NEW MEDIA FOR EMERGENCY TORNADO NOTIFICATION

KEY FINDINGS

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Executive Summary

This survey was executed to determine if a digital divide still existed, affecting specific groups of people in their ownership of specific communication devices based on socioeconomic factors outside of their control. The survey found out how residents in a specific community received notification of a late-season tornado, and what they did what the information. The purpose of the study was to determine if socioeconomic indicators of income and education, and also demographics including gender and age played a role in how information was received. It is important to note that two geographically disperse communities were selected for participation in this research.

A survey of this nature was the first for the disaster communication field. The findings of this study were based on online and telephone surveys with 1,038 residents in Palm Coast, FL who were affected by the "Starlight Tornado" in December 2013. Overall, the findings suggest that socioeconomic status did not appear to impact the ownership or ability for survey respondents to receive information. The City of Palm Coast provides their residents the opportunity to be notified of tornado warnings that affect them. They provide CodeRED Weather Warning technology as an added benefit, even above warnings residents are able to receive through more traditional means including the television and radio. This opportunity is open regardless of income, education, age and gender.

The survey found although there is equal access to receive tornado warning information, the behavior to adopt the technology is not always taken advantage of. If the resident does not see the value in the technology, they may never be more informed of future events that impact their safety.

The findings of this research are being presented to help officials determine what actionable items they can take to ensure their community has access to emergency tornado information, and to strategize on what can be done to improve the way they communicate with the public during an emergency.

The author would like to thank the City of Palm Coast for its generous support of this study.

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Emergency
Communications
Network

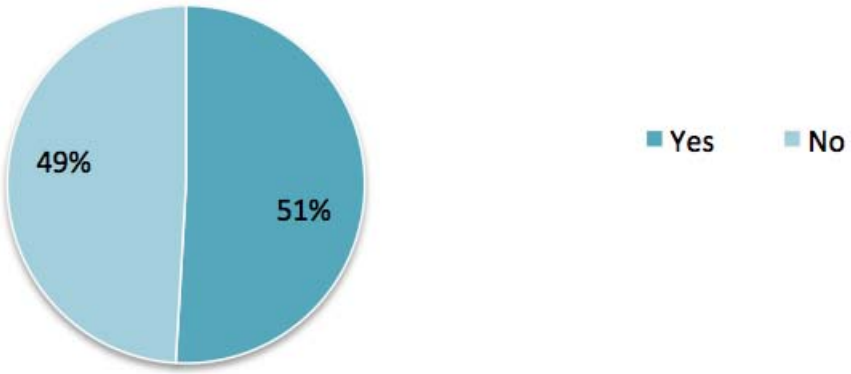
1.

Residents Could be **More Informed**

Nearly half of the residents surveyed indicated they knew there was a possibility of tornadoes in Palm Coast on December 14, 2013. The older a respondent, the more likely they had prior knowledge of storms in their area that day.

Prior Knowledge of Tornadoes

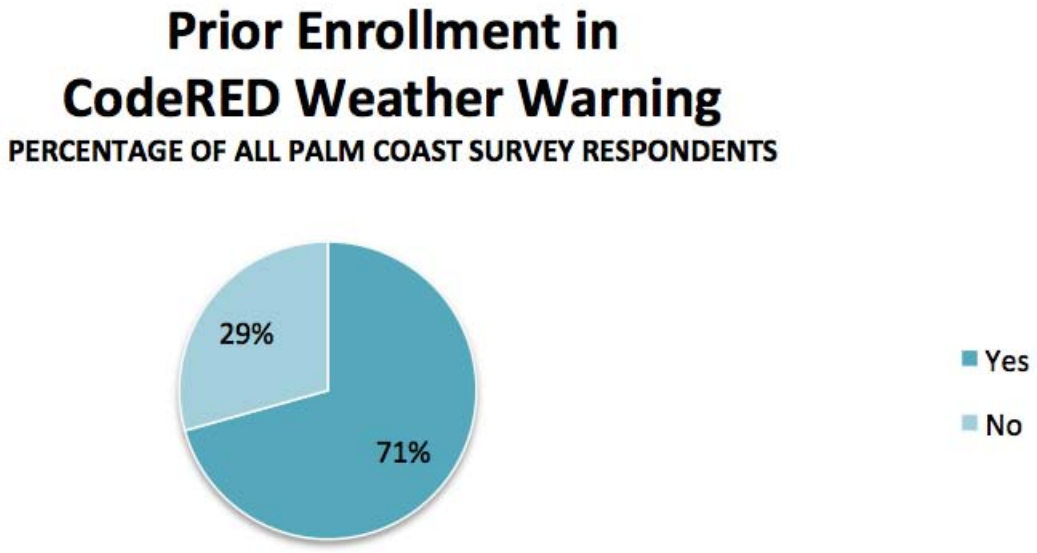
PERCENTAGE OF ALL PALM COAST SURVEY RESPONDENTS



2.

