic activity used in this study is Total Expenditures. This measure incorporates every dollar that changes hands in any transaction. For example, suppose a farmer sells wheat to a miller for \$0.50; the miller then sells flour to a baker for \$0.75; the baker, in turn, sells bread to a customer for \$1.25. The Total Expenditures recorded in this instance would be \$2.50, that is, \$0.50 + \$0.75 + \$1.25. This measure is quite broad but is useful in that (1) it reflects the overall interplay of all industries in the economy, and (2) some key fiscal variables such as sales taxes are linked to aggregate spending.

A second measure of business activity frequently employed in this analysis is that of Gross Product. This indicator represents the regional equivalent of Gross Domestic Product, the most commonly reported statistic regarding national economic performance. In other words, the Gross Product of Texas is the amount of US output that is produced in that state; it is defined as the value of all final goods produced in a given region for a specific period of time. Stated differently, it captures the amount of value-added (gross area product) over intermediate goods and services at each stage of the production process, that is, it eliminates the double counting in the Total Expenditures concept. Using the example above, the Gross Product is \$1.25 (the value of the bread) rather than \$2.50. Alternatively, it may be viewed as the sum of the value-added by the farmer, \$0.50; the miller, \$0.25 (\$0.75 - \$0.50); and the baker, \$0.50 (\$1.25 - \$0.75). The total value-added is, therefore, \$1.25, which is equivalent to the final value of the bread. In many industries, the primary component of value-added is the wage and salary payments to employees.

The third gauge of economic activity used in this evaluation is Personal Income. As the name implies, Personal Income is simply the income received by individuals, whether in the form of wages, salaries, interest, dividends, proprietors' profits, or other sources. It may thus be viewed as the segment of overall impacts which flows directly to the citizenry.

The final aggregates used are Jobs and Job-Years, which reflect the full-time equivalent jobs generated by an activity. For an economic stimulus expected to endure (such as the ongoing operations of a facility), the Jobs measure is used. It should be noted that, unlike the dollar values described above, Jobs is a "stock" rather than a "flow." In other words, if an area produces \$1 million in output in 2018 and \$1 million in 2019, it is appropriate to say that \$2 million was achieved in the 2018-19 period. If the same area has 100 people working in 2018 and 100 in 2019, it only has 100 Jobs. When a flow of jobs is measured, such as in a construction project or a cumulative assessment over multiple years, it is appropriate to measure employment in Job-Years (a person working for a year, though it could be multiple people working for partial years). This concept is distinct from Jobs, which anticipates that the relevant positions will be maintained on a continuing basis.

Appendix B: Detailed Results

The Estimated Impact of the Cost Savings Attained by Emergency Services Districts (ESDs) Relative to Nearby Municipalities for Fire Protection and Associated Services on Business Activity in Jefferson County ESD #3

Results by Industry

	Total	Gross	Personal	
Industry	Expenditures	Product	Income	Jobs
Agriculture	+\$5,111	+\$1,589	+\$1,001	+0
Mining	+\$699	+\$156	+\$74	+0
Utilities	+\$31,522	+\$7,083	+\$3,091	+0
Construction	+\$107,585	+\$49,745	+\$40,993	+0
Manufacturing	+\$57,684	+\$16,569	+\$9,905	+0
Wholesale Trade	+\$12,287	+\$8,316	+\$4,795	+0
Retail Trade*	+\$131,502	+\$99,214	+\$57,777	+2
Transportation & Warehousing	+\$16,766	+\$11,298	+\$7,472	+0
Information	+\$10,944	+\$6,778	+\$2,894	+0
Financial Activities*	+\$73,779	+\$11,066	+\$4,749	+0
Business Services	+\$36,997	+\$23,097	+\$18,841	+0
Health Services	+\$27,205	+\$19,190	+\$16,225	+0
Other Services	+\$46,841	+\$24,350	+\$19,396	+0
Total, All Industries	+\$558,921	+\$278,452	+\$187,213	+3

