



This document analyzes the Mass Notification System launches of Yolo County in response to the 2020 LNU Lightning Complex Fire

LNU Lightning Complex Fire Mass Notification Test

Test Analysis

September 4, 2020



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OVERVIEW

PURPOSE

To test the re-programming of evacuation and shelter in place templates, that occurred after the failed send attempts from the LNU Lightning Complex Fire, and was conducted near the City of Winters on September 4, 2020 at 10:00 a.m. The test was sent using the evacuation notification templates for zones 58, 59 & 60.

SUMMARY

This report is a high-level review of the data from the Mass Notification system test. This data review shows the success rate of the launch with analysis of the difference between voice notification and other device send success. The data also shows a dramatic improvement in the success rate of delivery of voice calls during the test. This success is directly related to the re-programming of the templates within the system to include the new caller ID - (833) 4CALALERT.

This report does not provide analysis of individual user accounts which may contain errors preventing a launch from reaching the end user. Users who think they did not receive a test notification outside the scope of this report, or those who would like a review of their independent user profile can contact the Yolo County Office of Emergency Services at any time for a review of their personal profile.

TEST CONCLUSIONS

During the September 4th test, the percentage of the non-delivery voice communications were greatly improved with the correct new caller ID number. Furthermore, this test demonstrated that the success of a notification relies heavily on the end-users' device(s). The improved delivery rate of voice calls during the test (not attributed to end-user configuration challenges) can be summed up as follows:

Zone Number	Initial Delivery Rate	Test Delivery Rate
58	0%	100%
59	0%	98%
60	0%	100%

DATA SUMMARY

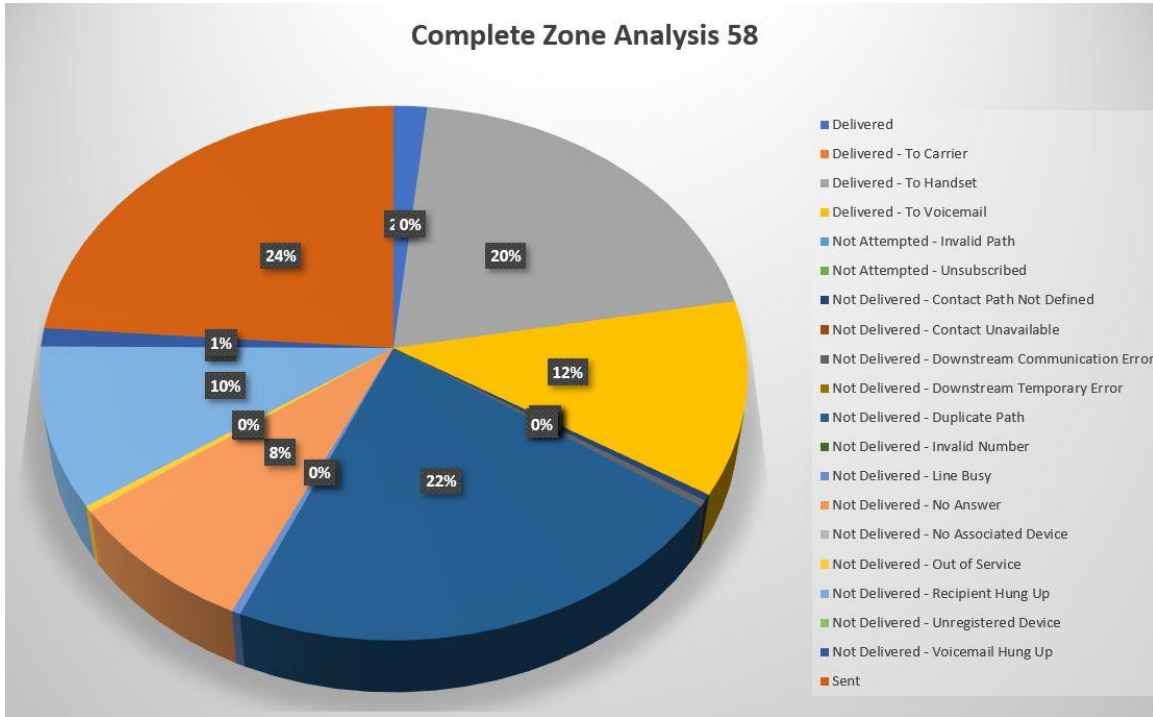
The numbers and charts below are a raw summary of the data from the test alert across evacuation zones 58, 59 and 60 which have simply been added without data manipulation. Delivered and Not Delivered status have been added together but do not necessarily indicate that the user did not receive a notification due to a system failure. A status may be considered Not Delivered based on the following error codes attributed to end-user activity/configurations:

