2023-2027

BROWARD COUNTY TRAUMA PLAN

BROWARD COUNTY
FLORIDA

Table of Contents

Trauma Service Area Eighteen

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1. Introduction, Definition of Terms & Background

INTRODUCTION

Since its inception in 1991, the Broward County Trauma Management Agency (BCTMA) has continued to develop and implement strategies to ensure the citizens of Broward County are afforded a comprehensive, timely, and uniform approach to trauma care.

The Agency's Strategic Plan has been developed in cooperation with Broward County government, the Broward County EMS Council, the Trauma Systems Quality Improvement Committee, Broward Health Planning Council, as well as, Sheriff's Office Fire Rescue, Municipal Fire Rescue agencies, and other Broward healthcare partners.

The current document represents the dedicated effort of local experts in outlining the level of Trauma services available in Broward County, addressing the development of additional system components, and presenting strategies for ongoing implementation of improvements to the trauma network in Broward County. The purpose is to provide information to inform strategies for the ongoing development, management, and continual analysis of the County's trauma network and its impact upon the safety of Broward County's residents and visitors.

DEFINITION OF TERMS

ACS: American College of Surgeons

AGENCY: Broward County Trauma Management Agency

AIR AMBULANCE: Refers to either fixed-wing aircraft or rotary-wing aircraft (helicopter) used for or intended to be used for air transport of sick or injured persons requiring or likely to require medical attention during transport.

ALS: Advanced Life Support. A high level of medical care rendered by paramedics in the pre-hospital setting and physicians or qualified nurses in the hospital setting.

BLS: Basic Life Support: A moderate level of medical care provided by an EMT or certified First Responder.

CONSOLIDATED OMNIBUS BUDGET RECONCILIATION ACT (COBRA): Federal legislation passed in February1988 that requires that if a hospital has certain facilities which another hospital lacks, that hospital must accept a patient transfer if requested. All hospitals in Broward operate under its guidelines.

DEPARTMENT: State of Florida, Department of Health (DOH).

EMS: Emergency Medical Service. A pre-hospital medical treatment and transportation system.

EMT: Emergency Medical Technician. A state-certified level of medical training required for ambulance personnel and BLS providers.

EMTALA: Emergency Medical Treatment and Active Labor Act is a U.S. Act of Congress passed in 1986 as part of the Consolidated Omnibus Budget Reconciliation Act (COBRA). It requires hospitals to provide care to anyone needing emergency healthcare treatment regardless of citizenship, legal status, or ability to pay. Participating hospitals may only transfer or discharge patients needing emergency treatment under their own informed consent, after stabilization, or when their condition requires transfer to a hospital better equipped to administer the treatment necessary.

FIRST RESPONDER: A certified level of basic first aid medical training. This level of training is usually provided to fire fighters and police officers as part of their initial education requirements.

GOLDEN HOUR: The hour following an incidence of blunt, penetrating, or burn traumatic injuries during which immediate treatment would significantly increase the patient's chances of surviving the injuries sustained.

INITIAL RECEIVING FACILITY: A hospital emergency room or designated trauma center where trauma patients are transported by the pre-hospital provider.

DEFINITION OF TERMS

LEVEL I TRAUMA CENTER: A medical center (hospital) which has formal research and education programs for the enhancement of trauma care; is verified by DOH to be in substantial compliance with Level I Trauma center- Adult and Pediatric Trauma Center standards; and has been approved by DOH to operate as a Level I trauma center.

LEVEL II TRAUMA CENTER: A medical center (hospital) verified by DOH to be in substantial compliance with Level II trauma center standards and has been approved by the department to operate as a Level II trauma center.

NATIONAL INCIDENT MANAGEMENT SYSTEM (NIMS): A systematic, proactive approach to guide departments and agencies at all levels of government, nongovernmental organizations and the private sector to work together seamlessly and manage incidents involving all threats and hazards, regardless of cause, size, location or complexity.

PARAMEDIC: Person who is certified by the department to perform basic and advanced life support (ALS).

TRAUMA: An umbrella term given to all forms of injury.

TRAUMA CENTER: A part of a hospital equipped and staffed to provide care for patients suffering from major traumatic injuries such as falls, motor vehicle collisions, or gunshot wounds.

TRAUMA NETWORK: A systematic approach to providing medical care to a victim of trauma that includes communications, pre-hospital care, patient transportation, trauma centers, and a well-defined management structure.

TRIAGE: The system of identifying and prioritizing patients' need for treatment.

UNINTENTIONAL INJURIES: Include falls, motor vehicle crashes, burns and pediatric injuries.

STATEMENT OF FACTS

- Nationally, trauma continues to be the leading cause of death for individuals aged one to forty-four.
- 1.3 million individuals were hospitalized due to injuries in 2018.
- 278,345 people died from injury in 2020 – appx. 1 person every 2 minutes.
- Each year millions of people are injured and survive but face with life-long mental, physical and financial problems.
- In 2018, 37.9 million people were treated in emergency rooms for injuries, nearly half of which resulted in hospitalization.
- The total cost of injuries and violence in the United States was $4.2 trillion in 2019, including $327 billion in medical care, $69 billion in work loss, and $3.8 trillion in value of statistical life and quality of life losses. More than one half of this cost ($2.4 trillion) was among working-aged adults (aged 25–64 years).

- 75% of all deaths among young people are the result of injuries and violence, with unintentional injuries the leading cause of death among persons aged 1 to 34.

- Each year, 22 million children under the age of fourteen (one out of every four) are accidentally injured. In 2019, more than 7,000 children and teens age 0-19 died because of unintentional injuries in 2019, about 20 deaths each day. Leading causes of child unintentional injury include motor vehicle crashes, suffocation, drowning, poisoning, fires, and falls.

- Distracted drivers are a main contributor to vehicular deaths and injuries. The primary causes of distractions include: Visual: taking your eyes off the road; Manual: taking your hands off the wheel; and Cognitive: taking your mind off of driving. Distracted driving activities include using a cell phone, texting, and eating.

- In the United States, for those aged 5 to 34, motor vehicle crashes are the leading cause of death, claiming the lives of over 18,000 individuals each year.

BROWARD COUNTY STATISTICS.

- In 2020 there were 1,280 unintentional injury deaths, including 313 motor vehicle deaths. Motor vehicle deaths comprised 24% of the unintentional deaths in Broward County.

- In 2020, more people under the age of 45 in Broward County, died from unintentional injuries than from any illness.

- The Unintentional Injury death rate including motor vehicles for Broward County was 61.2 per 100,000. (The Healthy People Target is 43.2).

- In 2020, unintentional injuries were the fifth leading cause of death for all Broward County residents, behind heart disease, cancer, COVID-19, and stroke.

- The vehicle traffic death rate for Broward County is 15.3 per 100,000 with the highest rate of deaths occurring amongst those age 18-44 years (19.4 per 100,000) and those 65 and over (21.3 per 100,000).

- Vehicle traffic death rates are much higher for males at 24.7 per 100,000 with the rate for females at 7.9 per 100,000.

- In 2020 there were 165 homicides committed in Broward County and 222 suicides

*Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. Web-based Injury Statistics Query and Reporting System Report [cited 2018] FloridaCharts.charts.BrowardCounty[cited 2015]

BACKGROUND

Trauma has been identified as a major cause of death and disability in the State of Florida. Numerous studies over the years by the National Research Council have documented that as many as one-in-three trauma deaths could be prevented. As part of the solution to improving the level of care provided to critically injured patients, the Council recommended the creation of trauma systems and the regionalization of trauma care.

With the passage of the Trauma Care Act in 1987, Florida expanded its statutes to establish a statewide trauma system, with additional components, in an effort to address these deficiencies on a statewide basis. Subsequent legislation supported system planning and developed a mechanism for trauma center designation and funding.

Recognizing the need for a regional approach to trauma care, the Broward County Board of County Commissioners established the Broward County Trauma Management Agency (BCTMA) in 1991 to act as the coordination point between its trauma centers, the emergency transport providers, and acute care hospitals.

The BCTMA continues to provide oversight for the Broward County Trauma System and serves a population of just under 2 million permanent residents, covering an area of approximately 1,320 square miles.

In 1996, the Broward County Commission consolidated similar government operations under one entity. This decision resulted in the BCTMA being joined with the operations of the County Medical Examiner's Office. Following this merger, BCTMA became a Section within Broward County's new Office of Medical Examiner and Trauma Services.

The Board of County Commissioners, in establishing the Trauma Agency, directed the Broward Regional Emergency Medical Services (EMS) Council, which serves as an appointed advisory board reporting directly to the County Commission, to facilitate the initial and continuing needs of the Trauma Agency. The EMS Council and its Trauma Systems Quality Improvement Committee have been effective in obtaining system cohesion and participation through the inclusion of a cross-section of service providers and community representatives.

The Trauma Systems Quality Improvement Committee is responsible for developing and updating trauma standards for the County. The BCTMA, as the focal point for the County's trauma system planning, coordination, and evaluation, provides support to both the EMS Council and Trauma Systems Quality Improvement Committee. BCTMA has the legislative authority to manage the elements of the trauma system while ensuring each entity maintains their own constitutional and legislative authority.

The current document recognizes the dedicated efforts of local experts while outlining the level of trauma services currently available in Broward County, addressing the development of additional system components, and presenting strategies for ongoing implementation of improvements to the trauma network in Broward County.

2. Physical Environment & Demographics

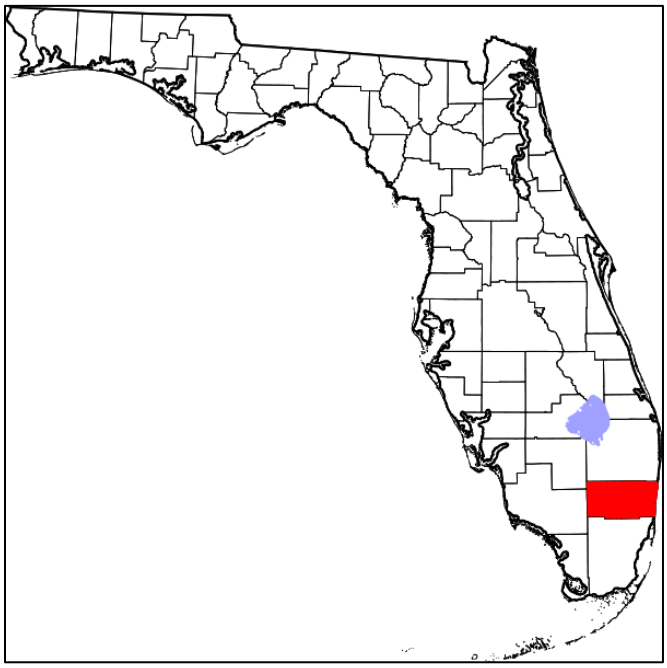
2. PHYSICAL ENVIRONMENT AND DEMOGRAPHICS

PHYSICAL DESCRIPTION

Broward County lies along a 25-mile stretch of the southeastern Florida coastline between Palm Beach County on the north, and Miami-Dade County on the south. From its eastern border on the Atlantic, the County extends westward some 50 miles to the Collier and Hendry County lines (See Map 1). Broward's land area totals approximately 1,320 square miles of which, 1,205 square miles is land and 115 square miles is water. The County contains approximately 471 square miles of developable land, the majority of which is built upon. The urban area is bordered by the Atlantic Ocean to the east and the Everglades National Park to the west. Within developable land, Broward County has an average population density of 3,740 per square mile. However, several sections of the County contain more than 4,000 to 6,000 residents per square mile.

Broward County consists of low-lying, flat terrain with nearly 23 miles of beach frontage and an extensive waterway system that includes the Atlantic Intracoastal Waterway and numerous private drainage canals. In recent years eroding beaches and saltwater intrusion have become significant issues for the area.

Map 1. Broward County, Florida



A. County Transportation Systems

Broward County's international airport and seaport are among the leading drivers of the local economy.

1. Air Travel Currently, FLL is one of the fastest-recovering U.S. airports, with passenger traffic approaching 2019 pre-pandemic levels. Before the COVID-19 pandemic, the airport generated $37.5 billion in economic activity annually and nearly 18,000 direct, local jobs. Despite the impact of COVID-19 on the aviation industry in 2020, FLL ranked 6th in total passenger traffic recovery and 4th in international traffic recovery amongst U.S. airports. In 2020, the airport served 16.5 million passengers.

The Broward Sheriff's Office (BSO) works with the Broward County Aviation Department, the Transportation Security Administration (TSA), the Airline Managers Association, airport tenants, and ancillary federal agencies to provide law enforcement and fire rescue protection for 1,400 acre airport site and its 18,000 employees.

Station 10: 250 Terminal Drive Fort Lauderdale/Hollywood International Airport

BSO is responsible for fire rescue services at the Fort Lauderdale/Hollywood International Airport, including structural fire-fighting, aircraft rescue fire-fighting, and emergency medical services. Personnel from the Fire Marshal's Office provide prevention services such as new construction plans review, annual fire inspections, and the fuel inspection program that includes training classes for employees. The airport command is also active in CPR and safety classes for the airport community.

Around the clock Fire Rescue services are provided with 1 Engine Company, 2 Rescue companies, 3 Crash trucks, and a Battalion Chief. Members of the Airport Command are required to be compliant with FAA Part 139 Training requirements which include numerous specialized training topics as well as an annual live burn exercise.

The Airport response is complemented from surrounding BSO fires stations 32, 17, 6 and 1.

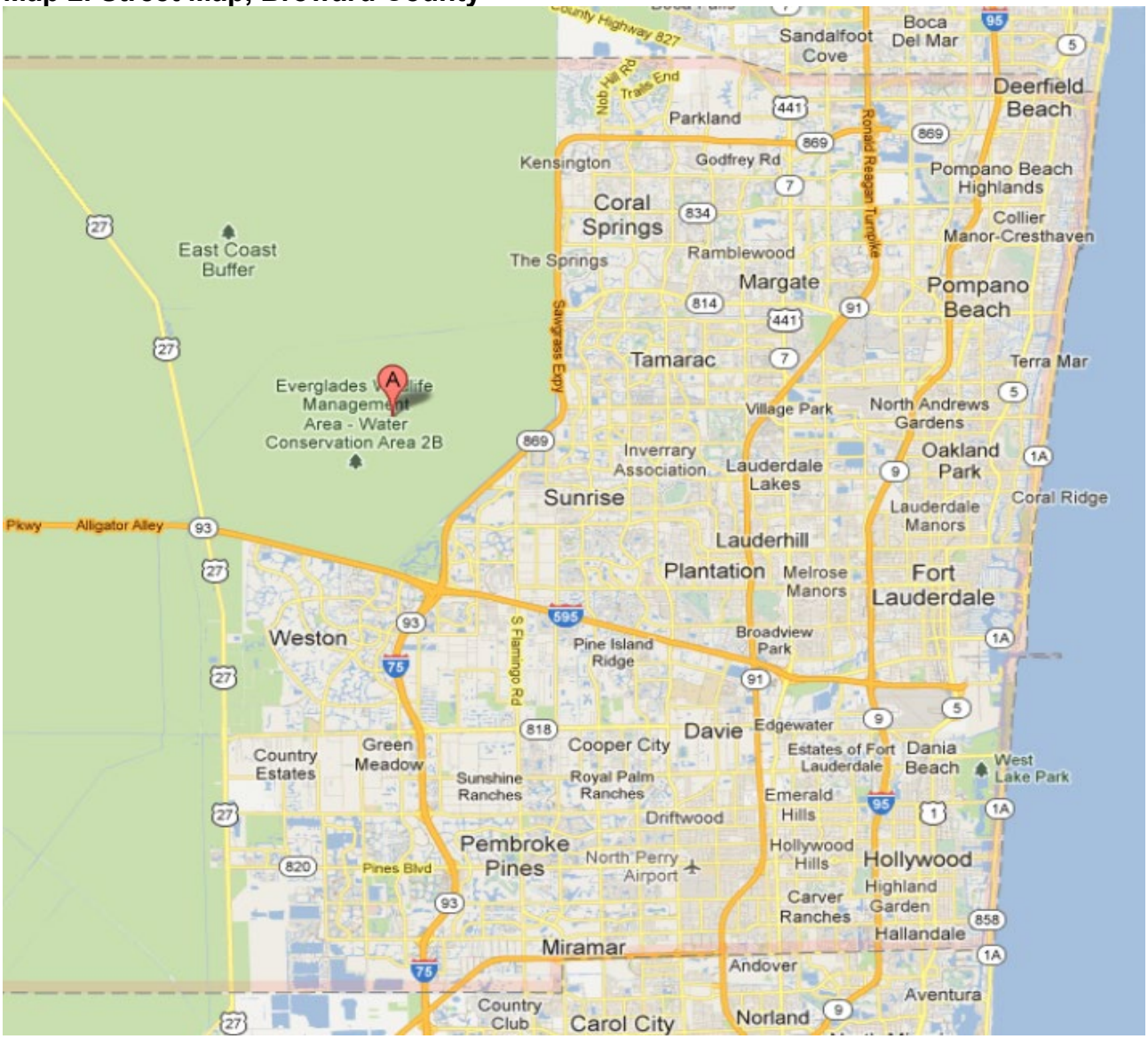
The Fort Lauderdale Executive Airport (FXE) is a general aviation airport located within the city of Fort Lauderdale. The airport serves over 165,000 aircraft operations per year, ranking it the eighth busiest General Aviation Center in the United States. This airport is designated as a general aviation reliever

facility for the Fort Lauderdale/Hollywood International Airport by the FAA. The airport also operates a 24-hours a day, seven days a week, ARFF facility that meets the requirements of index B, although not certified under FAR Part 139. Fort Lauderdale Fire Rescue's Station 53 provides ARFF services.

The ARFF team is trained to operate the department's specialized ARFF apparatus. The ARFF truck has pump and roll capabilities that help get close to the crash in a safe manner. Wearing special proximity suits, the team can advance on foot to the apparatus to perform search and rescue, followed by administering medical treatment.

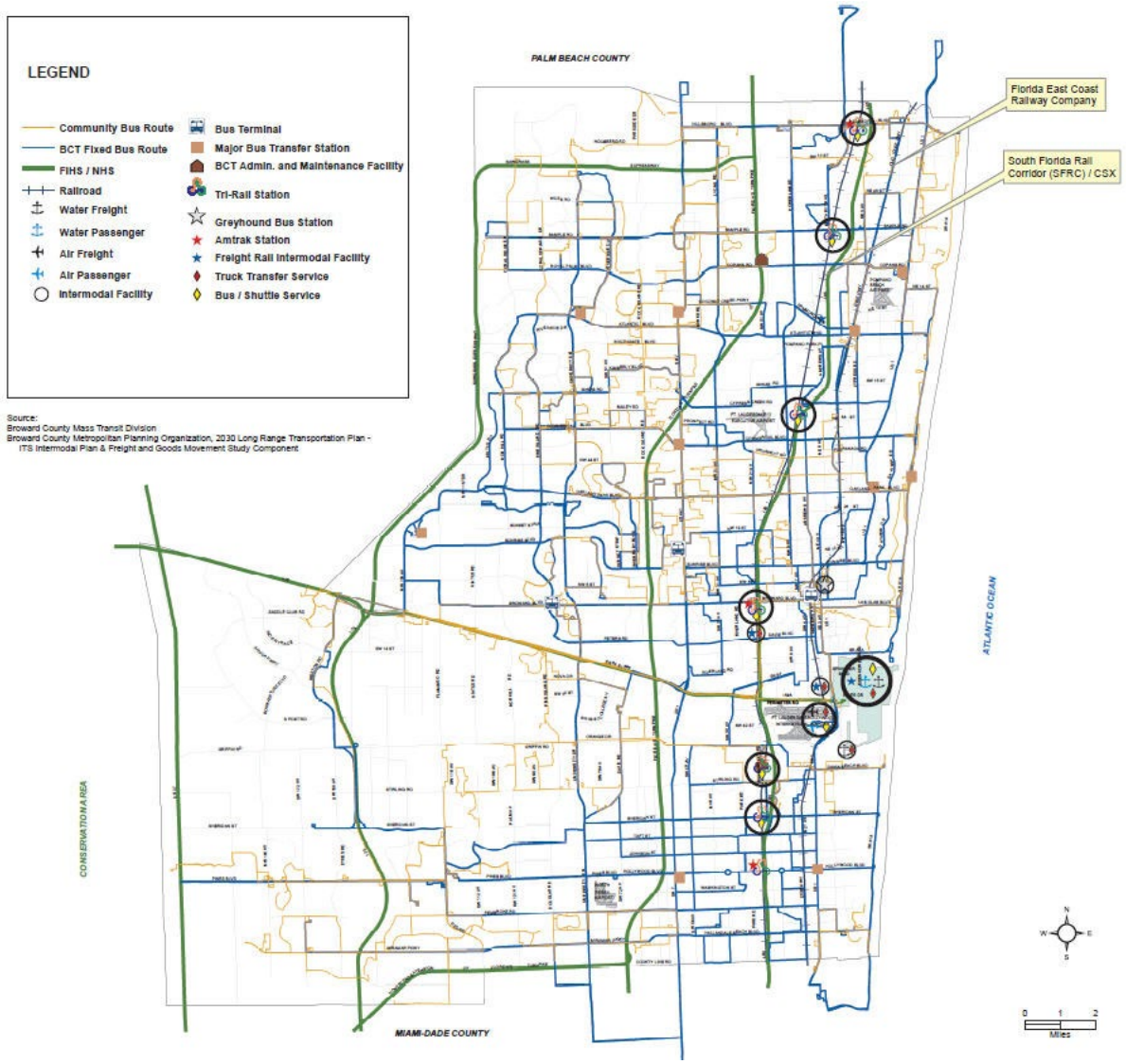
2. Highways: The most highly utilized highways serving Broward County are I-95 and the Florida Turnpike, which run north/south through the County. I-75 links the western part of Broward County with Dade County and provides access to Florida's west coast. The Sawgrass Expressway traverses the western edge of the County north and east to Deerfield Beach. I-595 provides an east-west corridor to Port Everglades. State Road 84 (Alligator Alley), which parallels I-595 through eastern Broward, extends westward to Naples and is the only direct access to the Indian Reservation and conservation areas. These routes, along with other major thoroughfares within the County, are shown in *Map 2.*

Map 2. Street Map, Broward County



3. Railroad System: Two major rail systems have mainline tracks that run the length of Broward County, from the Palm Beach to Dade County lines. The FEC tracks, with 74 at-grade crossings, are used primarily for cargo, while the SFRC tracks, with 47 crossings, also carry Amtrak passenger trains, Tri-Rail commuter trains, and Brightline, a privately run inter-city rail route running through Broward between Miami and West Palm Beach.

Map 3. Barriers (Airports, Railroad Crossings, Bridges)



4. Port Everglades covers an area of 2,380 acres and ranks as the third busiest cruise port in the world behind Port Miami and Port Canaveral. It also serves as the leading container port in Florida in terms of volume of containerized cargo. The seaport includes 12 cruise terminals serving 16 cruise lines that launch more than 3,000 cruises each year and serves as the destination of U. S. Naval ships each year for Fleet Week held in conjunction with the annual Fort Lauderdale Air and Sea Show.

BSO Fire Rescue Station 6 provides specialized firefighting and emergency response capabilities geared to the unique environment of Port Everglades. As part of this specialized response, the BSO Seaport Command has developed a multi-agency communication capability between the airport, seaport, and the United States Coast Guard.

Station 6 operates two engines, an ALS (Advanced Life Support) rescue unit and a specialized "chem-truck" that can deploy water, firefighting foam, or dry chemical extinguishing agents onto a fire.