Source: US Multi-Regional Impact Assessment System, The Perryman Group



The Estimated Impact of the Cost Savings Attained by Emergency Services Districts (ESDs) Relative to Nearby Municipalities for Fire Protection and Associated Services on Business Activity in Jefferson County ESD #4

Results by Industry

	Total	Gross	Personal	
Industry	Expenditures	Product	Income	Jobs
Agriculture	+\$15,787	+\$4,908	+\$3,091	+0
Mining	+\$2,159	+\$483	+\$228	+0
Utilities	+\$97,371	+\$21,880	+\$9,548	+0
Construction	+\$332,332	+\$153,664	+\$126,629	+2
Manufacturing	+\$178,187	+\$51,182	+\$30,597	+0
Wholesale Trade	+\$37,953	+\$25,688	+\$14,812	+0
Retail Trade*	+\$406,214	+\$306,474	+\$178,474	+5
Transportation & Warehousing	+\$51,790	+\$34,900	+\$23,082	+0
Information	+\$33,808	+\$20,938	+\$8,939	+0
Financial Activities*	+\$227,904	+\$34,183	+\$14,669	+0
Business Services	+\$114,286	+\$71,348	+\$58,202	+1
Health Services	+\$84,036	+\$59,278	+\$50,120	+1
Other Services	+\$144,693	+\$75,218	+\$59,915	+1
Total, All Industries	+\$1,726,521	+\$860,146	+\$578,305	+10

Source: US Multi-Regional Impact Assessment System, The Perryman Group

The Estimated Impact of the Cost Savings Attained by Emergency Services Districts (ESDs) Relative to Nearby Municipalities for Fire Protection and Associated Services on Business Activity in Orange County ESD #1

Results by Industry

	Total	Gross	Personal	
Industry	Expenditures	Product	Income	Jobs
Agriculture	+\$6,254	+\$2,150	+\$1,277	+0
Mining	+\$12,725	+\$3,111	+\$1,561	+0
Utilities	+\$107,886	+\$24,172	+\$10,548	+0
Construction	+\$44,806	+\$22,874	+\$18,850	+0
Manufacturing	+\$265,331	+\$84,062	+\$44,452	+0
Wholesale Trade	+\$20,884	+\$14,131	+\$8,148	+0
Retail Trade*	+\$298,412	+\$225,320	+\$131,249	+3
Transportation & Warehousing	+\$46,875	+\$30,683	+\$20,293	+0
Information	+\$19,001	+\$11,789	+\$5,033	+0
Financial Activities*	+\$184,000	+\$32,119	+\$10,083	+0
Business Services	+\$38,376	+\$22,524	+\$18,374	+0
Health Services	+\$55,838	+\$39,491	+\$33,390	+0
Other Services	+\$108,003	+\$56,235	+\$44,921	+1
Total, All Industries	+\$1,208,392	+\$568,661	+\$348,178	+6

Source: US Multi-Regional Impact Assessment System, The Perryman Group

The Estimated Impact of the Cost Savings Attained by Emergency Services Districts (ESDs) Relative to Nearby Municipalities for Fire Protection and Associated Services on Business Activity in Orange County ESD #2

Results by Industry

	Total	Gross	Personal	
Industry	Expenditures	Product	Income	Jobs
Agriculture	+\$9,175	+\$3,154	+\$1,874	+0
Mining	+\$18,667	+\$4,564	+\$2,290	+0
Utilities	+\$158,262	+\$35,460	+\$15,474	+0
Construction	+\$65,728	+\$33,556	+\$27,652	+0
Manufacturing	+\$389,226	+\$123,314	+\$65,208	+1
Wholesale Trade	+\$30,636	+\$20,729	+\$11,953	+0
Retail Trade*	+\$437,753	+\$330,532	+\$192,535	+5
Transportation & Warehousing	+\$68,763	+\$45,010	+\$29,768	+0
Information	+\$27,874	+\$17,294	+\$7,383	+0
Financial Activities*	+\$269,918	+\$47,117	+\$14,791	+0
Business Services	+\$56,295	+\$33,041	+\$26,953	+0
Health Services	+\$81,911	+\$57,930	+\$48,981	+1
Other Services	+\$158,434	+\$82,493	+\$65,897	+1
Total, All Industries	+\$1,772,640	+\$834,193	+\$510,757	+9

