- **Contracted EMS:** Some cities or counties contractually outsource their 9-1-1 ambulance service to a private company. Bastrop County and Bexar County contract with Acadian Ambulance and the city of Tyler contracts with East Texas Medical Center EMS to perform its 9-1-1 ambulance service.
- **Chartered or Private EMS Agency:** Some cities or counties work with a nonprofit EMS agency originally formed as a volunteer organization to provide EMS services and fulfill the community's 9-1-1 ambulance needs. Harris County Emergency Corps, which was founded in 1927 and served as Texas' first EMS agency, provides EMS 9-1-1 service in north Houston for more than 400,000 people. Many rural and frontier communities operate a volunteer ambulance service.
- **Hospital-based EMS:** In some communities the EMS service is an extension of the local hospital. Coryell Memorial Healthcare System in Gatesville is an example of this type of system.

While EMS clinical capabilities are evolving and patient outcomes are improving, the EMS payment system has remained stagnant for decades. In the current outdated fee-for-service model, EMS providers are only paid if the ambulance ultimately transports a patient to a hospital emergency department. As a result of better training, paramedics are able to treat more patients at the scene, which results in no hospital transport. While the overall healthcare system saves money due to the lack of a hospital visit, EMS providers ultimately lose money because they are only paid for hospital transports.

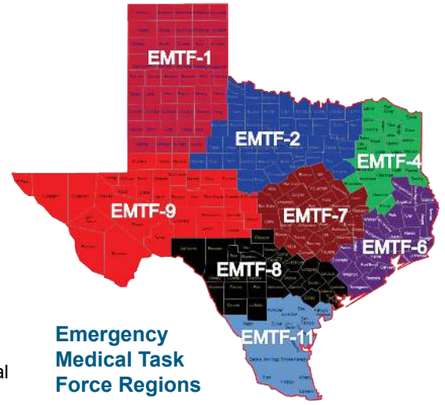
EMS agencies face a variety of costs when responding to 9-1-1 calls. The cost of readiness (the cost to make sure an ambulance is available to respond when someone calls 9-1-1) includes personnel, fuel, ambulance maintenance and a multitude of other factors. This readiness cost and the costs of supplies and time used to treat patients at the scene are not reimbursed when a patient waives hospital transport. This model of reimbursement is not fair and is penalizing EMS providers, forcing some small EMS agencies to close.

To help improve patient outcomes and reduce overall healthcare expenditures, **the Texas Legislature should work with stakeholders to allow the testing of innovative economic models for EMS.** These models could include payment for the response versus transport, capitated payments or payment for delivery models that prevent an ambulance response, such as 9-1-1 nurse triage programs and community paramedicine.

Texas Emergency Medical Task Force

The Texas Emergency Medical Task Force (EMTF) is a federally funded program with the mission of creating state-deployable medical teams, regionalized for rapid mobilization and readiness. The goal of the EMTF program is to provide a well-coordinated response, offering rapid professional medical assistance to emergency operation systems during large scale incidents. Immediately available resources include 13 AMBUSES strategically located across the state, Mobile Medical Units, dozens of Ambulance Strike Teams that involve some 200 ambulances, RN Strike Teams, Medical Incident Support Teams and Staging Managers.

Eight full-time Regional Coordinators and one State Program Manager are employed to assure emergency resources are immediately available across Texas. EMTF is part of the Texas Disaster Medical System.



Emergency Medical Task Force Regions

With reductions in federal Hospital Preparedness Program funding, the Texas EMTF program is at a crucial turning point and state funding is needed to ensure that this important resource continues to be available when disaster strikes. Many of the EMTF resources are nearing depletion. For example, medical supplies and medications have expiration dates and will need to be replaced. Durable medical equipment requires costly maintenance. In addition, few RACs have the vehicles needed to move the equipment; others rely on contracts for transportation, which slows response time. **The Texas Legislature should recognize EMTF and the role that it plays in state disaster response in statue and provide some financial support for this important infrastructure resource.**

Bottom Line

In 1989, Texas legislators acted to create an effective trauma and emergency healthcare system. Their vision has become a reality. In fact, today's system does even more than originally anticipated. Disaster and large-scale incident response also have become necessary in today's post 9/11 world.