Station 6 1901 Eller Drive Fort Lauderdale 33316

4. **Drawbridges:** Broward's waterways create a potential geographic barrier within the County, hindering the delivery of service in certain areas. There are currently twelve drawbridges across the Intracoastal Waterway, five New River crossings, and one inlet with a moveable bridge. High traffic flow, coupled with frequent bridge openings, can cause significant delays. As in the case with the rail system, many drawbridges are located in high traffic areas, which can negatively influence the delivery of emergency care. When transport vehicles are dispatched to areas with known drawbridges, the dispatcher notifies the bridge tender of the vehicle enroute, to provide adequate time to ensure that the bridge is not raised. Instances where the bridge is already raised or malfunctioning, transport personnel are instructed to take an alternative route. In those instances where a first responder vehicle is tied up in traffic associated with a drawbridge, alternate vehicles are also dispatched.

All of the barriers identified represent challenges to the fluid operation of the Broward County Trauma Transport System. In each case, the Trauma/EMS transport and communications system has been structured to accommodate and adjust to these challenges.

POPULATION CHARACTERISTICS

Broward County is the second most populous County in Florida, and the seventeenth largest County in the United States. Broward County's population increased steadily from a population of 5,135 in 1920 to 1,623,018 in 2000 with a decrease in 2010 of 2%. However, in 2020 the population of Broward County increased once again to just under 2.0 million, a 10.6% gain since 2010. (Table 1)

Table 1 – Broward Population 1980-2020

Year	Broward Population	% of State Population
1980	1,018,257	11.0%
1990	1,255,531	10.3%
2000	1,623,018	10.8%
2010	1,748,066	9.8%
2015	1,896,425	9.4%
2020	1,944,375	10.1%

While the population of Broward County *increased* to just under 2.0 million in 2020, Broward County's percentage of the State population has *decreased slightly* since 2000 as noted in Table 1, recently making a marginal increase since 2015.

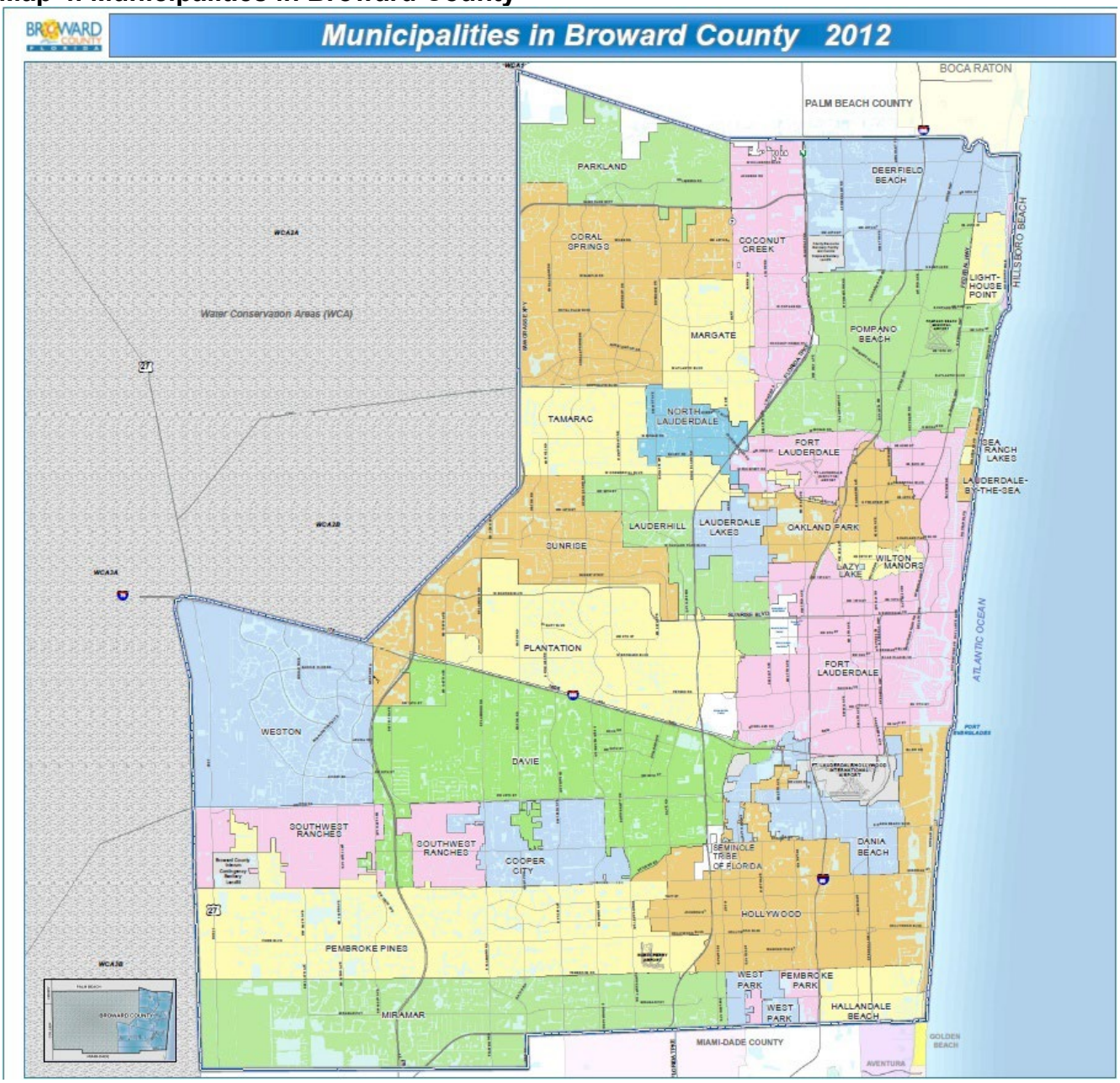
In addition to the increase in the County's permanent population over the past five years, tourism officials estimate that over 13 million people visit Broward County on an annual basis. According to the 2021 Visit Lauderdale Hospitality Report, 28.1 million tourists traveled by plane and there were 524.7 thousand cruiseline passengers. According to Greater Fort Lauderdale, visiting relatives/friends, vacationing, and attending special events/celebrations have been the top three motivators for visiting south Florida. In the last five years, going to the beach, visiting loved ones, enjoying cuisine/dining, shopping, and nightlife were identified as top activities in this area.

Tourists are drawn primarily from the northeast and north/central United States. The average visitor stays for approximately two weeks. However, many "snow-birds" remain for as long as six months. This latter group is largely comprised of retired or semi-retired individuals who are significantly older than the average vacationer. Peak months for seasonal visitors are December through March. During the height of the tourist season, Broward County's population more than doubles. The presence of tourists and part-time residents are significant factors when planning for the seasonal impact on local medical service capabilities and response times.

1. Municipalities in Broward County

Broward County is divided into 31 municipalities with decreasing areas remaining unincorporated. Over the past 10-15 years, the majority of unincorporated areas have been incorporated within existing or newly created municipalities as outlined in Map 4.

Map 4. Municipalities in Broward County



The distribution of population in Broward County has changed considerably since the early 1970s. In 1970, the majority, over 84% of the population, lived east of Florida's Turnpike in the cities bordering the ocean. In recent years, with a few exceptions, the population center has continued to move westward and to the northern portions of the county. (*Table 2- Population by Municipality*)

An integral component of the Trauma Management Agency's ongoing planning efforts will be to continue tracking shifts in population throughout the County to assess any necessary updates to its trauma management network.

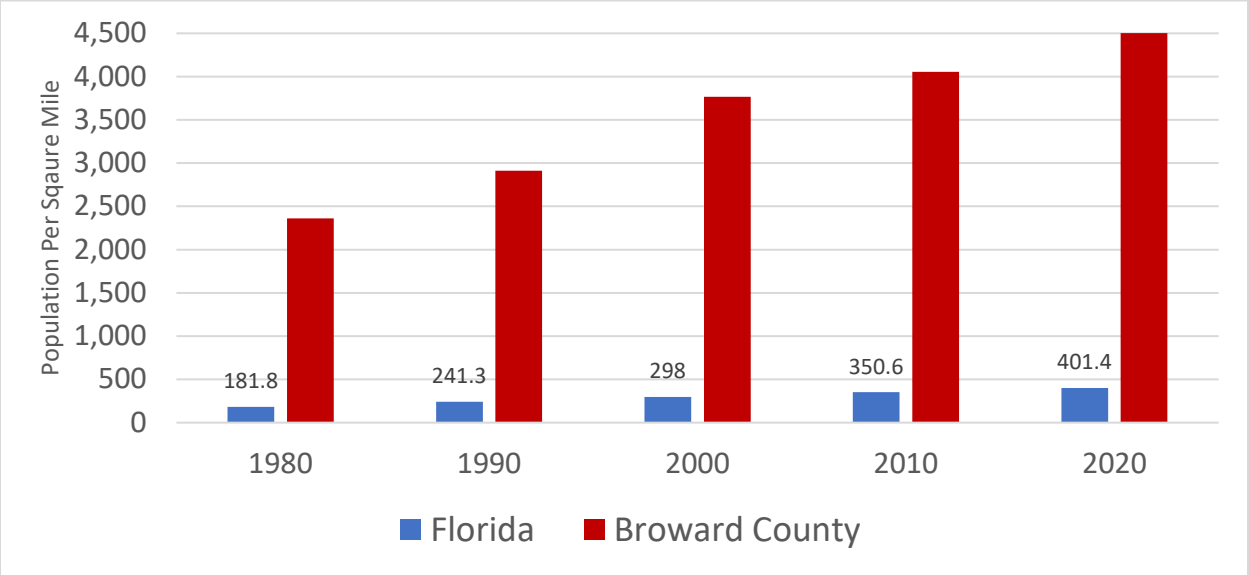
Table 2. Decennial Census 2010, Decennial Census 2020 & Municipalities

Jurisdiction	DecennialCensus 2010 Count	Decennial Census 2020 Count	Change	% Change
Florida	18,801,310	21,538,187	2,736,877	15%
Broward County	1,748,066	1,944,375	196,309	11%
BMSD (Unincorporated)	14,615	15,462	847	6%
Boulevard Gardens	1,274	1,457	183	14%
Broadview Park	7,125	7,670	545	8%
Franklin Park	860	1,025	165	19%
Hillsboro Pines	446	496	50	11%
Hillsboro Ranches	114	77	-37	-32%
Roosevelt Gardens	2,456	2,749	293	12%
Washington Park	1,672	1,948	276	17%
Other Urban Area	648	37	-611	-94%
Other Water Conservation Area	20	3	-17	-85%
Coconut Creek	52,909	57,833	4,924	9%
Cooper City	28,547	34,401	5,854	21%
Coral Springs	121,096	134,394	13,298	11%
Dania Beach	29,639	31,723	2,084	7%
Davie	91,992	105,691	13,699	15%
Deerfield Beach	75,018	86,859	11,841	16%
Fort Lauderdale	165,521	182,760	17,239	10%
Hallandale Beach	37,113	41,217	4,104	11%
Hillsboro Beach	1,875	1,987	112	6%
Hollywood	140,768	153,067	12,299	9%
Lauderdale-by-the-Sea	6,056	6,198	142	2%
Lauderdale Lakes	32,593	35,954	3,361	10%
Lauderhill	66,887	74,482	7,595	11%
Lazy Lake	24	33	9	38%
Lighthouse Point	10,344	10,486	142	1%
Margate	53,284	58,712	5,428	10%
Miramar	122,041	134,721	12,680	10%
North Lauderdale	41,023	44,794	3,771	9%
Oakland Park	41,363	44,229	2,866	7%
Parkland	23,962	34,670	10,708	45%
Pembroke Park	6,102	6,260	158	3%
Pembroke Pines	154,750	171,178	16,428	11%
Plantation	84,955	91,750	6,795	8%
Pompano Beach	99,845	112,046	12,201	12%
Sea Ranch Lakes	670	540	-130	-19%
Southwest Ranches	7,345	7,607	262	4%
Sunrise	84,439	97,335	12,896	15%
Tamarac	60,427	71,897	11,470	19%

Weston	65,333	68,107	2,774	4%
West Park	14,156	15,130	974	7%
Wilton Manors	11,632	11,426	-206	-2%
Seminole Tribal Land	1,742	1,426	-316	-18%

Broward is the second most densely populated County in Florida with its neighbor, Miami-Dade County being the most populated. Since 2003, the population density has exceeded an average of 1,400 persons per square mile. However, many municipalities currently exceed this density, with several areas having a density of between 4,000 to 6,000 residents per square mile. The population density of Broward continues to increase as much of the remaining undeveloped land in the County is either uninhabitable (swamps or marshes) or designated for government-owned parks or services. As of 2016, only 471 square miles remained as developable.

Table 3: Trends in Population Density for Broward County and Florida from1980 to 2020



Source: State Density, US Census: https://www.census.gov/data/tables/time-series/dec/density-data-text.html. County Source: US Census via the USDA ERS: https://www.ers.usda.gov/data-products/county-level-data-sets/download-data/. Note: Broward County's area based on current 431 square miles, east of the County's Conservation Area as calculated by the Broward County Planning Council: https://www.broward.org/PlanningCouncil/Pages/setting.aspx.

Table 4 illustrates the age distribution of Broward County's population for 2020. For the period 2010 to 2020, the population demographics of Broward County indicate a relatively steady annual growth rate of appx. 0.9%, ranging from 0.3-1.5% annually. The largest numeric increase was in the age group 20 – 34 (41,971) reflecting many municipalities efforts to attract a younger workforce, while the largest demographic age group continues to be the 35-54 age population.

Table 4. Broward County Population by Age, 2020

Age	Population	% of Total
0-19	450097	23.0%
20-34	370385	19.0%
35-54	528049	27.2%
55-64	264117	13.5%
65-84	287083	14.7%
85+	46373	2.4%
Total	**1,946,104**	**100.0%**

FL Charts, US Census Bureau, 2020

According to the 2020 Dicennial Census, there were approximately 333,000 *seniors* (65 and older) residing in Broward County. *Table 4* reflects the latest available percentages for each age group. Changes in population since 2010 (not shown) indicate a slight decrease in those under the age of 18 with a measurable decrease in seniors 85 years of age and older. The largest increase since 2010 has been in the population ages 55-64, a group that will continue to increase the number of seniors living in the area in the future. As the County increases its population, it also is experiencing an increase in the aging of its population. This aging of the population will continue to impact the demand for accessible health care facilities and emergency transport services.

Population changes naturally have an impact on the Trauma Network. The information gathered identifies several types of potential barriers to accessibility addressed by the trauma system. These barriers include:

1. The impact of tourism.
2. The distribution of population density.
3. The distribution of the elderly population.
4. Servicing the Indian reservation population.

In all instances, accommodations are in place to ensure that no significant population group is underserved or inappropriately served.

1. Seasonal Population Fluctuations (Tourism): Broward County is a major winter vacation spot for thousands of visitors from around the world (2019: 13 million visitors). Persons whose illnesses are not critical generally return to their homes to deal with medical problems. However, trauma presents additional challenges not faced by the non-emergency patient.

   The Broward County's pre-hospital and hospital system is staffed in winter months to accommodate additional patient demand. Additional rescue and transport capabilities are utilized in winter months when increased traffic tends to create situations that could slow response times. The availability of rescue helicopters provide an additional response assurance during high visitor, high traffic periods, and to accommodate increased rail usage.

2. Population Distribution: Hospital facilities have expanded their operations to the west to provide additional care to residents in the western portions of the County. In the case of pre-hospital providers, the County, in coordination with the EMS Council, maintains an active planning effort designed to locate additional pre-hospital providers in new or expanding population centers.

   While there are no Trauma Centers currently located in the western portion of the county, for the

purpose of trauma incidents, helicopter transport service ensures that no area of the county is beyond an acceptable transport time to a designated Trauma Center.

The financial considerations associated with the increase in population and trauma cases are met by Broward County's two tax-assisted hospital districts. In addition to insured patients, they also provide accessibility for all indigent residents, for both trauma and non-trauma hospital care, ensuring every individual has access to care.

3. Elderly Residents: There are significant concentrations of elderly residents in certain sections of the County. The pre-hospital emergency system responds to the existence of high concentrations of a variety of population groups through the distribution of emergency response vehicle sites.

4. Native American Population: The Seminole Indian Reservation, located in western Broward County, and the Miccosukee Indians, located in the Florida Everglades, offer challenges for the transport of emergency patients due to their limited highway access. In cases of traumatic injuries, where highway access or response time is compromised, rescue helicopter service is utilized as the situation dictates.

Impact of Potential Disasters on the Trauma Network

Broward County's Emergency Management Agency has the responsibility for developing and implementing disaster planning, mitigation, and response activities within the County under provisions of Florida State Statutes. Emergency Management operates the County's Emergency Operations Center (CEOC), and functions within the scope of the National Incident Management System (NIMS). The CEOC serves as a Multi-Agency Coordination system within which there are a number of Emergency Support Functions (ESF's). Representatives of the Trauma Management Agency serve as members of ESF-8, Health and Medical, operating under the Human Services Branch of the CEOC.

ESF-8, Health and Medical, provides the mechanism for coordinated assistance to supplement County and local resources in response to a public health and medical disaster, potential or actual incidents requiring a coordinated response, and/or during a developing or potential health and medical emergency. Within South Florida, hurricanes pose a real and potentially devastating threat. Florida's Hurricane season runs from June 1st thru November 30th, requiring preparedness planning on the part of the Trauma Management Agency in its role as a member of ESF-8. Developing and implementing updates to the appropriate disaster plans is an ongoing function of the Agency.

In the event of any major disaster potentially involving large amounts of casualties, such as a hurricane Category 3 or higher, a coordinated plan of response automatically goes into effect using the Broward County Emergency Management Plan through the County's Emergency Management Agency. Policies are in place which contain procedures for mutual aid response from municipal agencies in addition to the Broward Sheriff's Office response teams.

In addition to the implementation of the strategies involved in response to a hurricane, the Broward County Emergency Management Plan includes the Plan for Hazardous Materials and Weapons of Mass Destruction, all of which delineate the procedures that would be implemented to help minimize suffering and the loss of life.

In response and preparation for incidents of mass shootings, such as occurred at the Fort Lauderdale/Hollywood International Airport and Marjorie Stoneman Douglas High School, the Broward

Emergency Operations Center has reviewed policies and procedures related to any form of terrorist attack. This review also included a review of Communications and the Mutual Aid agreements in place for both the Broward Sheriff's Office and the various municipalities of Broward County.

The BCTMA also participates in active shooter and other mass casualty incident exercises to further develop and maintain cohesiveness throughout our response and trauma system.

MEDICAL FACILITIES

The County's three busiest emergency departments - Broward Health Medical Center in Fort Lauderdale; Memorial Regional Hospital in Hollywood; and Memorial Hospital West in Pembroke Pines are facilities within the North and South Broward Hospital Taxing Districts.

The following are locations and names of the sixteen (16) hospitals currently located in Broward County, including those belonging to the North and South Broward hospital taxing districts which are components of the Trauma Network. (Map 5)

1	BROWARD HEALTH CORAL SPRINGS 3000 Coral Hills Dr. Coral Springs, FL 33065	9	HCA FLORIDA WESTSIDE HOSPITAL 8201 W Broward Blvd. Plantation, FL 33324
2	BROWARD HEALTH IMPERIAL POINT 6401 N Federal Hwy. Fort Lauderdale, FL 33308	10	HCA FLORIDA WOODMONT HOSPITAL 7201 N University Dr. Tamarac, FL 33321
3	BROWARD HEALTH MEDICAL CENTER 1600 S Andrews Ave. Fort Lauderdale, FL 33316	11	HOLY CROSS HEALTH 4725 N Federal Hwy. Fort Lauderdale, FL 33308
4	BROWARD HEALTH NORTH 201 E Sample Rd. Pompano Beach, FL 33064	12	MEMORIAL HOSPITAL MIRAMAR 1901 SW 172nd Ave. Miramar, FL 33029
5	CLEVELAND CLINIC HOSPITAL 3100 Weston Rd. Weston, FL 33331	13	MEMORIAL HOSPITAL PEMBROKE 7800 Sheridan St. Pembroke Pines, FL 33024
6	FLORIDA MEDICAL CENTER 5000 W Oakland Park Blvd. Lauderdale Lakes, FL 33313	14	MEMORIAL HOSPITAL WEST 703 N Flamingo Rd. Pembroke Pines, FL 33028
7	HCA FLORIDA NORTHWEST HOSPITAL 2801 N SR7 Margate, FL 33063	15	MEMORIAL REGIONAL HOSPITAL 3501 Johnson St. Hollywood, FL 33021
8	HCA FLORIDA UNIVERITY HOSPITAL 3476 S. University Dr. Davie, FL 33328	16	MEMORIAL REGIONAL HOSPITAL SOUTH 3600 Washington St. Hollywood, FL 33021

Address of Trauma Centers noted in Map 5.

1	BROWARD HEALTH NORTH 201 E Sample Rd. Pompano Beach, FL 33064 **LEVEL 2 TRAUMA CENTER**
2	BROWARD HEALTH MEDICAL CENTER 1600 S Andrews Ave, Fort Lauderdale, FL 33316 **LEVEL 1 TRAUMA CENTER**
3	MEMORIAL REGIONAL HOSPITAL 3501 Johnson St. Hollywood, FL 33021 **LEVEL 1 TRAUMA CENTER**

Map 5. Broward County Level 1 & 2 Trauma Hospitals

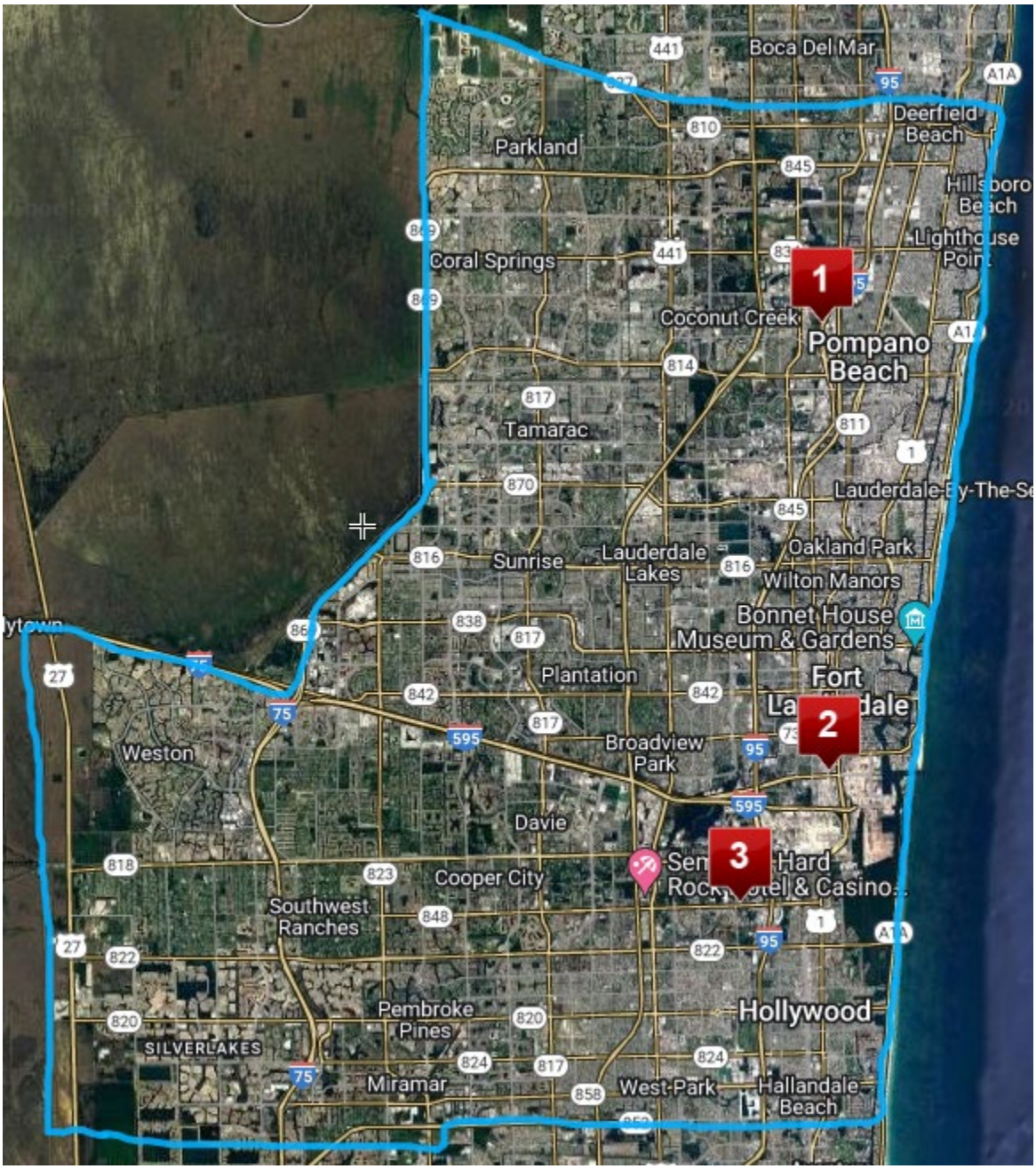


Table 5 indicates the Hospital Utilization rates as of 2020 for hospitals located within Broward County.

