Choosing a Service Provider Model:

A descriptive study of Texas Emergency Service Districts.

by

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Abstract

Purpose: This study provides a description of the choices made by Texas Emergency Service Districts (ESD) when selecting a service provider to deliver emergency response. Frequent assessment and evaluation of their community's risk profile compared to available resources will lead the ESD to 1) Contract with a local volunteer fire department, 2) Hire their own internal employees and create their own department, or 3) Contract with an external combination (paid and volunteer) department. A working knowledge of current situations and historical trends will be useful to ESD board members who make these decisions.

Method: This research uses document analysis of quantitative public records to generate descriptive statistics regarding the utilization of the various service delivery models. Records from the past twenty years, from five different agencies and organizations, were stitched together to form a coherent picture.

Findings: This study found a consistent growth pattern of Texas ESDs overall, an increase in the use of internal paid departments, a continued reliance on the volunteer fire service and a remarkable lack of compliance in the reporting.

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About the Author

David Bailey is a graduate of St. Edwards University in Austin, Texas where he earned a Bachelor of Applied Science in Public Safety Management. He has worked in Public Safety, Fire, EMS and Emergency Management for over 30 years, with organizations ranging from large municipalities to small, local government agencies. A lifelong Central Texan, he enjoys living on Lake Travis where he offers strategic consulting services to Texas ESDs through Professional Civic Services, LLC.

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Chapter One
Introduction

The Johnson's had enjoyed their lake homes in the Texas Hill Country for almost twenty years before they retired. Like most in their 1,000 person community, many had relocated from a larger city or town and they did not really miss the lack of public services like fire, EMS or police protection, and they especially did not miss the high city taxes. They would occasionally see the local volunteer fire department, more often at the annual fish fry fund-raiser than any actual emergency, but joined in the local sentiment that saw reduced public safety services as a part of living "out in the county." Then came the unprecedented wildfires of 2011, followed by historical flooding throughout the Highland Lakes, and finally, a 10-year old boy died from a tragic accident that might have been averted had the closest ambulance not been 35 minutes away.

The histories of Emergency Service Districts in the state of Texas are filled with stories like the one above. Eventually motivated by such tragedies, local residents begin casting about looking for solutions, no longer willing to accept the current level of service and protection. What options are available? And Who is responsible?

Background

The State of Texas utilizes the Department of Emergency Management to oversee thousands of disaster responders, including the mammoth Texas Task

Force One and Two, the Texas Forest Service and the Department of Public Safety- Yet none of these agencies will be readily available for your neighbor's brush fire. The resources of the state are further distributed through each of the 254 county sheriff's offices, yet they are tasked with law enforcement, jails, and courts- not ambulances or paramedics. The counties themselves do have the ability to adopt and administer a fire code, but only if the population is greater than 250,000 or if they are adjacent to such a county (LGC 233.061, 2001). Consequently, in 2013, 173 of the 254 (68%) counties did not have a fire code (Loftis, 2013.) County commissioners can decide to purchase fire trucks and other equipment and can also contract with volunteer or municipal fire departments to provide fire protection (LGC 352, 1987). Equally importantly, however, is the omission of the ability to operate a fire department or EMS service. State resources, and their county extensions, are clearly designed to support other, lower levels of government, after those local resources have been exhausted, but have no statutory authority to get into the local fire or EMS business.

Similarly, living in an unincorporated area means there is no city, village or town collecting taxes with which to provide public safety services either, thus, the creation of volunteer fire departments (VFDs). Texans have formed volunteer fire companies since the Civil War Texas and are, in many localities, still the sole responders (Ingle, 2017). Yet with changing economic and social climates and increased training requirements, many departments are

struggling to recruit and retain enough volunteers to continue to provide the level of service communities have come to expect (Quinn, 2016).

When the locality has been served by the same VFD for the past 25 years, while the characteristics of the community (population, age, industry) and of the VFD have changed, both of which clearly call for improvements in public safety response – and yet there is no benefactor from the state, county, city or VFD to drive those improvements – residents *do* have a mechanism to generate those improvements: an Emergency Service District (ESD).

ESDs and other Special Purpose Districts

For the past several decades, special purpose districts have seen the most explosive growth of any form of government in Texas. As of 2014, there were more than 3000 special purpose districts in the state, the most common type being independent school districts, water /wastewater districts and economic development districts (Texas Senate Research, 2014).

Emergency Services Districts (ESDs) are another type and are further defined as "local political subdivisions of the State of Texas that may provide fire, rescue, EMS and other emergency services' (SAFE-D, 2017). As of 2018, there were over 330 ESDs throughout Texas, found in 93 of the 254 counties. The key, of course, to the provision of these services is the District's ability to levy tax assessments on ad valorem property values as well as sales tax. It is this formal, reliable form of revenue that enables change.

ESDs, as a formal solution were established in 1987, but their origins are found in 1949 when the legislature formed Rural Fire Protection Districts (RFPD) specifically to provide a funding mechanism to farmers and property owners for fire protection. In 2003, the remaining RFPDs were converted to ESDs and the tax rate was set at a maximum of 10 cents per $100 valuation.

Remaining Questions

From the beginning, the establishment, provision, and extent of the emergency response services were based on the approval of the residents within the geographic boundaries of the District. *How* those services are actually provided is left to discernment and stewardship of the District's Board of Commissioners. State statute allows three broad models to provide those services:

1. The Board can sign a contract-for-services with the existing VFD, hoping that the stable income stream will sufficiently enhance and improve the VFD's capabilities to meet the needs of the District.
2. The Board can sign a contract-for-services with another service provider who they feel is better qualified to provide the service.
3. The Board can hire or build its own fire and EMS department.

Every new ESD is faced with this decision, eventually asking which model will provide the best service? In this aspect the literature is lacking, in large part due to the great variety found in the make-up of the 330 plus

districts. The better model for a large suburban district in Harris County would not at all be appropriate for a ten-person VFD in far west Texas. Further, there has been limited analysis of the current situation concerning which models are the most prevalent. Also lacking are trend analysis of the utilization of each model. We are unable to perform better/best studies without a baseline descriptive study that examines the current state of Texas ESDS, how they have evolved and what trends are emerging.

Introduction to the Research Topic

This paper seeks to examine and describe the options available to local residents who wish to improve their level of protection through the creation and utilization of an Emergency Service District. The goal is to determine the rate at which the models are being used and if those rates of usage are changing; whether ESDs changed or modified its model over time; and identify other broad descriptors.