Because of its robust economy, low-taxes and great weather, Texas has attracted people from all over the U.S. and the world. The population has grown more than 63 percent in the past 25 years.

More people have put more motor vehicles on the road, which cause more accidents. In addition, an aging state population has increased the incidence of stroke and heart attack. Disasters – both natural and man-made – have struck the state. The demand on the Texas Trauma and Emergency Healthcare System has never been greater.

At a time of growing demands on the system, state funding has been stagnant or declining. Rural and frontier communities already are experiencing a lack of access to timely emergency healthcare. Urban areas have more resources but still struggle to maintain services.

The question is simple: Does Texas want to maintain its unique, highly effective trauma and emergency healthcare system which benefits every Texan? If so, the Texas Legislature must ensure a more adequate, stable funding stream to shore up EMS providers and Trauma Regional Advisory Councils and help maintain hospitals' designated trauma centers. Failure to provide this funding will have consequences, which will impact rural and frontier communities first, but ultimately all Texans will be in jeopardy of not having access to timely trauma and emergency healthcare services when they are needed.

The Texas Trauma System

State's Unique, Coordinated System Saves Lives

TETAF
TEXAS EMS TRAUMA & ACUTE CARE FOUNDATION
3400 Enfield Road, Austin, TX 78703
512/524-2892 • www.tetaf.org

Each year in the U.S., trauma causes 41 million emergency department visits and **2.3 million** hospital admissions. In addition to the 192,000 lives lost to trauma annually, the economic burden to the country tops $671 billion in healthcare costs and lost productivity, according to the Centers for Disease Control & Prevention's National Center for Injury Prevention and Control.

In 1989, the Texas Legislature boldly acted to create a statewide system to expand access to and improve transportation of patients with life-threatening conditions. Their vision included pre-hospital stabilization and life-saving interventions at designated hospitals that meet specific standards related to staffing, equipment and education. Since 1989, that vision has become a reality with an excellent system of emergency medical service providers and designated trauma facilities, coordinated through Trauma Regional Advisory Councils.

However, the population explosion, declining healthcare reimbursement rates and minimal state funding jeopardize the ability of the Texas Trauma and Emergency Healthcare System to meet today's challenges as well as stand-ready for inevitable disasters, both natural and man-made.

Texans Need a Strong Trauma and Emergency Healthcare System

The Texas population continues to grow rapidly. In 1989, when the Texas trauma system was created, Texas had a population of about 16.8 million people. By 2015, the number of Texans had swelled to more than 27.4 million, a growth of 63 percent. Trauma and EMS resources have not kept pace, and the Texas Emergency Medical Task Force needs state as well as federal funding.

Injury is the leading cause of death for Texans under the age of 44. Nationally, trauma is the number one cause of death for individuals ages 1 to 46, and the number three cause of all deaths. The state's case **fatality rate was 2.5 percent for 2014,** according to the Texas Trauma Hospitalization Summary Report, 2014. A total of 3,297 trauma deaths were reported in Texas in 2014.

In 2014, the top two causes of injury resulting in trauma hospitalizations in Texas were **falls** and **motor vehicle accidents.** The top three categories for **trauma hospitalization fatalities** in Texas in 2014 were:

Falls
37 percent

Motor vehicle traffic crashes
32 percent

Firearms
15 percent

In Texas, motor vehicle traffic-related injuries are the leading cause of traumatic brain injury hospitalizations among individuals ages 15-54. Falls are the leading cause of TBI trauma hospitalizations for those 55 and older. Other statistics show that:

- 144,000 Texans sustain a TBI every year
- 381,000 Texans live with a disability due to TBI
- 5,700 Texas residents are permanently disabled every year by TBI

In addition to falls and motor vehicle accidents, other accidents – from drowning to electrical shock – send Texans to emergency departments. Among the elderly, stroke and heart attack create life-threatening situations.