These utilization rates decreased slightly from 56% inpatient bed occupancy in 2016 to just under 51% for 2020, while the number of beds increased 615 beds during the same period of time indicating the county hospital utilization continues to be stable and well-supported by current facility capacity. Reports on bed utilization are provided by the county's medical facilities on a quarterly basis to the Florida Agency for Health Care Administration (AHCA).

Table 5. 2020 Bed Utilization by Hospital

Hospital	# Licensed Beds	Occupancy Rate
Broward Health Medical Center*	716	48.60%
Cleveland Clinic Hospital	206	85.90%
Broward Health Coral Springs*	250	48.90%
Florida Medical Center	459	31.00%
Holy Cross Health	557	35.40%
Broward Health Imperial Point *	204	46.10%
Memorial Regional Hospital**	797	68.60%
Memorial Hospital Miramar**	178	52.60%
Memorial Hospital Pembroke**	301	32.90%
Memorial Regional Hospital South**	216	36.80%
Memorial Hospital West**	486	57.90%
Broward Health North*	409	47.80%
HCA Florida Northwest Hospital	286	54.90%
HCA Florida University Hospital	256	45.70%
HCA Florida Woodmont Hospital	317	43.50%
HCA Florida Westside Hospital	250	65.90%
TOTAL	6,272	50.80%

Source: 2020 Annual Utilization Report, BRHPC

* North Broward Hospital District Facilities

** South Broward Hospital District Facilities

Impact of Tourism on Emergency Department Utilization

Broward County continues to be a popular winter vacation spot for thousands of visitors from around the world. For the most part, these visitors arrive between December and April and stay limited amounts of time. Individuals, whose illnesses are not critical, generally return to their homes to deal with medical issues. During these peak tourist months, local hospitals must respond to the increased need for hospital beds by increasing staff and adjusting staffing patterns.

As noted in the section on *Population Characteristics*, tourism in South Florida has a major impact upon the Trauma Network, including the staffing of the County's medical facilities. The population trend in recent years has had winter residents arriving earlier and staying later.

However, the largest population increase in Broward County still occurs during the months from December through April, thus increasing both emergency department visits and hospital admissions as well as the need for trauma transport.

Inherent in this increase in population is also the need for adequate response time for trauma situations

when traffic patterns within the area become heavily congested. Also impacting trauma response is the projected increase in railway traffic as a result of the Brightline rail train which opened in January 2018.

With the increase in rail line usage, review of Fire Rescue station locations will be an integral part of the planning process to ensure that response times continue to remain within acceptable time frames.

Table 6 illustrates how emergency department visits and hospital admissions vary by month, with higher utilization rates occurring during Broward's peak seasonal months: December through March.

Table 6. 2020 Broward County Emergency Department Utilization by Month

Month	D Visits	Admissions
January	93,930	13,195
March	79,194	10,873
May	47,259	9,443
July	70,303	12,626
September	56,579	10,275
November	61,518	10,869
TOTAL	**776,552**	**133,183**

Source: 2020 Annual Utilization Report, BRHPC

Broward County's population is served by sixteen (16) Acute Care Hospitals (Table 7) located throughout the county. These facilities provide a range of medical and psychiatric services. Reviews of bed utilization rates are conducted periodically as part of the county's overall medical services planning and budgeting activities to determine demand and accessibility.

Table 7 lists the County's Acute Care Hospitals along with their respective number of licensed beds.

Table 7. Broward County Licensed Hospital Beds Acute Care, 2020

Hospitals		MS	CCU	Other	OB	Neo	Ped	Rehab	Psych
Broward Health Coral Springs*	250	112	16	34	53	10	25	0	0
Broward Health Imperial Point*	204	98	10	49	0	0	0	0	47
Broward Health Medical Center*	716	189	62	207	49	63	63	0	83
Broward Health North*	409	182	25	172	0	0	0	30	0
Cleveland Clinic Hospital	206	92	48	66	0	0	0	0	0
Holy Cross Health	557	356	54	68	22	9	0	48	0
Memorial Hospital Miramar**	178	54	18	40	50	16	0	0	0
Memorial Hospital Pembroke**	301	182	24	95	0	0	0	0	0
Memorial Hospital West**	486	396	32	0	38	20	0	0	0
Memorial Regional Hospital**	797	361	62	0	94	84	124	6	54
Memorial Regional Hospital South**	216	127	0	0	0	0	0	89	0
Florida Medical Center	459	154	53	178	0	0	0	0	74
HCA Florida Northwest Hospital	287	78	30	138	22	15	4	0	0
HCA Florida University Hospital	256	53	14	41	55	31	46	0	16
HCA Florida Woodmont Hospital	317	135	15	107	0	0	0	0	52
HCA Florida Westside Hospital	250	130	32	88	0	0	0	0	0
TOTAL	4,876	2,699	495	1,283	383	248	262	173	326

Source: 2020 Annual Utilization Report, BRHPC

*North Broward Hospital District (Broward Health) hospitals

** South Broward Hospital District (Memorial Healthcare System) hospitals

There are two (2) Freestanding Emergency Departments (FSEDs) serving Broward County. These FSEDs offer everything that is available at emergency departments that are physically connected to hospital complexes and are located only a few miles from their affiliated medical centers. These *emergency care centers* are similar to hospitals that handle basically everything, but may not have specialized capabilities, such as open heart surgery or comprehensive stroke care programs.

The FSED's have laboratory capabilities, imaging capabilities, a 128-slice CT, board certified emergency physicians, seasoned emergency room nurses, and paramedics. Patients requiring hospital admission are transferred to nearby hospitals as necessary by ambulance.

Broward County Emergency Department Utilization

All sixteen of the County's acute care hospitals have emergency department capabilities. As illustrated in Table 8, during 2020 there were 776,552 emergency department visits to these facilities. This reflects an decrease of 304,525 (28%) in Emergency Department visits since 2015. While at first glance this appears to be a significant decrease in the number of Emergency Department visits, the % of patients admitted to these facilities decreased from 18% in 2010 to 15% in 2016 and rose to 18% in 2020 due in large part to COVID-19. Tourism in 2020 was markedly down by more than half compared to 2019 and average length of inpatient stay rose by an average of appx. 3 patient days. The data suggests that the ED facilities in Broward robustly responded to the COVID-19 pandemic while maintaining high quality care for other conditions, particularly for Broward's own residents given the abrupt decrease in tourism.

Table 8. Broward County Emergency Department Utilization, 2020

	E.D. Visits			E.D. Admissions		
	Adult	Pediatric	Total	Adult Admit	Pediatric Admit	Total Admit
Broward Health Coral Springs*	36,181	9,964	46,145	6,676	541	7,217
Broward Health Imperial Point*	29,641	1,113	30,754	5,599	0	5,599
Broward Health Medical Center*	68,010	11,919	79,929	11,040	1,335	12,375
Broward Health North*	44,381	3,032	47,413	9,536	0	9,536
Cleveland Clinic Hospital	35,946	1,184	37,130	8,345	14	8,359
Holy Cross Health	44,976	2,015	46,991	9,542	6	9,548
Memorial Hospital Miramar**	34,667	8,981	43,648	4,154	16	4,170
Memorial Hospital Pembroke**	29,341	979	30,320	2,747	0	2,747
Memorial Hospital West**	59,739	10,539	70,278	11,700	0	11,700
Memorial Regional Hospital**	88,416	39,573	127,989	11,947	2,334	14,281
Memorial Regional Hospital South**	22,626	1,025	23,651	866	1	867
Florida Medical Center	26,458	1,140	27,598	9,648	3	9,651
HCA Florida Northwest Hospital	39,844	5,318	45,162	11,326	52	11,378
HCA Florida University Hospital	36,834	10,978	47,812	5,854	827	6,681
HCA Florida Woodmont Hospital	25,653	2,312	27,965	8,158	0	8,158
HCA Florida Westside Hospital	41,512	2,255	43,767	10,916	0	10,916
TOTAL	664,225	112,327	776,552	128,054	5,129	133,183

Source: 2020 Annual Utilization Report, BRHPC
* North Broward Hospital District Broward Health) hospitals
** South Broward Hospital District (Memorial Healthcare System) hospitals

Pre-hospital Services

Nineteen (19) Advanced Life Support (ALS) emergency providers serve Broward County. These providers have units stationed throughout the thirty-one municipalities and unincorporated area of Broward County.

The Broward County Trauma Management Agency, in conjunction with The Resilient Environment Department, Consumer Protection Division, is responsible for monitoring the licenses of the ALS providers and reviewing applications for any additional providers making application to serve areas of Broward County.

The Broward Sheriff's Office (BSO) currently provides the only emergency response rescue helicopter transportation in Broward County, with four (4) helicopters, one of which is available 24 hours a day, seven days a week available to respond to the County's needs . While only BSO operates the trauma response helicopters, funding for the helicopters is shared amongst the Sheriff's Office and both the North and South Broward Hospital Districts.

PATIENT REFERRALS

Patients in the Broward County Trauma System are transported in accordance with established triage and transport protocols. If tertiary care is required and cannot be provided at the receiving hospital, the patient is referred and transportation is provided as necessary to a facility with availability of more specialized care.

At the present time, area hospitals are able to ensure the availability of the majority of surgical and medical services. However, there are no specialized units offering tertiary services for serious burns in Broward County. If necessary these cases are transferred to the University of Miami/Jackson Memorial Burn Center in South Florida. The Burn Center provides a comprehensive team approach for the care of burn victims.

Although the patients requiring higher levels of care or more specialized treatment may be treated locally (depending on physician availability), patients are frequently transferred to higher-level facilities elsewhere in the State.

Formal and informal transfer agreements exist between Broward County hospitals and the following facilities: Jackson Memorial Hospital, Miami; Shands Hospital, Gainesville; Orlando Regional Hospital, Orlando; and Tampa General Hospital, Tampa. These agreements allow for expedited transfers to hospitals with higher levels of care for patients requiring specialized services.

3. Organizational Structure Of Broward County Trauma Network

3. ORGANIZATIONAL STRUCTURE OF THE BROWARD COUNTY TRAUMA NETWORK

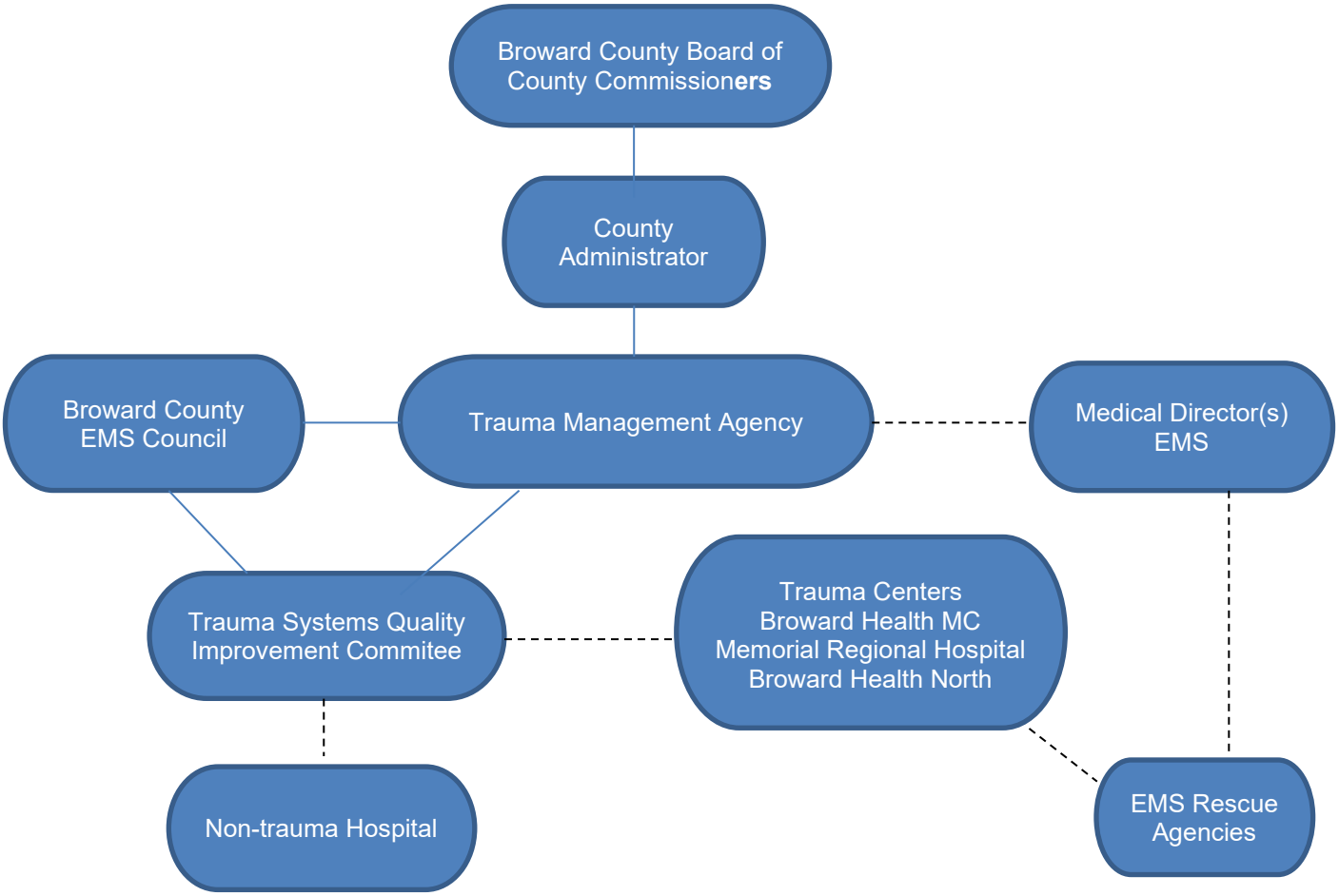
MANAGEMENT AND COORDINATION

The continued effectiveness and the long-term efficient operation of the Trauma Network requires a managerial agency to coordinate activities of the various trauma services, to act as liaison with state and federal governments and to provide a mechanism for system evaluation and monitoring. This function is currently the responsibility of the Broward County Trauma Management Agency, operated within the Office of Medical Examiner and Trauma Services of Broward County Government.

The Broward County Trauma Management Agency serves as the Local Trauma Agency and was created at the direction of the Broward County Board of County Commissioners to implement and manage the local trauma network. The Trauma Agency performs a number of additional functions for the State. Specific responsibilities of the Trauma Agency include:

- Facilitate the implementation and revisions of the local trauma plan
- Trauma system quality assurance and evaluation
- Coordinate pre-hospital care, including training, transportation, and communications
- Trauma system management and planning
- Assist state agencies in the certification and de-certification of local Trauma Centers
- Develop and monitor local protocols (i.e., inter-hospital transfer, trauma triage, system overload, etc.)
- Assist state in local trauma data reviews and help coordinate out-of-region expert reviews
- Monitor air transport system
- Provide staff support to the Trauma System Quality Improvement Committee (TSQIC)
- Coordinate with adjacent Regional, Local, and State programs
- Develop and implement an injury prevention program
- Conduct community awareness campaigns
- Facilitate system funding
- Fulfill state-mandated requirements of a Trauma Agency
- Assist in development of mass casualty and disaster plans
- Assist in the coordination of hospital participation in the trauma system

Broward County Local Trauma Agency
Areas of Coordination Flow Chart



The Trauma Agency operates as a section of the Office of Medical Examiner and Trauma Services (OMETS). The Trauma Management Agency fulfills its responsibilities by serving as the focal point for trauma system planning, coordination, and evaluation.

The Trauma Management Agency brings together the talents and expertise of participants in a number of agencies and organizations including the following:

- Broward County Board of County Commissioners
- EMS providers
- Acute care hospitals
- Medical community
- Trauma Centers
- Fire Chiefs' Association of Broward County, Uniform Fire Station Numbering

- Broward Regional Health Planning Council
- Broward Regional Emergency Medical Services (EMS) Council
- Broward County Emergency Management Division
- Florida Department of Health, Bureau of Emergency Medical Oversight, Trauma Program
- General Public

The Broward County Trauma Management Agency (BCTMA) was created by the County Commission in accordance with Florida Statutes, Section 395.401 and designated as such by the Florida Department of Health (DOH). The Agency performs its duties as outlined under the goals and objectives section of this Plan. Data collection activities on behalf of the State are in accordance with guidelines established for trauma patients by DOH's Trauma Program.

The ability to ensure the quality of patient care depends on medical control throughout the system. This control ranges from the adoption of protocols to resolving jurisdictional disputes between participants in the local system. Designation of the BCTMA as the Local Trauma Agency has provided authority and guidance to manage the elements of the system. At the same time, however, the participants in Broward's trauma system continue to be independent corporate structures and local governments with their own constitutional and legislated authority. Therefore, the BCTMA has put into place a process to oversee the working agreements between participating agencies and local governments. These agreements are implemented through County ordinance and contracts, mutual aid agreements, and additional inter-governmental agreements and contracts.

A variety of entities exist to support the Office of Medical Examiner and Trauma Services in the successful completion of its objectives. While all elements of the trauma system as mentioned above will continue to play important roles, the following entities will serve specific administrative and supportive roles to the BCTMA**.**

The Broward County Commission: Broward County has a charter form of local government with a nine-member board of elected County Commissioners and a County Administrator. The Commission appoints the members to the EMS Council and has authority to designate the local agency responsible for the operations of the County's Trauma Network.

Broward Regional Emergency Medical Services (EMS) Council: The EMS Council is an appointed board serving in an advisory capacity to the Board of County Commissioners. Its charge is to coordinate and direct the providers of emergency medical care in Broward County.

The EMS Council, in cooperation with the BCTMA, reports to the County Commission on issues relating to the operation of the County's Trauma Network. The Council currently has 37 members representing: Physicians, Hospitals, Transport, Advanced Life Support, Police and Fire, Nurses, Basic Life Support, and other organizational agencies. Additionally, each County Commissioner appoints one member to the Council to represent their District.

Appointees serve at the pleasure of the appointing Commissioner and except for the Medical Examiner and the directors (one each) of the Emergency Departments for Broward Health and Memorial Healthcare System, members must be residents of Broward County. (See Appendix iii. for the list of current council representation)

Trauma System Quality Improvement Committee (TSQIC): Advises the Manager of the Trauma Management Agency and Broward Regional Emergency Medical Services (EMS) Council on matters associated with the monitoring and evaluation of the trauma network's medical performance. Specific responsibilities of the TSQIC include:

- Quality assurance of the Broward County trauma system
- Quality improvement of trauma care given in the Broward County trauma system
- Review of all trauma related mortality and morbity in Broward County
- Collaborate on injury prevention, research, community education, and outreach
- Review and analyze the data provided by the BCTMA and Broward Sheriff's Office to make recommendations regarding the uniform trauma transport protocols, Trauma Plan, air rescue, and whole blood program
- Provide recommendations on trauma system management and planning
- Provide recommendations to the EMS Council regarding matters that require Commisson approval related to the trauma system in Broward County

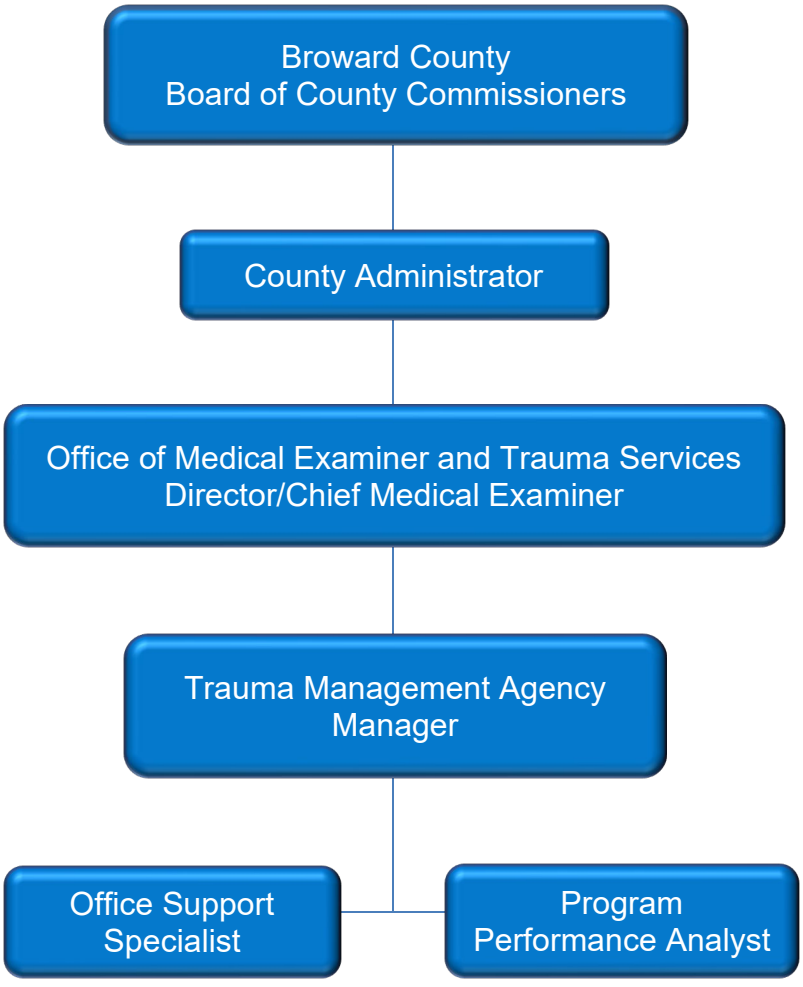
The TSQIC is comprised of the following:

- Fire Chiefs' Association of Broward County members
- Fire Chiefs' Association of Broward County, EMS Subcommittee members
- Trauma Center's Medical Directors, Trauma Surgeons, Trauma Program Managers, hospital and program administrative staff
- Broward Regional EMS Council members
- Acute Care Emergency Department Medical Directors
- Office of Medical Examiner and Trauma Services
- Broward County healthcare partners

Quality Improvement Committee: Individual Quality Improvement Committees, representing members of the Trauma Network, report to the Trauma System Quality Improvement Committee as part of the oversight and monitoring of care function: Pre-hospital Trauma CQI, Memorial Regional Hospital Trauma CQI, Broward Health Medical Center CQI, and the Broward Health North CQI.