- No Answer – indicates that the line being called never picked up
- Invalid Number – may indicate that the number in the system is no longer operable

- Line Busy – happens when a person may be on their phone line in an active call
- Out of Service – may indicate that the number in the system is no longer operable
- Recipient Hung Up – indicates that the end user hung up after answering the call
- Voicemail Hung Up – indicates that the end user’s voicemail or answering machine hung up on the call
- Duplicate Path - indicates that the system already identified that the number or device has already received a notification (some people list the same number for cell, home, and other phone number fields and the system will only call the number once, not how many times it is listed in the contact).

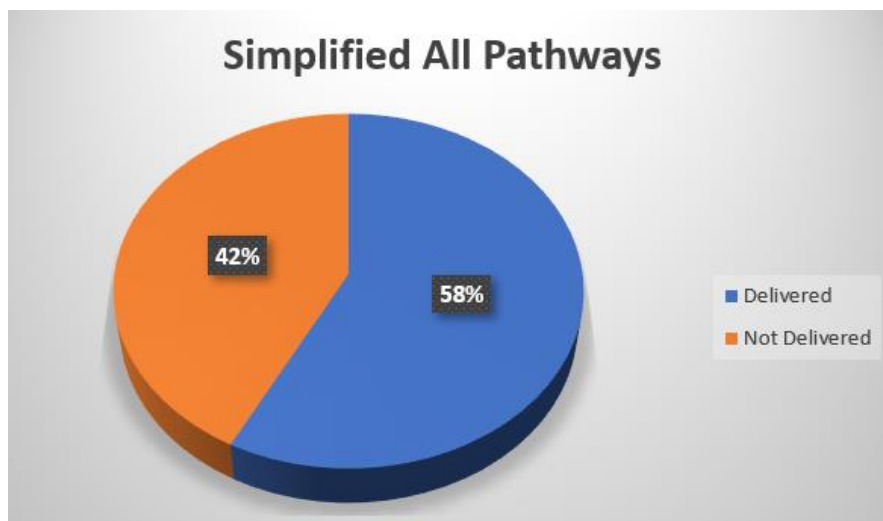
ITEMIZED VIEW OF TOTAL DELIVERY CODES - ZONE 58

This chart displays the original delivery codes from the Mass Notification system based on all delivery codes supplied within the system.



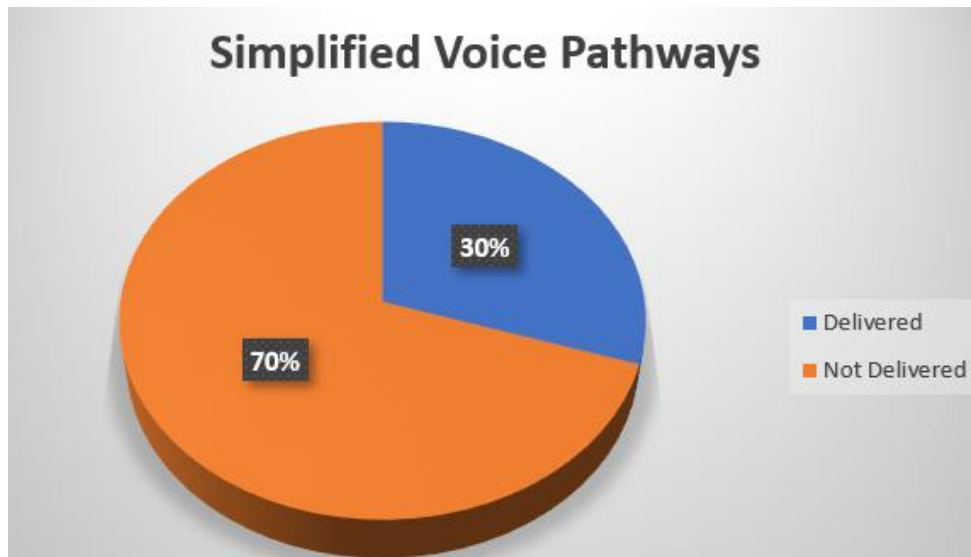
SIMPLIFIED VIEW - ALL DEVICES FOR ZONE 58