While accidents and life-threatening medical conditions occur every day, Texans also experience frequent large-scale disasters, some caused by weather and others by unanticipated events. Since the historic hurricane in Galveston in 1900, Texas has experienced numerous weather-related emergencies and dealt with their injuries and destruction. No one can forget the devastation of Hurricanes Rita and Katrina in 2005, nor Hurricane Ike in 2008 which took out the Level 1 Trauma Center at The University of Texas Medical Branch in Galveston. This resulted in an entire shift of patient traffic overwhelming the already strained Houston trauma centers, and it took more than a year to rebuild the UTMB facility.

In more recent years, Texans have been spared the brunt of a hurricane, but have faced other weather-related challenges. For the past two years, heavy rains in Central and Southeast Texas and their resulting flooding have created situations which required the deployment of regional and statewide responders.

In this decade, Texans have faced significant man-made disasters, including the fertilizer plant explosion in West, the Ebola outbreak in the Dallas Metroplex and mass shootings in Killeen.

Because of the foresight of legislators and the nation's response to the Sept. 11, 2001, terrorism attack on the U.S., investment has been made in preparing for disasters, especially those involving large numbers of victims.

Accidents, illnesses and disasters can affect anyone at any time. Clearly, all Texans benefit from a strong, effective trauma and emergency healthcare system. Everyone wants the trauma and emergency healthcare system to be there when it is needed. The challenge facing Texas is how to fund the ongoing resources needed to strengthen and preserve the state's excellent trauma and emergency healthcare system built over the past 25 years.

Trauma Funding

A stable source of at least $300 million annually is needed to help offset uncompensated trauma care costs at designated trauma centers and to help support other critical components of the trauma system, including emergency medical services (EMS), Trauma Service Area Regional Advisory Councils (RACs) and the state's Emergency Medical Task Force regional system.

Previous Legislatures created the Driver Responsibility Program (DRP) to help offset the cost of uncompensated trauma care. While the program has critics, it does provide an important source of funding to help support the trauma system. **The DRP should be improved, and all monies raised should be invested in the Texas Trauma and Emergency Healthcare System as intended.** It would be irresponsible to repeal the DRP without enacting a program to generate comparable funding. The intent of the 2003 legislation was to create accountability for bad drivers and the damages they cause, and this purpose seems even more relevant today.

While the DRP currently produces about $125 million annually, much of the money is diverted into other programs – such as Medicaid and medical education – and used to help balance the state budget. DRP fines and surcharges should be reviewed and modified to improve collection rates and make the program more effective.

In addition to diversions of DRP funds, in 2011, the $100 million corpus of the Permanent Tobacco Fund for EMS and Trauma Care was raided to provide funding for the Cancer Prevention and Research Institute of Texas (CPRIT). While funding cancer research has value, the lack of transparency in authorizing this action is disturbing. More importantly, this action has left EMS and RACs without the funds they need to save lives in emergency situations. Previous appropriations of the interest from this tobacco fund provided several million per year for local project grants to support EMS and coordination of regional trauma and emergency healthcare through the RACs. At the end of the 2016-17 biennium, approximately $11.6 million will remain in Fund 5046. However, this fund no longer can produce the interest needed to provide a perpetual source of funds for EMS providers and the 22 RACs.

The Legislature should restore the funds taken from the corpus of the Permanent Tobacco Fund for EMS and Trauma Care, and remove the authorization allowing its use for any purpose other than its original 1999 intent.

