

Senate Subcommittee on Flooding & Evacuations

Presentation by
Commission on State Emergency Communications
August 24, 2010
Houston, Texas

Overview of 9-1-1 in Texas

"9-1-1 service" means a telecommunications service that provides the user of the public telephone system the ability to reach a public safety answering point by dialing the digits 9-1-1.

9-1-1 in Texas

9-1-1 service is provided by the

- State program administered by the Commission on State Emergency Communications (CSEC) and managed by the 24 regional planning commissions (RPCs)
 - 35% of population
- 51 emergency communication districts (ECDs) that operate 9-1-1 systems that are independent of the state's system.
 - 53% of population in Chapter 772 districts
 - 12% of population in municipal districts

History

- 1968 9-1-1 became nationally recognized as the Emergency response number for the nation
- 1970's Texas cities initiated 9-1-1 programs
- 1983 Greater Harris County 9-1-1 Emergency Network authorized and established
- 1985 Advisory Commission on State Emergency Communications created
- 1987 State 9-1-1 program created, existing systems grandfathered

Source: Special Interim Committee on State Emergency Communications, Interim Report, 77th Legislature, October 2000



**Commission on
State Emergency
Communications**

Emergency Communication Districts

- 1 Abilene/Taylor Co. 9-1-1 District
- 2 Austin Co. Emergency Communications District
- 3 Bexar Metro 911 Network District
- 4 Brazos Co. Emergency Communications District
- 5 Calhoun Co. 911 Emergency Communications District
- 6 Cameron Co. Emergency Communications District
- 7 Denco Area 911 District
- 8 El Paso Co. 911 District
- 9 Emergency Communications District of Ector Co.
- 10 Galveston Co. Emergency Communications District
- 11 Greater Harris Co. 911 Emergency Network
- 12 Henderson Co. 911 Communications District
- 13 Howard Co. 911 Communications District
- 14 Kerr Co. Emergency 911 Network
- 15 Lubbock Co. Emergency Communications District
- 16 McLennan Co. Emergency Assistance District
- 17 Medina Co. 911 District
- 18 Midland Emergency Communications District
- 19 Montgomery Co. Emergency Communications District
- 20 Potter-Randall Co. Emergency Communications District
- 21 Smith County 911 Communications District
- 22 Tarrant Co. 911 District
- 23 Texas Eastern 911 Network
- 24 Wichita/Willbarger 911 Communications District