Chapter Two

Literature Review of the prevailing service-provider models.

This chapter will discuss the provider models utilized by local organizations to deliver fire and emergency services to their community. Scholarly literature was used to identify the main descriptors and key differences between the models. After a brief introduction, the chapter offers the major characteristics of each delivery model.

Introducing the Models

The importance of a comprehensive community needs assessment and accompanying gap analysis has been well known to fire service leadership for several generations. After all, the fire department exists to provide services to the community based on what it needs, not based on what the fire department or its members want to provide (Grant & Hoover, 1994).

For the purpose of this study, a main differentiation between the three service-provider models is the decision regarding the type of personnel used by the department: volunteer (non-paid), paid or a combination of paid and non-paid. Other factors such as who buys the equipment or who owns the fire station are certainly considerations when choosing between a contract for service or operating an internal department, but they are beyond the scope of this study.

A number of important factors can influence the type of personnel used by a fire department: 1) financial resources, 2) the frequency of incidents (call volume), 3) availability of on-call volunteers, 4) the range of services provided, and 5) the type of personnel preferred by the community (Paulsgrove, 2003).

Strategic, comprehensive planning for emergency response providers traditionally includes a set a measurable, specific goals and SMART objectives from which the organization explains, describes and justifies the actions and decisions they are making (Bennett & Forsythe, 2003).

There are no simple guidelines that set forth the requirements as to the type of personnel to be used for fire department operations. The success of their operation does not depend on paid or unpaid staff, but rather on the individual and collective abilities to achieve the objectives of the District. Effective staffing decisions are visibly linked to the strategic objectives of the organization.

1. External Volunteer Departments

The United States has a long and diverse history of local groups of volunteers coming together to address social, cultural, educational and human needs (Holland, 2008). As early as 1831 theorist recognized that "Americans of all ages, all situations in life, and of all dispositions, are forever forming associations….. In every case, at the head of any new undertaking, where in France you would find the government, or in England some territorial magnate, in the United States you are sure to find an association" (Tocqueville, 1831).

When it becomes clear that government will not, cannot or should not be the solution, Americans have demonstrated the likelihood to organize and form associations to do so.

Hensler identifies three historical eras in the American volunteer fire service (2011). The first era, Ben Franklin's volunteer system, started roughly in the 1730s and persisted in urban centers into the mid-1800s, a span of about 125 years. For a Texas example, the City of Austin, Texas fire department (AFD) formally organized as an all-volunteer association in 1858 (Austin, 2017). The next few decades, into the late 1800s, saw the volunteer departments reorganize through charters or incorporation as both volunteer and paid fire departments under limited government control. This second era system continues to this day as more volunteer departments now require financial support (in Texas, through ESDs) to continue providing essential emergency services to small towns and cities while adding paid personnel as they are able. To continue the example, AFD operated as a fully volunteer department for only 16 years, hiring its first engineer in 1878, and continued as a combination department for another 42 years.

The events of September 11, 2001 mark the end of the second volunteer era and the start of the third era of the volunteer. The world of public safety, and specifically the fire service, continues to feel the consequential increase in public expectations since that event. Various pressures—social and economic—will force the volunteer service to become even more like the paid service, if

they are to survive (Hensler, p.180).

Still, volunteer fire and emergency response departments continue to offer a classic example of the benefit of American voluntary association: Of the estimated 1.2 million American firefighters, 70% (814,850) are volunteers and of the 29,727 fire departments in the country, less than 9% (2,651) are all entirely career, fully paid fire departments (National Volunteer Fire Council, 2017).

The ratio of volunteer departments to paid departments is similar in Texas. The State Firefighters and Fire Marshals Association is Texas' oldest and largest fire association. Formed in 1876, the SFFMA serves roughly 1,200 fire departments and 20,000 individual members (SFFMA, 2019). In contrast, the Texas Commission of Fire Protection (TCFP), which certifies paid fire protection personnel and departments, reports 415 departments with more than 10 paid personnel and another 300 with 1-10 paid personnel (TCFP, 2019).

Decline in overall volunteerism

Unfortunately, volunteer rates in America have been slowly, but steadily dropping for over a decade. According to the U.S. Department of Labor's 2015 report, 24.9% of the U.S. population over the age of 16 volunteered at least once in the past year. In 2011, this percentage was 26.8%, and in 2005 it was 28.8% (Srebo, 2016). Further, national studies indicate that since 1985 there has been a ten percent decline in volunteer fire service, although researchers have reason to believe the decline is even larger (Greene, 2019). The U.S. Fire

Administration's 2007 report on recruitment and retention of volunteer firefighters provides amble explanation for the decline:

What Makes Your Members Leave Your Organization? *	
No time to volunteer	92.3%
Conflicts in organization	47.8%
Organizational leadership created adverse atmosphere	46.7%
Too much training	45.6%
Attitude of existing personnel to newcomers	39.1%
Criticism received from officers/older members.	38.0%
Lack of camaraderie.	19.5%
**Many respondents indicated more than one reason.*	

Table 2.0 Reasons to leave

Evolutions within the VFD that come with a contract

Mediating organizations like a VFD, who provide public services without a mandate or help of government, continue to fill a significant role in public safety. In situations where government funding or involvement was initially scarce, an all-volunteer, locally-focused organization such as a VFD, will flourish and may enjoy years of autonomy before accepting government funds and regulations (Smith & Lipsky, 1993).

The creation of an ESD, and a subsequent contract with the VFD, may well be the first acceptance of government funds and the accompanying regulation. Berger and Neuhaus (1977) saw the trend toward professionalism

as a direct threat to the voluntary association, observing that through increasing organizations and lobbies, professionals increasingly persuade the state to legislate standards and certifications that hit voluntary associations especially hard.

Should an ESD Board decide to contract with a non-profit VFD to deliver district services, the factors above must be considered and clearly addressed. The ESD Board's policies regarding strategic personnel decisions must be included and executed through the service contracts (SAFE-D, p. 21, 49). This model creates an arms-length, independent contractual relationship between the ESD and the VFD membership.