This chart displays the original delivery codes added into two basic categories. Although the “Not Delivered” rate still appears to be high, several factors account for this (see bullets in Data Summary on page 2). For example, a total of 118 devices (out of 538) are counted as not delivered because of a duplicate number. Meaning the end user has placed the same phone number in every field as opposed to having multiple numbers for the system to call.

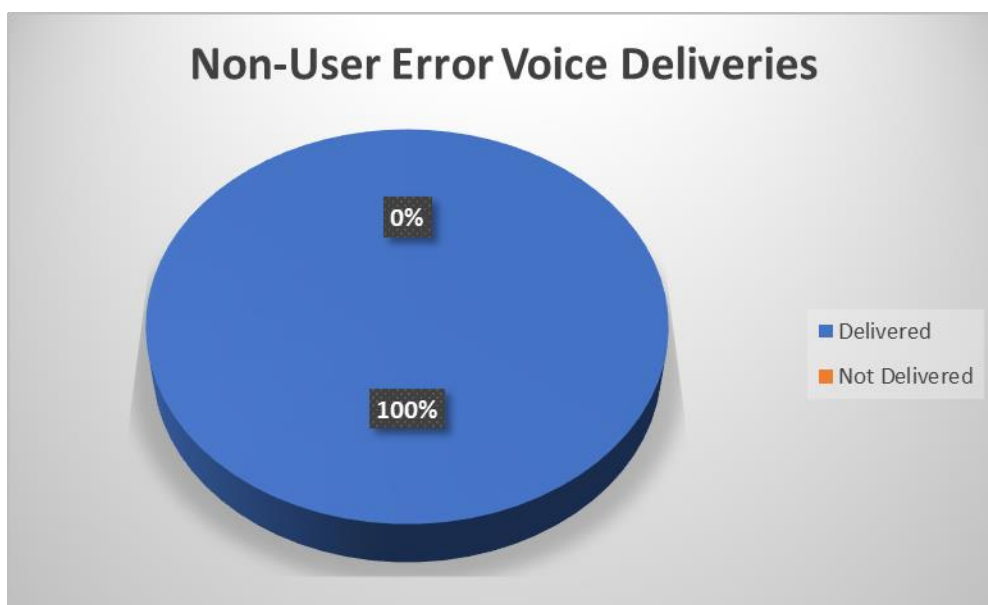


VOICE CALL SUCCESS RATE – ZONE 58

This chart displays the original delivery codes that pertain to voice calls ONLY, added into two basic categories. In Zone 58 there were 62 duplicate numbers, 44 devices that didn't answer and 52 recipients that hung up for a total of 152 voice calls being "Not Delivered" (out of 240 that were sent).

