



# 2010 Regional Trauma System Plan

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**[www.NCTTRAC.org](http://www.NCTTRAC.org)**

NCTTRAC serves the counties of Cooke, Fannin, Grayson, Denton, Wise, Parker, Palo Pinto, Ellis, Kaufman, Navarro, Collin, Hunt, Rockwall, Erath, Hood, Johnson, Somervell, Tarrant, and Dallas.

**North Central Texas Trauma Regional Advisory Council**

**2010 REGIONAL TRAUMA SYSTEM PLAN**

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## **I. MISSION**

The mission of the NCTTRAC Trauma System Plan is to focus diverse resources in a collective strategy to reduce morbidity and mortality due to trauma within Trauma Service Area E.

## **II. VISION**

To be the safest and most effective Trauma Service Area in Texas.

## **III. PHILOSOPHY**

Belief statements:

- We believe that all trauma patients are entitled to optimal trauma care (i.e. right patient, right care, right time, right place, and back home again).
- We believe that a planned and coordinated system with a public health model approach (assessment, policy development, and assurance) will result in a reduction of morbidity and mortality from injury events.
- We believe that the majority of injuries are preventable and that planned prevention strategies (primary, secondary, and tertiary) will result in decreased morbidity and mortality related to injury.
- We believe that a coordinated and organized approach is best accomplished with full commitment, engagement and collaboration of the essential disciplines involved in trauma care and injury prevention.
- We believe that resources are limited and that coordinated distribution and utilization of resources will result in the most safe and effective Trauma Service Area in Texas.
- We believe that trauma care providers, through organized education and training, can be trained to deliver optimal trauma care based on best evidence.

#### **IV. SCOPE OF RESPONSIBILITY**

This Trauma System Plan for Trauma Service Area (TSA) – E is provided to meet the requirements within Texas Administrative Code (TAC) § 157.123 and related Department of State Health Services (DSHS) documents forming the Regional Advisory Council (RAC) and Regional Trauma System Essential Criteria RAC Implementation Guidelines (Revised 08/2009). These Guidelines define the regional emergency medical services trauma system plan, the purpose of which is to “facilitate trauma and emergency healthcare system networking within a TSA.”

This plan is aligned with the Texas Department of State Health Services RAC Operation Guidelines Regional Trauma System Plan; however it is framed within the Health Services and Resources Administration (HRSA) and American College of Surgeons (ACS) Regional Trauma Systems: Optimal Elements, Integration, and Assessment Systems Consultation Guide. It is a regional resource to be updated annually and approved by NCTTRAC membership as a resource for providers of trauma care from the First Responder Organization through the rehabilitation facilities, and includes not only care providers, but other key components of this system including injury prevention, public and professional education, system performance improvement, and disaster preparedness.

#### **V. REGIONAL DEMOGRAPHICS**

Trauma Service Area E (TSA-E), known as the North Central Texas Trauma Regional Advisory Council (NCTTRAC), incorporates nineteen north central Texas rural, suburban and urban counties: Cooke, Fannin, Grayson, Wise, Denton, Palo Pinto, Parker, Ellis, Kaufman, Navarro, Collin, Hunt, Rockwall, Erath, Hood, Johnson, Somervell, Tarrant and Dallas counties. See Appendix A. The 2008 census indicates that 6.7 million people reside within the 15,574.71 square miles of TSA-E, representing 27% of the entire population of the State of Texas.

The business community includes an international airport, a multiservice regional airport, multiple small airports, a military base, a nuclear power plant, and several regional entertainment venues. Entertainment venues include an NFL stadium, an NBA/NHL arena, an MLB stadium, a NASCAR circuit speedway, several large scale amusement parks, and many large convention centers that play host to many cultural, business and political

events. The region has over six large college system campuses, multiple community colleges, and two medical school campuses. TSA-E is home to two of the most successful airlines in the industry, an automobile assembly plant, and many other national and international business headquarters. These issues must be taken into account when planning an integrated trauma system.