Broward Regional Health Planning Council, Inc. (BRHPC): Broward Regional Health Planning Council served as a catalyst for the initiation of the trauma planning activities and continues to provide services through its contract with OMETS. These services include planning, evaluation of specific system components, representative serving on the EMS Council and, assistance with preparation of both the Annual and 5 Year Trauma Management Plans and any other support services deemed necessary by the Trauma Agency. (See appendix for list of BRHPC members)

Trauma Management Agency Staffing: Although the organizational structure of the BCTMA is limited, additional resources are available through the staff of the Office of Medical Examiner and Trauma Services for items such as administrative support, medical direction from staff pathologists, public information, and education. Injury Prevention activities are provided with assistance from system participants and the Broward Regional EMS Council.



The Trauma Management Agency operates within the Office of Medical Examiner and Trauma Services. Noted below are the positions assigned to provide ongoing management of the Local Trauma Network. These include:

Medical Director: The Medical Director is responsible for ensuring that medical care provided in all phases of the trauma network meets with established standards. This position has the responsibility of evaluating and providing medical direction for the system and serving as liaison between the BCTMA Manager and the medical community. This role is provided by the Chief Medical Examiner/designee.

Manager: This is a professional level managerial position responsible for the implementation and operation of the Broward County Trauma Network. The Manager serves as a liaison between the Broward County EMS Council, the Broward Regional Health Planning Council, the Trauma System Quality Improvement Committee, and the Department of Health, Bureau of Emergency Medical Oversight, Trauma Program. This position supervises the Trauma Agency staff, coordinates the day-to-day activities of the evolving Trauma Network, and maintains its relationship with other emergency medical services. The Manager is responsible for monitoring and evaluating the Network's performance, in accordance with accepted standards of care. The Trauma Agency Manager reports directly to the Director of the Office of Medical Examiner and Trauma Services.

Program Performance Analyst: This position is designed to assist in the medical direction of the system by monitoring and evaluating system-generated data against Agency standards and criteria, as determined by the Medical Director and State law. The Analyst is responsible for data collection activities of the system.

Office Support Specialist: This position is designed to provide clerical support which involves maintaining records, correspondence, and minutes of the Quality Improvement meetings. This support is provided by an administrative position that also provides secretarial support to the Broward Regional EMS Council and the Office of Medical Examiner and Trauma Services.

Sensitive to public concern about the quality of trauma care, the Broward County Board of County Commissioners is committed to maintaining an effective and efficient Trauma Network in our region.

As an example of this commitment, the Trauma Management Agency provides a mechanism to ensure optimal Trauma Network participant performance. It assists members of the Quality Improvement Committee to review selected cases, coordinates with the committee and healthcare stakeholders to monitor and update system standards through the implementation of the Broward County Trauma Plan, and assists members of the Trauma Network in the ongoing development and implementation of system standards for the care and transport of trauma victims.

4. Trauma System Structure

4. TRAUMA SYSTEM STRUCTURE

DESCRIPTION

The Broward County Trauma System is designed to handle the needs of the critically injured patient in all phases of care: from the scene of an accident through hospitalization and rehabilitation. Uniform Trauma Transport Protocols have been collectively developed and adopted by all involved agencies in Broward County. As a living document, these protocols are reviewed and updated bi-annually or as deemed necessary. With ever changing medical breakthroughs on the care and transport of the trauma patient, a "position paper" (regarding enhanced treatment/transport) can also be rapidly formulated and provided to the medical community to initiate the new treatment/transport protocol without the need to wait for the bi-annual review.

TRAUMA SYSTEM COMPONENTS

Comparative studies from communities throughout the nation have shown that successful trauma systems are based on four major components: 1) good pre-hospital care; 2) the capability of local hospitals to treat injured patients and trauma centers to treat severely injured patients; 3) a sound organizational structure that provides strong leadership; and 4) adequate financial support.

The establishment of a trauma network in Broward County has served to coordinate and enhance the existing EMS system response and the implementation of the Trauma Plan has resulted in:

- The development of standardized protocols for the triage and transport of trauma patients
- The adoption of a system-wide quality assurance mechanism that better integrates the pre-hospital phase of patient care into the overall trauma system structure
- Expanded use of helicopter service for the transport of major trauma patients
- Improved communications among providers of trauma care

1. **Pre-hospital Care**
   At present, a network of public and private services provides a high level of pre-hospital care to the citizens of Broward County.

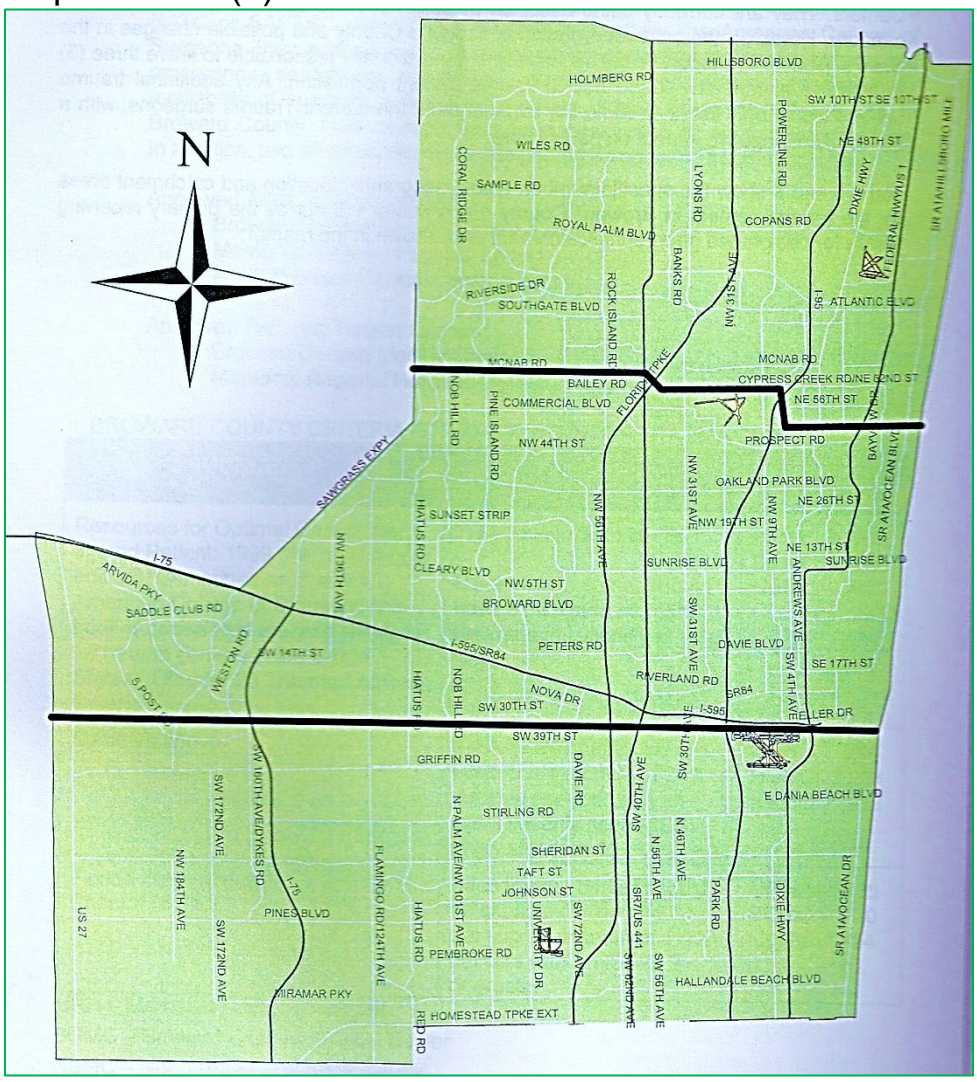
   Two (2) Freestanding Emergency Departments (FSEDs) are currently serving Broward County. These FSEDs offer everything that is available at emergency departments that are physically connected to hospital complexes and are located only a few miles from their affiliated medical centers.

2. **In-Hospital Care Capabilities**
   Sixteen (16) acute care hospitals offer emergency department services in Broward County. During 2020, local facilities reported that 776,552 patients visited their emergency departments. Of these, 133,183 persons were admitted to the hospital.

In 1993, three (3) Broward hospitals were designated by DOH, Trauma Program, as verified Trauma Centers, allowing each to treat trauma patients. Two (2) of these facilities also received designation as Verified Pediatric Trauma Centers, thereby authorizing them to treat pediatric trauma patients.

These designated trauma centers receive patients triaged at the scene of the injury using Broward County's Uniform Trauma Treatment and Transport protocols. Transport to the appropriate Trauma Center is determined by established catchment areas originally designed by a team of pre-hospital personnel, EMS Medical Directors, and the County. These transport catchment areas are reviewed to ensure they reflect the ongoing population shifts within each area. (*See Maps 6 and 7 for the adult and pediatric trauma catchment areas).*

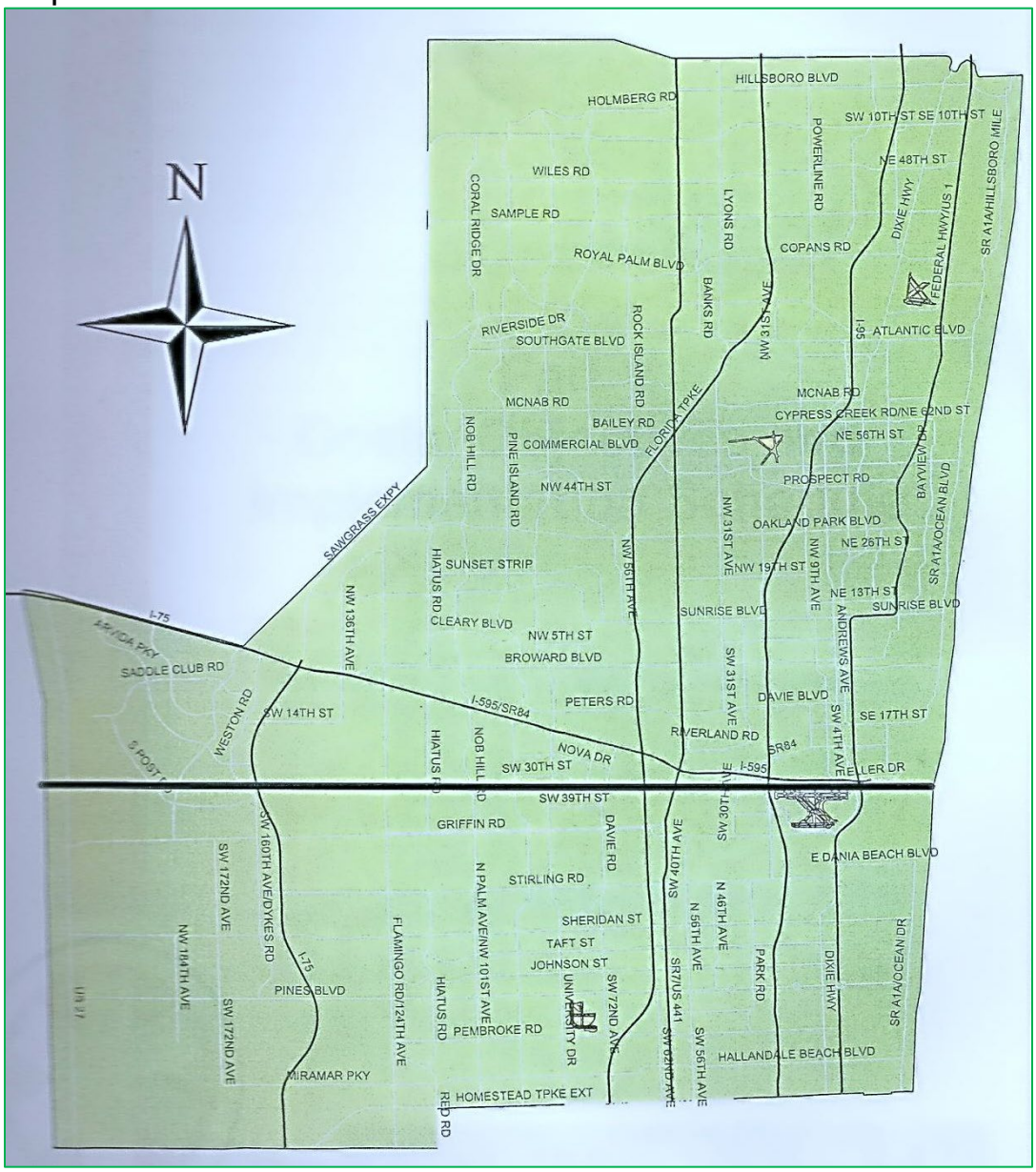
Map 6. Three (3) Adult Trauma Catchment Areas



Adult Catchment Areas Include:

1. Broward Health North – 201 East Sample Road, Deerfield Beach
2. Broward Health Medical Center – 1600 S. Andrews Avenue, Fort Lauderdale
3. Memorial Regional Hospital – 3501 Johnson Street, Hollywood

Map 7. Two Pediatric Trauma Catchment Areas



Pediatric Catchment Areas Include:

1. Broward Health Medical Center – 1600 S. Andrews Avenue, Ft. Lauderdale
2. Memorial Regional Hospital – 3501 Johnson Street, Hollywood

Broward County's trauma network, using state of the art triage and transport protocols, allows pre-hospital providers to bypass a "closer" hospital in favor of transporting directly to one of the County's Trauma Centers. Major trauma patients are transported to Trauma Centers, while less seriously injured patients are transported to community hospitals that meet the needs of that particular patient.

The standards for Trauma Center designation were established by the State of Florida, Department of Health. These standards are routinely reviewed to assure the public that the most comprehensive trauma care will be provided by those hospitals that are designated a “Trauma Center.”

The establishment of three trauma centers, all serving adults and two (2) serving pediatrics was determined to be the correct complement for the County’s needs at the time the system was initiated. Review of the system still clearly identifies this number of facilities as a "best practice" level of care and coverage for comprehensive trauma care in Broward County.

Since the implementation of the Broward County Trauma System, trauma patients have benefitted from timely and appropriate treatment. In addition, the Trauma Centers have attracted and retained qualified experts in trauma care and sharpened the skills of the entire trauma team. Implementation of the trauma network has significantly upgraded the level of tertiary services available in Broward County.

3. Management and Organization

The success of a regional trauma network ultimately depends on whether the various elements of the system are able to function in an integrated and unified manner.

EMS systems and hospitals in Broward County are independently managed and operated. Direct oversight for their management is the responsibility of the respective entity. However, system integration comes together in a number of ways, as discussed throughout this Plan.

The creation of the Broward Regional Emergency Medical Services (EMS) Council in 1981 provided a forum for representatives from all of the County’s EMS providers to come together and develop cooperative arrangements to continually update and improve the system.

As a result of this cooperation, changes have been implemented which have resulted in a more integrated and coordinated approach to patient care, treatment, and transport. Among these are:

- Use of a common source of training - Broward College, in cooperation with several area hospitals, serves as the primary training institution for paramedics and emergency medical technicians
- Development and implementation of local trauma triage, treatment, and transport protocols
- Shared trauma registry for BCTMA use to receive and analyze trauma data
- Collaborative community outreach and education
- Adoption of Countywide mutual aid agreements for EMS providers - Inter-local agreements permit pre-hospital providers to respond to a call outside of their primary response zone in the event of a disaster or if the adjacent area is left without adequate emergency response capability.

Over the years, individual providers have recognized the value of working together and have developed a relationship that allows them to function as a system. This sense of cooperation continues to be evident in their positive response to the need for enhanced regional trauma care.

Representatives from all components of the local EMS system, including pre-hospital providers, hospital administrators, physicians, County government officials, municipalities, and consumers have been actively involved in the development of Broward's Trauma Plan.

BCTMA provides the leadership to allow the Trauma System to continue development in a comprehensive, coordinated fashion. It functions as the important link between pre-hospital care systems, Trauma Centers, acute care hospitals, and rehabilitative programs. In order to ensure appropriate input from all levels of care, the BCTMA has the Trauma System Quality Improvement Committee which makes recommendations to develop system policies and procedures, as well as evaluates the quality of regional trauma care. This committee informs the Broward Regional EMS Council and the Council is also used to give recommendations regarding EMS, which includes trauma, to the Broward County Board of County Commissioners. Additionally, The BCTMA is also represented, reports out to, and receives feedback from the following groups:

- Fire Chiefs' Association of Broward County
- Fire Chiefs' Association of Broward County, EMS Subcommittee
- Fire Chiefs' Association of Broward County, Mutual Aid Subcommittee
- Broward County Healthcare Coalition
- Broward County Emergency Coordinating Council
- All Trauma Center Quality Improvement Committees

The Trauma Management Agency provides the Trauma Network System participants with a centralized base for data collection, assimilation and analysis, as well as the dissemination of public awareness information concerning trauma and safety issues.

4. **Financial Support**
   An integral component of any organizational structure is the availability of ongoing, dedicated funding for its operations. Designated funding for the Local Trauma System Network is outlined in Section VII – Budgetary Information and Fiscal Impact.

PARTICIPATION

Currently, all acute care hospitals and pre-hospital providers participate in the Broward County Trauma Network System. (See Table 7 on page 26)

COORDINATION

The Trauma Management Agency serves as the lead coordinating and managing entity, facilitating the operation of the local trauma network. Trauma Centers, and other network participants, serve their own independent role in other service delivery models such as the provision of basic life support transportation and in the implementation of disaster and mass casualty strategies. In this regard, BCTMA coordinates with the Broward County Emergency Management Division to develop procedures for treating the trauma patient in times of disaster.

TRAUMA CENTERS - TYPES AND LOCATIONS

The State of Florida has established stringent guidelines for designation as a State Verified Level I, Level II, or Pediatric Trauma Center. Based on guidelines outlined by the American College of Surgeons, the State addresses issues such as: facility commitment, trauma service and emergency department capabilities, equipment and staffing requirements, availability of specialty and support services, and quality assessment plans. As noted in *Table 9*, within Broward County, three facilities have been designated as adult trauma facilities with two facilities designated as pediatric trauma facilities.

Table 9. State Verified Trauma Centers

Adult Trauma Centers
Broward Health Medical Center, Level I
Memorial Regional Hospital, Level I
Broward Health North, Level II
Pediatric Trauma Centers
Broward Health Medical Center
Memorial Regional Hospital

Designated Trauma Centers

Level I: Facilities verified as Level I Trauma Centers must be in compliance with Florida Statute Chapter 395, Hospital Licensing and Regulation (see Appendix v). These facilities must also meet all standards as published in Department of Health Pamphlet (DHP) 150-9, January 2010 Trauma Center Standards, which is incorporated by reference, Rule 64J-2.011 Florida Administrative Code (F.A.C.), and available from the Department as defined by Subsection 64J-2.001(4), F.A.C.

Level II: Facilities verified as Level II Trauma Centers must be in compliance with Florida Statute Chapter 395, Hospital Licensing and Regulation (see Appendix vi). These facilities must also meet all standards as published in DHP 150-9, January 2010 Trauma Center Standards, which is incorporated by reference, Rule 64J-2.011 F.A.C., and available from the Department as defined by Subsection 64J-2.001(4), F.A.C. and available from the Department as defined by Subsection 64J-2.001(4) F.A.C.

It should be noted that stringent criteria is in place to ensure that the level and number of trauma centers meets or exceeds the needs of Broward's residents and visitors. The Broward County Criteria for Allocation of Trauma Centers is reflected in Table 10. The needs of the community are evaluated biennially, using injury severity data collected from the three current trauma centers, so the community can be assured that adequate trauma care is available as needed.

Based upon the criterion identified in Table 10, it has been determined that Broward County requires the availability of three (3) Trauma Centers. These designated Trauma Centers are located in the North, Central, and South portions of the County. At this time, the addition of Trauma Centers would only serve to dilute the experience of the current Trauma surgeons and respective staff, resulting in a possible negative impact on patient care.

Table 10. Broward County Criteria for Allocation of Trauma Center

SOURCE	STANDARD	2021 STATISTICS
Resources for Optimal Care of the Injured Patient 2022: Committee on Trauma, American College of Surgeons, Chapter 2, Program Scope and Governance	A Level I trauma center must admit at least 1,200 trauma patients yearly; or	MRH: 2,711 BHMC: 2,238
Same as above	240 admissions with an Injury Severity Score (ISS) of more than 15	MRH: 376 BHMC: 379
Florida State Statutes Chapter 395.402(1)	Level I and Level II trauma centers shall each be capable of annually treating a minimum of 1,000 and 500 patients, respectively, with an ISS of 9 or greater. Level II trauma centers in counties with a population of more than 500,000 shall have the capacity to care for 1,000 patients per year.	Level I: MRH: 1,307 BHMC: 1,214 Level II: BHN: 2,001

MRH – Memorial Regional
BHMC - Broward Health Medical Center
BHN -Broward Health North

5. Goals, Objectives & System Review

5. GOALS, OBJECTIVES & SYSTEM REVIEW

Each medical emergency incident requires specific and appropriate medical care. In the most severe cases, death will certainly occur if no definitive care is provided within specific time constraints. In trauma, mortality may be forestalled by early and sustained resuscitation. However, corrective surgery and intensive care management is the definitive, lifesaving factor.

To this end, the Trauma System must be accountable to the public it serves by ensuring that:

1. Medical care provided in all phases: pre-hospital, hospital, critical care, and rehabilitation meets established standards
2. The patient outcomes are the result of severity of injury, not system failure
3. Each patient reaches definitive and appropriate care in the shortest possible time
4. The system is medically monitored and a physician is ultimately responsible
5. The system design is medically sound
6. Patient triage and the protocols under which all providers operate are medically determined
7. All medical personnel involved in care of the critically injured are competent and obtain continuing education to maintain competencies

Broward County's Trauma System was first implemented in 1993. In addition to informal ongoing review, its goals and objectives are reviewed bi-annually and system updates are implemented, as necessary, to meet the ever-changing community needs and medical advancements.

6. Trauma System Budgetary Information and Fiscal Impact

6. TRAUMA SYSTEM BUDGETARY INFORMATION AND FISCAL IMPACT

FINANCING OF THE TRAUMA SYSTEM IN BROWARD COUNTY

The purpose of this section is to outline the financial arrangement for the funding of the Trauma System in Broward County.

FUNDING FOR SYSTEM COMPONENTS

A complete Trauma System consists of several components. Those components and the respective funding sources are outlined below.

Pre-hospital EMS Providers
A critical element of the Trauma System is rapid transportation of the victim to the appropriate Trauma Center. In Broward County, nineteen (19) Advanced Life Support agencies provide patient transportation. Funding to support these providers is via the respective operational agencies.

Helicopter Services
Helicopter service is a requirement for effective Trauma Systems. Helicopters have access to hard to reach locations throughout the county (especially during peak traffic periods). Broward Sheriff's Office (BSO) Fire Rescue is currently the only emergency response helicopter service in Broward County. BSO's Air Rescue Unit operates two Aviation Helicopter Units (Air Rescue 85) assigned to handle emergencies involving traumatic and medical rescue cases. Air Rescue unit team members are trained and equipped to respond, manage, and transport patients suffering from incidents involving, but not limited to, vehicle accidents, fall injuries, burns, penetrating trauma, cardiac and cerebral crisis. In addition, Air 85 facilitates interfacility transports from hospital to hospital upon request.
Both EMS helicopters are housed in a central geographic location at Pompano Beach Airpark. Air Rescue responds upon request 24 hours a day, and seven days a week. The Aviation Unit is part of the Special Operations Command and assigned to the 37th Battalion. Staffing includes one pilot and two flight medics (an officer and a flight medic).The utilization of helicopters also assists in ensuring that emergency medical response times are within acceptable limits for trauma patients. Helicopter transport is indicated whenever the ground transport time is expected to exceed twenty (20) minutes. The two hospital taxing districts, Broward Health and Memorial Healthcare System, contribute to the funding of this necessary service.