Source: US Multi-Regional Impact Assessment System, The Perryman Group



The Estimated Impact of the Cost Savings Attained by Emergency Services Districts (ESDs) Relative to Nearby Municipalities for Fire Protection and Associated Services on Business Activity in Jasper County ESD #1

Results by Industry

	Total	Gross	Personal	
Industry	Expenditures	Product	Income	Jobs
Agriculture	+\$1,485	+\$453	+\$323	+0
Mining	+\$2,340	+\$517	+\$240	+0
Utilities	+\$14,161	+\$3,171	+\$1,384	+0
Construction	+\$5,310	+\$2,701	+\$2,225	+0
Manufacturing	+\$14,585	+\$6,144	+\$3,173	+0
Wholesale Trade	+\$2,739	+\$1,853	+\$1,069	+0
Retail Trade*	+\$38,201	+\$28,840	+\$16,798	+0
Transportation & Warehousing	+\$4,791	+\$3,200	+\$2,116	+0
Information	+\$2,621	+\$1,624	+\$693	+0
Financial Activities*	+\$31,891	+\$7,345	+\$2,111	+0
Business Services	+\$4,403	+\$2,582	+\$2,106	+0
Health Services	+\$8,700	+\$6,119	+\$5,174	+0
Other Services	+\$14,127	+\$7,374	+\$5,872	+0
Total, All Industries	+\$145,354	+\$71,923	+\$43,285	+1

Source: US Multi-Regional Impact Assessment System, The Perryman Group

The Estimated Impact of the Cost Savings Attained by Emergency Services Districts (ESDs) Relative to Nearby Municipalities for Fire Protection and Associated Services on Business Activity in Parker County ESD #1

Results by Industry

	Total	Gross	Personal	
Industry	Expenditures	Product	Income	Jobs
Agriculture	+\$421,781	+\$111,232	+\$75,689	+1
Mining	+\$438,680	+\$115,968	+\$63,400	+0
Utilities	+\$1,095,845	+\$246,448	+\$107,543	+0
Construction	+\$856,670	+\$426,095	+\$351,129	+4
Manufacturing	+\$2,054,294	+\$744,383	+\$449,674	+6
Wholesale Trade	+\$546,197	+\$369,572	+\$213,099	+2
Retail Trade*	+\$4,838,049	+\$3,649,888	+\$2,125,490	+56
Transportation & Warehousing	+\$714,257	+\$469,140	+\$310,273	+4
Information	+\$291,190	+\$180,701	+\$77,147	+1
Financial Activities*	+\$4,645,932	+\$1,140,618	+\$379,099	+3
Business Services	+\$814,206	+\$495,527	+\$404,223	+4
Health Services	+\$861,974	+\$607,390	+\$513,554	+7
Other Services	+\$1,858,037	+\$966,735	+\$768,850	+15
Total, All Industries	+\$19,437,113	+\$9,523,698	+\$5,839,170	+104

Source: US Multi-Regional Impact Assessment System, The Perryman Group

The Estimated Impact of the Cost Savings Attained by Emergency Services Districts (ESDs) Relative to Nearby Municipalities for Fire Protection and Associated Services on Business Activity in Travis County ESD #2

Results by Industry

	Total	Gross	Personal	
Industry	Expenditures	Product	Income	Jobs
Agriculture	+\$205,744	+\$56,427	+\$38,059	+1
Mining	+\$123,695	+\$29,733	+\$14,464	+0
Utilities	+\$1,094,855	+\$245,974	+\$107,336	+0
Construction	+\$971,726	+\$489,148	+\$403,088	+5
Manufacturing	+\$2,505,370	+\$1,068,906	+\$662,078	+7
Wholesale Trade	+\$1,635,989	+\$1,106,941	+\$638,272	+6
Retail Trade*	+\$7,287,334	+\$5,456,287	+\$3,170,198	+85
Transportation & Warehousing	+\$521,396	+\$356,353	+\$235,679	+3
Information	+\$1,188,144	+\$734,687	+\$313,661	+2
Financial Activities*	+\$7,301,845	+\$1,897,775	+\$713,655	+6
Business Services	+\$2,303,669	+\$1,475,196	+\$1,203,382	+13
Health Services	+\$1,556,101	+\$1,093,194	+\$924,306	+13
Other Services	+\$3,002,745	+\$1,543,350	+\$1,216,886	+23
Total, All Industries	+\$29,698,613	+\$15,553,971	+\$9,641,065	+165

