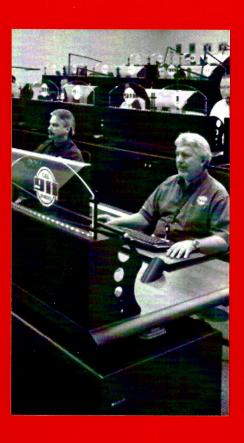
# **GREATER HARRIS COUNTY 9-1-1 EMERGENCY NETWORK**







# Who We Are, What We Do, Today and For the Next Generation



## **BOARD OF MANAGERS**

Greater Harris County 9-1-1 Emergency Network is governed by a six-member board representing governments, organizations, and the public throughout the service area. The board provides leadership on high-level performance and readiness issues such as policies, budgeting, planning, infrastructure, and technology.



Russell Rau Chairman Harris County



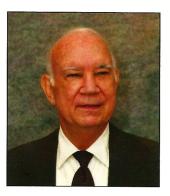
William (Bill) Anders Secretary Harris County Firefighters Association



Dennis Storemski Board Member City of Houston



Vergil Ratliff
Board Member
City of Houston



Charles W. Evans

Board Member Municipalities



Shawn Thompson Board Member AT&T Southwest

# "We serve 20% of Texas' population who make over 10,000 distress calls each day."



Lavergne Schwender
Executive Director
Greater Harris County
9-1-1 Emergency Network

Hello,

I am frequently asked what goes on here at Greater Harris County (GHC) 9-1-1. While 9-1-1 is for emergency assistance, relatively few people ever stop to wonder how it is even possible for them to dial 9-1-1 and reach emergency services. That seamless process is what the members of our organization is charged with insuring every day.

GHC 9-1-1 is the largest 9-1-1 system in Texas, second largest in the U.S., and has continually been recognized as one of the country's top-performing 9-1-1 agencies. We serve nearly five million people who make nearly 10,000 distress calls each day, with 80% of those calls originating from wireless phones.

GHC 9-1-1 does not physically answer phones or dispatch aid. Instead, for over two and a half decades, we have created communication technology systems and processes that enable local police, sheriff, fire, and EMS personnel to receive 9-1-1 calls and send help with maximum efficiency.

Throughout our history, innovations created at GHC 9-1-1 have set a standard for the entire U.S. emergency service industry. This is evident with the completion of the GHC 9-1-1 headquarters that opened in 2009. It is a mission-critical facility that houses all the equipment and staff responsible for monitoring and maintaining essential operations throughout its territory.

It is because of our organization's relentless passion for quality and service, its dedication to innovation and technology, and its commitment to safety that our community can rely on 9-1-1 without ever wondering what happens behind the scenes, now and into the next generation.

"To ensure that anyone, at anytime, in any place, using any device, shall be able to reach emergency services."

At GHC, this is our quest.

Laurope Shwadr

## THE 4-1-1 ON 9-1-1

The vital work of GHC 9-1-1 is not part of any city, county, phone company, police or fire department. Rather, since its inception in 1983, it is a separate governmental entity, (a "body politic," Chapter 772B, Texas Health and Safety Code) authorized to implement and administer the 9-1-1 services which include:

- · Implementating and monitoring technologies
- Maintaining the database
- Managing GIS mapping
- · Coordinating with jurisdictions, agencies, phone and wireless companies
- · Researching strategic planning, budgeting
- · Training for over 1,000 telecommunicators
- · Monitoring of related legislation
- · Participating with industry associations
- · Promoting public education

### **GHC VALUES**

Honesty

Knowledge

Teamwork

Communication

Respect

Fairness

### **TODAY**

Together, these services create a highly effective, highly efficient infrastructure for:

- · 2 urban counties
- 49 cities
- · Nearly 40 call centers
- · Over 100 telephone and wireless companies
- 150 police, fire, and emergency medical agencies
- · Nearly 1200 dispatchers
- A population of nearly 5 million people
- · Approximately 3.5 million calls per year

9-1-1 emergency aid is available 24/7 to cell phone callers, non-English speaking callers, the deaf or hard-of-hearing, and calls originating from Internet or digital phones.

### THE NEXT GENERATION

GHC 9-1-1 is very active with the National Emergency Number Association (NENA), Commission on State Emergency Communications (CSEC), Association of Public Safety Communications Officials, the Texas 9-1-1 Alliance, communication service providers, public safety answering points (PSAPs), legislative bodies, Public Educators of Texas, and others to arrive at "next generation" solutions. Soon, traditional telephones will give way to an Internet protocol (IP) world where broadband and wireless devices will replace phones as the primary mode of electronic communication.

**Command Center** 



**Data Center** 

# **INFORMATION TECHNOLOGY/OPERATIONS**

Our local 9-1-1 agency is an industry leader on many fronts but, most especially, in the area of mission-critical technology. In its state-of-the art Network Operation Center, also known as the GHC 9-1-1 Command Center, numerous vital operations take place. A team of highly skilled and certified professionals monitors and supports every facet of equipment functionality throughout the entire GHC 9-1-1 enterprise—circuits, networks, environmental, services, and applications—providing non-disruptive service for the nearly 40 call centers in the entire GHC 9-1-1 infrastructure, 24/7, 365 days a year.

When equipment issues arise, technicians can provide solutions remotely. Or, when necessary, 9-1-1 specialists are dispatched to remedy problems wherever they occur within a service area of nearly 3,000 square miles. No matter the number of call taker positions or volume of calls, every 9-1-1 call center benefits from the Command Center and its next generation solutions.

A major area in the headquarters building is the testing lab. It is used for testing new service providers and their devices, and for determining how voice and data affects 9-1-1 call centers. It is also used for certifying new software releases.