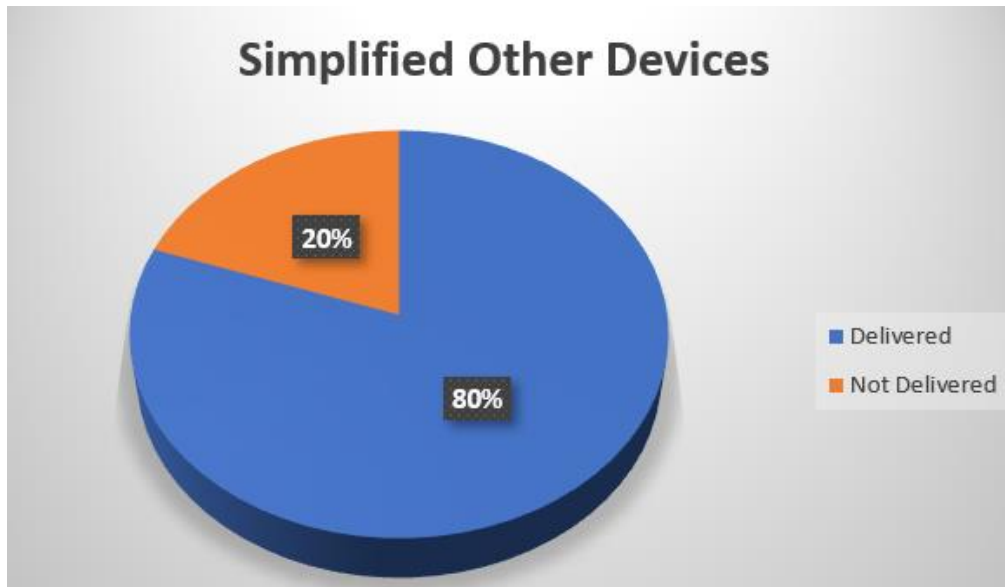


If the data is analyzed based on the "Not Delivered" codes that are directly related to any portion of the software and or telecommunications providers involved in an alert send (Contact Unavailable, Downstream Communication Error and Downstream Temporary Error), the data indicated for successful voice deliveries of the test in zone 58 is 100%.



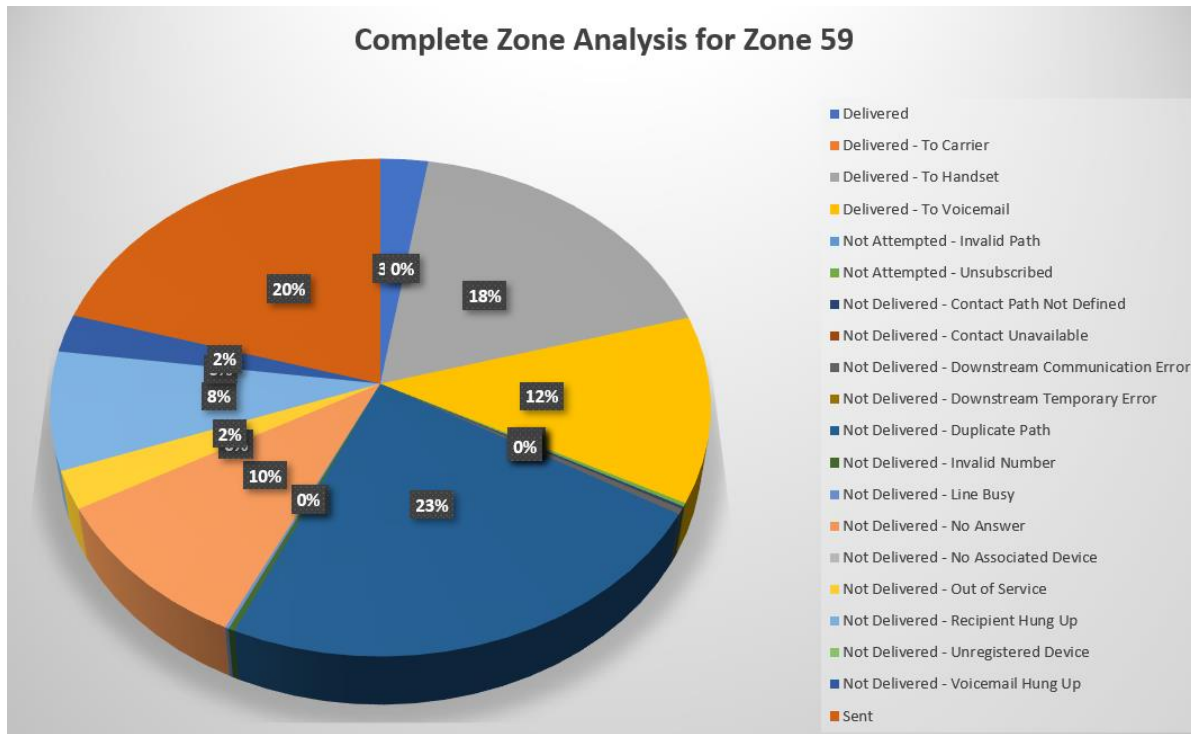
ALL OTHER DEVICES SUCCESS RATE – ZONE 58

This chart displays the success of all other device other than voice calls.