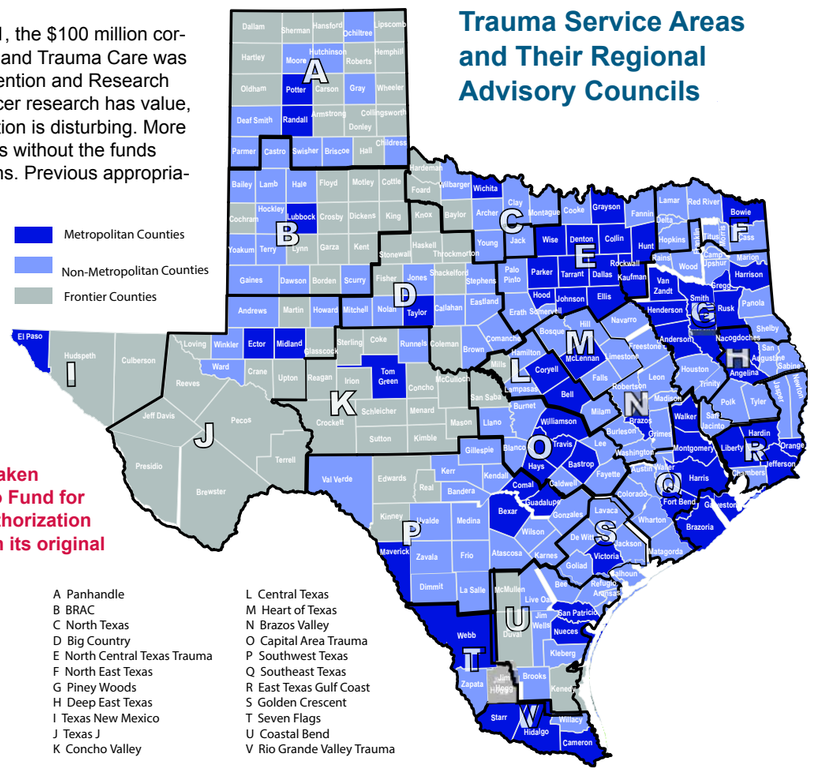
Regional Advisory Councils

The Trauma Service Area Regional Advisory Councils (RACs) perform critical services for the state's trauma and emergency healthcare system, but have been inadequately funded since their inception. Additional duties combined with their original tasks make it difficult to achieve their state-assigned responsibilities. Each of the 22 RACs unite competing healthcare providers to develop, implement, maintain and continuously improve a regional trauma and emergency healthcare system plan, which all segments of the system support and follow. RACs bring all stakeholders together, developing regional protocols for EMS response, distribution of patients and use of hospital resources. This ensures that trauma patients are treated timely and appropriately, giving all Texans the best chance of survival when facing an emergency healthcare situation.

Despite a lack of adequate funding, the role of RACs has evolved greatly from the original focus on trauma response coordination. RACs are working with EMS, hospitals and cardiac and neurology professionals to coordinate and improve care for cardiac and stroke patients. Through data collection and analysis, areas for improvement are identified, and educational programs help share this knowledge and result in consistent use of best practices. This critical function needs to be adequately financed and expanded to improve patient outcomes and save lives.

RACs also coordinate regional injury prevention efforts based on trends identified through trauma data collection. Injury prevention efforts are crucial to avoid emergency rooms visits, saving money for both the trauma system and the state.

Trauma Service Areas and Their Regional Advisory Councils



Note: Population data from 2010 U.S. Census

Metropolitan county = 50,000 inhabitants

Non-Metropolitan county = less than 50,000 inhabitants

Frontier county = 6 or fewer people per square mile

In recent years, the RACs have taken on a newer role, leading the healthcare response to natural and man-made disasters and contracting with the state to provide disaster preparedness coordination with hospitals. Eight RACs are part of the Texas Emergency Medical Task Force, which is part of the state's Texas Disaster Medical System. With significant cuts to federal Hospital Preparedness Program (HPP) funding, **state-level funding is more critical than ever in ensuring readiness for the next disaster.**

Most recently, the state has tapped RACs to coordinate neonatal/perinatal care. With a proven track record of bringing competing providers together to coordinate and improve trauma care, RACs are using their organizational and facilitation skills to tap the expertise of neonatologists and hospital neonatal nurses to improve the care provided to pregnant women and their babies, especially those at high risk who often need intensive care after birth. This is another unfunded mandate that RACs have absorbed.