Source: US Multi-Regional Impact Assessment System, The Perryman Group

The Estimated Impact of the Cost Savings Attained by Emergency Services Districts (ESDs) Relative to Nearby Municipalities for Fire Protection and Associated Services on Business Activity in Williamson County ESD #2

Results by Industry

	Total	Gross	Personal	
Industry	Expenditures	Product	Income	Jobs
Agriculture	+\$25,820	+\$7,068	+\$4,803	+0
Mining	+\$7,280	+\$2,676	+\$1,724	+0
Utilities	+\$83,022	+\$18,674	+\$8,149	+0
Construction	+\$95,711	+\$47,619	+\$39,241	+0
Manufacturing	+\$227,022	+\$98,421	+\$59,698	+1
Wholesale Trade	+\$118,684	+\$80,305	+\$46,304	+0
Retail Trade*	+\$494,096	+\$372,670	+\$217,006	+6
Transportation & Warehousing	+\$28,247	+\$18,658	+\$12,340	+0
Information	+\$34,293	+\$21,285	+\$9,087	+0
Financial Activities*	+\$367,061	+\$76,211	+\$25,621	+0
Business Services	+\$98,099	+\$61,057	+\$49,806	+1
Health Services	+\$94,816	+\$66,691	+\$56,388	+1
Other Services	+\$193,879	+\$100,269	+\$79,767	+1
Total, All Industries	+\$1,868,029	+\$971,603	+\$609,934	+11

Source: US Multi-Regional Impact Assessment System, The Perryman Group

The Estimated Impact of the Cost Savings Attained by Emergency Services Districts (ESDs) Relative to Nearby Municipalities for Fire Protection and Associated Services on Business Activity in Williamson County ESD #3

Results by Industry

	Total	Gross	Personal	
Industry	Expenditures	Product	Income	Jobs
Agriculture	+\$218,368	+\$59,774	+\$40,619	+1
Mining	+\$61,565	+\$22,635	+\$14,578	+0
Utilities	+\$702,133	+\$157,926	+\$68,915	+0
Construction	+\$809,446	+\$402,726	+\$331,871	+4
Manufacturing	+\$1,919,970	+\$832,368	+\$504,878	+5
Wholesale Trade	+\$1,003,733	+\$679,155	+\$391,607	+4
Retail Trade*	+\$4,178,679	+\$3,151,748	+\$1,835,267	+48
Transportation & Warehousing	+\$238,889	+\$157,797	+\$104,361	+1
Information	+\$290,023	+\$180,009	+\$76,852	+1
Financial Activities*	+\$3,104,313	+\$644,532	+\$216,681	+2
Business Services	+\$829,646	+\$516,368	+\$421,224	+4
Health Services	+\$801,883	+\$564,018	+\$476,882	+7
Other Services	+\$1,639,676	+\$847,997	+\$674,611	+12
Total, All Industries	+\$15,798,324	+\$8,217,053	+\$5,158,346	+90

Source: US Multi-Regional Impact Assessment System, The Perryman Group

The Estimated Impact of the Cost Savings Attained by Emergency Services Districts (ESDs) Relative to Nearby Municipalities for Fire Protection and Associated Services on Business Activity in Harris County ESD #13