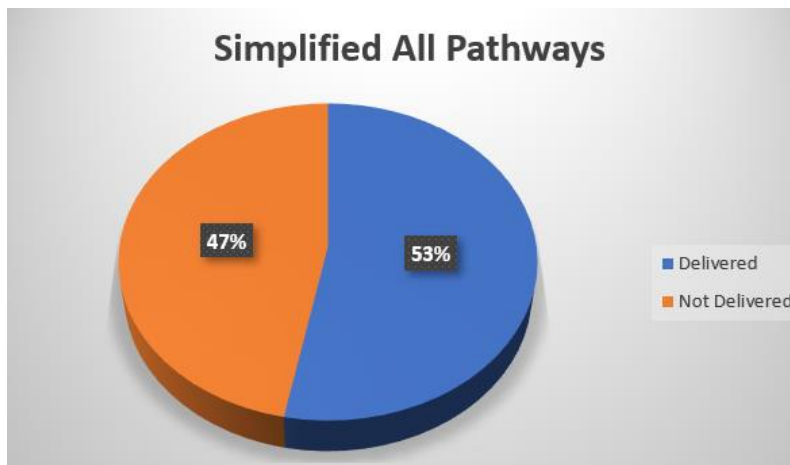
ITEMIZED VIEW OF TOTAL DELIVERY CODES - ZONE 59

This chart displays the original delivery codes from the Mass Notification system based on all delivery codes supplied within the system.



SIMPLIFIED VIEW - ALL DEVICES FOR ZONE 59

This chart displays the original delivery codes added into two basic categories. Although the “Not Delivered” rate still appears to be high, several factors account for this. For example, a total of 2,251 devices (out of 9,691) are counted as not delivered because of a duplicate number. Meaning the end user has placed the same phone number in every field as opposed to having multiple numbers for the system to call.

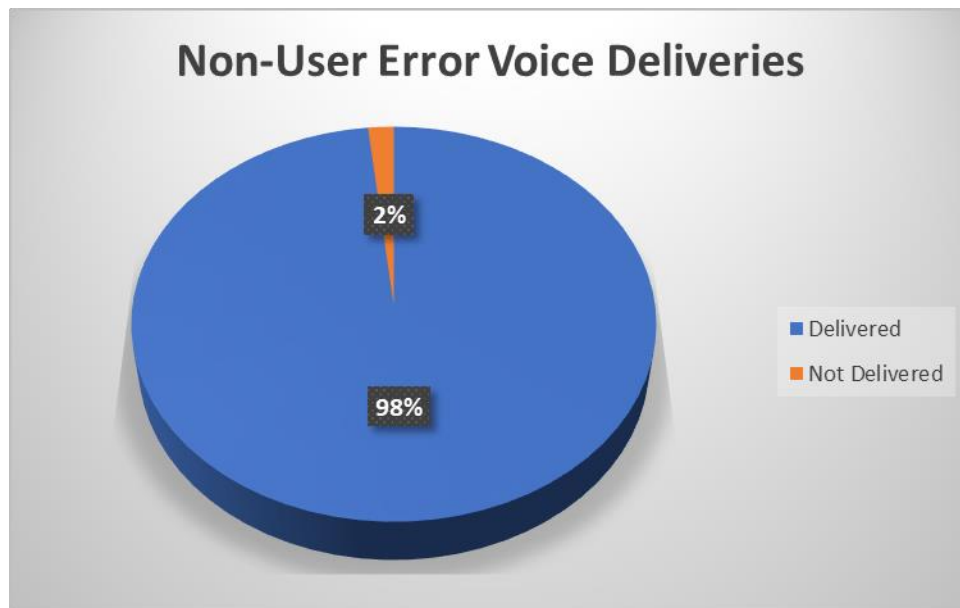


VOICE CALL SUCCESS RATE – ZONE 59

This chart displays the original delivery codes that pertain to voice calls ONLY, added into two basic categories. In Zone 59 there were 1,243 duplicate numbers, 956 devices that didn't answer and 744 recipients that hung up for a total of 2,351 voice calls being "Not Delivered" (out of 4,893 that were sent).