Most Had Enrolled In CodeRED Weather Warning

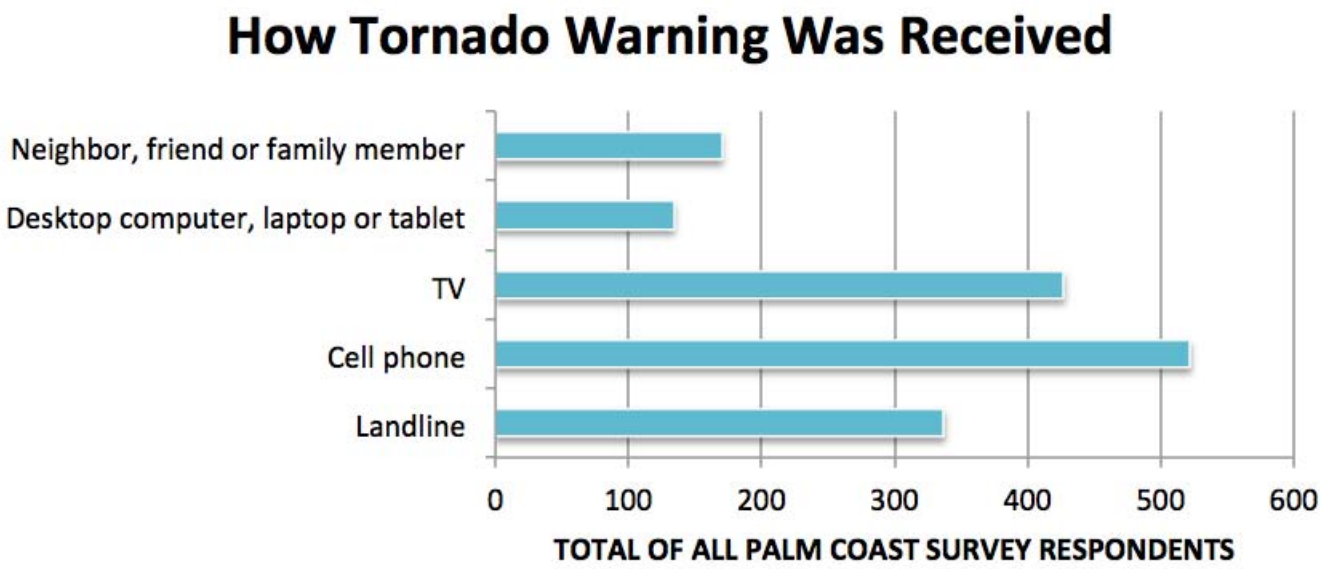
71% of survey respondents were registered to receive CodeRED Weather Warnings through Flagler County and Palm Coast prior to the tornado on December 14, 2013. During the survey period, more than 300 additional residents signed up to receive future CodeRED alerts.



3.

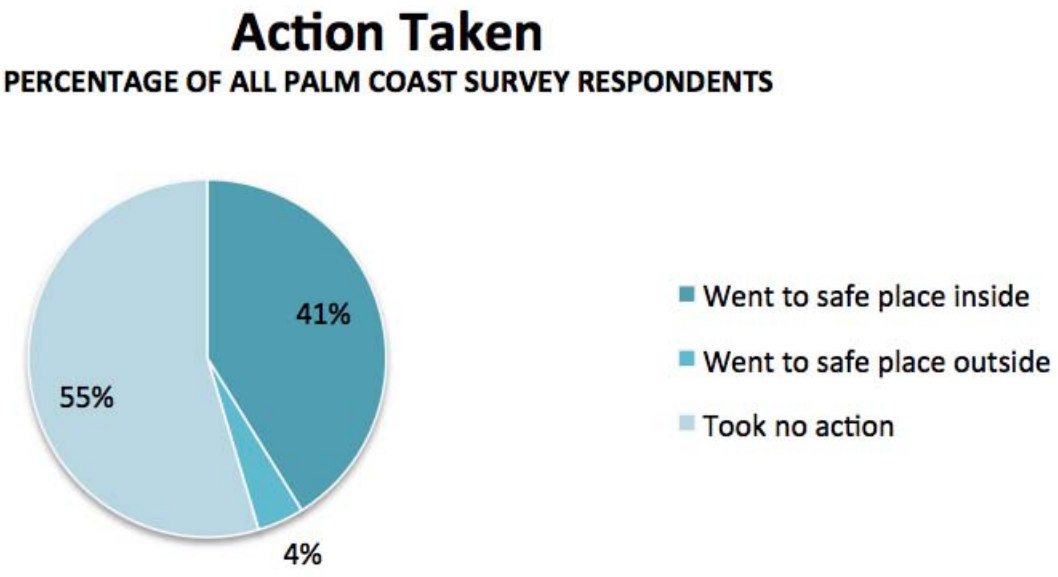
Warnings Mostly Received Through **Cellphone**