Results by Industry

	Total	Gross	Personal	
Industry	Expenditures	Product	Income	Jobs
Agriculture	+\$190,238	+\$54,383	+\$35,949	+0
Mining	+\$1,227,572	+\$274,698	+\$134,569	+1
Utilities	+\$2,789,353	+\$625,695	+\$273,037	+1
Construction	+\$1,315,999	+\$665,472	+\$548,390	+7
Manufacturing	+\$5,178,774	+\$1,475,711	+\$843,906	+10
Wholesale Trade	+\$1,773,407	+\$1,199,948	+\$691,901	+7
Retail Trade*	+\$8,129,540	+\$6,122,791	+\$3,563,780	+94
Transportation & Warehousing	+\$1,560,255	+\$968,917	+\$640,807	+8
Information	+\$927,168	+\$573,086	+\$244,669	+2
Financial Activities*	+\$8,226,056	+\$2,025,705	+\$732,071	+6
Business Services	+\$2,338,152	+\$1,462,952	+\$1,193,394	+13
Health Services	+\$1,824,612	+\$1,281,323	+\$1,083,370	+16
Other Services	+\$3,291,993	+\$1,717,122	+\$1,358,270	+26
Total, All Industries	+\$38,773,118	+\$18,447,802	+\$11,344,111	+189

Source: US Multi-Regional Impact Assessment System, The Perryman Group

The Estimated Impact of the Cost Savings Attained by Emergency Services Districts (ESDs) Relative to Nearby Municipalities for Fire Protection and Associated Services on Business Activity in Harris County ESD #48

Results by Industry

	Total	Gross	Personal	
Industry	Expenditures	Product	Income	Jobs
Agriculture	+\$441,843	+\$126,310	+\$83,494	+1
Mining	+\$2,851,142	+\$638,009	+\$312,548	+1
Utilities	+\$6,478,512	+\$1,453,231	+\$634,151	+2
Construction	+\$3,056,522	+\$1,545,616	+\$1,273,684	+16
Manufacturing	+\$12,028,148	+\$3,427,465	+\$1,960,043	+23
Wholesale Trade	+\$4,118,891	+\$2,786,983	+\$1,606,999	+16
Retail Trade*	+\$18,881,556	+\$14,220,710	+\$8,277,187	+219
Transportation & Warehousing	+\$3,623,827	+\$2,250,392	+\$1,488,329	+18
Information	+\$2,153,427	+\$1,331,043	+\$568,265	+4
Financial Activities*	+\$19,105,723	+\$4,704,875	+\$1,700,297	+15
Business Services	+\$5,430,559	+\$3,397,831	+\$2,771,759	+29
Health Services	+\$4,237,818	+\$2,975,983	+\$2,516,221	+36
Other Services	+\$7,645,937	+\$3,988,163	+\$3,154,698	+60
Total, All Industries	+\$90,053,906	+\$42,846,610	+\$26,347,675	+440

Source: US Multi-Regional Impact Assessment System, The Perryman Group

The Estimated Impact of the Cost Savings Attained by Emergency Services Districts (ESDs) Relative to Nearby Municipalities for Fire Protection and Associated Services on Business Activity in Bexar County ESD #4

Results by Industry

	Total	Gross	Personal	
Industry	Expenditures	Product	Income	Jobs
Agriculture	+\$32,742	+\$8,917	+\$5,970	+0
Mining	+\$23,372	+\$5,510	+\$2,669	+0
Utilities	+\$222,459	+\$50,074	+\$21,851	+0
Construction	+\$120,085	+\$60,429	+\$49,797	+1
Manufacturing	+\$348,369	+\$119,515	+\$68,557	+1
Wholesale Trade	+\$98,231	+\$66,464	+\$38,324	+0
Retail Trade*	+\$784,666	+\$590,272	+\$343,448	+9
Transportation & Warehousing	+\$113,214	+\$73,634	+\$48,699	+1
Information	+\$114,828	+\$70,918	+\$30,277	+0
Financial Activities*	+\$769,581	+\$226,129	+\$92,913	+1
Business Services	+\$185,552	+\$115,115	+\$93,904	+1
Health Services	+\$184,302	+\$129,246	+\$109,278	+2
Other Services	+\$312,988	+\$163,299	+\$129,377	+3
Total, All Industries	+\$3,310,391	+\$1,679,522	+\$1,035,065	+18