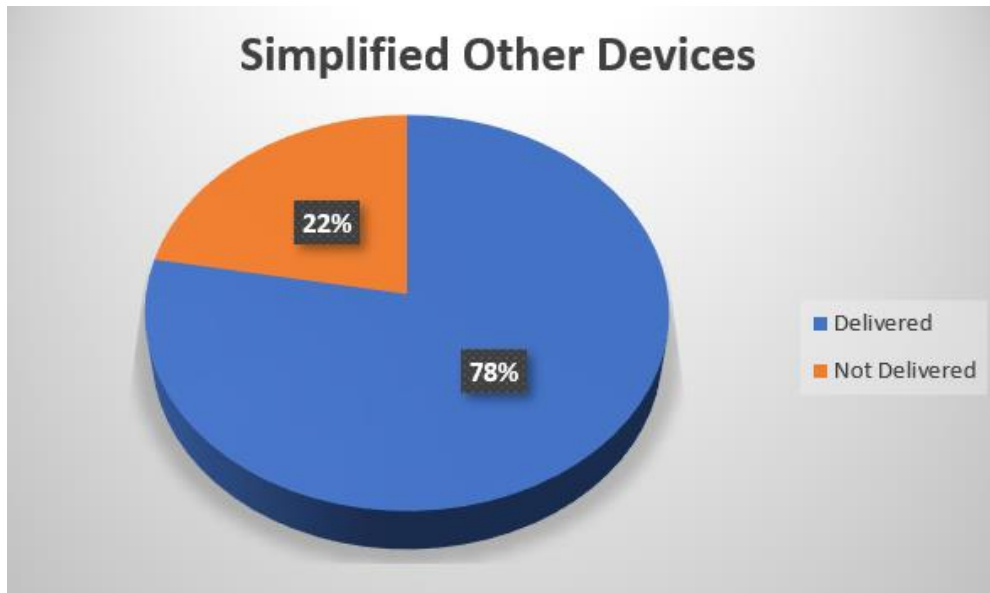


If the data is analyzed based on the "Not Delivered" codes that are directly related to any portion of the software and or telecommunications providers involved in an alert send (Contact Unavailable, Downstream Communication Error and Downstream Temporary Error), the data indicated for successful voice deliveries of the test in zone 59 is 98%.



