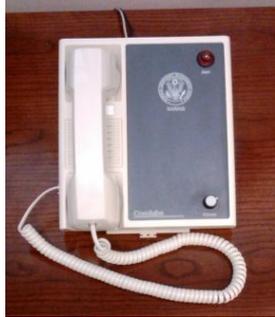




Warning in Sedgwick County

September 15, 2010



Sedgwick County...
working for you

W-072 – Central W of 119th West

Roadmap to presentation...

- Why this presentation today?
- The multi-layered warning system in Sedgwick County
- Why are we having to consider change?
- Recommendation
- Request for Board of County Commissioners to consider changing scope of existing Outdoor Warning CIP



WHY THIS PRESENTATION TODAY?



Sedgwick County...
working for you

Why this presentation today?

- We have discussed the issue of public warning with you in several work sessions.
- At your direction, Emergency Management is bringing this issue forward in a formal meeting so that the public can receive a briefing similar to the ones you have received.



Why this presentation today?

- So that you may review and consider official action to change the concept and scope of the existing CIP project approved by the Board of County Commissioners in 2009.



Mission Statement

- Sedgwick County Emergency Management exists to help people, organizations (governmental and non-governmental) and businesses prepare for, respond to, recover from and mitigate disasters – whether natural, technological, or homeland security.



THE MULTI-LAYERED WARNING SYSTEM IN SEDGWICK COUNTY



Sedgwick County...
working for you

Multi-Layered Warning System

- If a warning were needed now, it would reach the public through a system consisting of multiple layers:
 - Outdoor Warning Devices
 - NOAA Weather Radio
 - Partnership with Local Media
 - Emergency Alert System (EAS)



Multi-Layered Warning System

Outdoor Warning Devices



Sedgwick County...
working for you

Multi-Layered Warning System

- NOAA Weather Radio
 - Is able to sound a tone alert and a visible alert
 - Can provide visual information as well as audio information
 - Is usually backed up by battery operation
 - Can be programmed for specific county with SAME technology



Specific Area Message Encoding (SAME) Technology

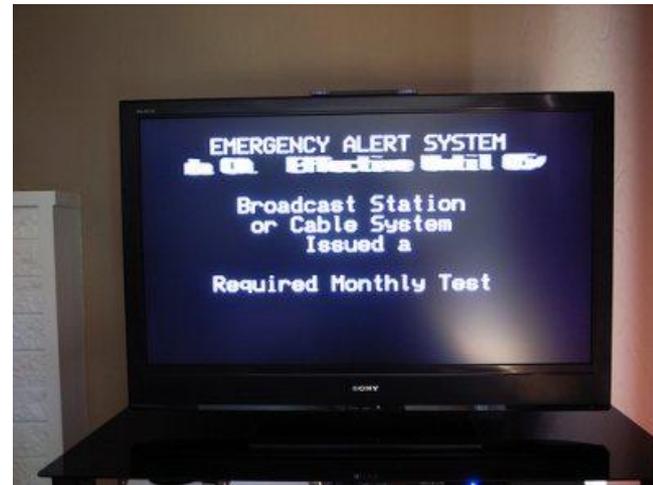


Multi-Layered Warning System

- Emergency Alert System



Radio



Local Broadcast
And Cable Television



Sedgwick County...
working for you

Multi-Layered Warning System

- Why use multiple layers?
 - No individual system is 100% reliable
 - No individual system can reach 100% of the public 100% of the time
 - A good system must have multiple layers to reach people outdoors and indoors
 - Outdoor warning devices are not designed to be heard indoors (although sometimes they can be)



Multi-Layered Warning System

- Systems must be regularly tested
- This ensures reliability



OUTDOOR WARNING DEVICES



Sedgwick County...
working for you

Outdoor Warning Devices

- Outdoor Warning Devices
 - Origin: 1950s
 - Air Raid / Nuclear Attack
 - Some jurisdictions have eliminated (Washington DC)
 - Others have updated (Oklahoma City, Andover, Wyandotte County, Douglas County, Overland Park, Olathe, Springfield, MO, Columbia, MO, Kansas City, MO, Shawnee County, Salina)
 - NWS research has confirmed link between warning and decreased deaths



Outdoor Warning Devices

- One central voice (transmitter) sends signal
- Over 100 sets of “ears” hear signal (receiver at each device location)
- The system allows us only one choice – to fully activate all devices



Outdoor Warning Devices

- Dependent on commercial electrical distribution
- This is WW II level of capability



Outdoor Warning System Testing

- Currently test outdoor warning “every Monday during clear weather. Exceptions include Monday holidays or insufficient staff available.”
- Test reliability is determined by making over 100 phone calls to citizens.