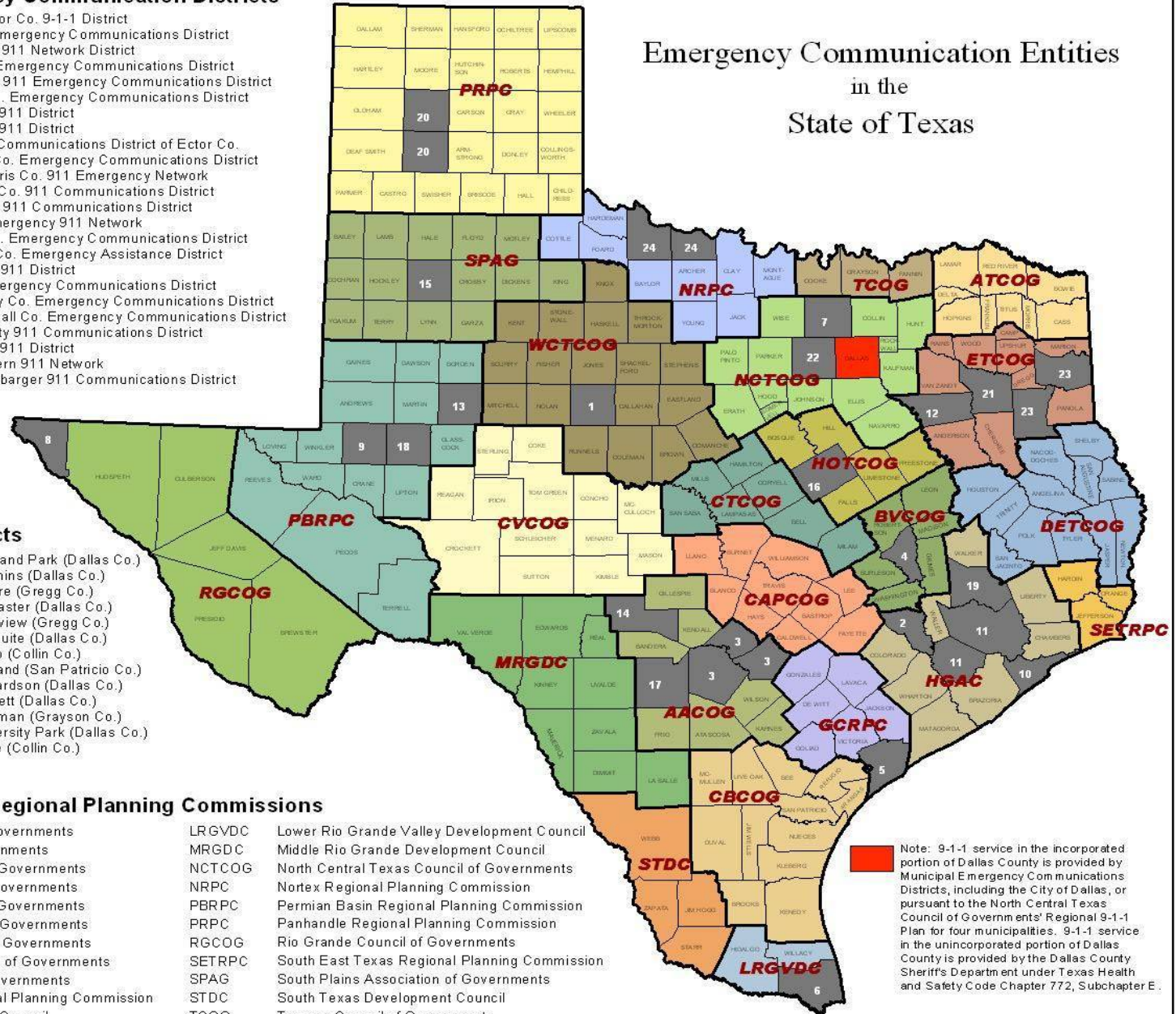
Municipal Emergency Communication Districts

- | | |
|-----------------------------|------------------------------|
| Addison (Dallas Co.) | Highland Park (Dallas Co.) |
| Aransas Pass (Aransas Co.) | Hutchins (Dallas Co.) |
| Cedar Hill (Dallas Co.) | Kilgore (Gregg Co.) |
| Coppell (Dallas Co.) | Lancaster (Dallas Co.) |
| Corpus Christi (Nueces Co.) | Longview (Gregg Co.) |
| Dallas (Dallas Co.) | Mesquite (Dallas Co.) |
| De Soto (Dallas Co.) | Plano (Collin Co.) |
| Denison (Grayson Co.) | Portland (San Patricio Co.) |
| Duncanville (Dallas Co.) | Richardson (Dallas Co.) |
| Ennis (Ellis Co.) | Rowlett (Dallas Co.) |
| Farmers Branch (Dallas Co.) | Sherman (Grayson Co.) |
| Garland (Dallas Co.) | University Park (Dallas Co.) |
| Glenn Heights (Dallas Co.) | Wylie (Collin Co.) |

