



Outdoor Warning Siren Activation & Policy Survey

April 2019

April 29, 2019

To the Members of the Iowa Emergency Management Association:

Earlier this year, a member requested a follow-up survey be conducted regarding the usage of outdoor warning sirens in the State of Iowa. The previous survey had been conducted in 2013 and at that time, only asked whether sirens were activated for straight-line winds.

The 2019 survey covered the following topics:

- The total number of sirens in the county
- Activation criteria for straight-line winds
- Activation criteria for hail
- Who can activate the sirens
- Activation policies
- How sirens are activated
- Whether or not automatic activation software is used and what brand
- Whether or not the county follows the *IEMA Outdoor Warning Siren Best Practices* document published in 2015

The survey using Google Forms was made available to the IEMA Membership via a link in an e-mail sent on Monday, March 18 at 12:03 p.m. A follow-up request for data was sent via e-mail to the IEMA membership on Wednesday, April 17 at 8:33 a.m. after only 37 responses had been received. The survey was closed on Monday, April 22 and results were tabulated. A total of 66 counties (67%) responded to the survey.

The results are contained in this document within the following sections:

- 2013 Survey Results
- Survey Questions
- Raw Survey Results
- Charts & Maps

If you have questions regarding the survey or the results presented here, please contact Michael Ehret at 712-336-3987 or by e-mail at mike@dcem.us.

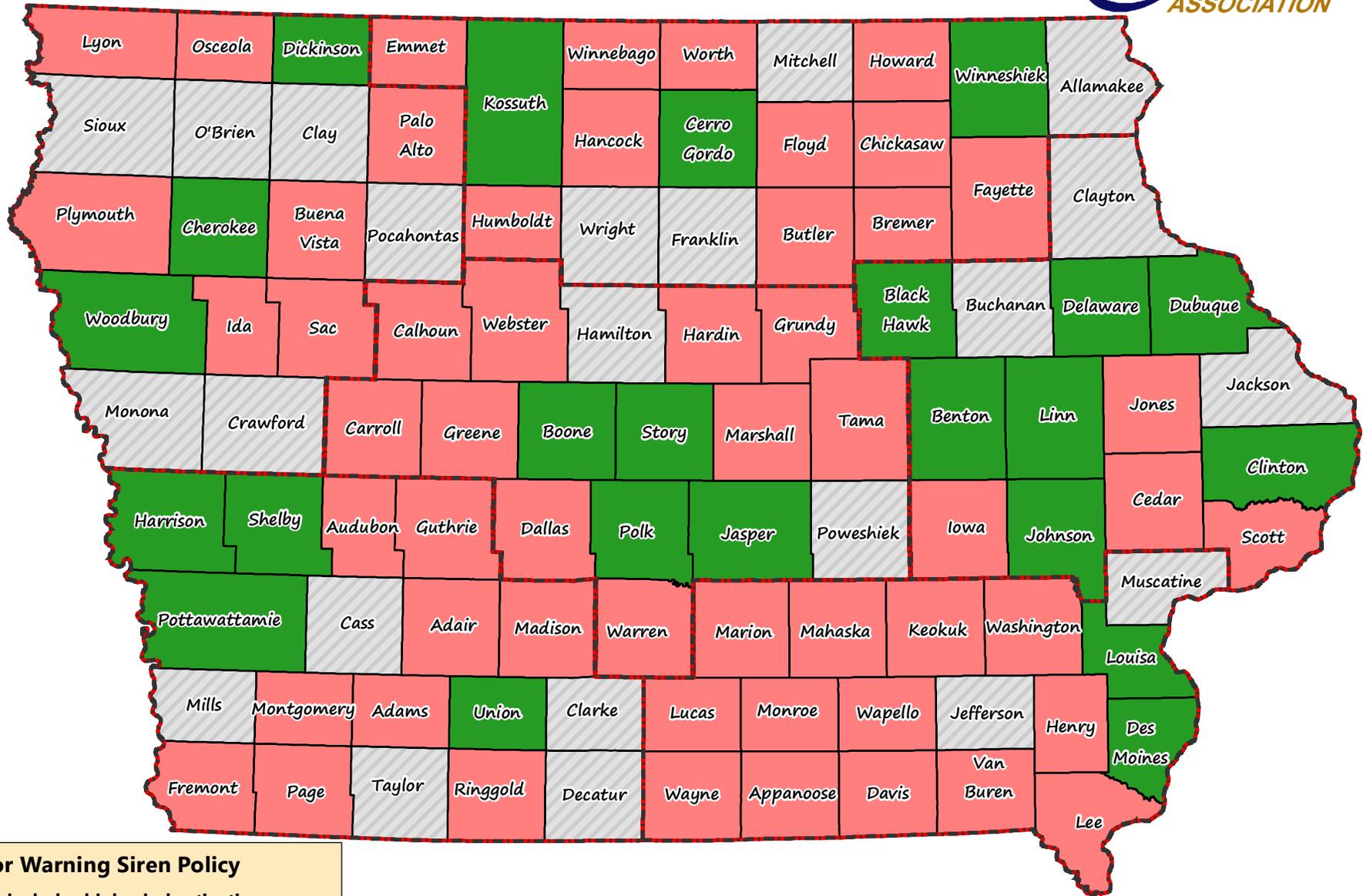
Respectfully Submitted,



Michael Ehret, Coordinator
Dickinson County Emergency Management

2013 Survey Results

Outdoor Warning Siren High Wind Policy



Outdoor Warning Siren Policy

- Policy includes high wind activation
- Policy does not include high wind activation
- No response to survey

Survey Questions

1. County *

Mark only one oval.

- ADAIR
- ADAMS
- ALLAMAKEE
- APPANOOSE
- AUDUBON
- BENTON
- BLACK HAWK
- BOONE
- BREMER
- BUCHANAN
- BUENA VISTA
- BUTLER
- CALHOUN
- CARROLL
- CASS
- CEDAR
- CERRO GORDO
- CHEROKEE
- CHICKASAW
- CLARKE
- CLAY
- CLAYTON
- CLINTON
- CRAWFORD
- DALLAS
- DAVIS
- DECATUR
- DELAWARE
- DES MOINES
- DICKINSON
- DUBUQUE
- EMMET
- FAYETTE
- FLOYD
- FRANKLIN
- FREMONT
- GREENE
- GRUNDY

- GUTHRIE
- HAMILTON
- HANCOCK
- HARDIN
- HARRISON
- HENRY
- HOWARD
- HUMBOLDT
- IDA
- IOWA
- JACKSON
- JASPER
- JEFFERSON
- JOHNSON
- JONES
- KEOKUK
- KOSSUTH
- LEE
- LINN
- LOUISA
- LUCAS
- LYON
- MADISON
- MAHASKA
- MARION
- MARSHALL
- MILLS
- MITCHELL
- MONONA
- MONROE
- MONTGOMERY
- MUSCATINE
- O'BRIEN
- OSCEOLA
- PAGE
- PALO ALTO
- PLYMOUTH
- POCAHONTAS
- POLK
- POTTAWATTAMIE

- POWESHIEK
- RINGGOLD
- SAC
- SCOTT
- SHELBY
- SIOUX
- STORY
- TAMA
- TAYLOR
- UNION
- VAN BUREN
- WAPELLO
- WARREN
- WASHINGTON
- WAYNE
- WEBSTER
- WINNEBAGO
- WINNESHIEK
- WOODBURY
- WORTH
- WRIGHT

2. How many outdoor warning sirens are in your county? *

Enter numbers only; no letters or punctuation

3. If your county activates sirens for straight-line winds, what is the speed threshold required for activation? *

Mark only one oval.

- 65 mph
- 70 mph
- 75 mph
- 80 mph
- 85 mph
- We don't activate for straight-line winds
- Other: _____

4. If your county activates sirens for hail, what is the size threshold required for activation? *

Mark only one oval.

- 2 inches
- 2.5 inches
- 3 inches
- 3.5 inches
- 4 inches
- 4.5 inches
- 5 inches
- We don't activate sirens for hail
- Other: _____

5. How are sirens activated in your county?

Mark only one oval.

- Dispatch and/or EOC
- Each city/town activates theirs manually
- A mix of these

6. Does your county use an automatic system/software for siren activation? *

Example: Federal Signal Commander, Storm Sentry, etc.

Mark only one oval.

- Yes
- No

7. If you use an automatic system/software, what system do you use?

8. Do you have a county-wide siren activation policy or does it vary by city/town? *

Mark only one oval.

- Countywide
- Varies by City/Town

9. In 2015, IEMA adopted the "Outdoor Warning Siren Best Practices Recommendation" document. Does your county follow these recommendations? *

The document can be downloaded here:

<https://www.iowaema.com/index.php/documents/download/2-public-documents/6-outdoor-warning-siren-best-practices-recommendation>

Mark only one oval.