2. Internal Department Service Providers

A major decision an ESD Board will make is if it will operate its own department or contract with an external provider. Operating its own department means hiring their own service providers as employees and that first employee hire leads to an entirely larger world of personnel management. Processes for recruitment, hiring, training, probations, promotions, affirmative action and equal employment opportunity, labor relations, occupational health and safety, wages and other employee benefits, disability, retirement, etc. are all elements of a paid, career department (Saunders, 2003). Unlike the arms-length, contractual, relationship of an external provider, the District assumes the central role of employer.

2.1 Internal fully-paid providers.

Of the largest 150 fire departments in Texas, over 90% are operated by a municipality, town, city or village (TCFP, 2019) who has access to human resources offices and practices from elsewhere within the municipality. In contrast, the typical Texas ESD operating a paid department bears the cost of personnel management on their own.

One benefit of operating its own internal department is eliminating the tedious, and at times contentious, service contract negotiations between the District and the vendor. On the other hand, operating an internal paid department does subject the fire department and its personnel to regulation by the Texas Commission on Fire Protection (SAFE-D, p.50).

2.2 Internal combination providers.

Combination departments are synonymous with departments undergoing organizational change. Ideally, an honest needs assessment has shown an obvious gap in capability and the organization is making decisions to better achieve its goals and objectives. The combination department offers an alternative arrangement used more frequently every year as departments transition from volunteer toward career (Hensler, 2001).

Combination departments come in various configurations. As of 2008, an NFPA survey of U.S. fire departments reported 30,185 fire departments with 8 percent full-time career, 6 percent mostly career, 17 percent mostly volunteer,

and 70 percent all-volunteer (Karter & Stein, 2008). Further, researchers offer four varieties for classifying combination departments (Benoit & Perkins, 2001): 1) A simple previously-volunteer departments who can now afford to hire a handful of administrative career personnel. 2) A simple previously-all-paid, career department that now fills vacant positions with volunteers, due to a severe downtown or uncertain economic future. 3) A complex previously-volunteer department that is experiencing rapid growth and development and is steadily supplementing volunteers with paid personnel. 4) A fourth type is the complex previously-combination department, usually found where several suburban departments merge with a larger central city department.

Transitions

Paid personnel are added to a VFD, creating a combination department, because some aspect(s) of the community profile has changed. The number of incidents, growing response times, the number of available volunteer responders, the type of incidents, an increase in available funding and/or the expectations of the taxpayers could all lead to the inclusion of paid personnel. Rarely are they hired to supplant the volunteers- but instead, are used to supplement and to increase the capacity of the organization to the extent demanded by the near-term community profile.

The National Volunteer Council reports of the most pervasive problems found in combination departments is friction between volunteer and career members (NVFC, p.70). Unfortunately, Greene reports in his study that

volunteers serve two to six years less when paid firefighters are introduced into a full-volunteer department (2019). This transition period is complicated by employment laws such as the Fair Labor Standards Act, which restrict paid employees from volunteering (Stittleburg, 2003), thus forcing members to choose one side or the other. Conflict and division also come from separate certification processes and a perceived difference in training levels, differing responsibilities and obligations, and the obvious monetary considerations. Perhaps most importantly is a lack of motivation by the volunteers when they do not feel they are as needed and involved as before.

Communities often have preferences for the type of providers they wish to serve in their fire departments. In some instances, the volunteer fire department serves as the focal point of community activity, and the community is satisfied with the level of service provided by the volunteer department (Paulsgrove, 2003). For others, paid resources must be added to achieve that satisfaction. The length of this transition period- or the duration of operating as a combination department- is based on the pace and nature of the changes that occur in the community.

3) External paid providers, fire and EMS.

Some ESDs will choose to contract for services with already-existing organization such as another ESD or a municipality rather than develop or operate their own departments (Texas Health and Safety Code sec. 775. 2013;

see also COA/ESD4 Contract, 2017). Newly created districts - with successful, neighboring departments who are willing to expand- are frequently satisfied by hiring the professionals next door.

Should the ESD contract with a neighboring department or ambulance service, a formal, contractual relationship is negotiated and monitored as would be the case with any other vendor the ESD may select (SAFE-D, p.52).

Some emergency service districts exist to provide emergency medical service or ambulance service, but not fire or rescue service. For ESDs looking to contract for advanced EMS or ambulance service, there are several options: contract with an EMS ESD, or with a private third-party ambulance service or with a county or municipality agency to secure ambulance service.

Finally, ESDs may have multiple contracts. For example, one contract for a paid fire department and one contract for an ambulance service.

4) Overlapping Districts

In 2001, Chapter 775 of the Health and Safety Code was amended to allow the creation of an ESD that could overlap the physical boundaries of an existing ESD, with the caveat that the new district did not duplicate the services provided by the original ESD. (Texas Health and Safety Code Sec. 775.0205). In 2011, the law was clarified to mandate that the original ESD must clearly define the services it will continue to provide prior to the election of the overlapping district (Katz, 2012).

Overlapping districts are created to address a deficiency in service delivery where the existing ESD has reached its maximum capacity. For example, a ten-year-old fire ESD that still cannot secure ambulance service. To meet the demands of the community, the second, overlapping ESD would be used to collect revenue for ambulance service while the original ESD remained in place to maintain the fire response (Carlton, 2012).

Review of Models

An ESD Board is charged with securing a service provider to respond to the needs of the district taxpayers. They may choose to use the existing VFD or simply pay the neighboring department. At times during their history, they will probably operate for a while as a combination department as they add capabilities and capacities. The more they expand the district's roles and missions, the greater their dependency will become on paid, professional staff or finding reliable agencies who will contact for services. They may come to see an overlapping district as a means of finally meeting the demands of the community. Every one of the 330-plus Texas ESDs are presently finding creative and unique ways to blend and bend the models describe above, to best fit the needs of their community. This study takes a closer look at their choices.

