A Few Issues in Siren Policy
(aka Many Questions Raised, Essentially None Answered!)

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What are Outdoor Warning Sirens?

- **Outdoor Warning Siren(s)** - Physical structure or network of physical structures that produce(s) an audible alert intended to warn outdoor publics of an impending hazard.
- Sirens might be used for tornadoes, floods, tsunamis, chemical spills, etc. or lunchtime!!
- Typically localized to facility, municipality or county.
What is the Debate?
A better question: What isn’t the debate?
My one size fits all framing of the debate:
Whether a technology some call outdated and expensive actually saves lives (or perhaps more lives than other warning technologies).
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My journalistic research involved:
- 25 in-depth interviews
- Comprehensive literature review
- Visits to several sites, including a handful of emergency management offices and the Little Sioux Scout Ranch near Little Sioux, Iowa.
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What I Found:

- Emergency managers and NWS employees, as a general rule, loathe sirens.
- They want everyone to use weather radios!
- The public, as a general rule, loves sirens.
- Those who do own them had been through a devastating storm.
- Research shows that 2-5% of people actually use a weather radio.
Issues in sirens (and others) Loathe Sirens:

- One siren can cost $10,000 to $50,000.
  - New residential developments often mandate that sirens must meet specific aesthetic requirements before being installed – increases cost
  - "Sirens are less effective and less dependable than a weather radio, and they’re late. You’ve got something that’s less effective, it’s late, and the cost has a legacy to it every single year." – Paul Johnson, Douglas Co. (NE) EM

- People expect to hear them anytime, anywhere
  - "Calling them ‘outdoor warning sirens’ is confusing to people. There isn’t a person alive who doesn’t expect to hear them in their house." - Mark Widner
  - "People become so dependent on them. People complain about not hearing them in their basements." – Doug Ahlberg, Lancaster County (NE) EM

- Absence of standardized how/when policy
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Why Many People Love Sirens:
- They are the anecdotal subjects (or relatives, friends, etc.) whose lives have been saved by sirens
  - One woman I interviewed had been working a string of night shifts and woke up late one morning and was in a hurry and jumped in the shower, unaware of weather, etc. She was alerted to an impending tornado only by a nearby siren, ran to an interior room, and her house was destroyed, including the bathroom she had been getting ready in only moments before.
  - Little Sioux Scout Camp, Iowa: Scouts’ only warning was homemade siren
- They are a passive warning method
  - People don’t have to actively pursue information to receive the warning
  - “Even our 6-year-old knows what the siren means and what to do when it goes off.” - Josh Harris, who took shelter in his house with his 6-month old and 6-year old when a Sylvania, Ala. EF3 tornado destroyed his home
What’s the Immediate Result of All This:

Communities Cannot Get Rid of Sirens

- Public sentiment/outrage is hard to ignore
- One person I interviewed said that in severe weather threats she travels to relative’s house in order to be able to hear sirens if they go off
- EMs I talked to said they continue to install sirens because of public expectations rather than their views of siren effectiveness
- “Sirens are kind of like this stepchild that you have to have but you don’t want. I think a lot of emergency managers appreciate what sirens can do, but they have got a black eye.” – Brian Cates, Blue Valley Public Safety, MO
- “We will always have them. We will always use them. People will always expect them.” – Mark Widner, City of Independence (MO) EPM
Another Issue That Came Up:

- **Individual perceptions of safety**

  Several individuals I interviewed stated that their perceptions of where they are safe influence their actions more than their rationale-based knowledge of where they are safe.

  One example: One person I interviewed said that even though she had a basement in a sturdy brick house, she feels safer going to her parents’ house, which is a vinyl siding house with no basement, and often does that during severe weather.

  Another example: One person I interviewed drives 15 miles with her young daughter and husband to her mother’s house during severe weather events. Although the interviewee lives in a mobile home and her mother lives in a brick house, she admitted that the “main” reason she travels to her mother’s house is because she “grew up there,” *withstood* “lots of severe weather” there, and feels “safe” there.
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What is the Answer?

WAS*IS!!!!!!

“...The greater challenge, then, falls to a community of integrated meteorology and social science researchers to better understand how people make decisions during warnings, whether forecasts for weather threats are communicated effectively, how people perceive and interpret that information, and how emergency managers and other community officials can better use tools, such as outdoor warning sirens, to save lives.”