Source: US Multi-Regional Impact Assessment System, The Perryman Group

The Estimated Impact of the Cost Savings Attained by Emergency Services Districts (ESDs) Relative to Nearby Municipalities for Fire Protection and Associated Services on Business Activity in Bexar County ESD #7

Results by Industry

	Total	Gross	Personal	
Industry	Expenditures	Product	Income	Jobs
Agriculture	+\$91,077	+\$24,804	+\$16,607	+0
Mining	+\$65,012	+\$15,327	+\$7,424	+0
Utilities	+\$618,797	+\$139,287	+\$60,781	+0
Construction	+\$334,032	+\$168,090	+\$138,516	+2
Manufacturing	+\$969,030	+\$332,444	+\$190,699	+3
Wholesale Trade	+\$273,242	+\$184,878	+\$106,603	+1
Retail Trade*	+\$2,182,643	+\$1,641,913	+\$955,342	+25
Transportation & Warehousing	+\$314,919	+\$204,823	+\$135,463	+2
Information	+\$319,409	+\$197,266	+\$84,219	+1
Financial Activities*	+\$2,140,681	+\$629,006	+\$258,449	+2
Business Services	+\$516,136	+\$320,206	+\$261,206	+3
Health Services	+\$512,657	+\$359,512	+\$303,971	+4
Other Services	+\$870,614	+\$454,235	+\$359,879	+7
Total, All Industries	+\$9,208,250	+\$4,671,791	+\$2,879,158	+50

Source: US Multi-Regional Impact Assessment System, The Perryman Group

The Estimated Impact of the Cost Savings Attained by Emergency Services Districts (ESDs) Relative to Nearby Municipalities for Fire Protection and Associated Services on Business Activity in Bexar County ESD #2

Results by Industry

	Total	Gross	Personal	
Industry	Expenditures	Product	Income	Jobs
Agriculture	+\$500,115	+\$136,201	+\$91,190	+1
Mining	+\$356,991	+\$84,163	+\$40,769	+0
Utilities	+\$3,397,906	+\$764,847	+\$333,759	+1
Construction	+\$1,834,221	+\$923,005	+\$760,614	+9
Manufacturing	+\$5,321,093	+\$1,825,501	+\$1,047,157	+15
Wholesale Trade	+\$1,500,413	+\$1,015,195	+\$585,371	+6
Retail Trade*	+\$11,985,224	+\$9,015,994	+\$5,245,925	+139
Transportation & Warehousing	+\$1,729,266	+\$1,124,714	+\$743,846	+9
Information	+\$1,753,924	+\$1,083,218	+\$462,461	+4
Financial Activities*	+\$11,754,806	+\$3,453,965	+\$1,419,183	+13
Business Services	+\$2,834,179	+\$1,758,299	+\$1,434,322	+15
Health Services	+\$2,815,079	+\$1,974,137	+\$1,669,151	+24
Other Services	+\$4,780,676	+\$2,494,272	+\$1,976,148	+39
Total, All Industries	+\$50,563,893	+\$25,653,513	+\$15,809,894	+275

Source: US Multi-Regional Impact Assessment System, The Perryman Group

The Estimated Impact of the Cost Savings Attained by Emergency Services Districts (ESDs) Relative to Nearby Municipalities for Fire Protection and Associated Services on Business Activity in Denton County ESD #1

Results by Industry

	Total	Gross	Personal	
Industry	Expenditures	Product	Income	Jobs
Agriculture	+\$8,998	+\$2,447	+\$1,663	+0
Mining	+\$1,963	+\$453	+\$221	+0
Utilities	+\$24,954	+\$5,614	+\$2,450	+0
Construction	+\$18,539	+\$9,261	+\$7,632	+0
Manufacturing	+\$59,208	+\$20,615	+\$11,940	+0
Wholesale Trade	+\$22,748	+\$15,392	+\$8,875	+0
Retail Trade*	+\$109,454	+\$82,406	+\$47,960	+1
Transportation & Warehousing	+\$11,532	+\$7,581	+\$5,014	+0
Information	+\$15,111	+\$9,336	+\$3,986	+0
Financial Activities*	+\$98,715	+\$22,672	+\$7,142	+0
Business Services	+\$24,183	+\$15,056	+\$12,282	+0
Health Services	+\$24,180	+\$16,997	+\$14,371	+0
Other Services	+\$42,894	+\$22,060	+\$17,416	+0
Total, All Industries	+\$462,479	+\$229,892	+\$140,953	+2

