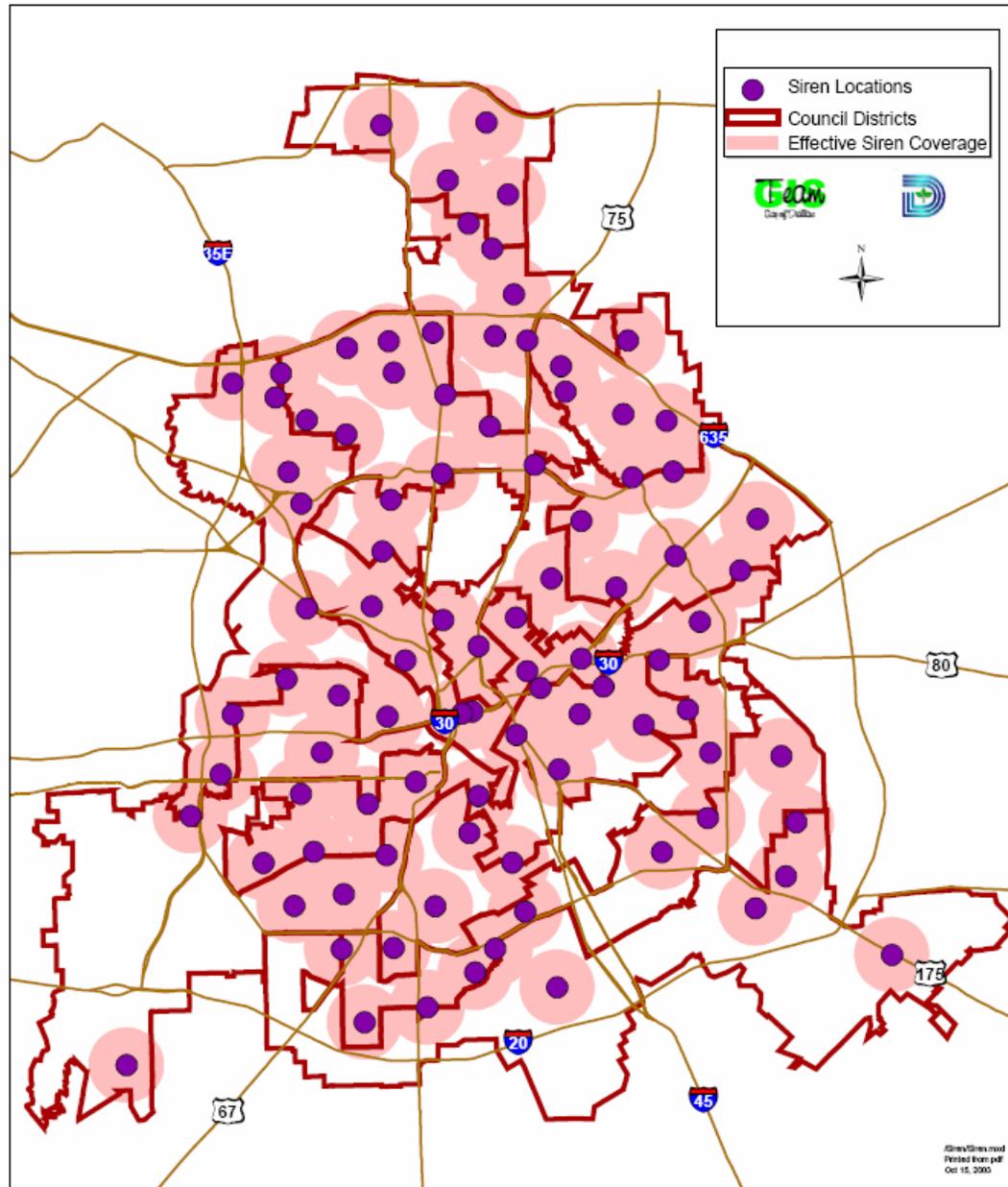