Table 2.1 Conceptual Framework for a descriptive study of the service provider models utilized by Texas Emergency Service Districts.		
Purpose: The purpose of this research is to examine and describe the major service provider models which are used by Texas Emergency Service Districts (ESD). This research will determine the rate at which each model is being used. Then it will examine if those rates are changing.		
	Service Provider Categories	**Supporting literature**
1.	External Volunteer Service Providers	Holland & Ritvo (2008), Tocqueville (1831), Hensler (2011), Austin Fire (2017), National Volunteer Fire Council (2017), SFFMA (2017), TCFP (2019), Srebo (2016), Greene (2019, USFA (2007), Smith & Lipsky (1993), Berger & Newhaus (1977), SAFE-D (2017)
2.	Internal Department Providers	Saunders (2003),
2.1	Internal Department, Fully-Paid Providers	TCFP (2019), SAFE-D (2017)
2.2	Internal Dept. Combination Providers	Hensler (2011), Karter & Stein (2008), Benoit & Perkins (2001), Greene (2019), Stittleburg (2003), National Volunteer Fire Council (2017), Paulsgrove (2003)
3.	External Paid Providers, fire and EMS	COA (2017), Texas Health and Safety Code (2013) , SAFE-D (2017), Texas Department of State Health Services (2010)
4.	Utilizing an overlapping ESD.	Texas Health and Safety Code (2013), Katz (2012), Carlton (2012)

Chapter 3
Methodology

Having identified the conceptual framework for the study, attention turns to a discussion of the environmental settings and methodologies used in the research. Document analysis, as a research method, is considered and applied to the study. Finally, the steps taken to generate the data are described.

Research Setting

Five sets of existing documents were examined during this research. The first set is the collected annual reports submitted by the 300 plus ESDs. The second set is records of Texas volunteer fire departments found at the State Firefighters and Fire Marshals Association (SFFMA). A third set are records of paid departments found at the Texas Commission on Fire Protection (TCFP). The fourth set of records was found at the Texas Forest Service's web portal-Texas FireConnect. Finally, the State Comptroller of Public Accounts retains records of all taxing entities in Texas.

Each of the document sets are available locally or through digital uploads. The SFFMA, TCFP and Texas Department of Agriculture, Rural Affairs have staff on-site that provides assistance in the production of requested documents. The State Association of Fire and Emergency Services Districts (SAFE-D) also have the annual reports submitted by the ESDs and provided

those documents. Texas FireConnect is an open portal website, as is much of the ESD data on the Comptroller's website.

Operationalizing the Conceptual Framework.

Conceptualizations of the prevailing service models become operationalized through the analysis of documents and explained in the Table 3.1. The four Categories to be described are in the first column. Column two names document analysis of existing records as the singular Method applied to all four categories. The actual records and dataset documents to be analyzed are listed in the Source column and the aspect we will measure is found in the final, Evidence, column.

Table 3.1 Operationalization Table for a Descriptive Study of the Service Provider Model utilized by Texas Emergency Service Districts.

Purpose: The purpose of this research is to examine and describe the major service provider models which are used by Texas Emergency Service Districts (ESD). This study will determine the rate at which each model is being used. Then it will examine if those rates are changing.

	Categories / Service Models	**Methods**	**Source**	**Evidence**
1.	Does the ESD contract with the local Volunteer Fire Department to provide emergency services?	Document analysis of existing records and reports.	Required annual reports submitted to the Texas Dept. of Rural Affairs (TDRA) and to (SAFE-D) Historical records of the State Fireman and Fire Marshal Association (SFFMA). The TexasFireConnect database of the TFS.	Evidence of ESDs using an external VFD.

2.	Does the ESDs operate their own, internal department to provide emergency services.	Document analysis	Annual reports submitted to the TDRA, SAFE-D and SFFMA. The TexasFireConnect database of the TFS.	Evidence of ESDs operating their own department.
2.1	Does the ESD have service providers that are fully career personnel?	Document analysis	Annual reports submitted to the TDRA, SAFE-D. The TexasFireConnect database of the TFS.	Evidence of ESDs operating their own, fully-career department.
2.2	Does the ESD operate a combination department?	Document analysis	Annual reports submitted to the TDRA, SAFE-D and SFFMA. The TexasFireConnect database of the TFS.	Evidence of ESDs that operated a combination department.
3.	Does the ESD contract with an external source for fire & rescue response?	Document analysis	Annual reports submitted to the TDRA, SAFE-D and SFFMA. The TexasFireConnect database of the TFS.	Evidence of ESDs that contracted with an external provider.
4.	Does the ESD operate in conjunction with an overlay district?	Document analysis	Annual reports submitted to the TDRA, SAFE-D and SFFMA. The TexasFireConnect database of the TFS.	Evidence of ESDs created which significantly overlapped an existing district.

Document analysis as a method of data collection.

Document analysis is a systematic procedure for reviewing or evaluating printed and electronic documents (Bowen, 2009). The procedure requires that data be examined and interpreted to elicit meaning, gain understanding, and develop empirical knowledge (Corbin & Strauss, 2008). The analytic procedure

entails finding, selecting, appraising, and synthesizing data contained in documents.

Strengths and Weaknesses of document analysis.

Document analysis as a research methodology offers several advantages. Because the researcher is *selecting* documents, rather than generating documents, the method is efficient and cost-effective. Since the large majority of activities undertaken by government generate an accessible public record, document analysis is especially applicable to public administration.

Data gained through the analysis of historical or archived documents (static documents, recorded without a researcher's intervention or manipulation) are assumed to have a high degree of reliability. Unlike qualitative opinions or conditions reflected in an interview, quantitative data from historical records and reports can be characterized as stable and exact. Such objectivity also reduces the obtrusiveness and reactivity seen in other methodology (Brown, 2009). Even greater proof of reliability is replicability, where a different researcher, operating in a different time and place, should arrive at the same results (Peels, 2019).

Purely quantitative document analysis does, however, lack the flexibility of surveys or interviews and limits the researcher's ability to ask "why" questions. Further, although the record may exist, it might have limited detail or be difficult to retrieve.

Research Procedure

Triangulation is a problem-solving method that seeks to answer a question by approaching the issue from three different prospectives. As a qualitative research technique, triangulation typically involves using more than one method to collect data (Patton, 1999). In this quantitative study, data triangulation will be used with three different sources, through the singular tool of document analysis. The technique provides a more detailed and balanced portrait of the situation and will increase the accuracy of the results (Alrichter, 1996)

Although communities could create an ESD as early as 1989, the legal mandate to submit an annual report was not in place until 1997 and then, only accomplished mixed results. Thus, a thoroughly complete, comprehensive record of the creation and development of Texas ESDs does not exist. Triangulation will be necessary between multiple sources:

A) The annual ESD reports sent, first, to the Department of Rural Affairs (years 1997-2016) and then to the Texas Department of Emergency Management (2017- present). Concurrently, the Texas State Association of Fire and Emergency Services Districts (SAFE-D) has assisted the individual ESDs in the collection and submission of these reports and can be a document source.