- We follow it completely
- We follow parts of it
- We don't follow any of it
- I haven't seen this document

Raw Survey Results

County	How many outdoor warning sirens are in your county?	If your county activates sirens for straight-line winds, what is the speed threshold required for activation?	If your county activates sirens for hail, what is the size threshold required for activation?	How are sirens activated in your county?	Does your county use an automatic system/software for siren activation?	If you use an automatic system/software, what system do you use?	Do you have a county-wide siren activation policy or does it vary by city/town?	In 2015, IEMA adopted the "Outdoor Warning Siren Best Practices Recommendation" document. Does your county follow these recommendations?
ADAIR	5	We don't activate for straight-line winds	We don't activate sirens for hail	A mix of these	No		Varies by City/Town	We follow parts of it
ADAMS	6	70 mph	We don't activate sirens for hail	A mix of these	Yes		Countywide	We follow parts of it
ALLAMAKEE	10	70 mph	Have hail listed, but not by size. Will work to update by size.	A mix of these	No	N/A	Varies by City/Town	We follow parts of it
APPANOOSE	8	70 mph	We don't activate sirens for hail	Dispatch and/or EOC	No		Countywide	We follow parts of it
BENTON	47	70 mph	2 inches	A mix of these	No		Countywide	We follow parts of it
BLACK HAWK	47	70 mph	2 inches	Dispatch and/or EOC	Yes	Nextgen	Countywide	We follow it completely
BOONE	14	70 mph	We don't activate sirens for hail	Dispatch and/or EOC	No		Countywide	We follow parts of it
BREMER	16	We don't activate for straight-line winds	We don't activate sirens for hail	A mix of these	No		Varies by City/Town	I haven't seen this document
BUCHANAN	16	70 mph	We don't activate sirens for hail	A mix of these	No		Countywide	We follow parts of it
BUENA VISTA	20	80 mph	We don't activate sirens for hail	Dispatch and/or EOC	No		Countywide	We follow parts of it
BUTLER	12	We don't activate for straight-line winds	We don't activate sirens for hail	A mix of these	No		Varies by City/Town	We follow parts of it
CALHOUN	15	We don't activate for straight-line winds	We don't activate sirens for hail	Dispatch and/or EOC	Yes	zuercher	Countywide	We follow parts of it
CASS	22	We don't activate for straight-line winds	We don't activate sirens for hail	A mix of these	No	NA	Varies by City/Town	We follow parts of it
CERRO GORDO	27	70 mph	We don't activate sirens for hail	A mix of these	No		Varies by City/Town	We follow parts of it
CHEROKEE	13	We don't activate for straight-line winds	We don't activate sirens for hail	Dispatch and/or EOC	No		Countywide	I haven't seen this document

County	How many outdoor warning sirens are in your county?	If your county activates sirens for straight-line winds, what is the speed threshold required for activation?	If your county activates sirens for hail, what is the size threshold required for activation?	How are sirens activated in your county?	Does your county use an automatic system/software for siren activation?	If you use an automatic system/software, what system do you use?	Do you have a county-wide siren activation policy or does it vary by city/town?	In 2015, IEMA adopted the "Outdoor Warning Siren Best Practices Recommendation" document. Does your county follow these recommendations?
CHICKASAW	10	70 mph	1.75 inches	Dispatch and/or EOC	No		Countywide	We follow it completely
CLINTON	36	70 mph	1.75 golf ball size	Dispatch and/or EOC	No		Countywide	We follow parts of it
CRAWFORD	14	We don't activate for straight-line winds	We don't activate sirens for hail	A mix of these	Yes	Federal	Countywide	We follow parts of it
DALLAS	44	Combination. Metro cities and Granger follow 70mph activation while remainder of County does not.	We don't activate sirens for hail	A mix of these	No	Some cities are in the process of implementation of this technology.	Varies by City/Town	We follow parts of it
DAVIS	6	70 mph	We don't activate sirens for hail	Dispatch and/or EOC	No		Countywide	We follow parts of it
DELAWARE	14	70 mph	We don't activate sirens for hail	Each city/town activates theirs manually	No		Countywide	We follow parts of it
DES MOINES	15	70 mph	We don't activate sirens for hail	A mix of these	No		Countywide	We follow it completely
DICKINSON	31	75 mph	We don't activate sirens for hail	Dispatch and/or EOC	No		Countywide	We follow parts of it
DUBUQUE	44	70 mph	1.75 inches or golf ball size	A mix of these	No		Countywide	We follow parts of it
EMMET	8	We don't activate for straight-line winds	We don't activate sirens for hail	A mix of these	No		Countywide	I haven't seen this document
FAYETTE	28	70 mph	2 inches	A mix of these	No		Countywide	We follow parts of it
FRANKLIN	12	70 mph	2.5 inches	Dispatch and/or EOC	No		Countywide	We follow parts of it
GREENE	9	70 mph	We don't activate sirens for hail	A mix of these	No		Countywide	I haven't seen this document
GRUNDY	10	If we're put into a Warning we will set off the sirens.	If we're put into a WARNING we will set off the sirens	Dispatch and/or EOC	No		Varies by City/Town	I haven't seen this document
GUTHRIE	16	We don't activate for straight-line winds	We don't activate sirens for hail	A mix of these	No		Varies by City/Town	We follow parts of it

County	How many outdoor warning sirens are in your county?	If your county activates sirens for straight-line winds, what is the speed threshold required for activation?	If your county activates sirens for hail, what is the size threshold required for activation?	How are sirens activated in your county?	Does your county use an automatic system/software for siren activation?	If you use an automatic system/software, what system do you use?	Do you have a county-wide siren activation policy or does it vary by city/town?	In 2015, IEMA adopted the "Outdoor Warning Siren Best Practices Recommendation" document. Does your county follow these recommendations?
HANCOCK	11	Dependent on ground truth reporting from spotters. We don't have a wind speed threshold in our policy.	Dependent on ground truth reporting from spotters. We don't have a hail size threshold in our policy.	A mix of these	No	N/A	Countywide	We follow parts of it
HARRISON	10	80 mph	We don't activate sirens for hail	A mix of these	No		Varies by City/Town	We follow parts of it
IDA	7	We don't activate for straight-line winds	We don't activate sirens for hail	Dispatch and/or EOC	No		Countywide	We follow parts of it
IOWA	10	70 mph	2 inches	Dispatch and/or EOC	No		Countywide	We follow it completely
JACKSON	12	70 mph	2 inches	Dispatch and/or EOC	No		Countywide	We follow it completely
JASPER	20	75 mph	2 inches	Dispatch and/or EOC	No		Countywide	We follow parts of it
JOHNSON	67	70 mph	Golf ball size.	Dispatch and/or EOC	No	NA	Countywide	We follow parts of it
JONES	13	We don't activate for straight-line winds	We don't activate sirens for hail	Dispatch and/or EOC	Yes	Ztron	Countywide	We don't follow any of it
KOSSUTH	20	70 mph	2 inches	A mix of these	No		Countywide	We follow it completely
LINN	109	70 mph	Golf ball sized hail	A mix of these	No		Countywide	We follow parts of it
LUCAS	7	We don't activate for straight-line winds	We don't activate sirens for hail	Dispatch and/or EOC	No		Countywide	We follow parts of it
LYON	8	We don't activate for straight-line winds	We don't activate sirens for hail	A mix of these	No		Varies by City/Town	We follow parts of it
MADISON	7	65 mph	2 inches	Dispatch and/or EOC	Yes		Varies by City/Town	We follow parts of it
MAHASKA	16	70 mph	1.75	Dispatch and/or EOC	Yes	WeatherWarn	Countywide	We follow parts of it
MARION	32	We don't activate for straight-line winds	We don't activate sirens for hail	A mix of these	No		Countywide	We don't follow any of it

County	How many outdoor warning sirens are in your county?	If your county activates sirens for straight-line winds, what is the speed threshold required for activation?	If your county activates sirens for hail, what is the size threshold required for activation?	How are sirens activated in your county?	Does your county use an automatic system/software for siren activation?	If you use an automatic system/software, what system do you use?	Do you have a county-wide siren activation policy or does it vary by city/town?	In 2015, IEMA adopted the "Outdoor Warning Siren Best Practices Recommendation" document. Does your county follow these recommendations?
MARSHALL	16	We don't activate for straight-line winds	We don't activate sirens for hail	A mix of these	No		Countywide	We follow parts of it
MONONA	15	75 mph	We don't activate sirens for hail	Dispatch and/or EOC	No		Countywide	I haven't seen this document
MONROE	5	70 mph	We don't activate sirens for hail	Dispatch and/or EOC	No		Countywide	We follow parts of it
MONTGOMERY	9	We don't activate for straight-line winds	We don't activate sirens for hail	Dispatch and/or EOC	No		Countywide	We don't follow any of it
O'BRIEN	16	75 mph	We don't activate sirens for hail	Dispatch and/or EOC	No		Countywide	We follow parts of it
PAGE	12	We don't activate for straight-line winds	We don't activate sirens for hail	A mix of these	No		Countywide	I haven't seen this document
PALO ALTO	16	We don't activate for straight-line winds	We don't activate sirens for hail	Dispatch and/or EOC	No		Countywide	We follow parts of it
PLYMOUTH	17	We don't activate for straight-line winds	We don't activate sirens for hail	A mix of these	No		Varies by City/Town	We follow parts of it
POLK	148	70 mph	We don't activate sirens for hail	Dispatch and/or EOC	No		Countywide	We follow parts of it
POWESHIEK	17	We don't activate for straight-line winds	We don't activate sirens for hail	A mix of these	No		Countywide	We follow parts of it
RINGGOLD	7	We don't activate for straight-line winds	We don't activate sirens for hail	Dispatch and/or EOC	No		Countywide	We follow parts of it
SCOTT	48	70 mph	golf ball sized (1.75"	Dispatch and/or EOC	No		Countywide	We follow parts of it
STORY	27	70 mph	1.75 inch/golf ball	Dispatch and/or EOC	No		Countywide	We follow parts of it
TAMA	17	75 mph	2.5 inches	A mix of these	No		Varies by City/Town	We follow parts of it
UNION	15	70 mph	2 inches	A mix of these	No		Countywide	We follow it completely