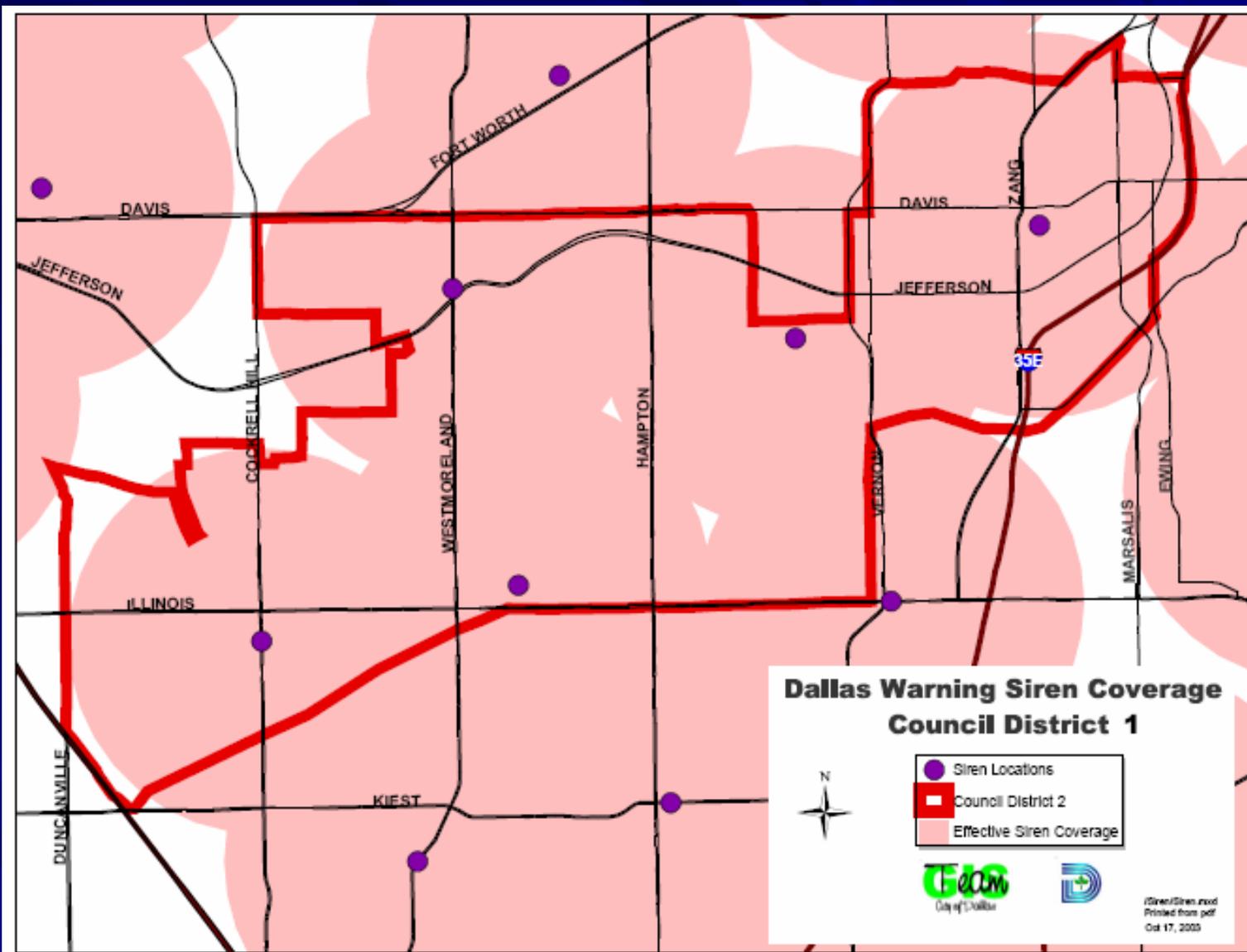