B) The Texas Commission on Fire Protection has employment records of paid, certified firefighters by regulated fire departments.

C) The State Firefighter and Fire Marshal Association has records on the creation of volunteer departments since the commencement of ESDs.

D) The Comptroller Office's has records of the creation dates of all Texas tax entities, both for property tax and sales tax.

E) The Texas Forest Service has created a very comprehensive database of all Texas fire departments; paid, combo and volunteer.

Copies of the record sets were requested from each of the agencies. Data from each set were used in conjunction with the other sets to generate an annual snapshot.

Analysis Process

1) An examination of the Texas Comptroller data regarding the creation dates of Texas ESDs provided the baseline growth pattern.
2) The annual reports of Texas ESDs were then examined for the evidence identified in Operational Table 3.1. Specifically sought were the description and name of the service provider(s) which is to be included in each ESD's submission along with address data.
3) Next, data from SFFMA and TCFP documents, generated for the same time frame, were used to confirm an employment or contractual association with an ESD.
4) Finally, TexasFireConnect and the individual ESD websites were used to complete the analysis.

Human Subject Protection

The study focused on ESDs and departments as organizations. No personal identities or information for any individual was included or examined in the study.

Summation

Utilizing the process and methodology described above, multiple data sources yielded their layer to the base-map. Only when all the layers were aligned did a more complete image emerge. Chapter four discusses the results of the analysis and the picture it paints.

Chapter 4
Results

The results of the document analysis will be shared in three broad narratives: 1) Descriptive statistics that describe the frequency with which each model is currently being used. 2) Trends and patterns describing their utilization over time. 3) A description of the compliance with annual reporting requirements.

Model I. Use of a Volunteer Department as provider.

In 2019, 162 of 355 ESDs are currently utilizing a volunteer fire department to provide emergency services, a full 48 percent of all ESDs. Texas Fire Connect shows 1,344 VFDs in its database. 95 percent of all Texas counties (239 of 254) have at least one VFD. The number of VFDs operating within a county varies from zero to 23 ESDs.

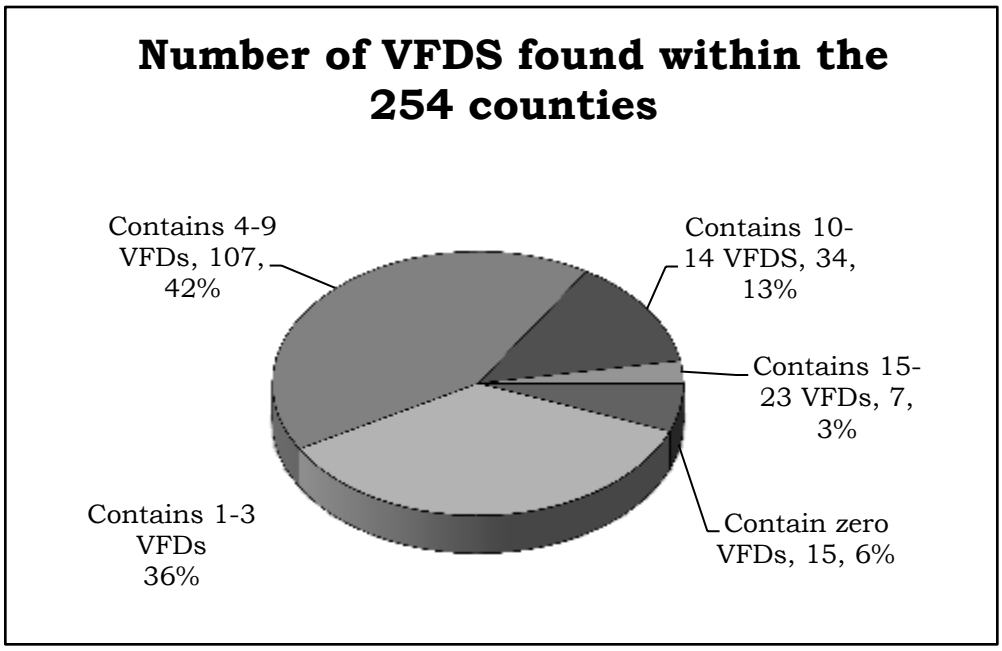


Table 4.1 Number of VFDs.

Unfortunately, the historical percentage trend of ESDs utilizing a VFD is not found in the public record due to poor annual reporting by the ESDs. VFDs may dissolve through a merger with another VFD, or may transition to a combination department or may change form for numerous other reasons. Throughout the state there are 1,192 non-profit organizations registered as a volunteer fire department, with only 162 directly supported by an ESD.

Model II. Use of an external combination / contracted provider.

In 2019 there are 98 ESDs (28%) who are contracting for services with an external organization who employs the fire and EMS responders. Many are still using the VFD that was crucial in the early development of the ESD, but the fire department has also begun hiring TCFP personnel. Other departments have nearly transitioned to fully-paid, career departments but still utilize volunteers though in a limited capacity. For example, a 40-member organization with 35 TCFP members and 5 volunteers who provide support functions- would still be considered a combination department, working under a contract with the ESD. Medical-only service districts and overlay districts are included in the totals for external providers, combination department ESD.

One set of ESDs are holding the TCFP certification as the employer and are operating as a TCFP regulated, career fire department (23%). The larger set of ESDs is utilizing TCFP firefighters, but the firefighters are the employees of the contracted service provider, not the ESD. Combination departments are of

the latter set. In 2019, almost half of all Texas ESDs are utilizing a volunteer department as its service provider, the other half are using paid responders to varying degrees.

Model III. Use of the ESD's own paid TCFP employees.

By 2019 there were 77 of the 335 ESDs who had made the decision to hire TCFP certified employees, becoming the employer of record rather than relying on a service contractor. In 2019, they make up 23 percent of all ESDs.