Outdoor Warning System Testing

- Citizens volunteer their time for this effort.
- Their responses are not 100% accurate.
- False-negative = \$250.00 [15 in 2008 (\$3,750.00); roughly the same in 2009]
- False-positive = \$Unknown



Outdoor Warning Devices

- 15 devices installed 1952 – 1958
- 27 devices installed 1960-1969
- 8 devices installed 1972-79
- 14 devices installed 1980-1989
- 20 devices installed 1990-1999
- 17 devices installed 2000-2008



Outdoor Warning Devices

- Devices Owned and Sounded by Sedgwick County – 101
- Bentley – 2
- Cheney – 5
- Garden Plain – 2
- Goddard - 4
- Viola – 1
- Clearwater – 2
- Haysville – 3
- Derby – 11
- Mulvane – 10
- Mount Hope – 1
- Bel Aire – 1
- Kechi – 2
- Valley Center – 3
- Colwich – 3
- Andale – 1



Outdoor Warning Devices

- Private Partners
 - McConnell Air Force Base – 5
 - Basic Chemicals (formerly Vulcan) – 2
 - Boeing / Spirit – 7
- We coordinate with these private partners during our system tests.
- These private partners utilize the devices for their own purposes.



Outdoor Warning System

Device reliability
94.96% YTD



Sedgwick County...
working for you

Outdoor Warning Devices 2009 Reliability by Device

66 Devices 95 – 100%

8 Devices 90 – 94.9%

27 Devices <90%



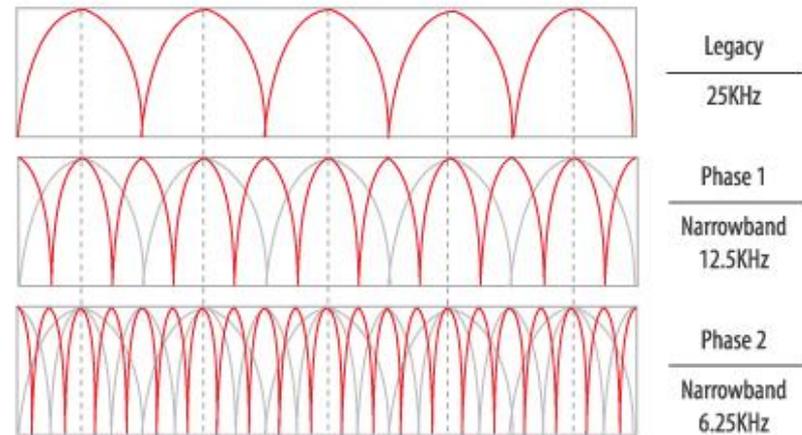
Why are we considering
changing our system now?



Sedgwick County...
working for you

Narrowbanding...

- FCC requires narrowbanding by January 1, 2013
- None of our outdoor warning device receivers can hear the new signal



RECOMMENDATION



Sedgwick County...
working for you

Key Stakeholder Meetings

- April 7, 2010
- April 7, 2010
- Communities present:
 - Bentley
 - Clearwater
 - Colwich
 - Derby
 - Goddard
- Communities present:
 - Haysville
 - Kechi
 - Maize
 - Mulvane
 - Park City
 - Valley Center

Communities not present at meeting: Andale, Bel Aire, Cheney Eastborough*, Garden Plain, Mount Hope**, Sedgwick, Viola

*Eastborough devices counted in 101 owned / operated by SG

**Mount Hope provided response even though they didn't attend



Sedgwick County...
working for you

Stakeholder Responses

Responded to questions

- Bentley - Interested
- Colwich - Interested
- Derby - Interested
- Haysville - more info
- Kechi - more info
- Mount Hope* – more info
- Mulvane - Interested
- Park City - Interested

No response to questions

- Clearwater
- Garden Plain
- Goddard
- Maize
- Valley Center

*Not at April 7, 2010 Meeting



Sedgwick County...
working for you

Stakeholder Consensus

- There seems to be clear consensus that the stakeholder communities prefer selective warning capability (Bentley, Colwich, Derby, Mulvane, Park City)
- Most communities would prefer that Sedgwick County take over operation, purchase, installation, and maintenance of a digital system.