Dallas Fort Worth International Airport is the third busiest airport in the world in terms of aircraft movements totaling 685,491 annually. In terms of passenger traffic, it is the seventh busiest airport in the world and the ninth busiest international gateway in the United States, transporting almost 60 million passengers in 2007. In terms of land area, at 18,076 acres, it is the largest airport in Texas, the second largest in the United States, and the third largest in the world. The Naval Air Station Joint Reserve Base Fort Worth (NAS JRB), also known as Carswell Field, is a military airfield located within NCTTRAC. This military airfield is operated by the United States Navy, and is headquarters to the Air Force Reserve Command's Tenth Air Force; the 301st Fighter Wing, and the 136th Airlift Wing of the Texas Air National Guard continue to be based at the installation. A number of Marine Corps aviation and ground units are also co-located at NAS JRB Fort Worth. The Comanche Peak Nuclear Power Plant is a two-unit nuclear-fueled power generating facility located four and a half miles northwest of Glen Rose in Somervell County.

Numerous entertainment venues are available to the residents and visitors within NCTTRAC including Six Flags Over Texas, the Texas State Fair at Fair Park, MayFest in Fort Worth, and many concert settings and sports arenas. In particular, the American Airlines Center in Dallas is a venue for hockey, basketball, and arena football games as well as concerts and various other events. The Ballpark in Arlington is home to the Texas Rangers and is located within walking distance from Six Flags and the new Cowboys Stadium in the heart of Arlington and TSA-E. Cowboys Stadium, the largest domed stadium in the world, seats 80,000, and expands to 100,000 for sporting and entertainment events including college bowl and championship football games, a Super Bowl, the NCAA Final Four and international rock star concerts. Texas Motor Speedway hosts several NASCAR series, seating over 138,000 spectators in Denton County.

NCTTRAC collaborates with the North Central Texas Council of Governments (NCTCOG). The NCTCOG is a voluntary association

comprised of 229 local government members, which include cities, counties, independent school districts, and special districts that serve a 16-county area surrounding Dallas/Fort Worth. Cooke, Grayson, and Fannin are not part of the NCTCOG; these counties are members of the Texoma Council of Governments. The NCTCOG is able to assist local governments and facilitate sound regional development through transportation planning, dissemination of demographic information, assistance with information systems development, environmental impact studies, planning for human services needs, 9-1-1 planning, emergency preparedness coordination, federally funded employment and training programs, training local government officials, and providing basic and continuing education for area personnel.

NCTTRAC is served by three Level I comprehensive adult trauma centers, one Level I comprehensive pediatric trauma center, two Level II major trauma centers, three Level III general trauma centers, fourteen Level IV basic trauma centers, 85 acute care hospitals, and approximately 125 ground and air EMS services.

## **VI. INJURY EPIDEMIOLOGY**

The NCTTRAC Board of Directors and membership have made a commitment to acquire meaningful data to provide information for decision making. The general area is trending upward, and NCTTRAC looks forward to the data that will be available soon after implementation of the regional registry this late spring. [See Appendix B](#) for sample partial data.

## VII. DATA EVALUATION

NCTTRAC has responsibility for implementation of a regional registry; the TSA-E regional registry for EMS and acute care is known as **REG\*E**. The regional trauma registry is a sub data set of **REG\*E** and is available to all NCTTRAC full members. Hospitals participating in NCTTRAC that are designated trauma facilities submit the standard Texas Trauma Registry data elements defined by the Department of State Health Services (DSHS) to NCTTRAC through **REG\*E**. EMS providers participate by submitting data elements for all patients as defined by DSHS to the **REG\*E**. Data submission is electronic unless special arrangements have been predefined. Data submission occurs monthly per the related performance standards.

Trauma Facilities and EMS Providers will each have a registry workgroup defined. These workgroups are charged with overseeing standards for maintaining the data integrity, data validation, data accuracy, and data security of the acute care functionality of **REG\*E**. The Regional Trauma Registry Workgroup defines the standard reports that are produced from the regional trauma registry and the processes for current members of NCTTRAC to request data from the regional registry. This workgroup will include a lead hospital representative from each designated level I, II, III and IV facility who have completed the regional registry super user training, the American Trauma Society's Trauma Registry Course, the AAAIM Injury Scoring Class, and have a letter of support from his or her facility to commit to participation in the Regional Trauma Registry Workgroup. Certification as a Trauma Registrar is preferred for participation in this workgroup. The EMS Registry Workgroup will have the same charge for EMS registry records. Participants on the EMS Registry Workgroup will have an appropriate background in EMS patient data management. All actions of these workgroups are processed through the System Development Committee through the appropriate subcommittee or the EMS Committee to the Board of Directors.

## VIII. SYSTEM LEADERSHIP

The Board of Directors is charged with promoting awareness of the Trauma System as a component of the NCTTRAC Annual Report.