To improve performance, GHC 9-1-1 upgraded its network infrastructure to multi-protocol label switching (MPLS). This enhancement ensures that GHC 9-1-1's system is well on its way to establishing an NG platform. In 2010, GHC 9-1-1 partnered with the City of Houston and Harris County to build a joint public safety microwave network. Adding this wireless system to the existing redundant design created an alternate delivery method that increased reliability.

## **DATABASE AND GEOGRAPHIC INFORMATION SYSTEMS (GIS)**

GHC 9-1-1 transitioned nearly 3 million telephone and address records to an in-house, self-managed database to provide greater control and improve the ability to process data faster and more accurately than ever before. The database team interacts with telephone providers on a daily basis to obtain the most up-to-date and accurate data. The GIS staff is responsible for maintaining an accurate spatial database for locating the origin of 9-1-1 calls. The team also works with other governmental entities to assure the quality of its maps. By connecting our GIS with the Database Management System, we are able to automatically locate 9-1-1 callers and instantaneously indicate their locations on maps used by call takers. All these crisis-sensitive systems are designed with disaster preparedness and rapid restoration-of-service in mind.



Due to the growing changes in communications technology, the agency is committed to educating the public about the purpose and proper use of the emergency number 9-1-1.

- How to call 9-1-1.
- When to call 9-1-1.
- · What to say.

This is best accomplished by combining efforts with emergency associations like NENA and police, fire, and emergency organizations. Together, we distribute educational materials to children, teens, adults, seniors, and the disabled, working through schools, churches, libraries, hospitals, mainstream media, and community events such as National Night Out.



**Cell Phone Sally** 

In cooperation with CSEC and Public Educators of Texas, "Cell Phone Sally" is used to educate kids.



**High-tech Training** 



GHC 9-1-1 has made great strides decreasing inappropriate calls by using billboards such as this one, TV, radio, and movie theater advertising.

# **CALL TAKER TRAINING**

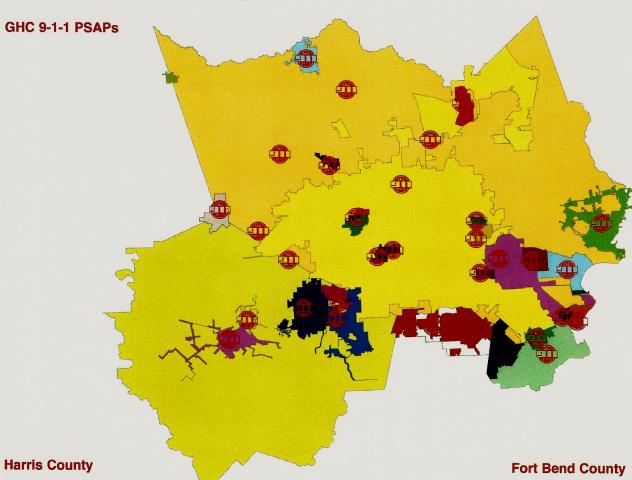
The heart of emergency response is call processing, evidenced by the dedication of GHC 9-1-1 to train nearly 1,200 call takers throughout its territory. They undergo intense instruction about how to properly utilize a sophisticated computer-telephony integrated system that provides operators with vital information. Training takes place in two specially-equipped, 24-seat rooms at headquarters. All call takers are taught the "best practices" of how to properly and efficiently link people in need with vital, emergency services.

# NEIGHBORHOOD EARLY WARNING SYSTEM (NEWS)

When it is critical that the public be informed about serious situations, GHC 9-1-1 provides an emergency notification system to its jurisdictions called NEWS. It alerts people when weather, accidents or crimes threaten neighborhood safety. It is also often used for missing person alerts and "shelter in place" notifications.

## **SERVICE AREA**

GHC 9-1-1 administers service to 49 cities, numerous communities in unincorporated areas of Harris and Fort Bend counties, including in excess of 150 police, fire, and emergency medical agencies. There are nearly 40 fully equipped PSAPs within the network's service area.



Baytown Bellaire Bunker Hill Village Crosby

Cypress Deer Park El Lago

Friendswood Galena Park

Hedwig Village Hilshire Village

Hockley Houston Huffman Humble

**Hunters Creek Village** 

Jacinto City Jersey Village

Katy Kingwood La Porte League City Missouri City

Morgan's Point Nassau Bay

**New Caney** Pasadena Pearland

Piney Point Village

Seabrook **Shoreacres** South Houston Southside Place

Spring Spring Valley Stafford Sugar Land

Taylor Lake Village

Tomball Waller Webster

West University Place

Arcola Beasley **Booth** Fairchilds Fresno **Fulshear** Kendleton Needville Orchard Pleak Richmond Rosenberg Simonton **Thompsons** Weston Lakes

# **Historic Milestones**

1983 – GHC 9-1-1 network is established.

1995 – Computer World Smithsonian Award for "Visionary Use of Information Technology," recognizing one of two patents held by GHC 9-1-1.

1996 – First to locate wireless callers within 125 meters, mandate of the Federal Communications Commission (FCC) to be available by the year 2001.

2001 – Successful trial of nation's first fully enhanced automatic collision notification (ACN) system, integrating voice and crash data.

2002 – Neighborhood Early Warning System (NEWS) telephones the public about dangerous situations (chemical spills, explosions) or hazardous weather conditions.

2008 – Database of nearly 3 million telephone and address records becomes in-house and self-managed for greater control and ability to process data faster than ever.

2009 – New headquarters in the Tom Bass Building sets the standard for 9-1-1 facilities nationwide.

2011 – Successful testing of emergency texting to accommodate the deaf and hearing-impaired community.



info@911.org www.911.org 832-237-9911