Source: US Multi-Regional Impact Assessment System, The Perryman Group

The Estimated Impact of the Cost Savings Attained by Emergency Services Districts (ESDs) Relative to Nearby Municipalities for Fire Protection and Associated Services on Business Activity in Fort Bend County ESD #4

Results by Industry

	Total	Gross	Personal	
Industry	Expenditures	Product	Income	Jobs
Agriculture	+\$199,879	+\$54,779	+\$36,748	+1
Mining	+\$341,939	+\$76,579	+\$35,811	+0
Utilities	+\$683,519	+\$153,205	+\$66,854	+0
Construction	+\$388,501	+\$195,288	+\$160,930	+2
Manufacturing	+\$1,624,153	+\$450,359	+\$255,578	+3
Wholesale Trade	+\$311,099	+\$210,494	+\$121,373	+1
Retail Trade*	+\$2,295,403	+\$1,731,087	+\$1,007,988	+27
Transportation & Warehousing	+\$159,173	+\$106,847	+\$70,665	+1
Information	+\$206,302	+\$127,576	+\$54,466	+0
Financial Activities*	+\$1,911,605	+\$437,387	+\$158,311	+1
Business Services	+\$497,835	+\$308,165	+\$251,383	+3
Health Services	+\$443,199	+\$312,084	+\$263,870	+4
Other Services	+\$881,650	+\$458,647	+\$364,854	+7
Total, All Industries	+\$9,944,257	+\$4,622,497	+\$2,848,831	+50

Source: US Multi-Regional Impact Assessment System, The Perryman Group

The Estimated Impact of the Cost Savings Attained by Emergency Services Districts (ESDs) Relative to Nearby Municipalities for Fire Protection and Associated Services on Business Activity in Fort Bend County ESD #2

Results by Industry

	Total	Gross	Personal	
Industry	Expenditures	Product	Income	Jobs
Agriculture	+\$113,111	+\$30,999	+\$20,795	+0
Mining	+\$193,502	+\$43,336	+\$20,266	+0
Utilities	+\$386,802	+\$86,698	+\$37,833	+0
Construction	+\$219,852	+\$110,513	+\$91,070	+1
Manufacturing	+\$919,104	+\$254,857	+\$144,631	+2
Wholesale Trade	+\$176,050	+\$119,118	+\$68,684	+1
Retail Trade*	+\$1,298,963	+\$979,617	+\$570,418	+15
Transportation & Warehousing	+\$90,076	+\$60,465	+\$39,989	+0
Information	+\$116,746	+\$72,195	+\$30,822	+0
Financial Activities*	+\$1,081,772	+\$247,516	+\$89,588	+1
Business Services	+\$281,723	+\$174,390	+\$142,257	+2
Health Services	+\$250,805	+\$176,607	+\$149,323	+2
Other Services	+\$498,923	+\$259,547	+\$206,470	+4
Total, All Industries	+\$5,627,428	+\$2,615,859	+\$1,612,146	+28

Source: US Multi-Regional Impact Assessment System, The Perryman Group

The Estimated Impact of the Cost Savings Attained by Emergency Services Districts (ESDs) Relative to Nearby Municipalities for Fire Protection and Associated Services on Business Activity in Smith County ESD #2