See attached Organizational Chart ([See Appendix C](#))

<b>Board of Directors</b>	<b>Officer</b>
Chair	Carrie Hecht, RN
Vice Chair	Jimmy Dunn
Treasurer	Wes Dunham
Secretary	Robert Knappage, LP
<b>Committee</b>	<b>Committee Chair</b>
Air Medical	Dr. Robert Simonson
EMS	Jodie Harbert, LP
Finance	Garrett Hall
Physician Advisory Group	Board Liaison: Dr. Robert Simonson
Pediatric	Lori Vinson, RN
Professional Development	Courtney Edwards, RN
Public Education/Injury Prevention	Mary Ann Contreras, RN
Regional Emergency Preparedness	Donna Glenn RN, EMT
System Performance Improvement	Cyndi Mastropieri, RN
Systems Development	Kris Powell, RN
Trauma Subcommittee	Jorie Klein, RN
Stroke Subcommittee	Robert Knappage, LP
Cardiac Subcommittee	Kris Powell, RN

### **NCTTRAC Contact:**

Hendrik J. (Rick) Antonisse  
Executive Director  
Phone: 817-608-0390  
600 Six Flags Drive  
Arlington, TX 76011

NCTTRAC committee chairs are elected for two year terms; they are chosen by vote of the present and eligible voting members of the committee and approved by a simple majority vote of the Board of Directors. NCTTRAC standing committee membership participation, with the exception of the System Performance Improvement Committee closed sessions, are open to any individual who wants to attend. Currently the

System Performance Improvement Committee membership is reviewing and defining committee structure to include but not be limited to the disciplines of trauma, stroke, and cardiac patient care for hospital and prehospital patients. However the System Performance Improvement Trauma Workgroup, which reports to the System Performance Improvement Committee, will generally consist of a balance of physicians, nurses, and prehospital providers as listed below. Refer to [www.NCTTRAC.org](http://www.NCTTRAC.org) for the most current committee information.

- Trauma Surgeons
- ED Physicians
- EMS Medical Directors
- Representatives from Level I,II,III and IV trauma facilities
- Urban/ Rural Ground EMS Providers
- Air Providers
- Pediatric
- Education

## **IX. COALITION BUILDING**

Coalition building is a continuous process of cultivating and maintaining relationships with stakeholders within the NCTTRAC trauma service area. Collaboration on injury control and trauma system development with community partnerships are key. Constituents include health care professionals, prehospital providers, insurers, payers, data experts, consumers, advocates, policy makers, trauma center administrators, and media representatives. Coalition priorities are trauma system development, policy making, financing initiatives and disaster preparedness, system integration, and promoting collaboration rather than competition between trauma centers and prehospital providers. It would be ideal if every member of NCTTRAC participated in at least one activity or one committee.

Currently most initiatives around Injury Prevention are carried out by members of NCTTRAC hospital and prehospital providers. NCTTRAC needs to focus on bringing in business partners and community leaders to assist with injury awareness and prevention activities. NCTTRAC is developing a list of coalitions and activities that members can engage in with the assistance of the new Public Relations and Development Program Manager.

## X. LEAD AGENCY AND HUMAN RESOURCES

DSHS is the Lead Agency for the trauma in the State of Texas and NCTTRAC is the Lead Agency for TSA-E. DSHS defines the regulatory standards for Emergency Medical Service Providers and Trauma Facilities. The American College of Surgeons defines the Trauma Facility criteria for the Level I and Level II trauma centers in *Optimal Care Resources for the Injured Patient*. The Level III and Level IV Trauma Facility criteria are defined by DSHS. In addition, criteria for Regional Advisory Councils are defined by DSHS. NCTTRAC defines the system standards of care for TSA-E. These standards include Trauma Facility Field Triage Criteria, Trauma Transfer Guidelines, and Regional Trauma Registry Data Management Guidelines. Due to the size and capabilities within TSA-E, the responsibility of lead trauma facility is shared between all Level I facilities. Refer to [definitive care facilities](#).

The Trauma Facilities Field Triage Criteria is reviewed annually through the Physician Advisory Group and processed through the Trauma System Subcommittee, the Systems Development Committee, and then approved by the Board of Directors. These criteria align with the national Trauma Center Field Triage Criteria outlined in the American College of Surgeons, *Optimal Care Resources for the Injured Patient*, and the Centers for Disease Control (CDC). [See Appendix D](#). This document is also posted on the NCTTRAC website at [www.NCTTRAC.org](http://www.NCTTRAC.org) under the Trauma System Plan. These criteria are recommendations but not mandated to be standardized due to TSA-Es variability of capabilities.