Hospitals
The successful operation of a Trauma Center depends on several factors:

- ✓ The availability of specialized surgeons
- ✓ A full complement of medical specialists to assist the surgeons
- ✓ Nursing personnel and other support staff with appropriate training
- ✓ Specialized supplies and equipment for patients with traumatic injuries

Major capital costs are associated with preparing and maintaining a facility to serve as a Trauma Center. Designated operating rooms and intensive care units, which must be maintained and available for use at a moment's notice in order to meet State recognized Trauma Center standards, are examples of these capital expenses.

In Broward County, both the Adult and Pediatric Trauma Centers are operated by the two local hospital taxing districts, North Broward Hospital District (Broward Health) and the South Broward Hospital District (Memorial Healthcare System). Some costs are recouped through other means, such as: patient fees, taxes, state grants, and traffic light revenues.

Trauma Management Agency

The Trauma Management Agency (BCTMA) is responsible for the coordination, monitoring, and regulation of the trauma system network, including the review and approval of ambulance contracts. The BCTMA functions within the Office of Medical Examiner and Trauma Services and is funded by general revenue funds of the Broward County Board of County Commissioners. Funding for the BCTMA does not directly influence costs related to providing trauma patient care nor does the BCTMA receive any reimbursement from the two (2) hospital taxing districts.

In addition to their duties as part of the County's Trauma Network, all BCTMA personnel have additional responsibilities related to the administration and day-to-day operations of the Office of Medical Examiner and Trauma Services.

7. Transportation System Design

GROUND TRANSPORTATION

Broward County is served by nineteen (19) Advanced Life Support (ALS) emergency providers and four (4) private ambulance providers with ALS transfer capabilities. Inter-local agreements allow units to cross municipal boundaries in response to a request for mutual aid. These agreements ensure that back-up coverage will be available in mass casualty situations, if an area is without adequate coverage, or response time is significantly delayed.

AIR TRANSPORTATION

There are numerous areas within Broward County where air transportation would expedite the transport of injured patients to an appropriate medical facility. The Broward Sheriff's Office, Department of Fire Rescue (BSODFR) provides on scene pre-hospital air transportation within Broward County. The Air Rescue Unit operates two Aviation Helicopter Units (Air Rescue 85) assigned to handle emergencies involving traumatic and medical rescue cases. Air Rescue unit team members are trained and equipped to respond, manage, and transport patients suffering from incidents involving, but not limited to, vehicle accidents, fall injuries, burns, penetrating trauma, cardiac and cerebral crisis. In addition, Air 85 facilitates interfacility transports from hospital to hospital upon request.

Both EMS helicopters are housed in a central geographic location at Pompano Beach Airpark. Air Rescue responds upon request 24 hours a day, and seven days a week. The Aviation Unit is part of the Special Operations Command and assigned to the 37th Battalion. Staffing includes one pilot and 2 flight medics (an officer and a flight medic).

Continuing educational training is organized and coordinated by the Training Division Chief, shift officers and Medical Directors. Personnel are recertified on an annual basis for FAA part 135 by the Director of Operations of the Aviation Unit. Memorial Regional Hospital is offering ongoing training for the BSODFR in their simulation lab, conducted by the hospital and their training staff. This training has proved to be a valuable resource in building relationships and skills needed for the Air Rescue Unit. The BSODFR Air Rescue Unit provides annual training to the three trauma center hospitals and to various cities that utilize the helicopter. This training ensures the safety of all persons that may come in contact with the helicopter.

The decision to transport trauma patients by helicopter is based on Broward County's Unified Trauma Transport Protocols. Trauma Alert patients in which ground transports may exceed 20 minutes and Level II patients in which ground transports may exceed 30 minutes require air transportation.

Due to Broward County's geographic configuration and growing population, pre-hospital providers must cope with increasing traffic congestion. The County also has many remote areas, making air transport the most appropriate means of transportation for injured patients requiring transport from these areas.

WATER TRANSPORTATION

If an accident occurs on the water, rescue units may be sent from the U.S. Coast Guard, Florida Marine Patrol, Broward Sheriff's Office, or local municipal departments. These units provide basic care and transport to land, where the patients are transferred to an appropriate unit for continued transport to the designated Trauma Center.

The United States Coast Guard Station Fort Lauderdale was commissioned in 1975. The Station carries out its mission with two 45 foot Response Boat-Medium (RB-M) and two Special Purpose Craft-Law Enforcement (SPC-LE) boat types. Station Fort Lauderdale is host to two other commands, including an 87 foot patrol boat, the USCGC GANNET, and the Aids to Navigation Team Fort Lauderdale.

There are currently 60 active duty members attached to the Station, frequently augmented by 30 reservists and more than 200 volunteer members of the Coast Guard Auxiliary.

Coast Guard Station Fort Lauderdale works regularly with many partner agencies, including local police and fire rescue departments, Broward Sheriff's Office, environmental and wildlife organizations, and other federal law enforcement agencies.

The U.S. Coast Guard routinely patrols the Intracoastal Waterway while also responding to emergencies offshore. While there is no U.S. Coast Guard *air station* specifically for Broward County, there is always a unit on standby with the ability to get to an accident scene if necessary. For severe injuries, a helicopter with at least an emergency medical technician on board is sent to the scene. All Coast Guard rescue swimmers have basic EMT training

CATCHMENT AREA

Three (3) medical facilities in Broward County have been designated to treat adult trauma patients. Two (2) medical facilities are part of the North Broward Hospital District: Broward Health and North, Broward Health Medical Center. One (1) facility is located in the South Broward Hospital District: Memorial Regional Hospital. Two (2) medical facilities are designated for pediatric trauma patients, one in each taxing district: Broward Medical Center and Memorial Regional Hospital (Joe DiMaggio Children's Hospital)

Uniform Trauma Transport protocols have been implemented and reflect the current Trauma Center catchment areas. These protocols are reviewed and updated biennially or as needed to reflect advancements in medical procedures, population changes, and barriers to transport. The coordination of this review and implementation activity is the responsibility of the BCTMA.

8. Uniform Broward County Trauma Transport Protocol

I. COMMUNICATION (DISPATCH) CENTER PROCEDURE

A. All EMS systems utilize the E911-phone system in conjunction with Computer Aided Dispatch (CAD) and Emergency Medical Dispatch programs. The call taker confirms all emergency information, including address and callback data prior to the end of the telephone conversation; immediately transmits the emergency call request to the nearest available Fire-Rescue unit(s) for response; and provides all unit(s) with all available information concerning the incident.

B. Call taker personnel/dispatchers shall make every attempt to obtain the following information from the 911 caller:
   1. Nature of the emergency;
   2. Location of the incident;
   3. Call back number;
   4. Number of patients;
   5. Severity of the illness/injury;
   6. Name of the caller.

Broward County operates a consolidated communications system, encompassing all but three self-aispatched fire rescue agencies. Should on scene personnel recognize a need for other emergency agencies (e.g. law enforcement, fire, EMS, Coast Guard), they shall notify Dispatch immediately. On scene personnel must identify the type of additional equipment/staffing needed/required. The communications center shall contact the appropriate services (mutual aid/automatic aid).

II. ON SCENE PROCEDURE - Ground

A. Upon arrival at the scene, EMS personnel shall conduct a size up of the scene, to include, but not limited to, Trauma Alert Criteria (Section IV), safe entry, severity, and number of patients, the need for extrication, and the need for additional help. Dispatch and the nearest appropriate trauma center will be notified, as soon as possible, of "Trauma Alert" patient(s). Dispatchers shall immediately transfer this information, using the words "Trauma Alert" to the supervisor on duty.

B. EMS personnel shall transport patient(s) to the nearest appropriate trauma center (catchment area identified in the Broward County Trauma Plan). If the nearest appropriate Trauma Center is outside of the Trauma Agency's geographical boundaries, the Trauma Alert patient will be transported to the nearest appropriate facility.

C. EMS personnel shall submit the treatment data for each trauma patient to the trauma center as required in 64J-1.014, F.A.C. and their respective agency.

III. TRANSPORT PROCEDURE (Rescue Helicopter)

Three steps to follow when Broward Sheriff's Office, Dept. of Fire Rescue's (BSODFR) Helicopter is used for rapid transport of the trauma patient. ***The first two*** *are directed toward the safety of the helicopter pilot and crew, ground personnel, patient, and bystanders; and the* ***third*** *is to establish operational guidelines as to when and/or if the helicopter may be used to transport these patients.*

A. Severe weather at scene, helicopter hanger, landing zone (LZ), or Trauma Center reduces the use of the Rescue Helicopter.

B. Safety considerations for landing zone (if any of 4 below, use ground transport or **move** the landing zone):
   1. Power lines around landing zone;
   2. Trees, signs, poles, or other obstacles in immediate landing area;
   3. Pedestrians and large gatherings of civilians in the area;
   4. An expectation that the area may not remain safe.

C. Rescue helicopter may be used if:
   1. Transport driving time to the appropriate Trauma Center the patient is farther away than twenty (20) minutes;
   2. Ground transportation is not available and is not expected to be available within a reasonable time;
   3. The helicopter is needed to gain access to a patient for transport from an inaccessible area;
   4. Extrication time greater than fifteen (15) minutes.

D. Operational Guidelines by ground EMS crews for Rescue helicopter use:

1. Secure a TAC radio channel through the County's dispatch center and keep open until Helicopter has left scene.
2. Ground Crew **PRE-ALERT** Trauma Center.
3. Start County Unified Trauma Telemetry Report **(CUTT REPORT)** or respective agency's modified patient treatment form.
4. Airway - advise Air Crew on airway status and if airway assistance or **RSI** (Rapid Sequence Intubation) is required.

NOTE; (for pediatric patients only) *if using the landing* ***pad at Broward Health North Medical Center and*** *crew* ***feels that the patient requires immediate attention, advise helicopter crew that the patient will be seen by the Trauma Services physicians prior to transport to pediatric trauma center (BHMC or Memorial)***

5. Begin Packaging Patient (remove shoes and clothes from vital areas). Advise Air Crew of the weight of the patient.
6. Have a minimum of three (3) unobstructed lanes of traffic for roadway landings whenever possible.
7. Pilot may require traffic stopped in both directions.
8. Landing Zone units must remain at their post until helicopter has left the scene.
9. Headlights should be turned off at night.
10. Only clear landing zone upon direction of Air Rescue crew and law enforcement on scene.

IV TRAUMA ALERT CRITERIA

The following guidelines are to be used to establish the criteria for a "Trauma Alert" patient and determine which patient(s) will be transported to a trauma center. Any patient that meets any **one** of the **"RED"** criteria or any two **"BLUE"** criterion will be considered a trauma alert.

A. ADULT TRAUMA SCORECARD METHODOLOGY

1. Each EMS provider shall ensure that upon arrival at the location of an incident, EMS personnel shall:
   a. Assess the condition of each adult trauma patient using the adult trauma scorecard methodology, as provided in this section to determine whether the patient should be a trauma alert.
   b. In assessing the condition of each adult trauma patient, the EMS personnel shall evaluate the patient's status for each of the following components: airway, circulation, best motor response (i.e., Glasgow Coma Scale), cutaneous, long bone fracture, patient's age, and mechanism of injury. The patient's age and mechanism of injury (i.e., ejection from a vehicle or deformed steering wheel) shall only be assessment factors when used in conjunction with assessment criteria included in # 3 **(Level 2)** of this section (NOTE: Glasgow Coma Scale included for quick reference.)

2. EMS personnel shall assess all adult trauma patients using the following **"RED"** criteria in the order presented and if **any one** of the following conditions is identified, the patient shall be considered a trauma alert.

a. **AIRWAY:** Active ventilation assistance required due to injury(ies) causing ineffective or labored breathing beyond the administration of oxygen.

b. **CIRCULATION:** Patient lacks a radial pulse with a sustained heart rate greater than or equal to 120 beats per minute or has a blood pressure of less than 90mmHg systolic.

c. **LONGBONE FRACTURE:** Patient reveals signs or symptoms of two or more long bone fractures sites (humerus, radius/ulna, femur, or tibia/fibula).

d. **CUTANEOUS:** 2nd or 3rd degree burns to 15 percent or greater of the total body surface area; electrical burns (high voltage/direct lightning) regardless of surface area calculations; an amputation proximal to the wrist or ankle; any penetrating injury to the head, neck, or torso (excluding superficial wounds where the depth of the wound can be determined).

e. **BEST MOTOR RESPONSE (BMR):** Patient exhibits a score of 4 or less on the motor assessment component of the Glasgow Coma Scale; exhibits the presence of paralysis; suspicion of a spinal cord injury; or the loss of sensation.

f. **MISC.:**

- PARAMEDIC JUDGEMENT- If none of the conditions are identified using the criteria above during the assessment of the adult trauma patient, the paramedic can call a trauma alert if, in his or her judgment, the patient's condition warrants such action.
- GLASGOW COMA SCORE- 12 or less

3. Should the patient not be identified as a trauma alert using the "RED" criterion listed in #2 of this section, the trauma patient shall be further assessed using the "BLUE" criteria in this section and shall be considered a **trauma alert** patient when a condition is identified from **any two** of the seven components included in this section.

   a. **AIRWAY:** Respiratory rate of 30 or greater.
   b. **CIRCULATION:** Sustained heart rate of 120 beats per minute or greater.
   c. **LONGBONE FRACTURE:** Patient reveals signs or symptoms of a single long bone fracture resulting from a motor vehicle collision or a fall from an elevation of 10 feet or greater.
   d. **CUTANEOUS:** Soft tissue loss from either a major degloving injury; or major flap avulsion greater than 5 inches; or has sustained a gunshot wound to the extremities of the body.
   e. **BEST MOTOR RESPONSE (BMR):** BMR of 5 on the motor component of the Glasgow Coma Scale.
   f. **MECHANISM OF INJURY:** Patient has been ejected from a motor vehicle, (excluding any motorcycle, moped, all-terrain vehicle, bicycle or the open body of a pick-up truck), or the driver of the motor vehicle has impacted with the steering wheel causing steering wheel deformity.
   g. **AGE:** Anticoagulated Older Adult >55
   h. **MISC.:** Blunt Abdominal Injury

4. If the patient is not identified as a trauma alert after evaluation using the criteria in sections 2 or 3 above, the trauma patient will be evaluated using all elements of the Glasgow Coma Scale. If the score is **12 or less**, the patient shall be considered a trauma alert (excluding patients whose normal Glasgow Coma Scale Score is 12 or less, as established by medical history or pre-existing medical condition when known).

5. Where additional trauma alert criteria have been approved by the EMS service's medical director and approved for use in conjunction with Broward County Trauma Alert Criteria as the basis for calling a trauma alert shall be documented as required in section 64J-1.014, F.A.C. of the patient care record. Such local trauma assessment criteria can only be applied after the patient has been assessed as provided in sections #2, #3, and #4 above of the Adult Trauma Alert Criteria.

6. If paramedic judgment is used as the basis for calling a trauma alert, it shall be documented on all patient data records as required in section 64J-1.014, F.A.C.

7. The results of the patient assessment shall be recorded and reported on all patient data records in accordance with the requirements of section 64J-1.014, F.A.C.

Patients found to meet Trauma Alert criteria upon arrival or after arrival at a non-trauma center will be expeditiously transferred to the appropriate trauma center. (See Section V.)

B. PEDIATRIC TRAUMA SCORECARD METHODOLOGY

Pediatric patients are those persons age 15 or younger and will be transported to the nearest appropriate Pediatric Trauma Center.

1. EMS personnel shall assess all pediatric trauma patients using the following **"RED"** criteria and if **any** of the following conditions are identified, the patient shall be considered a pediatric trauma alert:
   a. **AIRWAY:** Active ventilation assistance required due to injury(ies) causing ineffective or labored breathing beyond the administration of oxygen.
   b. **CONSCIOUSNESS:** Patient exhibits an altered mental status that includes drowsiness; lethargy; inability to follow commands; unresponsiveness to voice or painful stimuli; or suspicion of a spinal cord injury with/without the presence of paralysis or loss of sensation (can include reliable history of loss of consciousness).

c. **CIRCULATION:** Faint or non-palpable carotid or femoral pulse or the patient has a systolic blood pressure of less than 50 mmHg.

d. **FRACTURE:** Evidence of an open long bone (humerus, radius/ulna, femur, or tibia/fibula) fracture or there are multiple fracture sites or multiple dislocations (except for isolated wrist or ankle fractures or dislocations).

e. **CUTANEOUS:** Major soft tissue disruption, including major degloving injury; or major flap avulsions; or 2nd or 3rd degree burns to 10 percent or more of the total body surface area; electrical burns (high voltage/direct lightning) regardless of surface area calculations; or amputation proximal to the wrist or ankle; or any penetrating injury to the head, neck or torso (excluding superficial wounds where the depth of the wound can be determined).

f. **PARAMEDIC JUDGEMENT:** If none of the conditions are identified using the criteria above during the assessment of the pediatric trauma patient, the paramedic can call a trauma alert if, in his or her judgment, the patient's condition warrants such action.

2. In addition to the criteria listed above in (1) of this section, a pediatric trauma alert shall be called when **"Blue"** criteria are identified from **any two** of the components included below:

a. **CONSCIOUSNESS:** Exhibits symptoms of amnesia, or there is loss of consciousness.

b. **CIRCULATION:** Carotid or femoral pulse is palpable, but the radial or pedal pulses are not palpable or the systolic blood pressure is less than 90 mmHg.

c. **FRACTURE:** Reveals signs or symptoms of a single closed long bone fracture. *Long bone fractures do not include isolated wrist or ankle fractures.*

d. **MISC.:** Blunt Abdominal Injury

e. **SIZE:** Pediatric trauma patients weighing 11 kilograms or less, or the body length is equivalent to this weight on a pediatric length and weight emergency tape (the equivalent of 33 inches in measurement or less).

3. In the event paramedic judgment is used as the basis for calling a **Trauma Alert**, it shall be documented as required in the 64J-1.014 F.A.C., on the patient care report and the County Unified Trauma Telemetry Report (CUTT), if used.

C. LEVEL 2 TRAUMA PATIENTS:(ADULTAND PEDIATRIC)

Persons who sustain injury with any of the following Mechanisms of Injury shall be classified as a Level 2 Trauma

1. Falls > 12 feet (adults); falls > 6 feet (pediatrics);
2. Extrication time > 15 minutes;
3. Rollover motor vehicle crash;
4. Burns involving the face, eyes, ears, hands, feet, or perineum that may result in functional or cosmetic impairment:
5. Death of occupant in the same passenger compartment;
6. Major intrusion into passenger compartment;
7. Separation from a bicycle;
8. Pedestrian struck by vehicles not meeting the preceding automatic criteria (i.e. adults < 15 mph and pediatrics < 5 mph);
9. Any height fall adult age >55 on anticoagulant/antiplatelet medication;
10. Paramedic judgment.

V. TRANSFER PROCEDURES FOR EMERGENCY INTER-HOSPITAL TRAUMA TRANSFERS

Any hospital in Broward County may transfer a patient meeting **"Trauma Alert"** criteria by:

A. Calling 911 and reporting **a Trauma Alert** in their Emergency Department. This call will automatically initiate a response from the local EMS rescue agency.

B. Calling the closest Trauma Center (adult vs. pediatric) and advising the trauma section of the Trauma Alert completes the initiation of the transfer. This call should be from the sending emergency department physician to the receiving trauma surgeon.

C. The Fire-Rescue/EMS Provider that is responsible for the area where the sending hospital is located, shall respond to the emergency department and transport the patient to the nearest trauma center as identified by the sending hospital.

D. At the start of the transport, the Fire Rescue/EMS Provider shall notify the receiving trauma center that the unit is enroute to their facility and provide the trauma center with an estimated time of arrival.

VI. GLASGOW COMA SCALE SCORING

The Glasgow Coma *Score (GCS) measures cognitive abilities. It is composed of three parameters, (eye, verbal, and motor responses) and uses numerical scoring to assist in the correlation of brain injury. Those scores are* as *follows:*

Adult GCS:

Best Eye Response:

1. No eye opening;
2. Eye opening to pain;
3. Eye opening to verbal command;
4. Eyes open spontaneously.

Best Verbal Response:

1. No verbal response;
2. Incomprehensible sounds;
3. Inappropriate words;
4. Confused;
5. Oriented.

Best Motor Response:

1. No motor response;
2. Extension to pain;
3. Flexion to pain;
4. Withdrawal from pain;
5. Localizing pain;
6. Obeys commands.

A GCS score is between **3** and **15, 3 being the worst and 15 the best.** A Coma score of 13 or higher correlates with a mild brain injury; 9 to 12 is a moderate injury, and 8 or less a severe brain injury. (Note a phrase "GCS of 11" is essentially meaningless, and it is important to break the figure down into its components, such as eye 3+ verbal 3 + motor 5 = GCS 11)

Pediatric GCS:

Eye Opening	<1 Year	>1 Year	
4	Spontaneously	Spontaneously	
3	To verbal command	To verbal command	
2	To pain	To pain	
1	No response	No response	
Motor Response	**<1 Year**	**>1 Year**	
6		Obeys	
5	Localizes pain	Localizes pain	
4	Flexion – normal	Flexion – withdrawal	
3	Flexion – abnormal (decorticate rigidity)	Flexion – abnormal (decorticate rigidity)	
2	Extension (decerebrate rigidity)	Extension (decerebrate rigidity)	
1	No response	No response	
Verbal Response	**0-23 Months**	**<2-5 Years**	**>5 Years**
5	Smiles, coos, cries appropriately	Appropriate words and phrases	Oriented and converses
4	Cries	Inappropriate words	Disoriented and converses
3	Inappropriate crying and/or screaming	Cries and/or screams	Inappropriate words
2	Grunts	Grunts	Incomprehensible
1	No response	No response	No response

*A GCS score is between **3** and **15**, **3 being the worst and 15 the best**. A Coma score of 13 or higher correlates with a mild brain injury; 9 to 12 is a moderate injury, and 8 or less a severe brain injury. (Note a phrase "GCS of 11" is essentially meaningless, and it is important to break the figure down into its components, such as eye 3 + verbal 3 + motor 5 = GCS 11)*

V. DESIGNATED FACILITIES

Trauma Alert patients will be transported to the nearest appropriate trauma center. If the nearest appropriate Trauma Center is outside of the Trauma Agency's geographical boundaries, the Trauma Alert patient will be transported to the nearest appropriate facility. Should this Trauma Center be temporarily unable to provide adequate trauma care, the patient will be transported to the next closest Trauma Center.

Listed below are the Trauma Centers located in Broward County:

Broward Health North Medical Center 201 E.
Sample Road
Deerfield Beach, Florida 33064

Broward Health Medical Center 1600
S. Andrews Avenue
Fort Lauderdale, Florida 33316

Memorial Regional Hospital 3501
Johnson Street
Hollywood, Florida 33021

Listed below are the Pediatric Trauma Centers located in Broward County:

Broward Health Medical Center 1600
S. Andrews Avenue
Fort Lauderdale, Florida 33316

Memorial Regional Hospital 3501
Johnson Street
Hollywood, Florida 33021

V. RUN REPORTS

The Fire Rescue/EMS provider issuing the **"Trauma Alert"** shall provide the trauma center (Adult or Pediatric) with information required under section 64J- 2.002(5), F.A.C., as well as ensuring the timely delivery of a copy of the Patient Care Run report. In addition, the EMS crew will complete the County Unified Trauma Telemetry (CUTT) Report for rapid transfer of patient information to Air Rescue and leave a copy of this report with the trauma center staff if utilized by respective EMS agency. (See attached.)