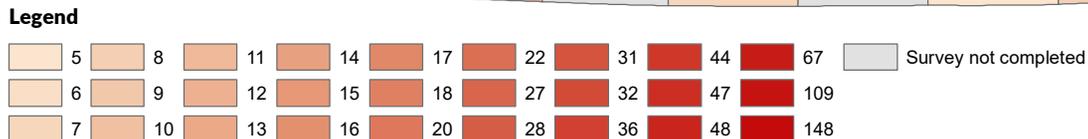
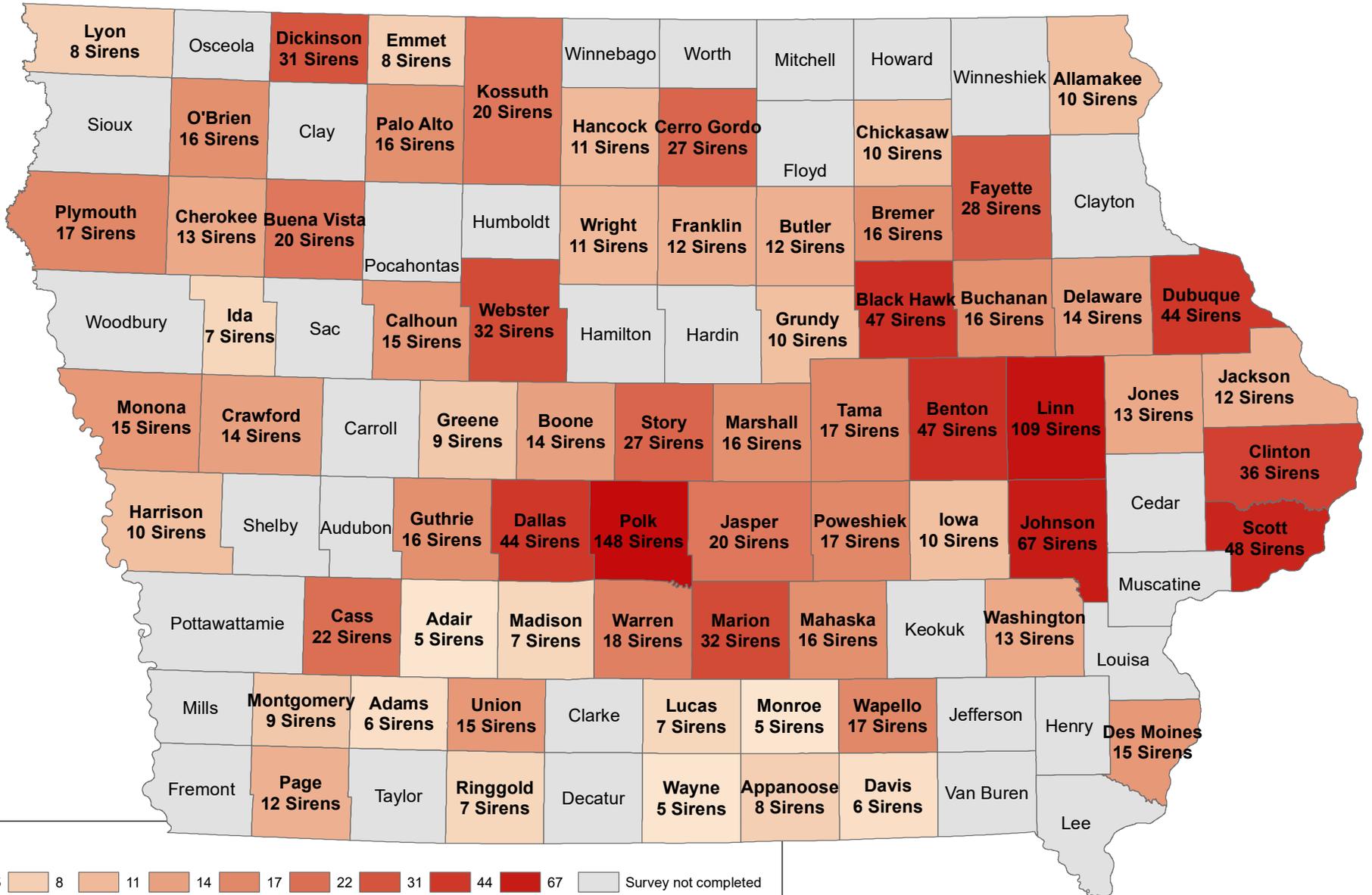
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WAPELLO	17	70 mph	1.75	Dispatch and/or EOC	No		Countywide	We follow parts of it
WARREN	18	70 mph	2 inches	Dispatch and/or EOC	No		Countywide	We follow parts of it
WASHINGTON	13	We don't activate for straight-line winds	We don't activate sirens for hail	A mix of these	No		Countywide	We follow parts of it
WAYNE	5	We don't activate for straight-line winds	We don't activate sirens for hail	Dispatch and/or EOC	No		Varies by City/Town	We follow parts of it
WEBSTER	32	We don't activate for straight-line winds	We don't activate sirens for hail	A mix of these	Yes	Weather Warn	Varies by City/Town	We follow parts of it
WRIGHT	11	We don't activate for straight-line winds	We don't activate sirens for hail	A mix of these	No		Countywide	I haven't seen this document

Charts & Maps

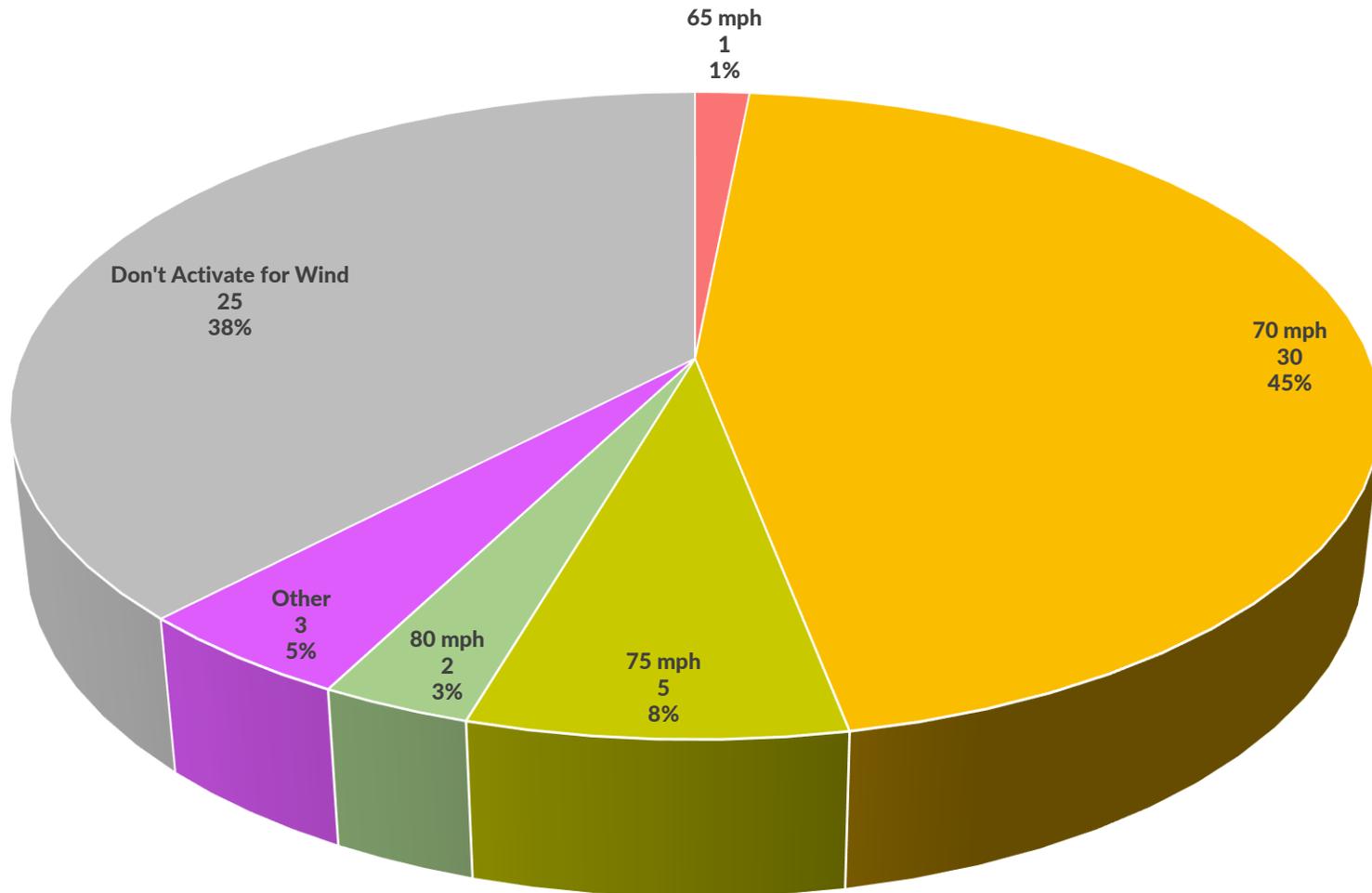
Outdoor Warning Siren Survey Spring 2019



Number of Outdoor Warning Sirens (1,405 in the counties that responded)



If your county activates sirens for straight-line winds, what is the speed threshold required for activation?