Digital Upgrade

Digital Update To Receivers

Sedgwick County Cost	Costs on behalf of Stakeholders	Total
\$857,307.00* (includes \$32,000.00 for software)	\$397,693.00*	\$1,255,000.00*

*Budgetary estimate only



Sedgwick County...
working for you

Total Replacement Costs Both Receivers and Noisemakers

Estimated Replacement Cost for “Noisemakers” and receivers

Sedgwick County Costs	Stakeholder Costs	Total
\$ 857,307.00* Rec.	\$397,693.00* Rec.	\$1,255,000.00* Rec.
<u>\$ 859,075.95* Noise</u>	<u>\$287,688.70* Noise</u>	<u>\$1,146,764.65* Noise</u>
\$1,716,382.95* Total	\$685,381.70* Total	\$2,401,764.65* Total

*Budgetary estimate only



*Sedgwick County...
working for you*

Recommendations

- Staff recommends upgrading receivers to digital for Sedgwick County and Stakeholders
- Budgetary estimate: \$1,255,000.00
- You have already approved \$857,307.00 in the 2009 CIP



Recommendations (cont'd)

- Staff recommends taking a phased approach to replacement of the “noisemakers” in the CIP over time

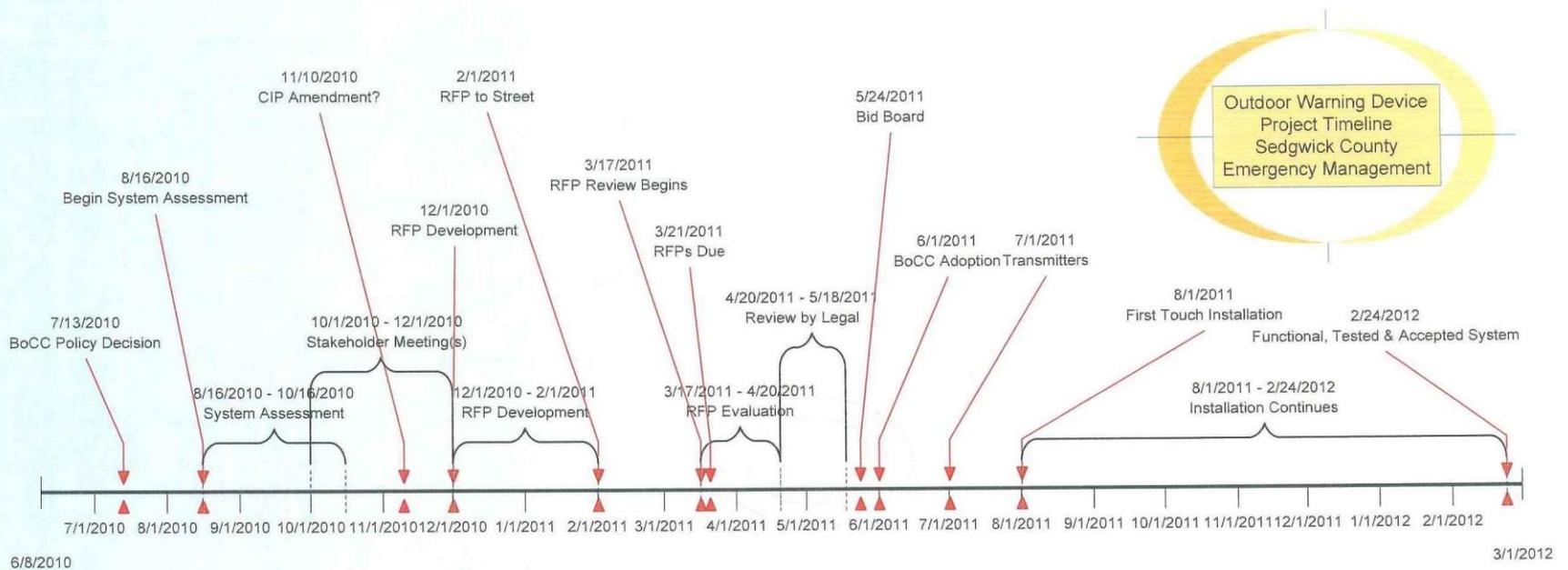


Recommendations (cont'd)

- Staff recommends addressing future County growth by continuing CIP program to add new devices



Project Timeline



Sedgwick County...
working for you

What are we asking for today?

- Your decision as to whether or not you concur with the **concept** of our recommendation
- We will come back before you at a later date with more exact dollar figures – and a request to consider changing the **amount** of funding of the existing CIP



Benefits to Sedgwick County

- Improving and modernizing our multi-layer warning system
- Continuing to insure the level of reliability of our outdoor warning devices
- Selective warning capability
- Uniform system county-wide