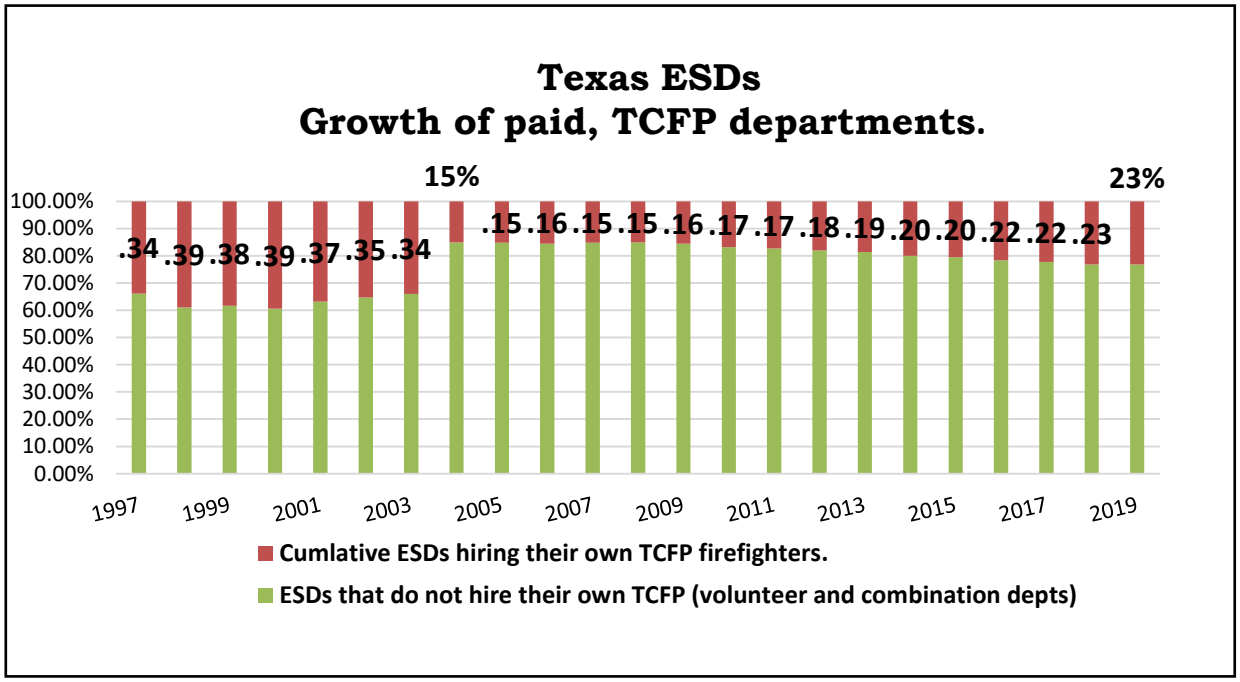


Table 4.2 Growth in paid TCFP personnel.

The data for the chart above was gleaned from the earliest hiring dates of a TCFP certified employee, indicating the ESDs had begun building a paid department. The actual creation dates of Texas regulated fire departments is not a record currently tracked or maintained by TCFP.

Model IV. Use of an overlapping district

The use of the term “overlay” or “overlapping” district is not used in any reporting document. Indeed, overlapping districts look and act like any other ESD who chooses to contract with an external service provider, thus making identification difficult through a public document. Instead, histories found on websites and other online sources may contain the only descriptor of the overlay. Since Chapter 775 was clarified regarding overlapping districts in 2011, there have been 43 new districts formed. Of those 43, only 3 – fewer than 10% - have clearly self-defined as an overlapping district.

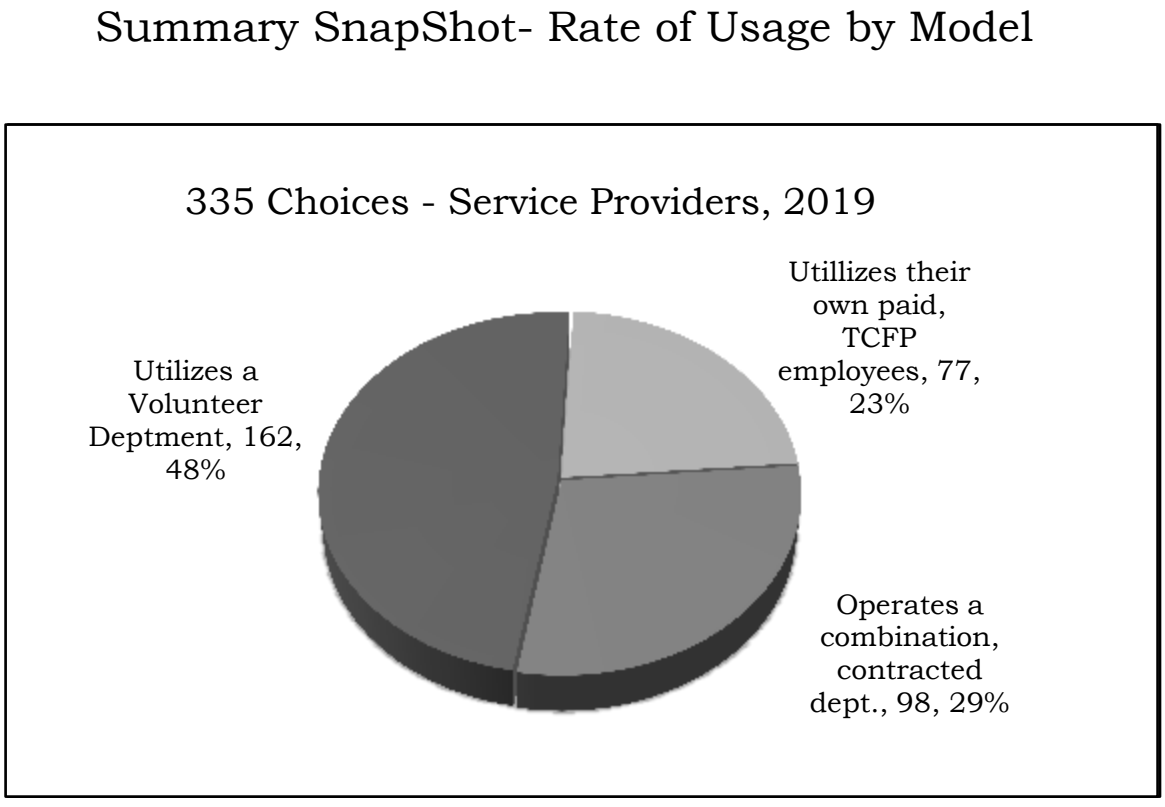


Figure 4.3 2019 snapshot of service providers.

Overall ESD Growth

In the past 20 years, the number of Texas ESDs has grown by over 500 percent, totaling 335 as of June 2019. For most of that span, the growth has been mostly steady, averaging 6.9 new ESDs every year except 2003-2004.