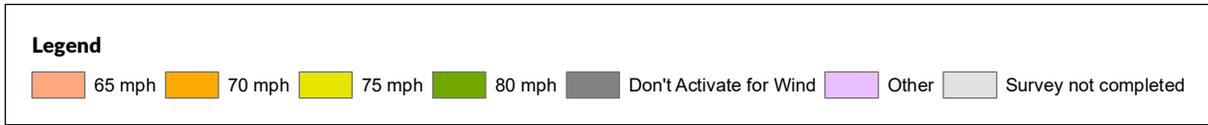
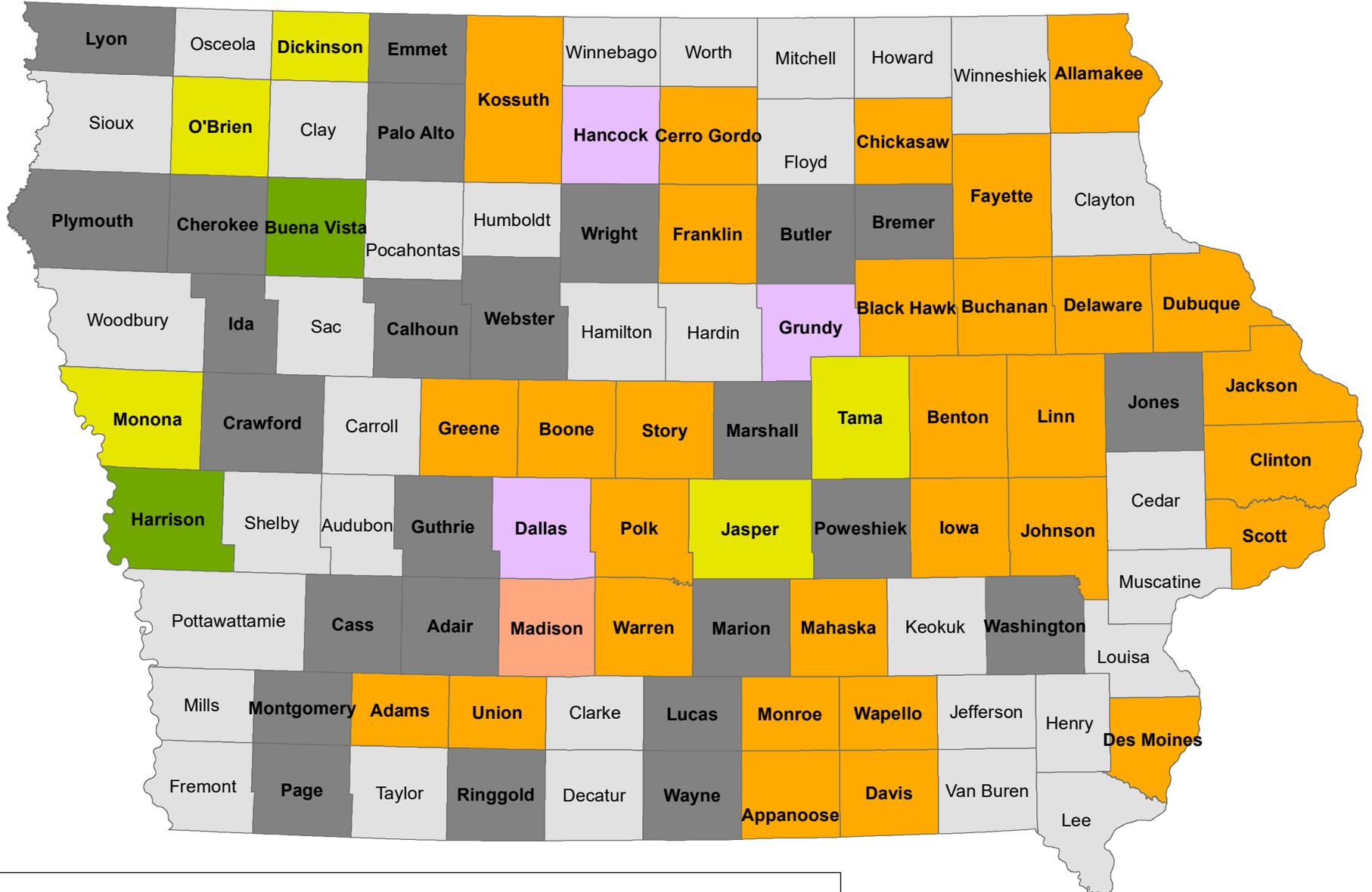


■ 65 mph ■ 70 mph ■ 75 mph ■ 80 mph ■ Other ■ Don't Activate for Wind

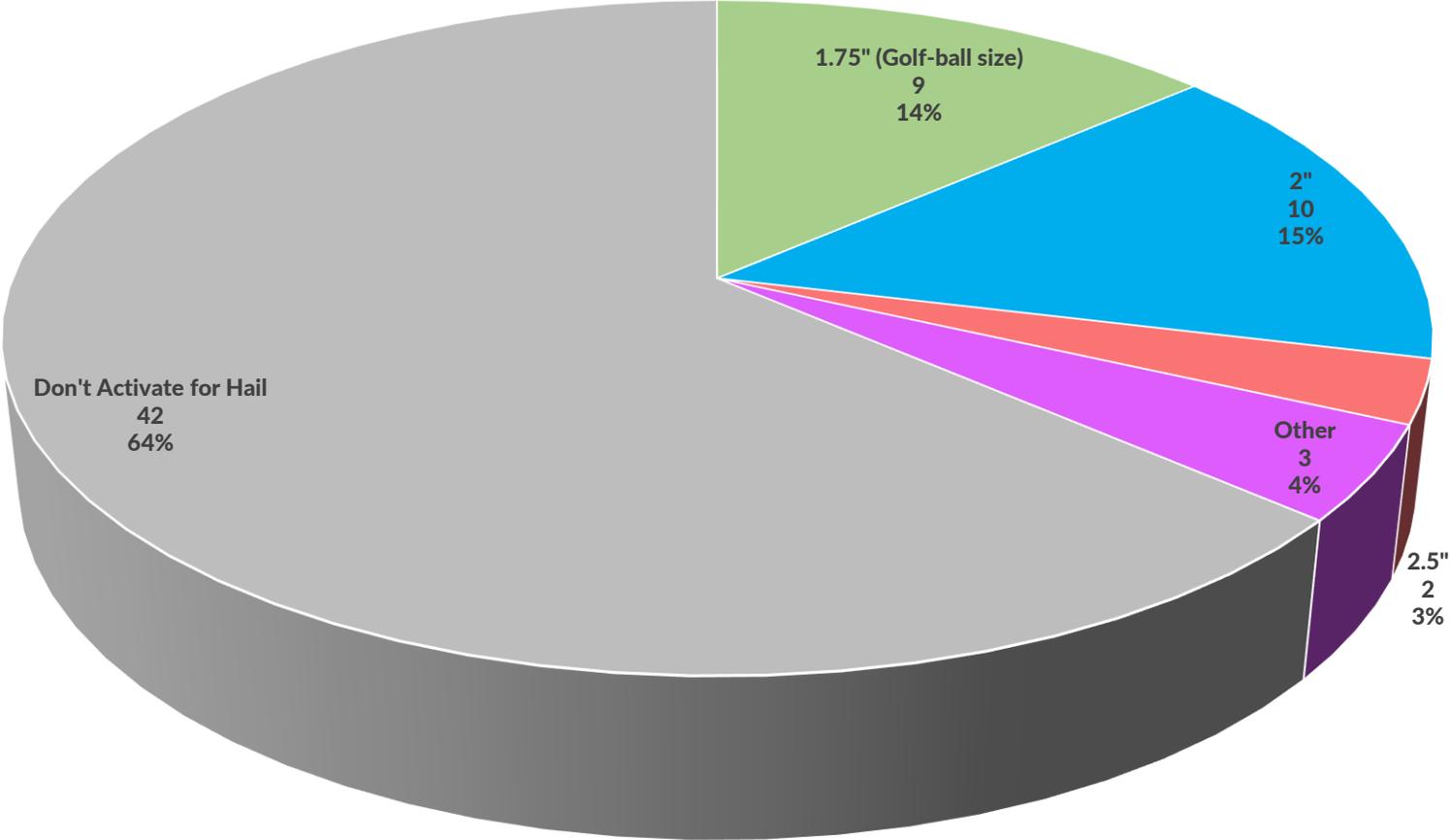
Outdoor Warning Siren Survey Spring 2019



Siren Activation for Straight-Line Winds



If your county activates sirens for hail, what is the size threshold required for activation?