Most Palm Coast residents received warning of the December 14, 2013 tornado through their cellphone. The younger the respondent, the more likely they were to receive a tornado warning through a cellphone. A large number of Palm Coast residents also received warnings through the TV. The older the survey respondent, the more likely they are to receive a tornado warning through their TV.



4. Most Residents **Took No Action**

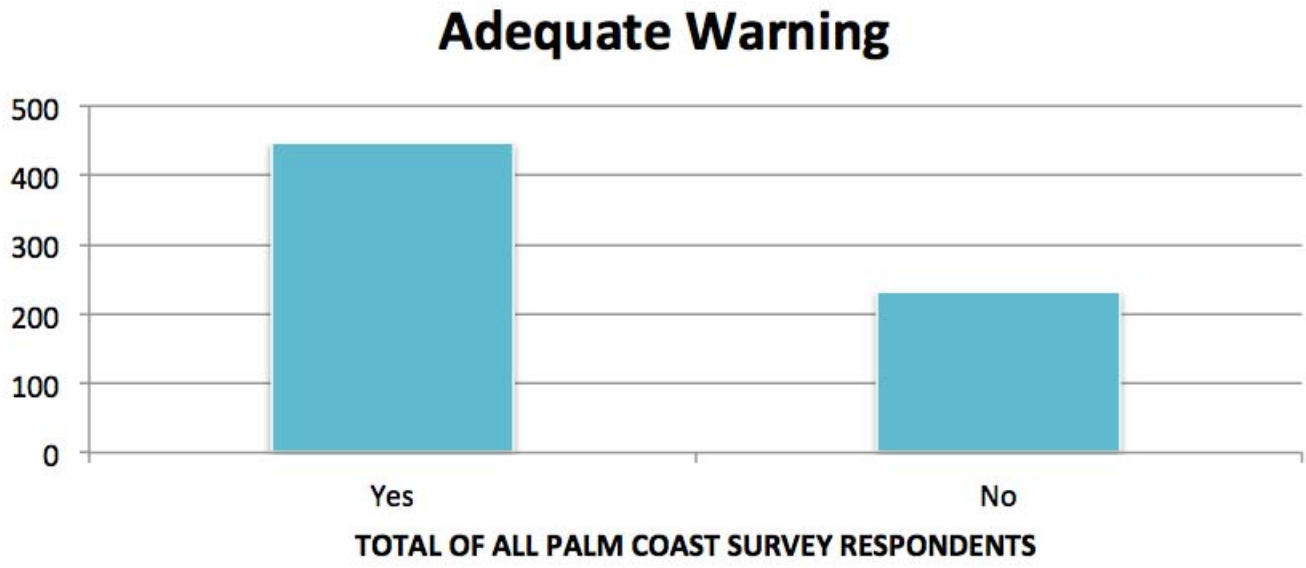
When the tornado warning was received, 55% of residents took no action and 41% chose to shelter in a safe place inside. The study found respondents with a higher total household income and completed a higher level of education were more likely to relocate to a safe place once a tornado warning was received.



5.

There Was **Adequate Warning** Of The Tornado

Survey respondents felt adequately warned of the December 14, 2013 tornado, with 66% of those surveyed indicating they had enough warning. Open ended responses indicated desensitization was commonly admitted by residents who received the warning in an adequate amount of time before the storm hit but decided to take no action. Many residents indicated tornado sirens would be helpful for future warning.



6.

Mobile Phones Are Important For Future Warnings

Palm Coast survey respondents indicated that mobile telephones were the most important devices to receive future emergency tornado alerts from Flagler County and Palm Coast emergency officials. Mobile telephones were 17% more important than any other communication device, and compared to outdoor warning/storm sirens, weather radios, landline telephones, television and desktop, laptop or tablet devices.