IX. TRANSPORT DEVIATION

- Any deviation from these Trauma Transport Protocols must be documented and justified on the patient-care incident report.

Pre-hospital providers covered under these Uniform Trauma Transport Protocols are:

American Medical Response	Broward Sheriff's Office Fire Rescue
Century Ambulance Service	Coral Springs Fire Rescue
Coconut Creek Fire Rescue	Davie Fire Rescue
Fort Lauderdale Fire Rescue	Hollywood Fire Rescue
Lauderhill Fire Rescue	Lighthouse Point Fire Rescue
Margate Fire Rescue	MCT Express d/b/a/ Tri-County Ambulance Service
Miramar Fire Rescue	National Health Transport
North Lauderdale Fire Rescue	Oakland Park Fire Rescue
Pembroke Pines Fire Rescue	Plantation Fire Rescue
Pompano Beach Fire Rescue	Seminole Tribe Fire Rescue
Sunrise Fire Rescue	Tamarac Fire Rescue

9. Medical Control and Accountability

9. MEDICAL CONTROL AND ACCOUNTABILITY

For a Trauma System to deliver the highest quality patient care, medical control and accountability are essential elements.

Medical control assures that all patient care will be under the supervision of a qualified physician. This authority extends throughout all phases of trauma care. Each local EMS service has a Medical Director to provide medical leadership. Their responsibilities include:

- Supervision and assumption of direct authority for the performance of the medical personnel operating within their agency
- Medical treatment advisement
- Training
- Quality assurance review

Medical control creates a mechanism where each provider is ultimately responsible to a medical director and, thus, accountable for their actions. This concept of accountability also extends to the services themselves.

At the pre-hospital level, medical control guides the performance of emergency medical personnel in the field. This may be accomplished directly (on-line) through voice communication, with instructions relayed via radio or telephone from local emergency department physicians; or indirectly (off-line), relying on standing medical procedures contained in accepted triage and transport protocols for trauma patients. Physician-approved training and quality assurance activities further guarantee the delivery of optimal patient care.

The American College of Emergency Physicians suggests that pre-hospital EMS agencies should be managed by physicians who meet the following criteria:

- Board certified in emergency medicine
- Familiar with the design and operation of pre-hospital EMS systems
- Experienced in pre-hospital emergency care of the acutely ill or injured patient
- Participate in radio control of pre-hospital emergency units
- Experienced in emergency department management of the acutely ill or injured patient
- Active participant in emergency department management of the acutely ill or injured patient
- Active involvement in the training of pre-hospital personnel
- Active involvement in the medical audit, review, and evaluation of pre-hospital personnel

- Participation in the administrative and legislative process affecting the regional and/or state pre-hospital EMS system

In order to ensure the availability of both on-line and off-line medical control in Broward County, the 19 ALS services have identified qualified Medical Directors through the Certificate of Public Convenience and Necessity (COPCN) process.

Although the Medical Directors for each system work independently, they engage in collaborative dialogue monthly. The Trauma Agency works with the Medical Directors, all pre-hospital service providers, emergency physicians, and trauma surgeons to develop and implement standardized triage and treatment protocols on a County-wide basis.

The Director of each hospital's emergency department is responsible for the medical management of that facility's emergency physicians. Hospitals with emergency rooms are as follows:

Broward Health Coral Springs
Broward Health Imperial Point
Broward Health Medical Center
Broward Health North
Cleveland Clinic Hospital
Florida Medical Center
HCA Florida Northwest Hospital
HCA Florida University Hospital
HCA Florida Westside Hospital
HCA Florida Woodmont Hospital
Holy Cross Health
Memorial Hospital Miramar
Memorial Hospital Pembroke
Memorial Hospital West
Memorial Regional Hospital
Memorial Regional Hospital South

Each hospital is currently responsible for performing its own quality assurance program, in accordance with the Joint Commission (formerly the Joint Commission on Accreditation of Healthcare Organizations) requirements. Trauma Center Verification Standards also require designated hospitals to conduct their own quality assurance audits of significant trauma cases.

The County's Office of Medical Examiner and Trauma Services (OMETS), Pathology Section, is responsible for performing autopsies on all trauma deaths. OMETS develops statistics on trauma mortality, which are available to the public and integrated into the data system.

10. Emergency Medical Services Communication

10. EMERGENCY MEDICAL SERVICES COMMUNICATION

It is the intention of Broward County Trauma Management Agency that Broward County's EMS communications system operates in full compliance with the State of Florida's Emergency Medical Services Communication Plan (EMSCP), Volume I (2015), and Volume II (2013).

The communications required for health and medical operations have always been pertinent to the success of emergency response in Broward County. Medical services rely heavily on the ability to receive, as well as deliver, lifesaving information between multiple agencies, hospitals, and EMS responders. An Emergency Medical Services (EMS) communications system must provide the means by which emergency medical resources can be accessed, mobilized, managed, and coordinated. This system must therefore employ sufficient communication paths and operational capabilities among all participants to facilitate functional communications.

Section 401.015. (Emergency Medical Services Telecommunications Act) http://www.leg.state.fl.us/Statutes/index.cfm?App_mode=Display_Statute&Search_String=&URL= 0300-0399/0381/Sections/0381.04015.html?App_mode=Display_Statute&Search_String=&URL=Ch0401/SEC015.HTM&Title=-%3e2007-%3eCh0401-%3eSection%20015 - 0401.015 and Section 395.1031 (Hospital Licensing Regulations), Florida Statutes, mandates a statewide plan for emergency medical telecommunications within the state. The purpose of the EMSCP is to establish and regulate EMS radio communications (voice or data) to licensed EMS agencies and hospital emergency departments.

EMS Communications Plan (EMSCP) is broken into two sections, each with specific information for use by hospitals, trauma centers, and emergency medical services. Those sections are:

- **Volume I** provides general administrative and regulatory information as well as compliance standards for radio communications equipment needed by the public safety organizations involved in EMS operations. This volume also outlines the basic concepts for local medical coordination communication systems within Broward County and throughout the State of Florida.

- **Volume II** was developed as an operational "field manual" to be carried as standard equipment on all permitted advanced or basic life support vehicles within the State. It lists contact information for Level I and II Trauma Centers and EMS ground and air transport services within Broward County, as well as, acute care designated hospitals, thus providing the data necessary to enable radio communications during transport of a trauma patient.

The communications plan states that in order for Trauma Centers and EMS resources to be accessed, mobilized, managed, and coordinated in both normal and adverse situations, Broward County's communications system must include the following components:

- Citizen Access
- Vehicle Dispatch and Response
- Medical Coordination

CITIZEN ACCESS

The communication system must have the ability to receive and process incoming requests that report emergencies and require emergency medical assistance.

Broward County has a single access E-911 (Enhanced 911) system that provides direct citizen access to police, fire, and EMS services. E-911 calls are received through primary PSAP's (Public Safety Answering Points).

During receipt of the call, the PSAP operator obtains the necessary information regarding the type of request and relays calls for EMS assistance to medical dispatchers at the appropriate responding agency, depending on local jurisdiction.

The enhanced system provides an automatic visual display of the caller's telephone (landline or cellular) number and the location from which the call is originating. Another innovation, "caller aid," provides a computer display of emergency medical instructions, which can be read to the caller to provide medical interventions that the caller might accomplish for the victim until EMS units arrive.

The Broward Communications System, comprised of five regional communication centers, also enables citizens who have unique communications barriers the ability to communicate their needs through specialized services, such as, TDD for deaf residents and translation services for persons who do not speak English.

VEHICLE DISPATCH AND RESPONSE

Broward County is organizationally complex with multi-jurisdictional responsibilities. EMS dispatch is operated by a number of distinct systems that operate independently. Broward Sheriff's Office Department of Fire Rescue provides EMS and fire dispatch to the majority of Broward's municipal providers.

In 2002 Broward County voters approved a charter amendment calling for coordination between Broward County and municipalities to establish a countywide communications infrastructure for fire and emergency medical services to enable closest unit response for life-threatening emergencies and support for regional specialty teams. Effective October 1, 2014, all Broward County cities, except Plantation and Coral Springs, are now part of Broward County's Regional Consolidated E911 Dispatch System.

The Broward County Commission has approved a $60 million upgrade to the police and fire radio communications system for Broward County to be implemented during 2018.

Private providers utilize their own communication systems. During the dispatch process, all of the dispatch centers have the capability and training to render medical assistance over the phone at the time of the call.

Dispatchers are able to route EMS vehicles to the scene of an emergency by using the vehicle communications' two-way radio channel assigned by the FCC. This two-way radio capability also allows

them to communicate with the responding vehicle enroute to the medical incident, at the scene, on the way to the hospital, and during the unit's return to availability.
Broward County operates on a Countywide 800 MHz trunked radio system. This technology utilizes a centralized computer to coordinate radio frequency assignments thus allowing a mobile unit to be automatically switched to a free channel. This reduces the need for units to override the communications of another unit or be unable to communicate their needs in a timely manner. Additionally, all ground and air EMS units have hospital communications using the statewide medical channels as well as local medical resource channels which are a direct link into area hospitals and Trauma Centers.

MEDICAL COORDINATION

All EMS vehicles in Broward County communicate with local hospitals via the medical communications (MEDCOM) channels. In this way, the EMS units on the scene may exchange treatment information with the medical control physician or other emergency department staff or alert the receiving facility that a trauma patient is on the way. Additionally, the EMS units have the ability to use the statewide medical channels as well as local medical resource channels, which directly link into area hospitals and Trauma Centers. *(State of Florida's Emergency Medical Services Communication Plan (EMSCP), Volume I (2015), and Volume II (2013) for further information and frequency listings)*

If any traumatically injured patient meets the Trauma Scorecard Methodology criteria (Chapter 64J, Florida Administrative Code), the on-scene EMS unit issues a Trauma Alert to the receiving hospital.

Of the medical resource channels, MED-8 is available for local medical coordination during a large scale casualty event, but is reserved for state-wide medical coordination. MED-8 serves as the Medical Resource Coordination Channel allowing hospitals and EMS providers to communicate directly in a disaster or mass casualty situation. Additionally, this frequency allows paramedics and emergency department personnel to communicate even if a vehicle travels outside the County or is unable to access its local channels.

The MEDCOM system possesses telemetry capability allowing paramedics to transmit data relating to a patient's biological functions from the incident to a trauma surgeon or emergency department physician.

If the responding units determine that they require assistance from other agencies or need to contact specialty treatment centers, they advise their medical dispatcher via radio. The dispatch center then makes the appropriate contact via telephone.

Broward County has a comprehensive emergency medical communications system that meets the requirements of the State of Florida's Communication Plan. This includes: in-service training for all communications personnel, analysis of the need for additional equipment, integration of the communication components into evaluation activities, procedures for alerting Trauma Center(s), and procedures for communicating with the trauma team staff.

11. Data Collection

1. DATA COLLECTION

Historically, statistical data reflecting the status of emergency trauma care in the State of Florida was not collected with a uniform approach. Patient records were maintained by each agency or service and no standardized reporting format existed among the various providers.

As the importance of coordinated and uniform collection of data became more relevant to presenting a reliable statistical picture of the incidence of trauma related injuries, patient flow patterns, or the effectiveness of existing trauma system(s) for both planning and funding, EMS providers throughout the state developed and implemented a system to integrate this important data amongst healthcare providers. With the implementation of integrated data it is now possible to track trauma patients through the system and document treatment outcomes.

Additionally, as victims of blunt, penetrating injury, or burns must be included in the Trauma/Head-Injury, Spinal Cord-Injury Registry, this data is being combined with the EMS data collected, resulting in the availability of valuable reports on the efficacy of trauma care throughout the County.

DATA SYSTEM

The Florida Trauma Registry collects patient data from the state's verified and provisional trauma centers, as authorized by Section 395.404(1), *Florida Statutes*. To be a state verified trauma center, the facility must maintain a comprehensive database of all injured patients treated in the hospital as a result of a traumatic injury. The trauma registry supports the trauma centers' required activities, including performance improvement, outcome research, and resource utilization, as well as providing the state public health system with the necessary data for statewide planning and injury prevention initiatives.

Next Generation Trauma Registry and Data Collection

The reporting requirements for trauma centers are listed in *The Florida Trauma Registry Manual, Data Dictionary, 2017 Edition.* The current registry manual is compliant with the National Trauma Data Bank® and the Trauma Quality Improvement Program (TQIP).

Data collected from the Florida trauma centers is submitted through the Next Generation Trauma Registry (NGTR). The NGTR can be accessed after appropriate credentialing has occurred at www.fltraumaregistry.com.

Acute Care Hospital Participation

Beginning in 2015, all acute care hospitals have been required to submit data to the registry for trauma cases that are treated within their facility. The Next Generation Trauma Registry allows for acute care hospitals to enter the required information directly or to upload the raw data through the web application. Patients discharged on or after January 1, 2016 fall under the reporting requirements of the *Florida Acute Care Trauma Registry Manual, Data Dictionary, 2016 Edition.*

Following to be added based upon new #'s for 2016 or latest year information is available. Illustrated in Table 11 are the Trauma Alerts received by the Designated Trauma Centers for both adult and pediatric trauma cases for the period 2012 through 2016.

Table 11 illustrates the number of **Trauma Alerts by Category for Broward County 2017-2021.**

Table 11. Broward County Trauma (Level I & II) Alerts, 2017-2021

Trauma Center	2017	2018	2019	2020	2021	Total
Broward Health Medical Center	2,266	2,566	2,543	2,272	2,721	12,368
Broward Health North	1,247	1,231	1,321	1,449	1,269	6,517
Memorial Regional Hospital	1,629	1,610	2,032	1,913	2,407	9,591
Totals	5,142	5,407	5,896	5,634	6,397	

The following Table 12 illustrates the number of Trauma Injuries by Category for Broward County by year.

Table 12. Broward County Trauma Injuries by Category, 2017-2021

Year	2017	2018	2019	2020	2021	% change over 5 years
Blunt Trauma Totals	6,731	6,987	7,782	7,132	8,369	24.3%
Bicycle	280	268	301	287	306	9.3%
Fall	3,453	3,726	4,335	3,886	4,508	30.6%
Motorcycle Crash	485	537	473	437	581	19.8%
Motor Vehicle Crash	1,483	1,419	1,567	1,589	1,914	29.1%
Pedestrian	412	402	393	325	414	0.5%
Other Blunt	618	635	713	608	646	4.5%
Penetrating Trauma Totals	660	598	700	830	876	32.7%
Gunshot Wound	303	281	333	466	486	60.4%
Stab Wound	213	169	181	173	188	-11.7%
Other Penetrating	144	148	186	191	202	40.3%
Burn Trauma Totals	99	92	91	83	90	-9.1%

12. Trauma System Evaluation and Quality Improvement

12. TRAUMA SYSTEM EVALUATION AND QUALITY IMPROVEMENT

Trauma system evaluation, the process for assessing the effectiveness of all system components is essential. Its purpose is to monitor the delivery of services, determine whether regionalization of trauma care is effective in reducing death and disability, and identify areas where improvement can be made.

The regional evaluation program provides an integrated perspective on how system components function as a whole. It offers a unique forum for experts from all levels of care to exchange ideas and evaluate strategies.

The role of the Trauma Agency is to:

1. Evaluate the quality of medical care within Broward County's Trauma System to include:
   a. Medical audit of patient records (hospital, pre-hospitalization, and EMS transport including inter-hospital transfers)
   b. Identification of problem areas
   c. Propose corrective actions

2. Study the epidemiology of trauma within the community

3. Measure the impact of regionalized trauma care on patient outcomes

4. Identify trends and educational needs

5. Monitor system compliance with State and County standards through:
   a. Trauma transport protocols
   b. Trauma scorecard methodology
   c. Registry reporting requirements

6. Refer to State EMS Office any providers who are non-compliant with submission of data if they do not respond to requests for submission

Individual and systematic approaches are utilized to evaluate the quality of medical care provided within the system, as well, as the availability and use of resources.

INDIVIDUAL MEDICAL AUDIT

Evaluation of treatment rendered begins with a thorough review of individual patient records. All pre-hospital EMS providers and hospitals routinely conduct medical audits as part of their internal quality assurance activities. Each agency or facility determines which cases are selected for review, using treatment and transport audit filters to identify patients who fail to meet specified quality limits.

To maintain a "Trauma Center Verification," certain standards are required for quality assurance activities, utilizing a specified list of audit filters. Designated facilities must review all trauma deaths and conduct regular morbidity and mortality conferences using "peer review" methods during open discussion of each case.

Under the auspices of the Trauma System Quality Improvement Committee (TSQIC), the Trauma Management Agency's (TMA) medical audit uses a combination of pre-hospital and Trauma Center audit filters for case review. The TMA reviews accidental deaths occurring in non-trauma hospitals using parameters to identify whether the patient required treatment at a Trauma Center. If the case should have been handled as a Trauma Alert, all parties involved with the care of the patient are advised that the patient should have been transported for treatment to the nearest Trauma Center. The TMA works with the agencies (pre-hospital and hospital) to ensure that all have a clear understanding of the guidelines of the trauma system and the criteria utilized to designate a case as a Trauma Alert within Broward County.

SYSTEM EVALUATION

Quality Management Review

System-wide evaluation involves the accumulation of data from many patients such as: type and severity of injuries, mortality rates, patient triage, specific care rendered, etc. Compilation and evaluation of group statistics help to determine whether the trauma system as a whole is meeting its stated objectives.

Evaluation of trauma care requires a systematic quantitative approach to offset concerns associated with self-review. In order to understand the epidemiology of trauma and objectively judge the quality of care provided, reliable indexes must be chosen to quantify injury severity.

The Trauma Agency uses the TRISS (Trauma Score/Injury Severity Score) methodology to evaluate patient outcome. This technique uses anatomic, physiologic and age characteristics, along with trauma score and severity of injury to estimate the probability of survival.

The trauma score is essentially a field scoring system that uses physiologic parameters such as systolic blood pressure, capillary refill, respiratory rate, and the Glasgow Coma Scale score to evaluate injury severity at the scene of an accident. The trauma score helps separate major trauma victims from those with non-life-threatening injuries and helps determine whether a patient should be sent to the nearest available facility or triaged to a Trauma Center.

The ISS "injury severity score" is assigned by the hospital and represents the overall degree of severity for a patient with a discharge diagnosis reflecting traumatic injury.

Trauma experts generally agree that an ISS of nine (9) or greater indicates serious injury that should be evaluated at a Trauma Center. A patient with an ISS score of fifteen (15) or greater is considered to be severely injured and at risk of dying without prompt, definitive care.

By using the Trauma Score and ISS Score, it is possible to calculate the probability of survival (greater or less than 50%), based on national data. The TRISS methodology can further differentiate those patients who predictably should have lived, from those who should have died. Comparison of actual survival rates for Broward County patients provides a meaningful measurement of system effectiveness.

Other variables commonly associated with patient outcome such as: transport time, proper patient triage, and availability of specialized teams are monitored on an ongoing basis to determine whether they have a significant impact on morbidity and mortality.

Information from pre-hospital providers, Trauma Centers, non-designated facilities, and the BCTMA is also used to analyze the need for and utilization of Trauma Network services. Statistics reflecting such variables as patient volume are collected regularly. In addition, epidemiological studies of patient characteristics help to define the population and highlight system-wide strengths and weaknesses. For example, a review of age, sex, and injury type can highlight the need for various subgroups, which are then used to help target education and injury prevention campaigns.

Data collection from acute care Center resources is limited to registry information and Medical Examiner reports. As the evaluation process has progressed, source data has been expanded. Expanded data allows additional research projects to be evaluated on an ongoing basis.

The results of all system-wide studies are presented to the Trauma System Quality Improvement Committee monthly. Members discuss the impact on regional care, need for corrective action or additional investigation, and distribution of findings and conclusions.

Periodic reports are presented to the local EMS Council, and annual statistical summaries are prepared and provided at request.

Reporting Compliance

The evaluation process also involves routine review of the regional reporting system to assure that all licensed pre-hospital and in-hospital providers comply with DOH requirements.

The Agency ensures that each EMS provider meets the trauma scorecard requirements as provided in Chapter 64J-2, Florida Administrative Code and trauma transport requirements as also provided in Chapter 64J-1.

Quality Assurance and Evaluation Process

The system evaluation parameters identified in this section provide the basis for the activities of the Trauma System Quality Improvement Committee (TSQIC). These parameters are nationally accepted guidelines for quality assurance and evaluation programs. As these parameters are not all encompassing, the committee has added a number of additional measures for use in system evaluation, such as, additional data sets, extra geographic measures causing concerns on delayed transport, and mechanisms to ensure compliance to inter-facility transports to appropriate centers.

The Broward County Trauma Management Agency Manager attends and participates in the monthly Trauma Quality Improvement meetings at each of the three Trauma Centers in Broward County. Through these meetings, each trauma death is formally presented and discussed.

These same cases are presented at the monthly Trauma System Quality Improvement Committee (TSQIC) meetings; during which trauma cases from each facility are presented to representatives from the non-Trauma Centers, pre-hospital providers, pre-hospital Medical Directors, the Chief Medical Examiner or designee and each Trauma Center. The TSQIC, in conjunction with the Trauma Management Agency, also evaluates the performance of the trauma system on a regular basis. It is through this TSQIC, that the Trauma Agency reviews the Trauma Centers and the entire system's compliance with State statutes and guidelines for a Trauma System, as well as the system-wide goals and objectives for the coming year.

13. Mass Casualty and Disaster Plan Coordination

13. MASS CASUALTY AND DISASTER PLAN COORDINATION

Broward County is susceptible to tropical storms, as well as other natural and manmade disasters. As such, it is essential that the County is prepared for any type of mass casualty or disaster situation.

Broward County's Emergency Management Division has the responsibility for developing and implementing disaster planning, mitigation, and response activities within the County under provisions of State statutes. Emergency Management operates the County Emergency Operations Center (CEOC), which functions within the scope of the National Incident Management System. The CEOC serves as a Multi-Agency Coordination system, within which there is a number of Emergency Support Functions (ESF). Representatives of the Trauma Management Agency serve as members of ESF-8 Health and Medical group operating under the Human Services Branch of the CEOC.

ESF-8 Health and Medical Services provides the mechanism for coordinated assistance to supplement County and local resources in response to a public health and medical disaster, potential or actual incidents requiring a coordinated medical response, and/or during a developing or potential health and medical emergency.

Within South Florida, hurricanes pose a real and potentially devastating threat. Florida's hurricane season runs from June 1st thru November 30th, requiring preparedness planning on the part of the Trauma Management Agency in their role as a member of ESF-8.

In the event of any major disaster involving large numbers of casualties, such as a major hurricane or terrorism event, a coordinated plan of response automatically goes into effect in coordination with the County's Emergency Response Plan and its emergency management agency.

In addition to the implementation of the strategies involved in response to a hurricane, the Broward County Emergency Response Plan includes several specific plans including Hazardous Materials Response, Mass Casualty and Fatalities, and Nuclear Disasters, each delineating the policies and procedures that would be implemented to help minimize suffering and the loss of life to the residents and visitors to Broward County. Developing and implementing updates to the appropriate disaster plans is an ongoing function of the Trauma Management Agency.

The Broward County Fire Rescue has developed two (2) new SOG/Policies related to *"Active Shooter Hostile Violent Situations"* and *"Rescue Task Force Operations".*

As these plans are protected from disclosure by Florida statutes, a copy must be requested through the Broward Emergency Management Division.

14. Public Information and Education

14. PUBLIC INFORMATION AND EDUCATION

All of the components of a Trauma System have the same overall goal, the reduction of trauma related morbidity and mortality. The previous chapters have detailed the value of early medical intervention after an injury occurs. However, it has been shown that the most successful approach is still prevention. Therefore, an effective program of public education regarding the prevention of injuries is essential.