City of Dallas

Siren System

Dallas Warning Siren Coverage Council Districts





History

- The first sirens were placed in Dallas following a 1957 tornado that killed 10 people, injured 200, and caused \$2.5 million in damage
- There are now 94 sirens citywide
- Most were purchased in 1960 – 70's
- Intended as one part of an overall warning system including radio, TV, cable interrupt and “weather radios”
- Especially effective at nights and outdoors and are not intended for indoor warning

Spreadsheet of all siren info

| Location | Siren Type | Date Purchased | Mapsco | |
|--|------------|----------------|--------|--|
| | | | | |
| New St Paul Baptist Church, 10345 Webb Chapel, | 1000 | 1964 | 23C | |
| Burleson Elementary School, 6300 Elam, | 1000 | 1964 | 57V | |
| Alexander Elementary School, 1830 Goldwood, | 1000 | 1964 | 64W | |
| T.C. Marsh Jr. High School, 3838 Crown Shore, | 1000 | 1964 | 14W | |
| Salvation Army, 5554 Harry Hines, | 1000 | 1964 | 34T | |
| Cochran Elementary School, 6000 Keeneland, | 1000 | 1964 | 52S | |
| L.B. Stockard Middle School, 2300 S. Ravinia, | 1000 | 1964 | 53Q | |
| Fire Station #09, 2002 Cool Mist, | 1000 | 1964 | 69A-P | |

Operation & Maintenance

- Our River Levee electricians do repairs as needed
- Office of Emergency Management – oversees the program and “pushes the button”
- Fire & Police Dispatch can also set them off
- Lots of mechanical moving parts & batteries
- Difficult to acquire parts for some of the older sirens
- 30 year *reliable* life expectancy
- Current cost for a new siren \$20,000 – 25,000 each

Coverage

- 60% of the land area
- 83% of the population
- Average 1 mile radius
- Estimates for “full coverage” = 50-115 more sirens
- Siren vendors will perform a “coverage survey” at no cost

New Available Technology

- Computerized two-way monitoring system tells us how the siren is functioning
- Allows silent testing
- Voice capability (live or taped)
- Allows individual sirens or neighborhoods to be activated as well as “citywide”

2001SRNB Siren



Documented signal strength of 128dBC at 100ft – every Siren is tested to assure it meets our Sound Pressure rating!
Maintenance free, sealed bearing motors - 5 year warranty

- A rotating directional, electro-mechanical siren that covers more than 3.5 square miles
- Produces three high powered signals
- AC, DC or AC/DC operation available
- Supplies minimum of 15 minutes full power output from batteries after AC power loss
- Produces a 60 degree projection of sound which rotates at 3RPM

Modulator Series Siren Speaker Array



Fully tested in Federal's certified anechoic chamber with output from 106 to 125dB

Easy servicing through convenient access panels

- Highly efficient design produces high intensity warning signals, and makes moderate demands on the battery power source
- Up to 7 different warning signals, voice communication, and continued emergency operation regardless of primary power outages
- Excellent frequency response for crystal clear voice reproduction
- 360 degree coverage with no sound variation in the horizontal plane

Federal Commander Digital System™



Complete, secure activation
and status monitoring of any
siren system

- Point and click activation and polling
- Maps with color-coded status of each siren
- FSK digital encryption
- Complete RTU configuration and reprogramming from control site
- “Digipeat” system feature eliminates the need for radio repeater systems
- Direct communication between RTUs
- Automatic call-out function to alert key personnel of events
- Password protection for Activation, Operator and Administrator levels
- Complete storage of all status and alarm data
- Automatic notification of change in AC Power, Low Battery, Intrusion, etc.
- Remote system control

Options to Consider

1. Continue the current practice of dealing with siren issues as they arise
 2. Begin an annual systematic program to add or replace sirens at most needed sites
 - Would require an annual budget
 - Four sirens per year would cost \$100,000
 3. Consider replacing the entire system through a capital improvement bond issue - \$4-5 million
 1. This method has been very successful in many cities
- The current Homeland Security Grants do not specifically allow for outdoor warning sirens.