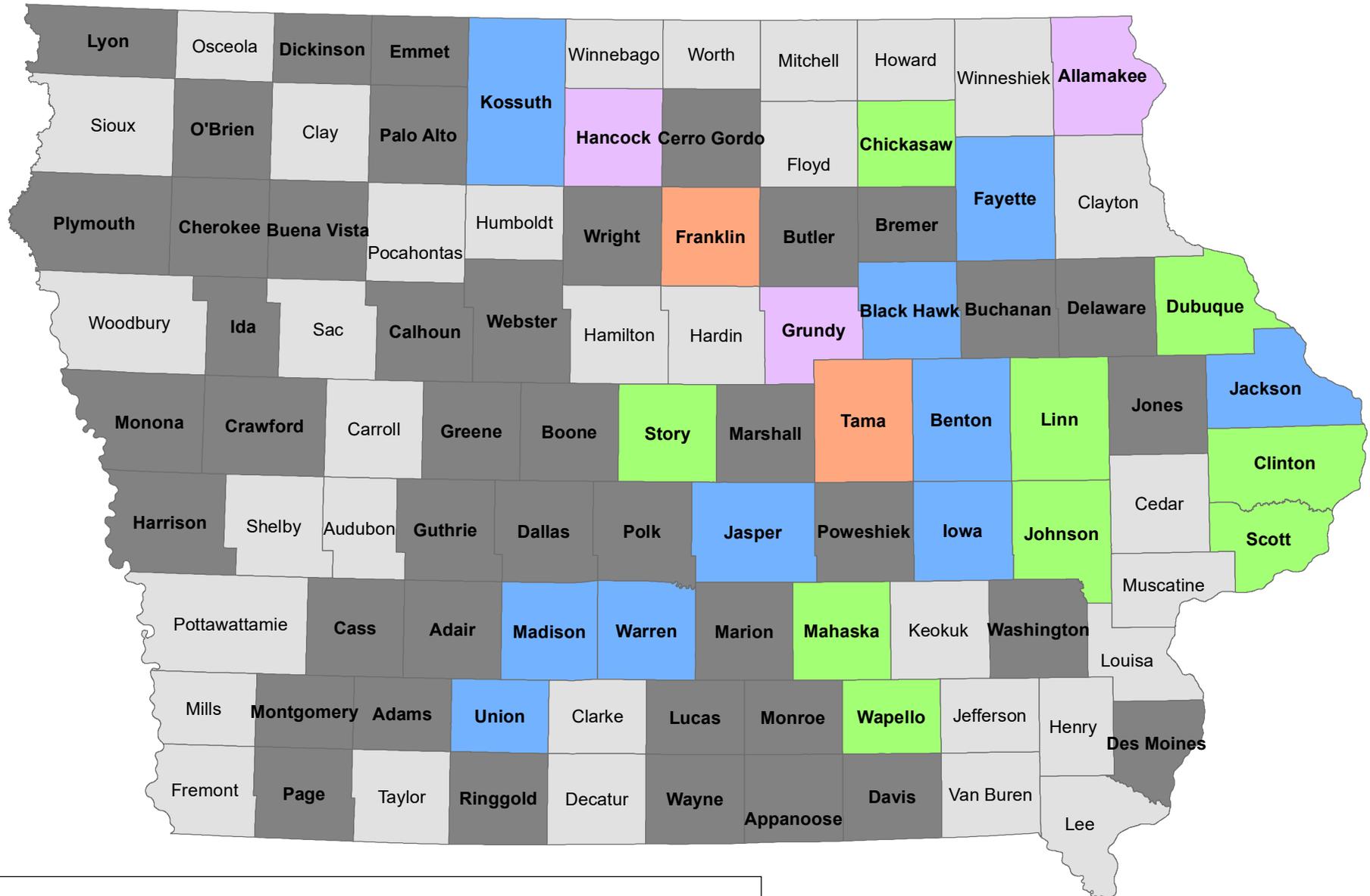
■ 1.75" (Golf-ball size) ■ 2" ■ 2.5" ■ Other ■ Don't Activate for Hail

Outdoor Warning Siren Survey

Spring 2019



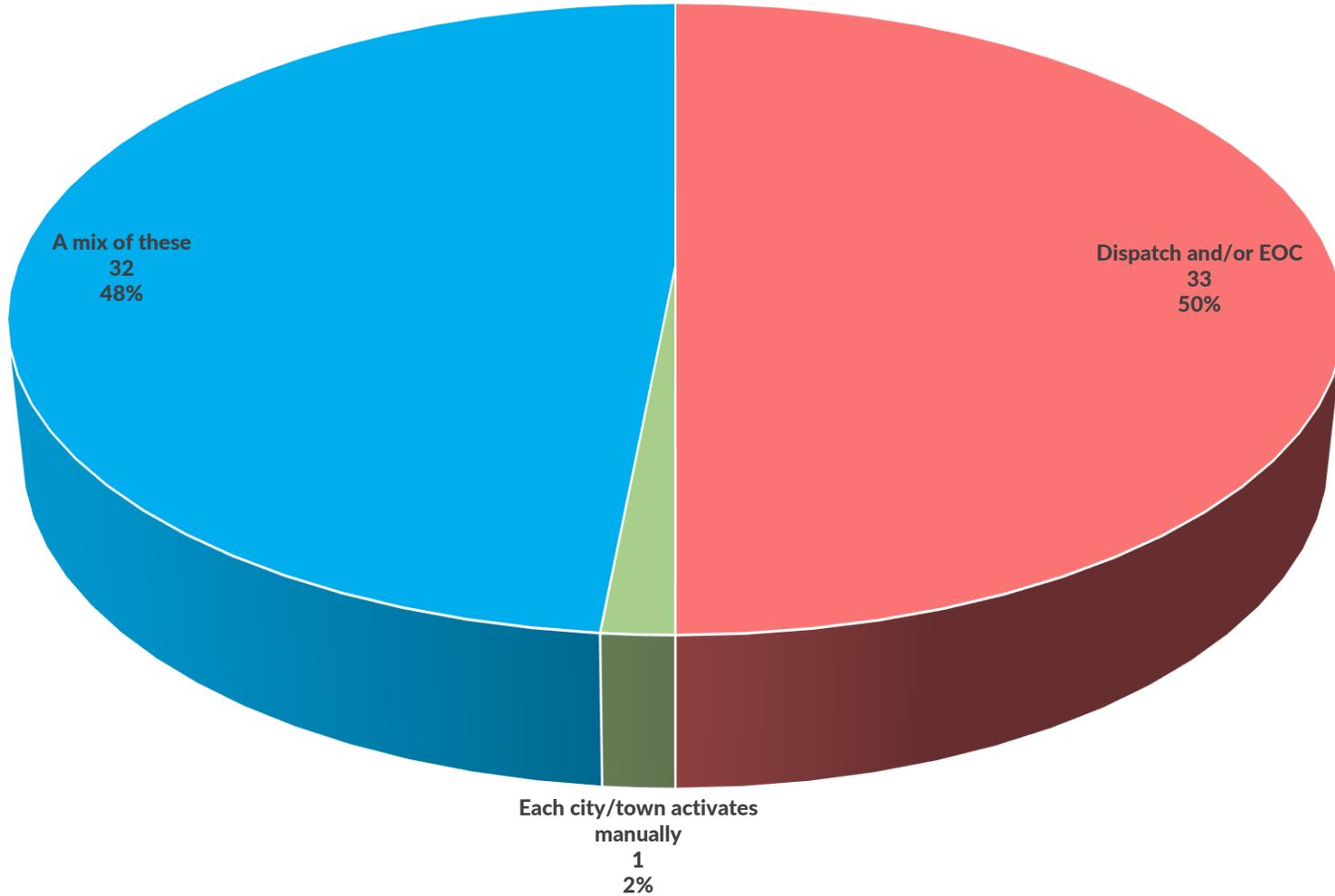
Siren Activation for Hail



Legend

- 1.75" (Golf Ball Size)
- 2"
- 2.5"
- Don't Activate for Hail
- Other
- Survey not completed

How are sirens activated in your county?