Results by Industry

	Total	Gross	Personal	
Industry	Expenditures	Product	Income	Jobs
Agriculture	+\$1,763,166	+\$463,978	+\$314,898	+4
Mining	+\$2,219,761	+\$493,953	+\$240,643	+1
Utilities	+\$3,006,759	+\$675,719	+\$294,866	+1
Construction	+\$2,204,263	+\$1,102,853	+\$908,820	+11
Manufacturing	+\$8,345,279	+\$2,725,573	+\$1,562,538	+22
Wholesale Trade	+\$2,210,508	+\$1,495,643	+\$862,401	+8
Retail Trade*	+\$18,968,718	+\$14,324,995	+\$8,344,652	+220
Transportation & Warehousing	+\$1,774,074	+\$1,189,382	+\$786,615	+9
Information	+\$2,464,613	+\$1,519,732	+\$648,822	+5
Financial Activities*	+\$18,235,472	+\$4,689,329	+\$1,653,158	+15
Business Services	+\$3,091,000	+\$1,892,849	+\$1,544,079	+16
Health Services	+\$5,129,822	+\$3,561,960	+\$3,011,671	+43
Other Services	+\$7,005,422	+\$3,654,146	+\$2,920,234	+57
Total, All Industries	+\$76,418,856	+\$37,790,111	+\$23,093,396	+412

Source: US Multi-Regional Impact Assessment System, The Perryman Group



The Estimated Impact of the Cost Savings Attained by Emergency Services Districts (ESDs) Relative to Nearby Municipalities for Fire Protection and Associated Services on Business Activity Harrison County ESD #3

Results by Industry

	Total	Gross	Personal	
Industry	Expenditures	Product	Income	Jobs
Agriculture	+\$37,613	+\$14,660	+\$6,744	+0
Mining	+\$53,603	+\$15,887	+\$10,038	+0
Utilities	+\$90,097	+\$20,150	+\$8,793	+0
Construction	+\$34,001	+\$17,457	+\$14,386	+0
Manufacturing	+\$197,699	+\$59,683	+\$33,760	+0
Wholesale Trade	+\$16,919	+\$11,449	+\$6,602	+0
Retail Trade*	+\$230,824	+\$175,027	+\$102,081	+3
Transportation & Warehousing	+\$31,173	+\$20,918	+\$13,835	+0
Information	+\$16,379	+\$10,162	+\$4,339	+0
Financial Activities*	+\$159,164	+\$31,112	+\$12,384	+0
Business Services	+\$24,029	+\$13,641	+\$11,128	+0
Health Services	+\$46,972	+\$33,174	+\$28,049	+0
Other Services	+\$87,600	+\$45,594	+\$36,465	+1
Total, All Industries	+\$1,026,073	+\$468,915	+\$288,602	+5

Source: US Multi-Regional Impact Assessment System, The Perryman Group

The Aggregate Net Estimated Impact of the Cost Savings Attained by Emergency Services Districts (ESDs) Relative to Nearby Municipalities for Fire Protection and Associated Services on Business Activity in Texas

Results by Industry

	Total	Gross	Personal	
Industry	Expenditures	Product	Income	Jobs
Agriculture	+\$47,185,302	+\$13,505,942	+\$8,868,615	+120
Mining	+\$89,554,075	+\$20,528,831	+\$10,620,864	+51
Utilities	+\$162,704,826	+\$36,497,307	+\$15,926,452	+59
Construction	+\$78,456,988	+\$39,698,801	+\$32,714,284	+398
Manufacturing	+\$386,828,307	+\$120,502,088	+\$67,870,210	+858
Wholesale Trade	+\$94,449,236	+\$63,905,485	+\$36,848,470	+363
Retail Trade*	+\$517,201,212	+\$389,767,014	+\$226,905,784	+5,991
Transportation & Warehousing	+\$80,675,190	+\$53,260,524	+\$35,224,607	+416
Information	+\$69,500,160	+\$42,920,775	+\$18,324,261	+142
Financial Activities*	+\$514,398,598	+\$130,489,188	+\$47,326,120	+420
Business Services	+\$129,133,101	+\$80,363,767	+\$65,556,242	+692
Health Services	+\$114,763,642	+\$80,594,712	+\$68,143,580	+976
Other Services	+\$199,110,273	+\$103,667,163	+\$82,194,776	+1,594
Total, All Industries	+\$2,483,960,912	+\$1,175,701,598	+\$716,524,266	+12,081

Source: US Multi-Regional Impact Assessment System, The Perryman Group