Regional Planning Commissions

- | | | | |
|--------|--|--------|---|
| AACOG | Alamo Area Council of Governments | LRGVDC | Lower Rio Grande Valley Development Council |
| ATCOG | Ark-Tex Council of Governments | MRGDC | Middle Rio Grande Development Council |
| BVCOG | Brazos Valley Council of Governments | NCTCOG | North Central Texas Council of Governments |
| CAPCOG | Capital Area Council of Governments | NRPC | Nortex Regional Planning Commission |
| CBCOG | Coastal Bend Council of Governments | PBRPC | Permian Basin Regional Planning Commission |
| CTCOG | Central Texas Council of Governments | PRPC | Panhandle Regional Planning Commission |
| CVCOG | Concho Valley Council of Governments | RGCOG | Rio Grande Council of Governments |
| DETCOG | Deep East Texas Council of Governments | SETRPC | South East Texas Regional Planning Commission |
| ETCOG | East Texas Council of Governments | SPAG | South Plains Association of Governments |
| GCRPC | Golden Crescent Regional Planning Commission | STDC | South Texas Development Council |
| HGAC | Houston-Galveston Area Council | TCOG | Texoma Council of Governments |
| HOTCOG | Heart of Texas Council of Governments | WCTCOG | West Central Texas Council of Governments |

Emergency Communication Entities in the State of Texas



Current Systems

9-1-1 has been a success story for four decades

- Designed to provide single 3 digit dialing from landline to reach emergency response
- Automatic Number and Location ID added and well integrated
- Wireless capability added through considerable system modification and effort
- Voice over Internet Protocols (VoIP) capability added
- Still has limitations

Limitations

- Cannot support all current devices
 - Unregistered nomadic & mobile VoIP callers
- Unable to access caller generated data
 - Text messaging (critical for hard of hearing)
 - Images
- Single points of failure
- Local
 - Does not support call taking by geographically dispersed PSAPs
- And what about the next new technology?
 - Need to integrate more rapidly

Solution: Next Generation 9-1-1 (NG9-1-1)

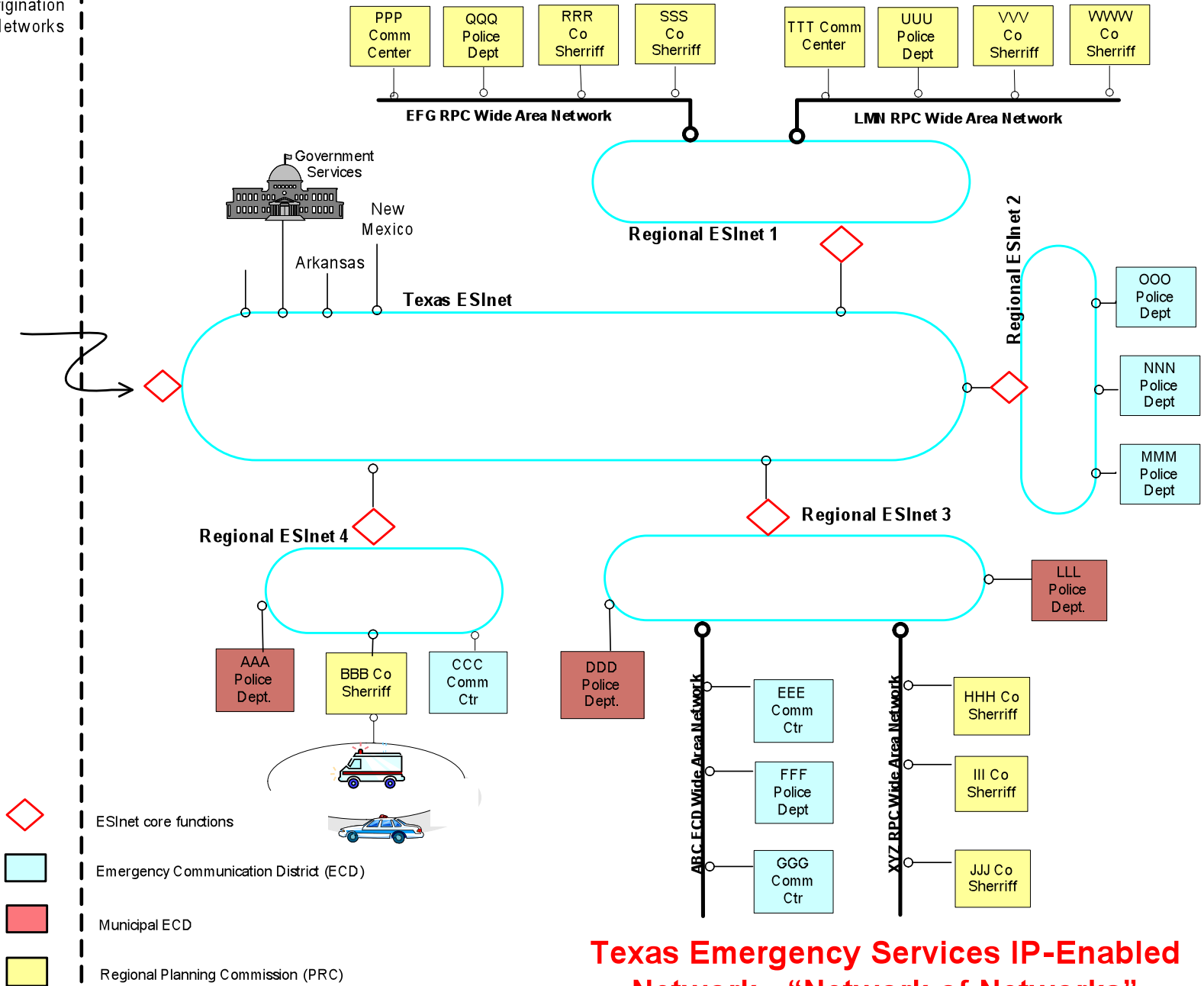
- ✓ An Internet Protocol (IP) Based Replacement for E9-1-1 System Features and Functions
- ✓ Supporting all Sources of Emergency Access to the Appropriate PSAP
- ✓ Operating on Privately Managed, Multipurpose IP Networks
- ✓ Providing Expanded Multimedia Data Capabilities for PSAPs and Other Emergency Communications Entities