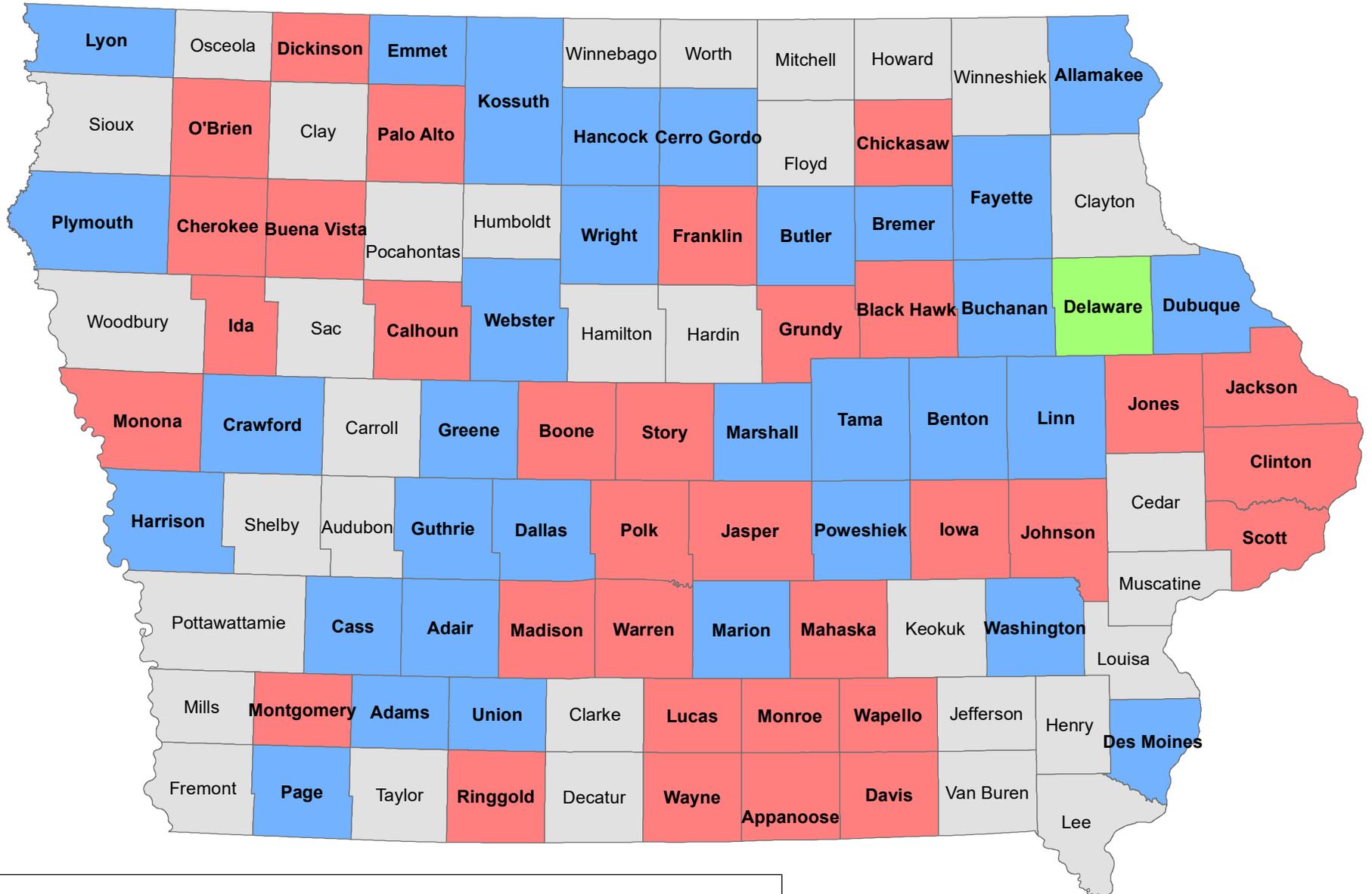


■ Dispatch and/or EOC ■ Each city/town activates manually ■ A mix of these

Outdoor Warning Siren Survey Spring 2019



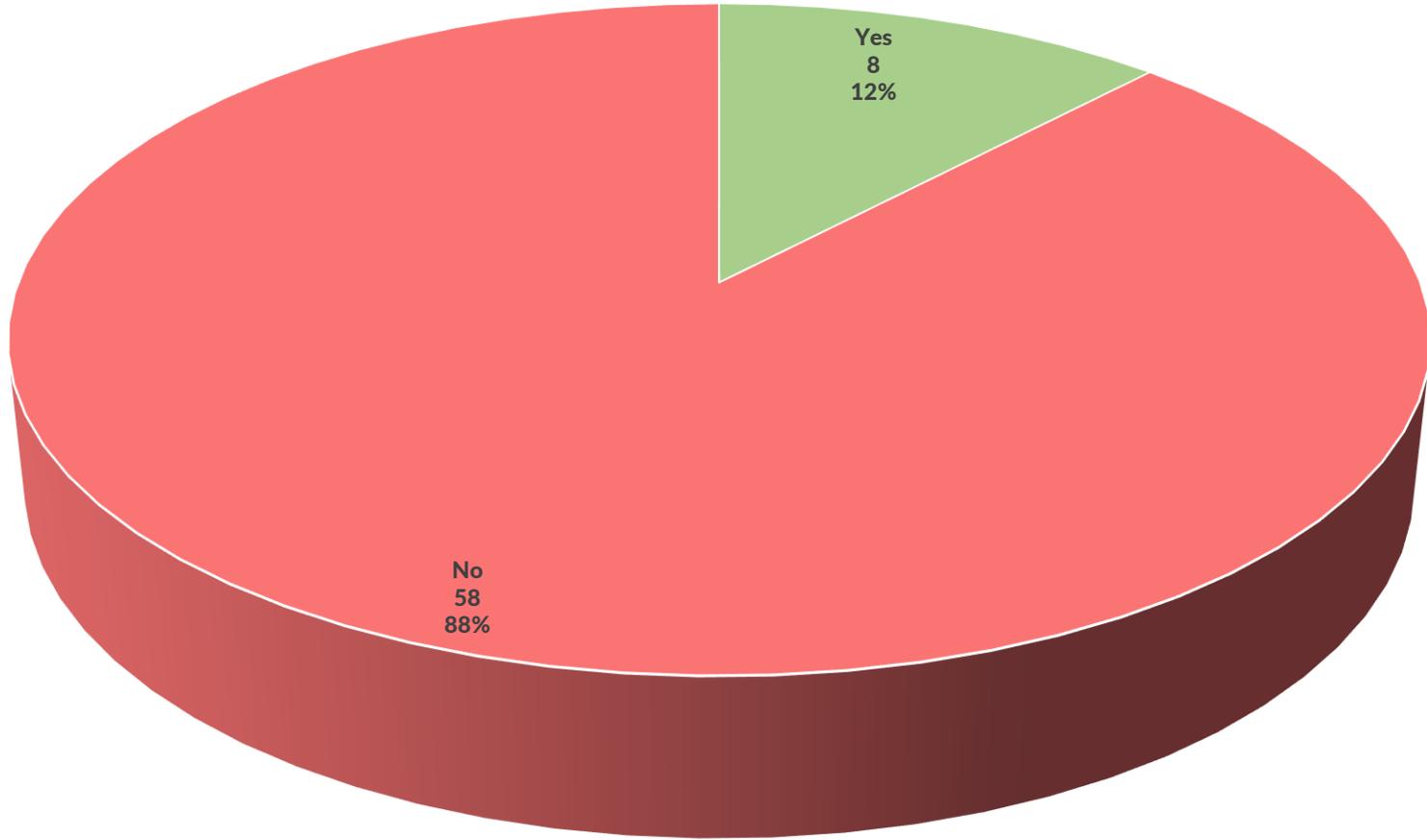
Method of Siren Activation



Legend

- Dispatch and/or EOC
- Each city/town activates theirs manually
- A mix of these
- Survey not completed

Does your county use an automatic system/software for siren activation?