The ability of trauma facilities to monitor their resource capabilities is through NCTTRAC implementation of TSA-E Tracking, Resource, Alerts, and Communications (**E\*TRACS**). Communication to providers is addressed through EMResource. For details refer to the [Disaster Preparedness](#) section.

The Regional Communications Center (RCC), as a contracted service through NCTTRAC, assists facilities in the region to transfer serious and critical trauma patients to definitive care. For details refer to the [System Coordination Patient Flow](#) section.

NCTTRAC has dedicated staff to assist in development, implementation, education, and monitoring of the Regional Trauma System Plan. Listed are the individuals that assist in coordination of the Regional Trauma System Plan. Contact information and areas of responsibility are listed at [www.NCTTRAC.org](http://www.NCTTRAC.org).

<b>NCTTRAC Staff</b>	
Executive Director	Hendrik J. (Rick) Antonisse
Comptroller/Deputy Director	Paula J. Welch
Senior Program Assistant	Vicki Thedford
Program Assistant	Sue Curfman
Emergency Healthcare Systems Program Manager	Leigh Anne Bedrich
EHS Coordinator	Danielle KWL Chinn
Data Systems Program Manager	Shawn Chisholm
Data Systems Administrator	Kacy Bird
Hospital Preparedness Program Manager	Hank Hufham
Logistics & Transportation Supervisor	Jean Becerril
Logistics & Transportation Coordinator	Raymond Coimbre
Training, Exercises & PI Supervisor	Ann Marie Harris
Training, Exercises & PI Coordinator	Derek Trabon
Public Relations & Development Manager	Michelle Raczynski
Operations Center Manager	Chip Orton
Communications & Ops Support Supervisor	Phillip Tetreault
Communications & Ops Support Coordinator	

## **NCTTRAC Bylaws**

[See Appendix E](#)

## **Evidence of System Participation**

Announcements for trauma system planning are sent electronically to all NCTTRAC membership to allow participation from interested members and to include a broad range such as physicians, nurses, EMS prehospital providers, and staff. Members have the capability to call in through both audio and visual forms of technology. Announcements are made at the Board of Directors meetings for maximum visibility of members to participate. To provide evidence and track actual participation in trauma system planning, rosters are kept at NCTTRAC offices.

## **XI. FINANCIAL MANAGEMENT**

NCTTRAC's Board of Directors defines an annual operating budget that supports the Regional Trauma System Plan. The Trauma System Subcommittee participates in the development of this budget. This budget is moved to the System Development Committee and approved or adjusted by the Board of Directors. NCTTRAC staff is responsible for the execution and management of the overall NCTTRAC budget.

### **Trauma System Funding**

#### **Senate Bill 102 (SB-102)**

Signed in June 1997, established the EMS/Trauma System fund (Health and Safety Codes §773.122 – 144, and §157.130). The following November, the Board of Health proposed rules for the commitment of funding distribution, and then adopted in March 1998.

#### **Senate Bill 1131 (78<sup>th</sup> Legislative Session)**

Established a fund for county and regional emergency medical services, designated trauma facilities, and trauma care systems, which was appropriated to the Department of State Health Services. Within the bill are stipulations for the distribution of funds composed of money deposited under the Code of Criminal Procedures, and earnings of the account.

#### **Senate Bill 3588; Article 10: Driver Responsibility Act (78<sup>th</sup> Legislation)**

Created a system of points and surcharges applied to the driver's license of those convicted of certain moving violations to be implemented by the Department of Public Safety. One half of the funds are credited to trauma facilities and emergency medical services. Additionally, a \$30 court fee was added on some traffic violations, of which one-third of the revenue is credited to designated trauma facilities and emergency medical services and is to expire in September 2007.