In addition, knowledge concerning the role of the Trauma Agency and the appropriate use of trauma facilities is instrumental to the continued success of Broward County's Trauma Network. The effort to communicate these roles, as well as, general information regarding trauma service delivery, is a major responsibility of the Trauma Agency and provider groups.

Public information programs include:

1. **Information to heighten public awareness of the trauma system:**
   These programs help the public understand the need for specialized trauma care and how the system operates. They stress the value of an integrated trauma network and explain how lives have been saved through its implementation. In addition, these programs are designed to teach the citizens of Broward County how to access the system, how it operates on a day-to-day basis, and which facilities serve as designated Trauma Centers.

2. **Injury Prevention and Control:**
   These programs are directed at reducing risk factors commonly associated with traumatic injuries. A significant effort is made to decrease the number of preventable accidents by educating the public about such topics as, the importance of using age-appropriate child car seats and seatbelts, bicycle safety, the dangers of driving while impaired, and driving distracted (texting).

There is already a widespread effort within the community to educate the public about EMS-related issues. Additionally, many local hospitals, public safety agencies, and professional organizations offer educational programs and materials to promote a healthy lifestyle and personal safety.

A number of volunteer groups such as MADD, (Mothers Against Drunk Drivers) have been actively involved in bringing specific issues to the public’s attention. Educational and training programs, sponsored by the TMA and Trauma Centers are offered on a regular basis in Broward County to help emergency services personnel meet the educational standards established by their professions.

The Broward Chapters of the National Safety Council, the American Heart Association, and the American Red Cross provide public information services and consumer training in CPR and emergency care. Additionally, the Broward School Board, through its Industry Services Division, provides health training to groups either on division premises or at the company/organization’s place of business.

A primary role of the Trauma Agency is to foster consolidation of these programs and encourage communication among providers. Existing pubic information and education activities are documented and evaluated and additional programs are added as topics of concern or interest are identified.

The Trauma Agency works with the Trauma Centers and educational specialists throughout South Florida, using a variety of materials, to evaluate the adequacy of trauma education for the public and to facilitate the implementation of various public information aspects of the education program. Educational programs are currently available to the public, EMS personnel, and in-hospital personnel.

A variety of methods are used to promote the Agency's and the Trauma Network system's public awareness and injury control programs. These include: distribution of brochures; public service announcements; health fairs; seminars; and expansion of the local media's role in educating the public. Community lectures by local medical providers, law enforcement officers, and other concerned volunteers are used to publicize the role of the Trauma Network and the consequences of high-risk behaviors.

Public information programs are aimed at those populations at greatest risk of traumatic injury. For example, motor vehicle safety campaigns are directed toward the youngest and oldest drivers, those with small children, and drivers with impaired driving due to alcohol or drugs and to the current use of mobile communication devices which leads to "distracted driving." Every effort is made to involve concerned organizations such as schools, church groups, local businesses, and civic and local interest clubs and community organizations in educational activities.

The evaluation parameters of the Trauma System assists agency staff in analyzing various components of trauma incidents and deaths, and to identify significant problem areas, thus targeting appropriate groups for future prevention efforts.

Public information and education programs are important and necessary components of a successful trauma system. Effective educational programs increase community awareness regarding the issues surrounding traumatic injuries, provide support for the local trauma network, encourage proper utilization of the network, and, most importantly, assist in decreasing the number of preventable deaths and reducing permanent disabilities.

Appendix i.
Broward County
Fire Rescue Locations

Appendix i.

Fire Chiefs' Association of Broward County, Uniform Fire Station Numbering

1	**Broward Sheriff Fire Rescue (Dania Beach)** 116 W Dania Beach Blvd., Dania, FL 33004-.3283	954-924-6815 954-342-4251
2	**Ft.Lauderdale Fire Department** 528 NW 2 Street, Ft. Lauderdale, FL 33311-9108	954-828-5330
3	**Ft.Lauderdale Fire Department** 2801 SW 4 Avenue, Ft. Lauderdale, FL 33315-3033	954-828-4560
4	**Broward Sheriff Fire Rescue (Deerfield Beach)** 928 E Hillsboro Blvd, Deerfield Beach, FL 33441-3554	954-480-4364
5	**Hollywood Fire Rescue** 1821 N. 21 Avenue, Hollywood, FL 33020	954-921-3451
6	**Broward Sheriff Fire Rescue (Sea Port)** 1901 Eller Drive, Ft. Lauderdale, FL 33316	954-522-1528 954-765-4191
7	**Broward Sheriff Fire Rescue (Hallandale Beach)** 111 Foster Rd, Hallandale Beach, FL 33009	954-457-1470
8	**Ft.Lauderdale Fire Department** 528 NW 2 Street, Ft.Lauderdale, FL 33311-9108	954-828-4563
9	**Oakland Park Fire Rescue** 301 NE 38 Street, Oakland Park, FL 33334-2224	954-630-4580
10	**Broward Sheriff Fire Rescue (FLL International Airport)** 250 Terminal Drive, Fort Lauderdale, Fl. 33315	954-635-3301
11	**Pompano Beach Fire Rescue** 3264 NE 3 Street, Pompano Beach, FL 33062-5041	954-786-4123
12	**Lauderdale by the Sea Fire Rescue** 4504 Bougainvilla Drive, Lauderdale by the Sea, FL 33308	954-640-4250
13	**Ft.Lauderdale Fire Department** 2871 E Sunrise Blvd, Ft. Lauderdale, FL 33311-33277	954-828-3614
14	**Broward Sheriff Fire Rescue (Central Broward)** 791 NW 31 Avenue, Lauderhill, FL 33311	954-791-1058
15	**Tamarac Fire Rescue** 6000 Hiatus Road, Tamarac, FL 33321-6414	954-597-3800
16	**Ft Lauderdale Department, Wilton Manors** 524 NE 21 Court, Wilton Manors, FL 33305-2112	954-390-2113
17	**Broward Sheriff Fire Rescue (Haz-Mat & Dania Beach)** 2308A SW 42 Street, Ft. Lauderdale, FL 33312	954-327-8707
18	**Coconut Creek Fire Rescue,** 5785 Park Drive, Margate, FL 33063-2833	954-972-3315
19	**Miramar Fire Rescue** 6700 Miramar Parkway, Miramar, FL 33023-489	954-883-5211
20	**Oakland Park Fire Rescue** 4721 NW 9 Avenue, Ft. Lauderdale, FL 33309-3805	954-630-4595
21	**Broward Sheriff Fire Rescue (Weston)** 275 Bonaventure Blvd, Weston, FL 33326	954-991-3500
22	**Lighthouse Point Fire Department** 3740 NE 22 Avenue, Lighthouse Point , FL 33064-3928	954-941-2624
23	**Broward Sheriff Fire Rescue (Haz-Mat Engine)** 2200 SW 46 Avenue, Ft. Lauderdale, FL 33317	954-791-1055
24	**Pompano Beach Fire Rescue (Pompano Air Park)**	954-786-4122

	2001 NE 10 Street, Pompano Beach, FL 33060	
25	**Plantation Fire Department** 5200 W Broward Blvd., Plantation, FL 33317-6814	954-797-2150
26	**South Florida Rehab and Emergency Support Team (Canteen)**	954-903-7139
27	**Broward Sheriff Fire Rescue (Pembroke Park & West Park)** 2610 SW 40 Avenue, West Park, FL 33023	954-964-0225 954-864-0225
28	**Broward Sheriff Fire Rescue (Cooper City)** 10550 Stirling Road, Cooper City, FL 33328	954-432-8905
29	**Ft.Lauderdale Fire Department** 2002 NE 16 Street, Ft. Lauderdale, FL 33304-1419	954-828-3613
30	**Lauderhill Fire Department** 1181 NW 41 Terrace, Lauderhill, FL 33313-6614	954-321-2471
31	**Hollywood Fire Rescue (Haz-Mat & TRT)** 3401 Hollywood Blvd, Hollywood, FL 33021-6910	954-967-4251 954-967-4252
32	**Broward Sheriff Fire Rescue (TRT)** 3400 SW 4 Avenue, Fort Lauderdale, FL 33311	954-467-5687
33	**Pembroke Pines Fire Rescue (North Perry Air Park)** 600 SW 72 Avenue, Pembroke Pines, FL 33023-1075	954-986-5020
34	**North Lauderdale Fire Rescue** 6151 Bailey Road, Fort Lauderdale, FL 33068-4939	954-720-4315
35	**Fort Lauderdale Fire Rescue** 1969 East Commercial Blvd, Fort Lauderdale, FL 33308-3767	954-828-4957
36	**Tamarac Fire Rescue** 7200 N. University, Tamarac, FL 33321-2428	954-597-3836
37	**Broward Sheriff Fire Rescue (Lauderdale Lakes)** 3461 NW 43 Avenue, Lauderdale Lakes, FL 33319-5740	954-535-2770
38	**Davie Fire Rescue Department** 6905 Orange Drive, Davie, FL 33314-3238	954-797-1090
39	**Sunrise Fire Rescue** 6800 Sunset Strip, Sunrise, FL 33313-2848	954-572-2410
40	**Hollywood Fire Rescue** 1581 South Ocean Drive, Hollywood, FL 33019-3506	954-921-3456
41	**Tamarac Fire Rescue** 7501 NW 88 Ave, Tamarac, FL 33321-2428	954-597-3841
42	**Coral Springs Fire Rescue (Parkland)** 6500 Parkside Drive, Parkland, FL 33067-1638	954-753-6799
43	**Coral Springs Fire Department** 4550 Rock Island Road, Coral Springs, FL 33065	954-345-2228
44	**North Lauderdale Fire Rescue** 7700 Hampton BLVD, North Lauderdale, FL 33068-5585	954-720-4315
45	**Hollywood Fire Rescue** 1810 N 64th Avenue, Hollywood, FL 33024-4100	954-967-4255
46	**Fort Lauderdale Fire Department** 1515 NW 19 Street, Fort Lauderdale, FL 33311-6222	954-828-3562
47	**Fort Lauderdale Fire Department (TRT)** 1000 SW 27th Avenue, Fort Lauderdale, FL 33312-2938	954-828-3224
48	**Sunrise Fire Rescue** 10490 W Oakland Park Blvd., Sunrise, FL 33351	954-572-2414

49	**Fort Lauderdale Fire Department (Marine Rescue & Fire Boat)** 1015 Seabreeze Blvd., Fort Lauderdale, FL 33316-2423	954-828-3561
50	**Coconut Creek Fire Rescue** 4500 Coconut Creek Parkway, Coconut Creek, FL 33063-1535	954-973-6706
51	**Broward Sheriff Fire Rescue (Pompano Beach)** 3192 North Powerline Road, Pompano Beach, FL 33069-1016	954-935-6720
52	**Pompano Beach Fire Rescue** 10 SW 27th Avenue, Pompano Beach, FL 33069-3019	954-786-4515
53	**Fort Lauderdale Fire Department (Haz-Mat & Executive Airport)** 2200 Executive Airport Way, Fort Lauderdale, FL 33309-1733	954-828-4956
54	**Fort Lauderdale Fire Department** 3200 NE 32 Street, Fort Lauderdale, FL 33308-7102	954-828-3612
55	**Broward Sheriff Fire Rescue (Weston)** 3955 Bonaventure Blvd., Weston, FL 33326	954-389-2080
56	**Plantation Fire Department** 550 NW 65th Avenue, Plantation, FL 33317-1702	954-797-2150
57	**Lauderhill Fire Rescue** 1980 NW 56th Avenue, Lauderhill, FL 33313-4060	954-730-2950
58	**Margate Fire Rescue** 600 Rock Island Road, Margate, FL 33063-4327	954-975-5675
59	**Sunrise Fire Rescue** 8330 NW 27th Place, Sunrise, FL 33322-2303	954-572-2412
60	**Broward Sheriff Fire Rescue (Hallandale Beach)** 2801 E Hallandale Beach Blvd, Hallandale Beach, FL 33009	954-457-1486
61	**Pompano Beach Fire Rescue** 2121 NW 3rd Avenue, Pompano Beach, FL 33060-4969	954-786-4132
62	**Plantation Fire Department** 12101 W Broward Blvd, Plantation, FL 33325-2401	954-797-2150
63	**Pompano Beach Fire Rescue** 120 SW 3rd Street, Pompano Beach, FL 33060-7900	954-786-4349
64	**Coral Springs Fire Department** 500 Ramblewood Drive, Coral Springs, FL 33071-7144	954-345-2226
65	**Davie Fire Rescue Department** 1200 S Nob Hill RD, Davie, FL 33324-4201	954-693-8213
66	**Broward Sheriff Fire Rescue (Deerfield Beach)** 590 S Powerline Road, Deerfield Beach, FL 33442	954-480-4340
67	**Broward Sheriff Fire Rescue (Weston)** 951 Saddle Club Road, Weston, FL 33327	954-389-2058
68	**Davie Fire Rescue Department** 3600 Flamingo Rd Davie, FL 33330-1612	954-979-1098
69	**Pembroke Pines Fire Rescue** 9500 Pines Blvd. Bldg. B Pembroke Pines, FL 33024-6258	954-431-2322
70	**Miramar Fire Rescue** 9001 Miramar Parkway Miramar, FL 33025-4128	954-883-5212
71	**Coral Springs Fire Department** 11800 NW 41st Street Coral Springs, FL 33065-7606	954-345-2227
72	**Sunrise Fire Rescue** 10490 W Oakland Park Blvd., Sunrise, FL 33351	954-572-2414

73	**Lauderhill Fire Department** 7801 NW 50 Street, Lauderhill, FL 33321	954-572-1468
74	**Hollywood Fire Rescue** 2741 Stirling Road, Hollywood, FL 33020-1124	954-967-4243
75	**Broward Sheriff Fire Rescue (Deerfield Beach)** 71 SE 21st Avenue, Deerfield Beach, FL 33441-4581	954-480-4335
76	**Plantation Fire Department** 8200 SW 3rd Street, Plantation, FL 33324	954-797-2150
77	**Plantation Fire Department** 901 N Pine Island Road, Fort Lauderdale, FL 33324-1101	954-797-2150
78	**Tamarac Fire Rescue** 4801 W Commercial BLVD, Tamarac, FL 33319-2833	954-597-3878
79	**Pembroke Pines Fire Rescue** 19900 Pines Blvd. Pembroke Pines, FL 33029-1210	954-538-1928
80	**Coral Springs Fire Department** 2825 Coral Springs Drive, Coral Springs, FL 33065-3825	954-346-1386
81	**Broward Sheriff Fire Rescue (Weston)** 17350 Royal Palm Blvd, Ft. Lauderdale, FL 33327	954-389-2015
82	**Southwest Ranches Fire Rescue** 17350 SW 46th Street Southwest Ranches, FL 33331-1124	954-434-4788
83	**Sunrise Fire Rescue** 60 Weston Road, Sunrise, FL 33326	9541-385-5026
84	**Miramar Fire Rescue** 14801 SW 27th Street, Miramar, FL 33027-4100	954-883-5213
85	**Broward Sheriff Fire Rescue (Air Rescue)** 5252 NW 21st Avenue Fort Lauderdale, FL 33309	954-938-0653
86	**Davie Fire Rescue Department** 14651 SW 14th Street, Davie, FL 33325	954-797-1213
87	**Oakland Park Fire Rescue** 2100 NW 39th Street, Oakland Park, FL 33309	954-630-4560
88	**Fort Lauderdale Fire Department (Haz-Mat)** 2200 Executive Airport Way, Fort Lauderdale, FL 33309-1733	
89	**Pembroke Pines Fire Rescue** 13000 Pines Blvd. Pembroke Pines, FL 33027-1690	954-435-6744
90	**Broward Sheriff Fire Rescue (Hallandale Beach)** 101 Three Islands Blvd. Hallandale Beach, FL 33009	954-457-1485
91	**Davie Fire Rescue Department** 6101 SW 148TH AVE Southwest Ranches, FL 33330-3400	954-797-2070

92	**Sunrise Fire Rescue** 13721 NW 21 Street Sunrise, FL 33323	954-845-1010
93	**Reserved for Broward Sheriff Fire Rescue**	
94	**Coconut Creek Fire Rescue** 4555 Sol Press Blvd, Coconut Creek, FL 33073-1601	954-973-6706
95	**Coral Springs Fire Department** 300 Coral Ridge Drive, Coral Springs, FL 33071-6180	954-345-2153
96	**Plantation Fire Department** 11050 W Sunrise Blvd, Plantation, FL 33322	954-797-2150
97	**Coral Springs Fire Department** 6650 University Drive, Parkland, FL 33067-2500	954-753-6035
98	**Margate Fire Rescue** 5395 NW 24th Street Margate, FL 33063-7766	954-971-8961
99	**Pembroke Pines Fire Rescue** 16999 Pines Blvd., Pembroke Pines, FL 33027-1005	954-450-6912
100	**Miramar Fire Rescue** 2800 SW 184th Avenue Miramar, FL 33029	954-883-5214
101	**Pembroke Pines Fire Rescue** 6057 SW 198th Terrace, Pembroke Pines, FL 33301	954-680-5150
102	**Broward Sheriff Fire Rescue** 1441 SW 11th Way, Deerfield Beach, FL 33441	954-480-4350
103	**Pompano Beach Fire Rescue** 3500 NE 16th Terrace Pompano Beach, FL 33064-6281	954-786-4101
104	**Davie Fire Rescue Department** 4491 Oakes Rd, Davie, FL 33314-2205	954-327-3954
105	**Hollywood Fire Rescue** 1511 South Federal Highway, Hollywood, FL 33021	954-921-3546
106	**Broward Sheriff Fire Rescue (Everglades)** 35000 Everglades Parkway (Alligator Alley), Ft. Lauderdale, FL 33327	954-325-1984
107	**Miramar Fire Rescue** 11811 Miramar Parkway, Miramar, FL 33025-4128	954-883-5210
108	**Seminole Tribe Fire Rescue (Hollywood Reservation)** 3105 N. State Road 7, Hollywood, FL 33024-2957	954-986-2080
109	**Coral Springs Fire Deptartment (Parkland)** 11050 Trails End Drive, Parkland, FL 33076	954-753-0498
110	**Lauderhill Fire Rescue** 3120 NW 12th Place Lauderhill, FL 33311-4944	954-792-1224
111	**Broward Sheriff Fire Rescue (Deerfield Beach)** 232 Goolsby Blvd, Deerfield Beach, FL 33442	954-480-1431
112	**Davie Fire Rescue Department (SW Ranches)** 17220 Griffin Road, Southwest Ranches, FL 33331	954-797-1162
113	**Coconut Creek Fire-Rescue** 5450 Wiles Rd, Coconut Creek, FL 33073	

Appendix ii. - County Unified Trauma Telemetry (CUTT) Report

Appendix ii.

Broward County Unified Trauma Telemetry Report

Rescue Unit #:_____ Trauma Alert Type: Adult_____ OB >20weeks_____ Pediatric ≤15 YOA_____
Mode of Transportation: Ground_____ Air_____ ETA_____
Meets Color Criteria: Red_____ Blue_____ (1 red or 2 blue = Trauma Alert)
Meets Level 2 Criteria: _____

Adult Trauma Alert Criteria		
	Red Criteria (1 Required)	**Blue Criteria (2 Required)**
Airway	_____ Active airway assistance required	_____ Sustained respiratory rate ≥ 30
Circulation	_____ No radial pulse with sustained HR ≥ 120 or BP < 90 systolic	_____ Sustained HR ≥ 120
Fractures	_____ Multiple long bone FX sites	_____ Single long bone FX sites due to MVA or single long bone FX site due to fall ≥ 10 feet.
Cutaneous	_____ 2° or 3° burns > 15% BSA, electrical burns (high voltage/direct lightning) regardless of surface area, amputation proximal to wrist or ankle, penetrating injury to head, neck, or torso	_____ Major degloving, flap avulsion > 5 inches, or GSW to extremities
Best Motor Response (BMR)	_____ BMR ≤ 4, or exhibits presence of paralysis, suspicion of spinal cord injury, or loss of sensation	_____ BMR = 5
Mechanism of Injury		_____ Ejection from vehicle (excluding open vehicles) or deformed steering wheel
Age		_____ Anticoagulated Older Adult >55
Misc.	_____ Paramedic Judgment (Comment Below) _____ Glasgow Coma Score ≤ 12	_____ Blunt Abdominal Injury
Pediatric Trauma Alert Criteria		
	Red Criteria (1 Required)	**Blue Criteria (2 Required)**
Airway	_____ Assisted or Intubated	
Consciousness	_____ Altered mental status, paralysis, suspected spinal cord injury, or loss of sensation	_____ Amnesia or reliable HX of LOC
Circulation	_____ Faint or non-palpable carotid or femoral pulses, systolic BP < 50	_____ Carotid or femoral pulses palpable; no pedal pulses or systolic BP <90
Fracture	_____ Any open long bone FX or multiple FX sites or multiple dislocations	_____ Single closed long bone FX site
Cutaneous	_____ Major soft tissue disruption, amputation proximal to wrist or ankle, 2° or 3° burns to 10% BSA, electrical burns (high voltage/direct lightning) regardless of surface area, penetrating injury to head, neck, or torso	
Misc.	_____ Paramedic Judgment	_____ Blunt Abdominal Injury
Size		_____ Red, Purple <11kg (<24 lbs.)

Level 2 Trauma Alert Criteria (Adult and Pediatric)		
_____ Falls > 12 ft. Adult _____ Falls > 6 ft. Pediatric	_____ Death of an occupant in the same passenger compartment	_____ Any height fall adult >55 on anticoagulant/antiplatelet
_____ Extrication time > 15min.	_____ Major Intrusion into passenger compartment	_____ Paramedic Judgement
_____ Rollover motor-vehicle crash	_____ Separation from Bicycle	
_____ Burns involving the face, eyes, ears, hands, feet, or perineum that may result in functional or cosmetic impairment	_____ Pedestrian struck by vehicle not meeting the preceding automatic criteria (i.e. Adults < 15 mph and pediatrics < 5 mph)	

Paramedic Judgement Comments: _____

Broward County Unified Trauma Telemetry Report

Patient Evaluation

Age:_____ Sex: M or F Glasgow Coma Score (Adult): _____
Mechanism of Injury:_____

Initial Vital Signs: BP:_____/_____ Pulse: _____ Resp. Rate: _____ Skin: _____ Color: _____
Assessed Injuries:

Treatment Interventions: (Check all that apply)
☐ Oxygen ☐ C-Collar ☐ IV x _____ ☐ BVM ☐ Backboard ☐ ETT ☐ CPR

☐ Drug Therapy:
_____

☐ Other:
_____

Current Vital Signs: BP_____Pulse_____ Resp. Rate _____ Glasgow Coma Score _____
Additional Information: (If time permits)

Name:_____ Date of Birth: _____

Address:
_____

Past Medical History:
_____

Medications:
_____

Allergies:
_____

Glasgow Coma Score

Best Eye Response (4)
1 – No eye opening
2 – Eye opening to pain
3 – Eye opening to verbal command
4 – Eyes open spontaneously

Best Verbal Response (5)
1 – No verbal response
2 – Incomprehensible sounds
3 – Inappropriate words
4 – Confused
5 – Orientated

Best Motor Response (6)
1 - No motor response
2 – Extension to pain
3 – Flexion to pain
4 – Withdrawal from pain
5 – Localizing Pain
6 – Obeys Commands

Eye = _____ Verbal = _____ Motor = _____

Total E ( ) V (_) M ( ) = GCS _____

Note the Glasgow Coma Scale measures cognitive ability. Therefore, if injury (chronic or acute) has caused paraplegia or quadriplegia, alternate methods of assessing motor response must be used (e.g., ability to blink eyes = obeys commands).