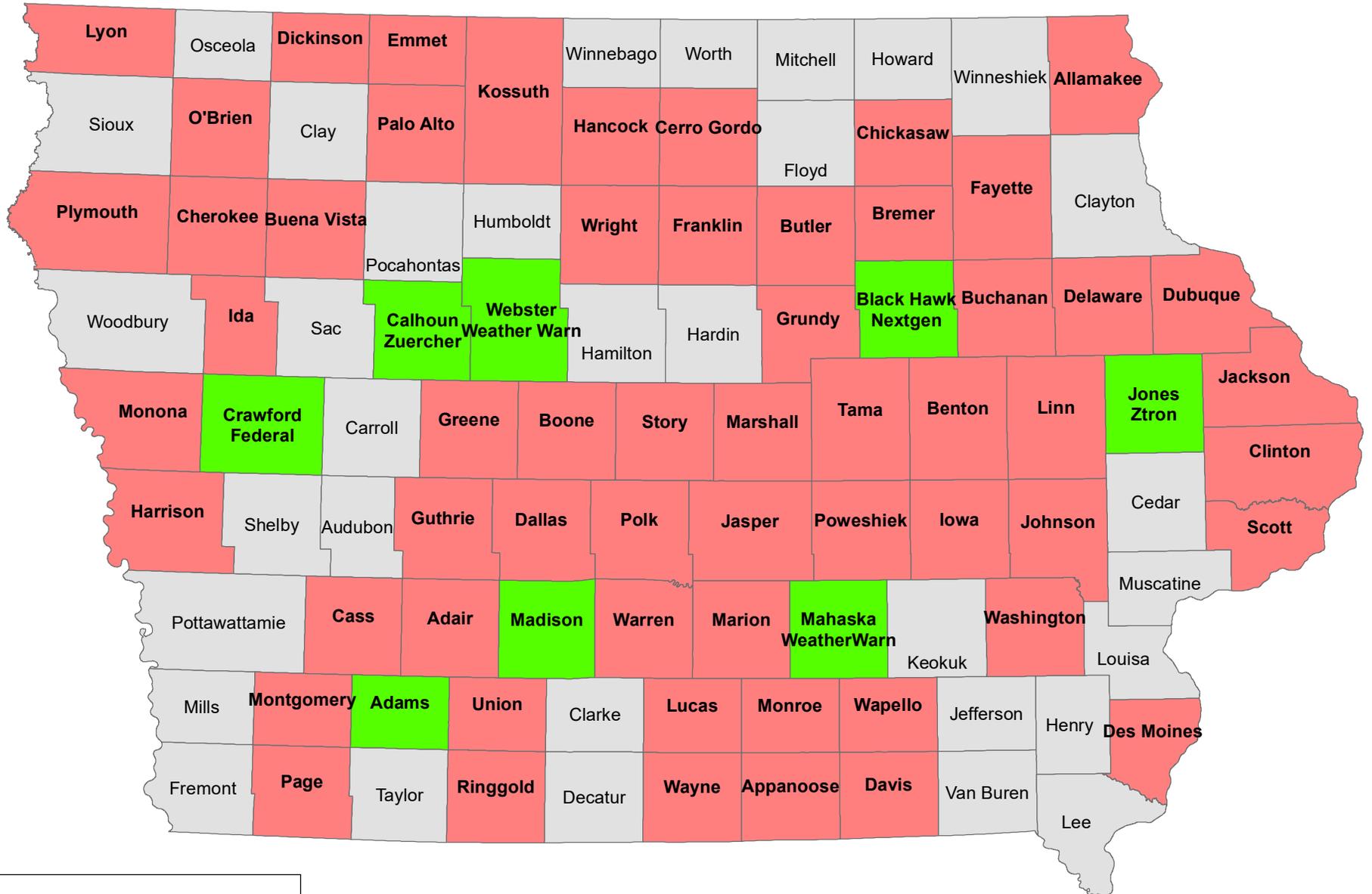


■ Yes ■ No

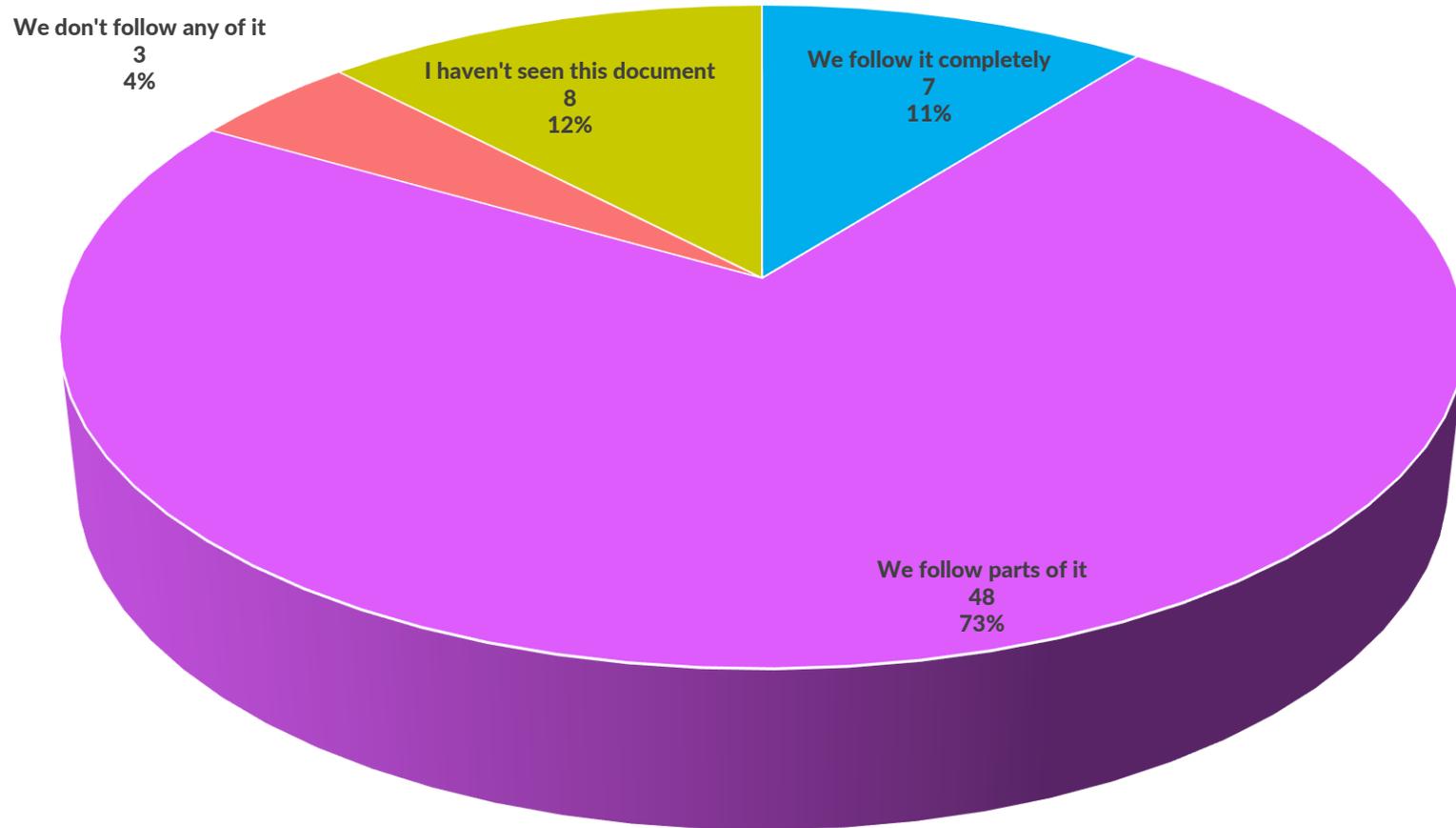
Outdoor Warning Siren Survey Spring 2019



Use of Automatic System/Software



In 2015, IEMA adopted the "Outdoor Warning Siren Best Practices Recommendation" document. Does your county follow these recommendations?

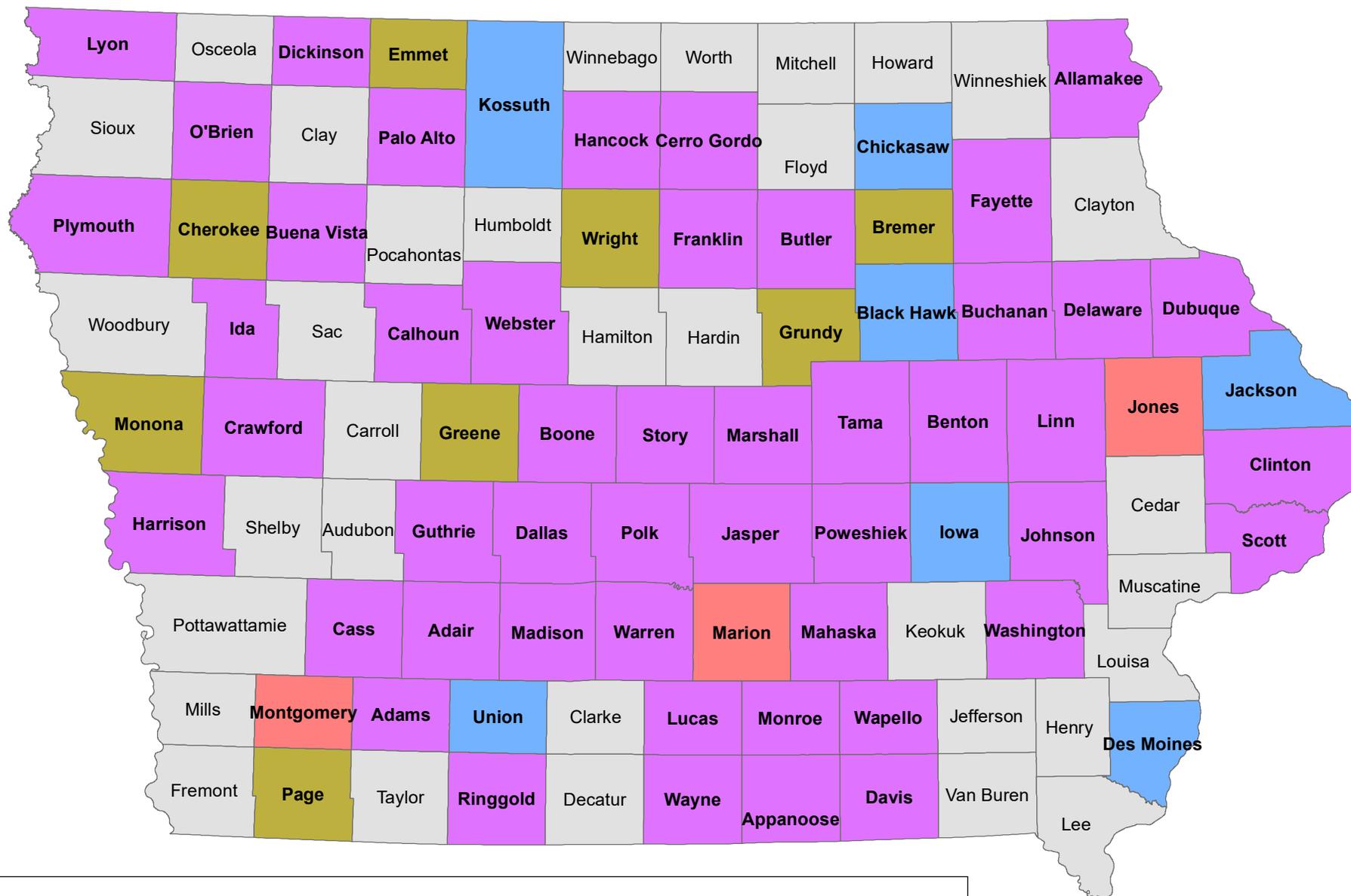


■ We follow it completely ■ We follow parts of it ■ We don't follow any of it ■ I haven't seen this document