Hospitals

In 2014, Texas hospitals had more than 10.9 million emergency room visits. Approximately one-third of all trauma patients in Texas are uninsured. As a result, Texas hospitals bear more than $300 million in uncompensated trauma care costs annually. In the last 10 years, uncompensated trauma care has cost Texas hospitals more than $2 billion.

State funding received by Texas trauma facilities has been used to maintain a trauma safety net for all Texans. These funds also helped facilitate the expansion of trauma care and increased access to trauma services throughout the state. After passage of the DRP, an additional 101 Texas hospitals were designated as trauma facilities. However, uncompensated trauma care costs have continued to grow from a combination of decreasing state funding and a surging population needing services. Several small trauma facilities have closed entirely, often leaving a rural community with no access to emergency healthcare services.

Number of Designated Trauma Facilities: 290

Level I Comprehensive Trauma Facilities **17** facilities are currently designated	**Level II Major Trauma Facilities** **14** facilities are currently designated
Level III Advanced Trauma Facilities **56** facilities are currently designated	**Level IV Basic Trauma Facilities** **203** facilities are currently designated

The availability and response time for emergency healthcare services varies across the state. In frontier areas of the state – such as the Texas Panhandle – accident victims must travel 100 miles to access a Level III trauma center and more than 200 miles to obtain care at a Level I or II facility. This lack of access affects all who travel throughout Texas, not just those who choose to live in a rural community.

While DRP funds have been used to increase federal Medicaid matching dollars that go to participating hospitals which have designated trauma centers, the money is not necessarily invested in strengthening the hospital's trauma and emergency healthcare program, the intent of DRP funding.

Emergency Medical Services (EMS)

Emergency Medical Services (EMS) agencies are a vital part of the state's healthcare delivery system. EMS providers are the only segment of the system designed to respond to the location of a patient suffering from an acute onset of illness or a traumatic injury, providing patients with initial care on scene and timely access to a specialized treatment at a trauma hospital, cardiac care center or stroke center.

EMS providers deliver on-the-scene life-saving treatment that is critical to patients' survival and outcomes. Yet, their funding is haphazard and inadequate, and quality of care varies across the state due to limited resources.

EMS Dispatch Estimation: 2015

- ✓ 4 million annual dispatches
- ✓ 10,958 daily
- ✓ 456 per hour
- ✓ 7.6 dispatches every minute of the day

In Texas, there are more than 4 million annual dispatches. That amounts to 7.6 dispatches every minute of the day! Each EMS agency is different. Approximately 800 entities are licensed by the Texas Department of State Health Services to provide EMS service to Texas communities. However, each EMS provider may have a specialized skill-set specific to their community or mission:

- Agencies may specialize in responding to 9-1-1 calls to assess a patient's acute onset of symptoms and transport them to an appropriate hospital.
- Agencies may specialize in continuing care in which an ambulance transfers a patient from a lower level of care to a more specialized setting. An example may be an ambulance transferring a patient from a rural hospital to a more specialized urban facility. Some of these agencies also serve as a back-up to the community's primary 9-1-1 EMS provider.
- Agencies may provide critical care transfers that require a higher level of training and equipment to provide continuity of care for patients in critical conditions.
- Agencies often have specialized roles such as: automobile extrication teams, technical rescue teams and tactical medicine teams. EMS agencies often serve a key role in providing care and preparation for large events such as sporting events.
- Many EMS agencies in Texas provide all of these services.

Texas is such a large and diverse state that communities use different models for delivering ambulance services to their citizens.

- **The Fire Department Model:** EMS operations are associated with the community's fire department. The cities of San Antonio, Dallas, Houston, Lewisville and New Braunfels are examples.
- **The Government-Owned and Operated EMS Model (3rd Service):** EMS entities operate as an independent agency within the local government (city, county, emergency services district or hospital district) and are separate from the fire department. This often is referred to as a "3rd Service" EMS model because the city has three distinct first responder teams: a police department, a fire department and a separate EMS department. Austin/Travis County EMS, Schertz EMS and Paris EMS are examples.