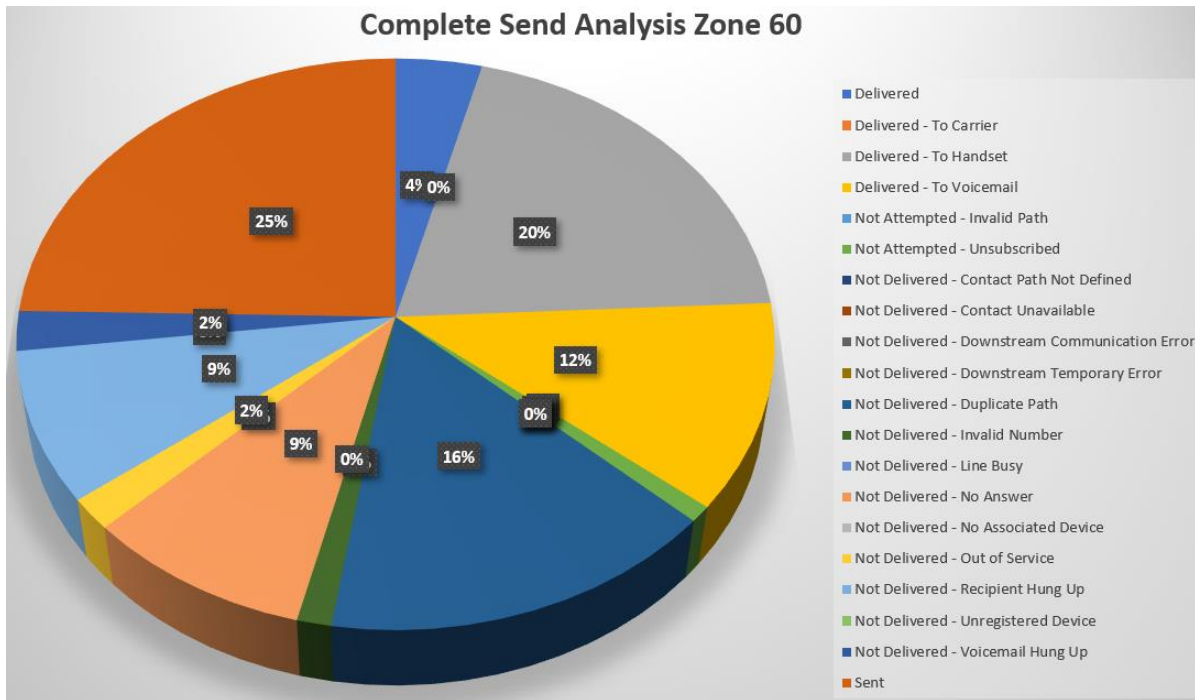
ALL SIMPLIFIED OTHER DEVICES SUCCESS RATE - ZONE 59

This chart displays the success of all other device other than voice calls.



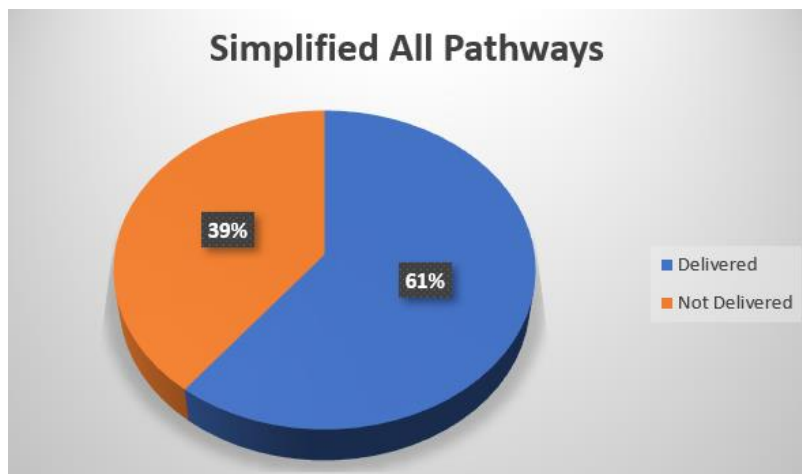
ITEMIZED VIEW OF TOTAL DELIVERY CODES - ZONE 60

This chart displays the original delivery codes from the Mass Notification system based on all delivery codes supplied within the system.