Outdoor Warning Siren Survey Spring 2019



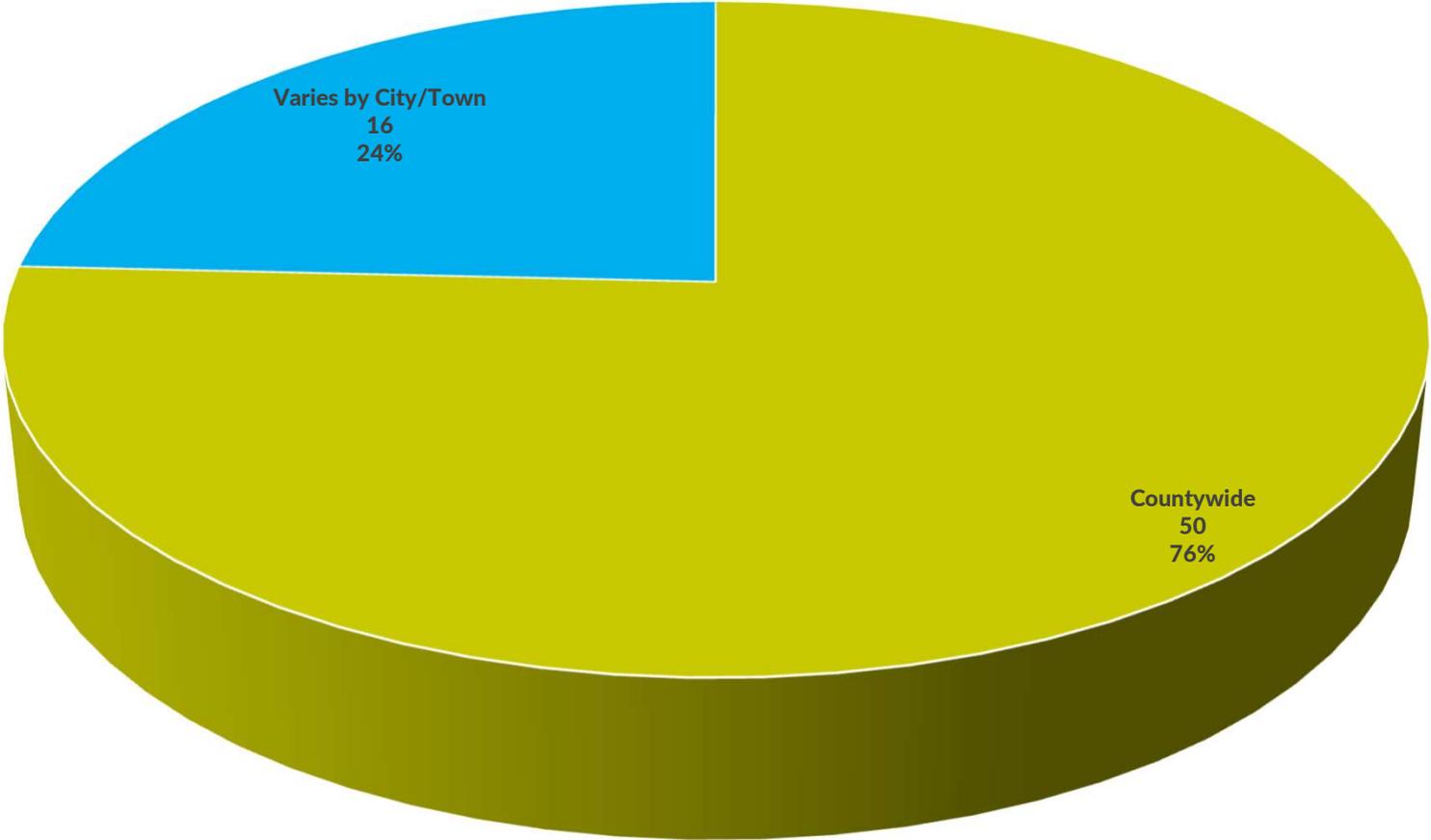
IEMA Best Practices Document for Outdoor Warning Sirens



Legend

- We follow it completely
- We follow parts of it
- We don't follow any of it
- I haven't seen this document
- Survey not completed

Do you have a county-wide siren activation policy or does it vary by city/town?

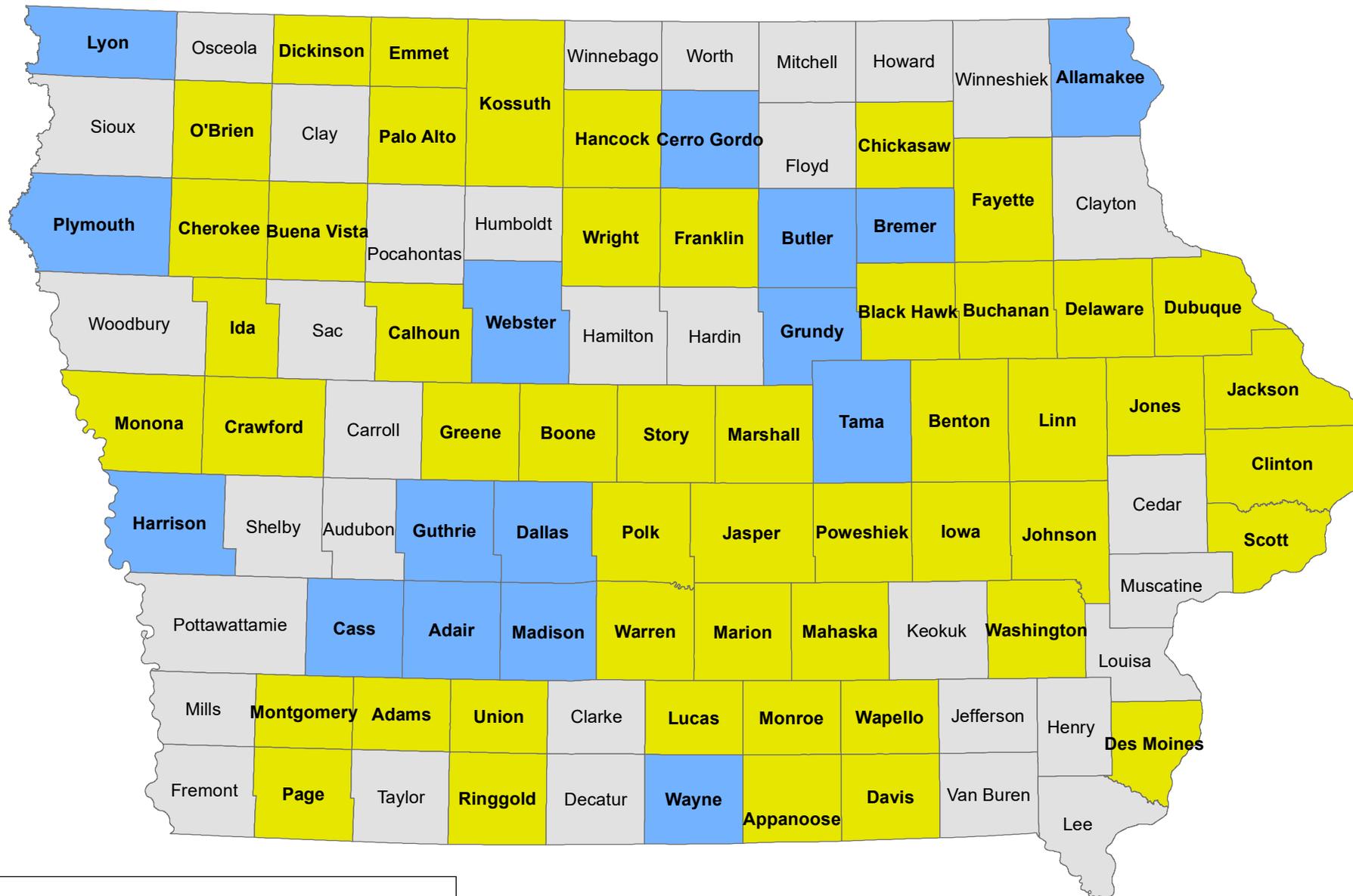


■ Countywide ■ Varies by City/Town

Outdoor Warning Siren Survey Spring 2019



Countywide Siren Activation Policy



Legend

- Countywide
- Varies by City/Town
- Survey not completed