#### **House Bill 1676 (76<sup>th</sup> Legislative Session)**

Established the EMS & Trauma Care Tobacco Endowment for emergency medical services and trauma care to reduce morbidity and mortality due to injuries. The source of funds is interest earned on the endowment up to the appropriation level established by the 76<sup>th</sup> Legislative Session. The annual allocations are for Regional EMS/Trauma Systems Development



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### XXII. RECOMMENDATIONS APPENDIX

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### Coalition Building and Community Support

(to ultimately improve patient outcomes and limit injury within the population)

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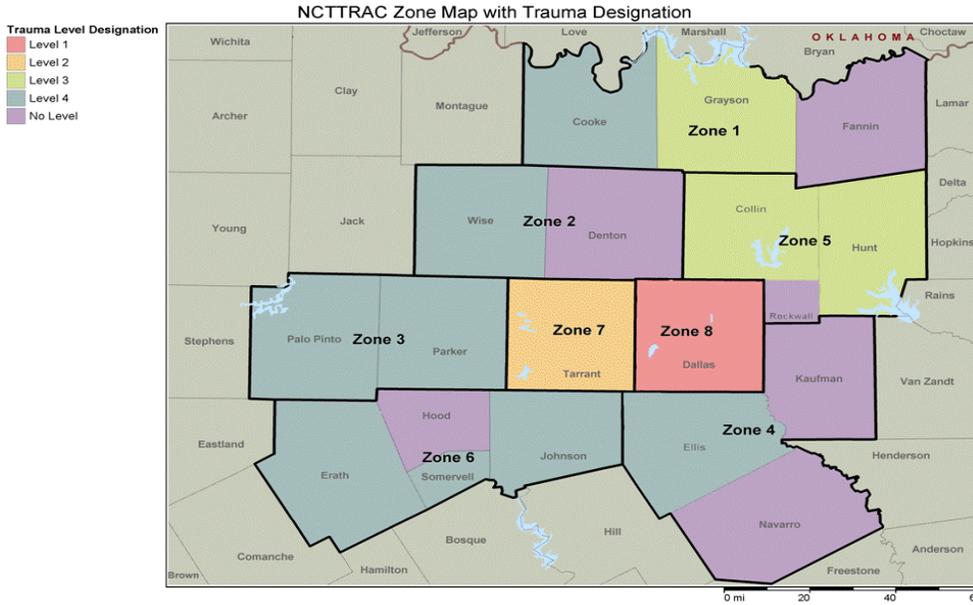
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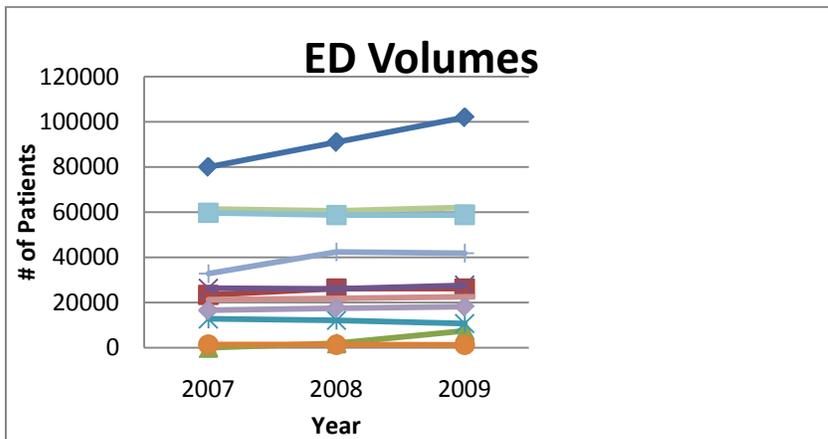