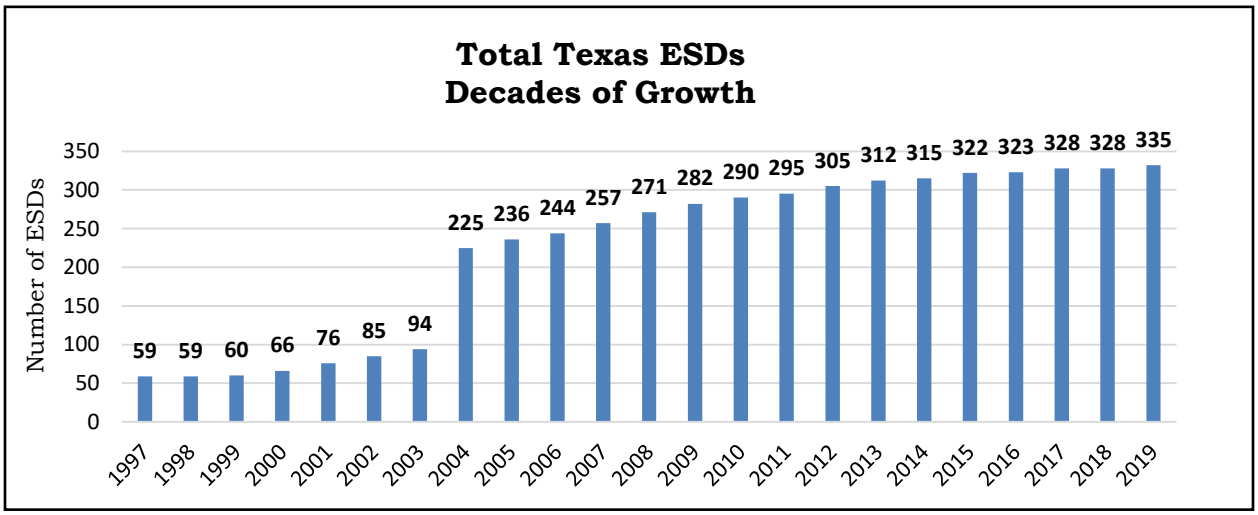


Figure 4.4 Two decades of growth

New districts created yearly.	
Overall- 1998-2019	**6.9 new ESDs per year.**
2nd Decade 1998-2009	**9.4 new ESDs per year.**
3rd Decade 2010-2019,	**5.0 new ESDs per year.**

In the first decade of 1987-1997, Texas communities created 59 ESDs, averaging almost six per year. In 2003, the legislature required that all existing Rural Fire Protection Districts be converted to ESDs explaining the 132 new ESDs in 2004. Closer examination also revels the second decade averaged almost ten new ESDs per year (excluding 2004's spike) whereas the third decade has slowed to five per year.

Annual Reporting Compliance

Since 1998 all ESDs have been required to submit an annual report which provides public information about the district, to a state agency for collection, collation and publication. First, the Texas Department of Agriculture and now the Texas Department of Emergency Management were so tasked and neither have been able to gain a high level of compliance. The SAFE-D organization stepped up and volunteered to help publish the requirement and to collect the reports, but again to limited success.

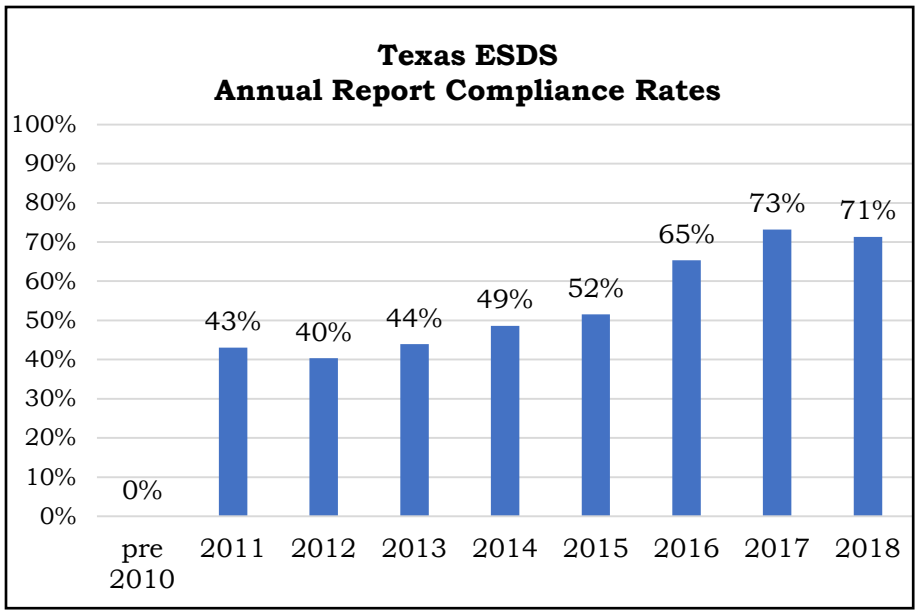


Figure 4.5 - Compliance Rate

The highest rate of compliance rate was in 2017, where 240 out of 331 ESDs reported and 97 did not. No records of annual reports for years 1998 through 2010 were located. For the past eight years the compliance rate averaged just 54%. In contrast, an ESD's reporting to the Texas State Comptroller's Office was found to be the most reliable source, particularly as it pertained to ESD creation, development and funding.

Summary

The public records and documents that were analyzed for this study show a significant 20-year growth trend in the creation of new ESDS. The utilization of internal paid responders has also trended for the past decade toward a larger percentage of ESD users. Although the volunteer fire service has experienced a slight overall decrease in active departments, they are still the service providers of choice to almost half of Texas ESDS. The research also shows that although the requirement has been in place for some time, many ESDs are not motivated to submit their annual reports.

Chapter 5
Conclusion

This study set out to describe the utilization of four service delivery models that are available to Texas ESDs. In this chapter a summary of those statistical descriptors will be provided as well as the reason for such a focus and several applications of is findings.

Summary Descriptors of the Categories:

	Categories / Service Models	**Findings**
1.	ESDs who utilize the local Volunteer Fire Department.	48% of the current ESDs use a local VFD.
2.	ESDs who operate their own, internal department.	23% of the current ESDs operate their own, internal paid department.
3.	ESDs who contract with an external source (fire or ems)	29% of the current ESDs contract for service with an external provider.
4.	ESDs who operate in conjunction with an overlay district.	3 of the last 43 ESDs created were designed as overlay districts.