What do you get?

Today's 9-1-1	Next Generation 9-1-1
40 year old legacy technology Difficult to adapt to change Proprietary	Future oriented Plug and play Based on open standards
Analog Fixed - dedicated	Digital Dynamic – multi purpose
Primarily voice Limited data capability	Advanced data capability Text, images, crash notification
Local access Limited transfer and backup	Long distance access Expanded transfer and backup

Clients

Access & Origination Networks



Texas Emergency Services IP-Enabled Network - "Network of Networks"

NG9-1-1 Progress to Date

- Planning
 - 2008 Began NG9-1-1 Planning Project
 - 2009 Master Plan
- Federal grant
 - 2009 Awarded \$5.4 million
 - Acquisition and deployment of hardware and software to enable the migration to an IP-enabled emergency network
 - Build a state level Emergency Services IP network (ESInet)
 - Expires September 2012
 - Requested state funding in LAR to sustain
- State-level ESInet Advisory Council
 - 2010 Established by Rule 252.8

ENS - Emergency Notification Systems or Service

Automatically dial and play recorded notification message

- Landline phone systems
 - Database of geocoded telephone numbers
 - White pages
 - 9-1-1
 - Equipment (System or Service)
 - Authenticate originator
 - Identify area to be notified
 - Record message
 - Place calls
 - Access lines
- Mobile phone systems
 - Most use SMS
 - Registration may be required

Overview of ENS in Texas

- Initially clustered around refineries and chemical plants
- More interest after 9/11/2001
- Locally funded and operated
 - Some ECDs own or operate
 - Some RPCs own or operate with other funding
- CSEC participation limited to access to 9-1-1 database
 - Rule 251.13 - The Use of the 9-1-1 Database for Emergency Notification Services
 - 16 approved applications