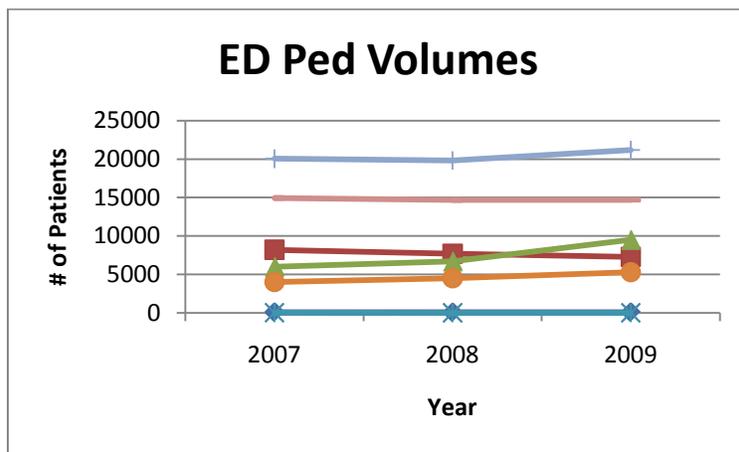
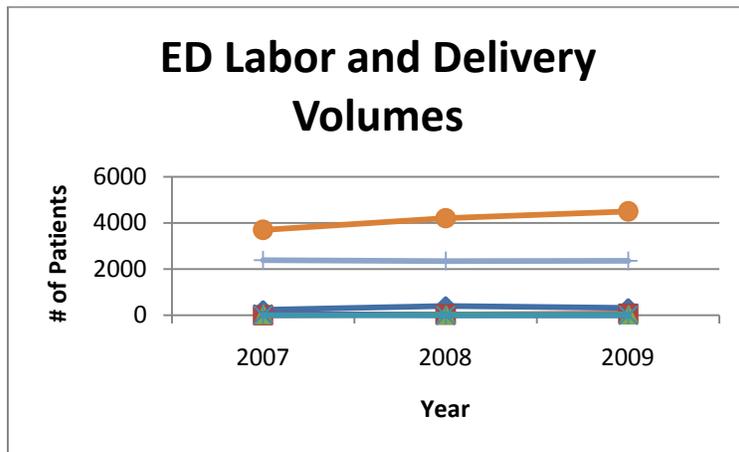
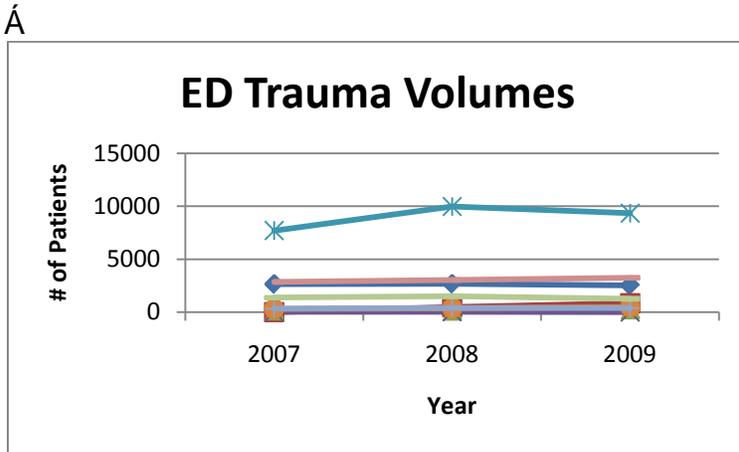
# Appendix A

## Zone Map



# Appendix B







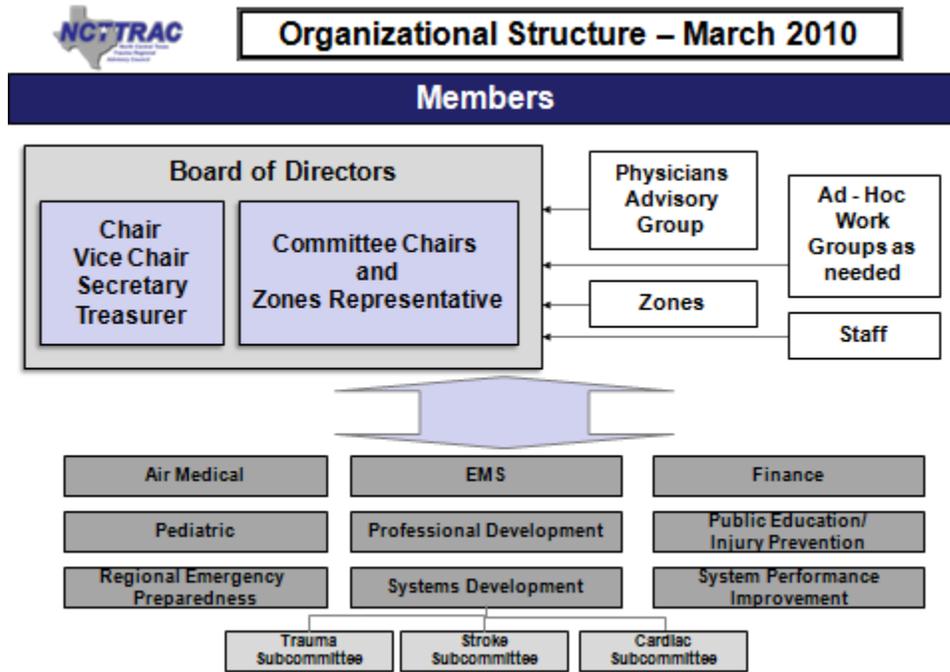
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## Appendix C



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## Appendix D

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## Appendix E

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## Appendix F

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Approval Date: 03/09/2010