Table 5.0 summary.

Why is the choice of service provider so important?

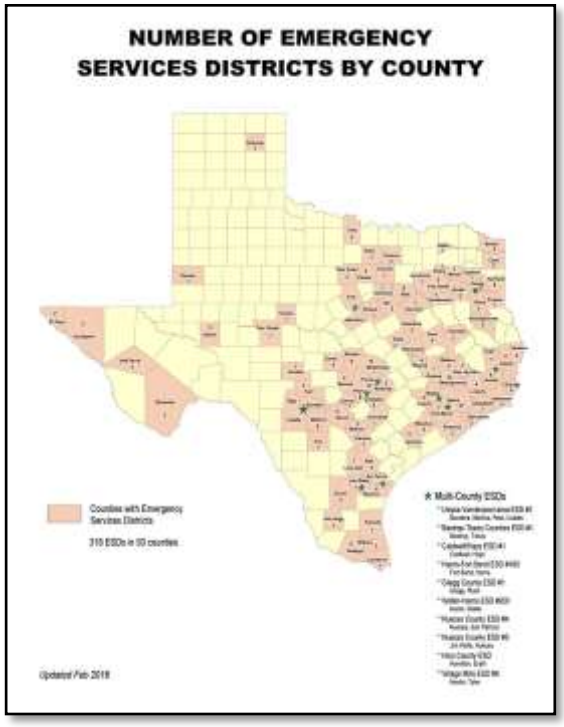
"If I were running a company today, I would have one priority above all others: to acquire as many of the best people as I could [because] the single biggest constraint on the success of my organization is the ability to get and to hang on to enough of the right people." – (Collins, 2001)

Great vision without the right people is irrelevant. The most brilliant strategic plan will fail if the ESD board is unable to marry it to an available

service provider. The ESD board that dreams of enhanced response capability must, at the same time, be conscientiously intentional in their choice of provider organization. Consider the time and energy put into a single decision regarding securing a new piece of equipment: Should we buy or lease? Will the equipment be used, refurbished or brand new? What can it do, what are its limitations? Effective ESD boards should take the same deliberate, meaningful action when choosing a model of service provider.

Overall Trends

The adoption of an ESD as a local solution follows other demographic trends happening across Texas. ESD growth patterns match the change in population, moving away from rural counties toward suburban and urban areas. Of Texas' 254 counties, 93 are home to an ESD with heavy representation in the south and east Texas. Although the opportunity is surely available to communities in the other 141 counties, several factors seem to be limiting that geographic expansion.



From 2008 to 2019, some 75 new ESDs were created, but only five districts were the first ESD of their county. Further, only one of the new 75 was created in a county west of Interstate 35.

Overall population and resource shifts, from rural to urban and suburban, are one explanation. The degree and direction of the population shift are factors, whether the farmland was swallowed up by suburban sprawl, or if residents simply moved to the city and left those behind with even fewer resources. Continuity, or direct contact with a neighboring ESD, seems to play an important role as well. Some generalizations regarding creating new ESDs can be made:

- Once the first ESD is in place, the others come easier.
- Communities in fast-growing counties with numerous ESDs may experience pressure to meet the rising standards seen in competing neighborhoods. Response times and ISO ratings are frequently cited and compared.
- An influx of urbanites, who bring their previous experiences and expectations to surrounding rural areas, are often drivers of new districts.
- The cultural differences and practical realities of rural, isolated counties that have resisted new ESDs for 30 years are still in place and recent demographic changes are not likely to change those decisions.

Trends found in the content

The study's strict reliance on quantitative public documents, rather than broadening the study to include survey instruments proved to be a two-edged sword. The source material that could be accessed proved highly reliable, but an assumption that a legislative reporting mandate would yield plentiful

documentation was mistaken. Strong evidence is present to demonstrate that ESDs, as a group, are not motivated to comply with the annual reporting requirement. Nor are the state agencies tasked with collection and compilation. Consequently, the opportunity for more detailed historical analysis through public records has been lost.

The 2019 snapshot of service delivery model choices does provide a clear picture of the current situation. This information should inform policy decisions regarding resource allocation and educational / training needs. Assessing the impact of pending legislation is both clearer and more complex when applied to the findings. Legislative lobbying efforts are seen in a new light when assessed against a richer picture. The *historical context* of how these ratios are changing- of which segment is growing and which is shrinking- should be a major benefit gained from the annual reports.

Similarly, we do find evidence that an increasing percentage of ESDs are choosing to hire their own employees rather than rely on a contractor. However, the duration of that transition from volunteer, to combination, to fully paid, is still an educated guess rather than a known, historical statistic. Assumptions can be made about the maturity of the district or its growth in revenue, but the actual motivation of the transition would be helpful information to ESD Boards who are at such crossroads.

Armed with a more filtered list of combination-department-only ESDS, future researchers may have to rely on survey instruments, rather than the annual reports.

Data sets

Of the data sets examined during this study, the Texas Comptroller's origination dates were the most trustworthy; had there been errors, the districts were financially motivated to immediately correct them. TexasFireConnect, from the Texas Forrest Service, was equally robust and easily the most comprehensive set of information regarding every fire department in Texas, yet it does not include all associations or relationships between fire departments and ESDs. The SFFMA is surely the greatest source of information regarding the volunteer fire service in Texas, but they also have little opportunity to track relationships between VFDs and ESDs. The TCFP can tell you when a fire department with an ESD name first hired a certified firefighter, but cannot tell you when the department was created.

Each data set reflects the priorities and information needs of the host agency, but no one silo contains the complete picture. Further, there is no penalty or consequence for not submitting the annual ESD report. Hopefully, the Texas Department of Emergency Management will embrace that challenge as they take over the collection / compilation duties for the annual ESD reports.

Final Thoughts

There is a truism that is often heard in many conversations regarding ESDs; that "if you've seen one ESD, you've seen one ESD." Certainly, an accurate statement when describing the uniqueness of every community's needs and resources, but it is also often used to justify the ESD's insistence on local self-determination and perhaps reveals a reluctance to explore other options.

One of the ESD board's biggest decisions is who to utilize to provide emergency response services to their community. Those decisions may be re-assessed and re-considered annually or they may be an inherited arrangement that is simply assumed to be the best fit. Regardless, there *are* trends and patterns among ESDs that can be studied and utilized to make better, more informed decisions.

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