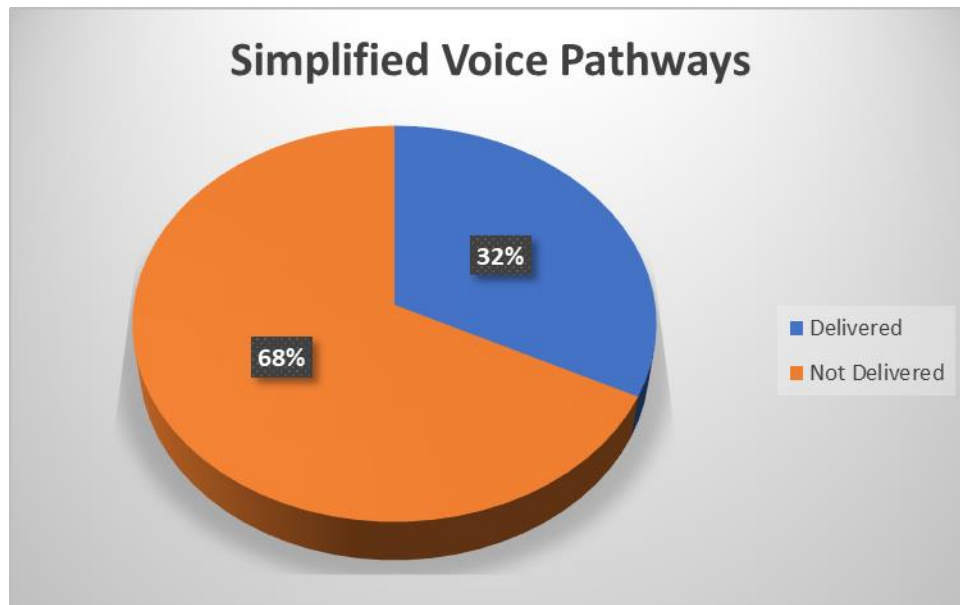
SIMPLIFIED VIEW - ALL DEVICES FOR ZONE 60

This chart displays the original delivery codes added into two basic categories. Although the “Not Delivered” rate still appears to be high, several factors account for this. For example, a total of 35 devices (out of 223) are counted as “Not Delivered” because of a duplicate number. Meaning the end user has placed the same phone number in every field as opposed to having multiple numbers for the system to call.

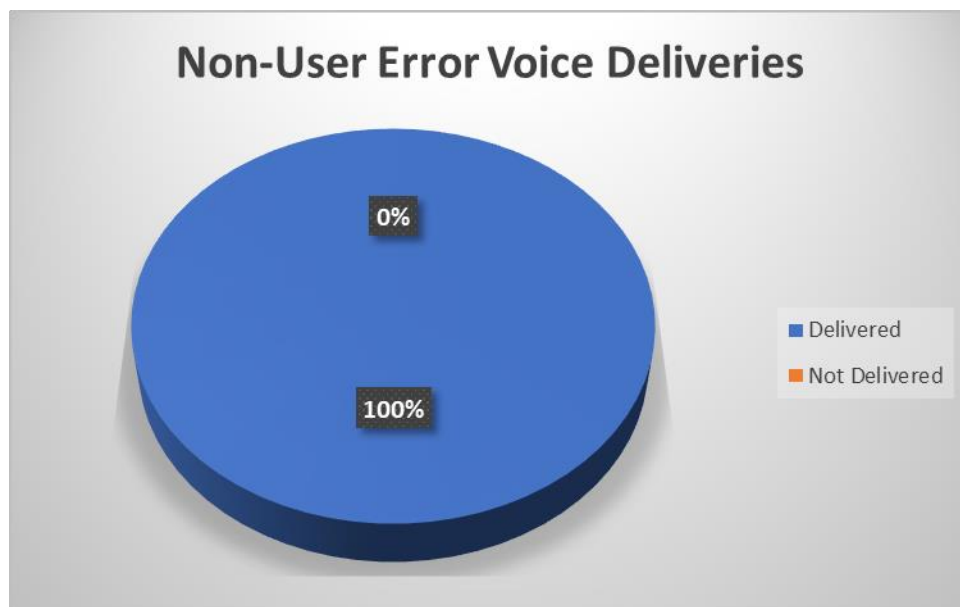


VOICE CALL SUCCESS RATE – ZONE 60

This chart displays the original delivery codes that pertain to voice calls ONLY, added into two basic categories. In Zone 60 there were 25 duplicate numbers, 20 devices that didn't answer and 19 recipients that hung up for a total of 64 voice calls being "Not Delivered" (out of 108 that were sent).



If the data is analyzed based on the "Not Delivered" codes that are directly related to any portion of the software and or telecommunications providers involved in an alert send (Contact Unavailable, Downstream Communication Error and Downstream Temporary Error), the data indicated for successful voice deliveries of the test in zone 60 is 100%.



ALL SIMPLIFIED OTHER DEVICES SUCCESS RATE - ZONE 60

This chart displays the success of all other device other than voice calls.