Appendix iii. Broward Regional Emergency Medical Services (EMS) Council

Appendix iii

Broward Regional Emergency Medical Services (EMS) Council

Chair	Vacant
Vice-chair	Frederick M. Keroff, MD
Staff Contacts	Alison Zerbe 954-357-5234 Michele Bachmann 954-357-5229

BROWARD COUNTY COMMISSIONERS

Commission District	Commissioner
District 1	Commissioner Nan Rich
District 2	Commissioner Mark D. Bogen
District 3	Commissioner Mark Udine
District 4	Commissioner Lamar P. Fisher
District 5	Commissioner Steve Geller
District 6	Commissioner Beam Furr
District 7	Commissioner Tim Ryan
District 8	Commissioner Jared E. Moskowitz
District 9	Vacant

Physicians

Emergency Medicine

Surgeon

Public Health

Pediatrician

Pre-hospital Medical Director

Broward County Medical Examiner

Emergency Department Director from Broward Health

Emergency Department Director from Memorial Healthcare System

Hospitals
Nonprofit/Proprietary
Broward Health, Administration
Memorial Healthcare System, Administration
Nurses
Emergency Room
Transport
Private Ambulance
Municipal Fire
County Fire
Aircraft
Advanced Life Support (ALS)
Municipal Provider
County Provider
Private Provider
Organizations/Agencies
Broward Emergency Medical Services Education
Broward Regional Health Planning Council, Inc.
American Red Cross, Broward County Chapter
American Heart Association, Broward County Chapter
Broward County Trauma Advisory Panel
EMS Dispatch, County or Municipal
Critical Incident Stress Management (CISM)
Law Enforcement, Union Representative
Fire and Paramedic, Union Representative

Appendix iv.
Broward Regional Health Planning Council, Inc.

Appendix iv

Broward Regional Health Planning Council, Inc.

Barbara S. Effman, MPH, Chair

John Benz, MBA, Vice Chair

Samuel F. Morrison, BA, MLS, Secretary

Mark Dissette, MBA, Treasurer

Pamela Africk, Board Member

Osmel Delgado, MBA, PharmD, FASHP, Board Member

Alexander Fernandez, MBA, CPA, Board Member

Albert C. Jones, MA, Board Member

Leilani Kicklighter, MBA, ARM, RN, Board Member

Peter Powers, FACHE, Board Member

Cary Zinkin, D.P.M., Board Member

Venessa E. Walker, DC, Board Member

Michael De Lucca, MHM, President/CEO

Appendix v.
Trauma Systems Quality Improvement Committee

Appendix v.

Trauma Systems Quality Improvement Committee

- Fire Chiefs' Association of Broward County members
- Fire Chiefs' Association of Broward County, EMS Subcommittee members
- Trauma Center's Medical Directors, Trauma Surgeons, Trauma Program Managers, hospital and program administrative staff
- Broward Regional EMS Council members
- Acute Care Emergency Department Medical Directors
- Office of Medical Examiner and Trauma Services
- Broward County healthcare partners

Appendix vi.
Florida Statute 395.40

64J-2.011 - Trauma Center Requirements

Title XXIX

PUBLIC HEALTH

Chapter 395 HOSPITAL LICENSING AND REGULATION

Entire Chapter

SECTION 4025

Trauma centers; selection; quality assurance; records.

[1]**395.4025 Trauma centers; selection; quality assurance; records.**—

(1) For purposes of developing a system of trauma centers, the department shall use the 18 trauma service areas established in s. 395.402. The department shall designate those hospitals that are to be recognized as trauma centers.

(2)(a) The department shall prepare an analysis of the Florida trauma system by August 31, 2020, and every 3 years thereafter, using the hospital discharge database described in s. 408.061 for the most current year and the most recent 5 years of population data for the state available from the American Community Survey 5-Year Estimates by the United States Census Bureau. The department's report must, at a minimum, include all of the following:

1. The population growth for each trauma service area and for the state.

2. The number of high-risk patients treated at each trauma center within each trauma service area, including pediatric trauma centers.

3. The total number of high-risk patients treated at all acute care hospitals, including nontrauma centers, in each trauma service area.

4. The percentage of each trauma center's sufficient volume of trauma patients, as described in subparagraph (3)(d)2., in accordance with the International Classification Injury Severity Score for the trauma center's designation, inclusive of the additional caseload volume required for those trauma centers with graduate medical education programs.

(b) The department shall make available all data, formulas, methodologies, calculations, and risk adjustment tools used in preparing the report.

(3)(a) The department shall notify each acute care general hospital and each local and each regional trauma agency in a trauma service area with an identified need for an additional trauma center that the department is accepting letters of intent from hospitals that are interested in becoming trauma centers. The department may accept a letter of intent only if there is statutory capacity for an additional trauma center in accordance with subsection (2), paragraph (d), and s. 395.402. Letters of intent must be postmarked no later than midnight October 1 of the year in which the department notifies hospitals that it plans to accept letters of intent.

(b) By October 15, the department shall send to all hospitals that submitted a letter of intent an application package that will provide the hospitals with instructions for submitting information to the department for selection as a trauma center. The standards for trauma centers provided for in s. 395.401(2), as adopted by rule of the department, shall serve as the basis for these instructions.

(c) In order to be considered by the department, applications from those hospitals seeking selection as trauma centers, including those current verified trauma centers that seek a change or redesignation in approval status as a

trauma center, must be received by the department no later than the close of business on April 1 of the year following submission of the letter of intent. The department shall conduct an initial review of each application for the purpose of determining whether the hospital's application is complete and the hospital is capable of constructing and operating a trauma center that includes the critical elements required for a trauma center. This critical review must be based on trauma center standards and must include, but need not be limited to, a review as to whether the hospital is prepared to attain and operate with all of the following components before April 30 of the following year:

1. Equipment and physical facilities necessary to provide trauma services.
2. Personnel in sufficient numbers and with proper qualifications to provide trauma services.
3. An effective quality assurance process.

(d) Except as otherwise provided in this part, the department may not approve an application for a Level I trauma center, Level II trauma center, Level II trauma center with a pediatric trauma center, jointly certified pediatric trauma center, or stand-alone pediatric trauma center if approval of the application would exceed the limits on the numbers of Level I trauma centers, Level II trauma centers, Level II trauma centers with a pediatric trauma center, jointly certified pediatric trauma centers, or stand-alone pediatric trauma centers set forth in s. 395.402(1). However, the department shall review and may approve an application for a trauma center when approval of the application would result in a total number of trauma centers which exceeds the limit on the number of trauma centers in a trauma service area as set forth in s. 395.402(1), if the applicant demonstrates and the department determines that:

1. The existing trauma center's actual caseload volume of high-risk patients exceeds the minimum caseload volume capabilities, including the additional caseload volume for graduate medical education critical care and trauma surgical subspecialty residents or fellows, by more than two times the statutory minimums listed in sub-subparagraphs 2.a.-d. or three times the statutory minimum listed in sub-subparagraph 2.e., and the population growth for the trauma service area exceeds the statewide population growth by more than 15 percent based on the American Community Survey 5-Year Estimates by the United States Census Bureau for the 5-year period before the date the applicant files its letter of intent; and

2. A sufficient caseload volume of potential trauma patients exists within the trauma service area to ensure that existing trauma centers caseload volumes are at the following levels:

a. For Level I trauma centers in trauma service areas with a population of greater than 1.5 million, a minimum caseload volume of the greater of 1,200 high-risk patients admitted per year or, for a trauma center with a trauma or critical care residency or fellowship program, 1,200 high-risk patients admitted plus 40 cases per year for each accredited critical care and trauma surgical subspecialty medical resident or fellow.

b. For Level I trauma centers in trauma service areas with a population of less than 1.5 million, a minimum caseload volume of the greater of 1,000 high-risk patients admitted per year or, for a trauma center with a critical care or trauma residency or fellowship program, 1,000 high-risk patients admitted plus 40 cases per year for each accredited critical care and trauma surgical subspecialty medical resident or fellow.

c. For Level II trauma centers and Level II trauma centers with a pediatric trauma center in trauma service areas with a population of greater than 1.25 million, a minimum caseload volume of the greater of 1,000 high-risk patients admitted or, for a trauma center with a critical care or trauma residency or fellowship program, 1,000 high-risk

patients admitted plus 40 cases per year for each accredited critical care and trauma surgical subspecialty medical resident or fellow.

d. For Level II trauma centers and Level II trauma centers with a pediatric trauma center in trauma service areas with a population of less than 1.25 million, a minimum caseload volume of the greater of 500 high-risk patients admitted per year or, for a trauma center with a critical care or trauma residency or fellowship program, 500 high-risk patients admitted plus 40 cases per year for each accredited critical care and trauma surgical subspecialty medical resident or fellow.

e. For pediatric trauma centers, a minimum caseload volume of the greater of 500 high-risk patients admitted per year or, for a trauma center with a critical care or trauma residency or fellowship program, 500 high-risk patients admitted per year plus 40 cases per year for each accredited critical care and trauma surgical subspecialty medical resident or fellow.

The International Classification Injury Severity Score calculations and caseload volume must be calculated using the most recent available hospital discharge data collected by the agency from all acute care hospitals pursuant to s. 408.061. The agency, in consultation with the department, shall adopt rules, for trauma centers and acute care hospitals for the submission of data required for the department to perform its duties under this chapter.

(e) If the department determines that the hospital is capable of attaining and operating with the components required in paragraph (c), the applicant must be ready to operate in compliance with state trauma center standards no later than April 30 of the year following the department's initial review and approval of the hospital's application to proceed with preparation to operate as a trauma center. A hospital that fails to comply with this subsection may not be designated as a trauma center.

(4) By May 1, the department shall select one or more hospitals that submitted an application found acceptable by the department based on initial review for approval to prepare to operate with the components required in paragraph (3)(c). If the department receives more applications than may be approved, the department must select the best applicant or applicants from the available pool based on the department's determination of the capability of an applicant to provide the highest quality patient care using the most recent technological, medical, and staffing resources available and which is located the farthest away from an existing trauma center in the applicant's trauma service area to maximize access. The number of applicants selected is limited to available statutory need in the specified trauma service area as designated in paragraph (3)(d) or s. 395.402(1).

(5) Following its initial review, the department shall conduct an in-depth evaluation of all applications found acceptable in the initial review. The applications shall be evaluated against criteria enumerated in the application packages as provided to the hospitals by the department. An applicant may not operate as a provisional trauma center until the department completes the initial and in-depth reviews and approves the application through those review stages.

(6) Within 1 year after the hospital begins operating as a provisional trauma center, a review team of out-of-state experts assembled by the department shall make onsite visits to all provisional trauma centers. The department shall develop a survey instrument to be used by the expert team of reviewers. The instrument must include objective criteria and guidelines for reviewers based on existing trauma center standards such that all trauma centers are

assessed equally. The survey instrument must also include a uniform rating system that reviewers must use to indicate the degree of compliance of each trauma center with specific standards, and to indicate the quality of care provided by each trauma center as determined through an audit of patient charts. In addition, hospitals being considered as provisional trauma centers must meet all the requirements of a trauma center and must be located in a trauma service area that has a need for such a trauma center.

(7) Based on recommendations from the review team, the department shall approve for designation a trauma center that is in compliance with trauma center standards, as established by department rule, and with this section. Each trauma center shall be granted a 7-year approval period during which time it must continue to maintain trauma center standards and acceptable patient outcomes as determined by department rule. An approval, unless sooner suspended or revoked, automatically expires 7 years after the date of issuance and is renewable upon application for renewal as prescribed by rule of the department.

(8) Only an applicant or hospital with an existing trauma center in the same trauma service area or in a trauma service area contiguous to the trauma service area where the applicant has applied to operate a trauma center may protest a decision made by the department with regard to whether the application should be approved, or whether a need has been established pursuant to the criteria in paragraph (3)(d). Hearings held under this subsection shall be conducted in the same manner as provided in ss. 120.569 and 120.57. Cases filed under chapter 120 may combine all disputes between parties.

(9) Notwithstanding any provision of chapter 381, a hospital licensed under ss. 395.001-395.3025 that operates a trauma center may not terminate or substantially reduce the availability of trauma service without providing at least 180 days' notice of its intent to terminate such service. Such notice shall be given to the department, to all affected local or regional trauma agencies, and to all trauma centers, hospitals, and emergency medical service providers in the trauma service area. The department shall adopt by rule the procedures and process for notification, duration, and explanation of the termination of trauma services.

(10) Except as otherwise provided in this subsection, the department or its agent may collect trauma care and registry data, as prescribed by rule of the department, from trauma centers, hospitals, emergency medical service providers, local or regional trauma agencies, or medical examiners for the purposes of evaluating trauma system effectiveness, ensuring compliance with the standards, and monitoring patient outcomes. A trauma center, hospital, emergency medical service provider, medical examiner, or local trauma agency or regional trauma agency, or a panel or committee assembled by such an agency under s. 395.50(1) may, but is not required to, disclose to the department patient care quality assurance proceedings, records, or reports. However, the department may require a local trauma agency or a regional trauma agency, or a panel or committee assembled by such an agency to disclose to the department patient care quality assurance proceedings, records, or reports that the department needs solely to conduct quality assurance activities under s. 395.4015, or to ensure compliance with the quality assurance component of the trauma agency's plan approved under s. 395.401. The patient care quality assurance proceedings, records, or reports that the department may require for these purposes include, but are not limited to, the structure, processes, and procedures of the agency's quality assurance activities, and any recommendation for improving or modifying the

overall trauma system, if the identity of a trauma center, hospital, emergency medical service provider, medical examiner, or an individual who provides trauma services is not disclosed.

(11) Out-of-state experts assembled by the department to conduct onsite visits are agents of the department for the purposes of s. 395.3025. An out-of-state expert who acts as an agent of the department under this subsection is not liable for any civil damages as a result of actions taken by him or her, unless he or she is found to be operating outside the scope of the authority and responsibility assigned by the department.

(12) Onsite visits by the department or its agent may be conducted at any reasonable time and may include but not be limited to a review of records in the possession of trauma centers, hospitals, emergency medical service providers, local or regional trauma agencies, or medical examiners regarding the care, transport, treatment, or examination of trauma patients.

(13) Patient care, transport, or treatment records or reports, or patient care quality assurance proceedings, records, or reports obtained or made pursuant to this section, s. 395.3025(4)(f), s. 395.401, s. 395.4015, s. 395.402, s. 395.403, s. 395.404, s. 395.4045, s. 395.405, s. 395.50, or s. 395.51 must be held confidential by the department or its agent and are exempt from the provisions of s. 119.07(1). Patient care quality assurance proceedings, records, or reports obtained or made pursuant to these sections are not subject to discovery or introduction into evidence in any civil or administrative action.

(14) The department may adopt, by rule, the procedures and process by which it will select trauma centers. Such procedures and process must be used in selecting trauma centers and must be consistent with subsections (1)-(9) except in those situations in which it is in the best interest of, and mutually agreed to by, all applicants within a service area and the department to reduce the timeframes.

(15) Notwithstanding the procedures established pursuant to subsections (1)-(14), hospitals located in areas with limited access to trauma center services shall be designated by the department as Level II trauma centers based on documentation of a valid certificate of trauma center verification from the American College of Surgeons. Areas with limited access to trauma center services are defined by the following criteria:

(a) The hospital is located in a trauma service area with a population greater than 600,000 persons but a population density of less than 225 persons per square mile;

(b) The hospital is located in a county with no verified trauma center; and

(c) The hospital is located at least 15 miles or 20 minutes travel time by ground transport from the nearest verified trauma center.

(16)(a) Notwithstanding the statutory capacity limits established in s. 395.402(1), the provisions of subsection (8), or any other provision of this part, an adult Level I trauma center, an adult Level II trauma center, a Level II trauma center with a pediatric trauma center, a jointly certified pediatric trauma center, or a stand-alone pediatric trauma center that was verified by the department before December 15, 2017, is deemed to have met the trauma center application and operational requirements of this section and must be verified and designated as a trauma center.

(b) Notwithstanding the statutory capacity limits established in s. 395.402(1), the provisions of subsection (8), or any other provision of this part, a trauma center that was not verified by the department before December 15, 2017, but that was provisionally approved by the department to be in substantial compliance with Level II trauma standards before January 1, 2017, and is operating as a Level II trauma center, is deemed to have met the application and

operational requirements of this section for a trauma center and must be verified and designated as a Level II trauma center.

(c) Notwithstanding the statutory capacity limits established in s. 395.402(1), the provisions of subsection (8), or any other provision of this part, a trauma center that was not verified by the department before December 15, 2017, as a Level I trauma center but that was provisionally approved by the department to be in substantial compliance with Level I trauma standards before January 1, 2017, and is operating as a Level I trauma center is deemed to have met the application and operational requirements of this section for a trauma center and must be verified and designated as a Level I trauma center.

(d) Notwithstanding the statutory capacity limits established in s. 395.402(1), the provisions of subsection (8), or any other provision of this part, a trauma center that was not verified by the department before December 15, 2017, as a pediatric trauma center but was provisionally approved by the department to be in substantial compliance with the pediatric trauma standards established by rule before January 1, 2018, and is operating as a pediatric trauma center is deemed to have met the application and operational requirements of this section for a pediatric trauma center and, upon successful completion of the in-depth and site review process, shall be verified and designated as a pediatric trauma center. Notwithstanding subsection (8), no existing trauma center in the same trauma service area or in a trauma service area contiguous to the trauma service area where the applicant is located may protest the in-depth review, site survey, or verification decision of the department regarding an applicant that meets the requirements of this paragraph.

(e) Notwithstanding the statutory capacity limits established in s. 395.402(1) or any other provision of this part, a hospital operating as a Level II trauma center after January 1, 2017, must be designated and verified by the department as a Level II trauma center if all of the following apply:

1. The hospital was provisionally approved after January 1, 2017, to operate as a Level II trauma center, and was in operation on or before June 1, 2017;

2. The department's decision to approve the hospital to operate a provisional Level II trauma center was in litigation on or before January 1, 2018;

3. The hospital receives a recommended order from the Division of Administrative Hearings, a final order from the department, or an order from a court of competent jurisdiction that it was entitled to be designated and verified as a Level II trauma center; and

4. The department determines that the hospital is in substantial compliance with the Level II trauma center standards, including the in-depth and site reviews.

Any provisional trauma center operating under this paragraph may not be required to cease trauma operations unless a court of competent jurisdiction or the department determines that it has failed to meet the trauma center standards, as established by department rule.

(f) Notwithstanding the statutory capacity limits established in s. 395.402(1), or any other provision of this act, a joint pediatric trauma center involving a Level II trauma center and a specialty licensed children's hospital which was verified by the department before December 15, 2017, is deemed to have met the application and operational requirements of this section for a pediatric trauma center and shall be verified and designated as a pediatric trauma

center even if the joint program is dissolved upon the expiration of the existing certificate and the pediatric trauma center continues operations independently through the specialty licensed children's hospital, provided that the pediatric trauma center meets all requirements for verification by the department.

(g) Nothing in this subsection shall limit the department's authority to review and approve trauma center applications.

History.—ss. 6, 15, ch. 90-284; s. 78, ch. 91-282; ss. 38, 98, ch. 92-289; s. 1, ch. 94-129; s. 3, ch. 94-260; s. 1052, ch. 95-148; s. 27, ch. 95-398; s. 218, ch. 96-406; s. 125, ch. 96-410; s. 106, ch. 99-8; s. 4, ch. 2000-189; s. 7, ch. 2004-259; s. 3, ch. 2013-153; s. 6, ch. 2018-66; s. 61, ch. 2019-3.

[1]**Note.**—Section 14, ch. 2018-66, provides that "[i]f the provisions of this act relating to s. 395.4025(16), Florida Statutes, are held to be invalid or inoperative for any reason, the remaining provisions of this act shall be deemed to be void and of no effect, it being the legislative intent that this act as a whole would not have been adopted had any provision of the act not been included."

Note.—Former s. 395.0335.

Fla. Admin. Code R. 64J-2.011

Current through Reg. 48, No. 115; June 14, 2022

Section 64J-2.011 - Trauma Center Requirements

(1) The standards for Level I, Level II and Pediatric trauma centers are published in DH Pamphlet (DHP) 150-9, January 2010, Trauma Center Standards, which is incorporated by reference and available from the department, as defined by subsection 64J-2.001(4), F.A.C. Any hospital that has been granted Provisional trauma center status or has been granted a 7 year Certificate of Approval to operate as a verified trauma center at the time this rule is amended must be in full compliance with the revised standards one year from the date the rule is amended. On or after the effective date of the amended rule, completed applications for Provisional trauma center status that do not demonstrate full compliance with these standards shall be denied.

(2) To be a Level I trauma center, a hospital shall be a state licensed general hospital and shall:**(a)** Meet and maintain after receiving provisional status and during the 7 year approval period the standards for a Level I trauma center as provided in DHP 150-9;**(b)** Meet the site visit requirements described in Rule 64J-2.016, F.A.C.;**(c)** Meet and maintain after receiving provisional status and during the 7 year approval period the requirements provided in Rule 64J-2.006, F.A.C., regarding the collecting and reporting of trauma registry data; and**(d)** Maintain and update at least annually an in-hospital copy of the application that was approved by the department as described in Rule 64J-2.012, F.A.C., so that the application reflects current and accurate information. Documentation used by the trauma center to update the application, but maintained elsewhere between annual application updates shall be immediately available for department review at any time. The application shall be maintained and updated after receiving provisional status and during the 7 year approval period, and organized in the same manner as was required at the time of application.

(3) To be a Level II trauma center, a hospital shall:**(a)** Meet and maintain after receiving provisional status and during the 7 year approval period the standards for a Level II trauma center, as provided in DHP 150-9;**(b)** Meet

the site visit requirements described in Rule 64J-2.016, F.A.C.;**(c)** Meet and maintain after receiving provisional status and during the 7 year approval period the requirements provided in Rule 64J-2.006, F.A.C., regarding the collecting and reporting of trauma registry data; and**(d)** Maintain and update at least annually an in-hospital copy of the application that was approved by the department as described in Rule 64J-2.012, F.A.C., so that the application reflects current and accurate information. The application shall be maintained and updated after receiving provisional status and during the 7 year approval period, and organized in the same manner as was required at the time of application.
(4) To be a pediatric trauma center, a hospital shall:**(a)** Meet and maintain after receiving provisional status and during the 7 year approval period the standards for a pediatric trauma center, as provided in DHP 150-9;**(b)** Meet the site visit requirements described in Rule 64J-2.016, F.A.C.;**(c)** Meet and maintain after receiving provisional status and during the 7 year approval period the requirements provided in Rule 64J-2.006, F.A.C., regarding the collecting and reporting of trauma registry data; and**(d)** Maintain and update at least annually an in-hospital copy of the application that was approved by the department as described in Rule 64J-2.012, F.A.C., so that the application reflects current and accurate information. Documentation used by the trauma center to update the application, but maintained elsewhere between annual application updates shall be immediately available for department review at any time. The application shall be maintained and updated after receiving provisional status and during the 7 year approval period, and organized in the same manner as was required at the time of application.
Fla. Admin. Code Ann. R. 64J-2.011

Rulemaking Authority 395.405 FS. Law
Implemented 395.401, 395.4015, 395.402, 395.4025, 395.404, 395.4045, 395.405 FS.New 8-3-88, Amended 12-10-92, 12-10-95, Formerly 10D-66.108, Amended 8-4-98, 2-20-00, 6-3-02, 6-9-05, 3-5-08, Formerly 64E-2.023, Amended 11-5-09, 4-20-10.