

The Community Warning System

A partnership of industry,
government and the media
to warn and inform
our community
in the event of an emergency

Telephone Emergency Notification System Test
8/28/2013

SM

Contra Costa
County
Office of the Sheriff



Contra Costa County CWS Test

Objective

To assess the capability and scalability of the CWS system to reach county residents via phones, SMS and emails

System Test Details

On August 28, 2013, four (4) county areas participated in a coordinated test of CWS capabilities

- Pittsburg area around Dow
- Martinez area around Shell
- Rodeo/ Crockett area around Phillips66
- Richmond area around Chevron

CWS test focused on the following methods of notification:

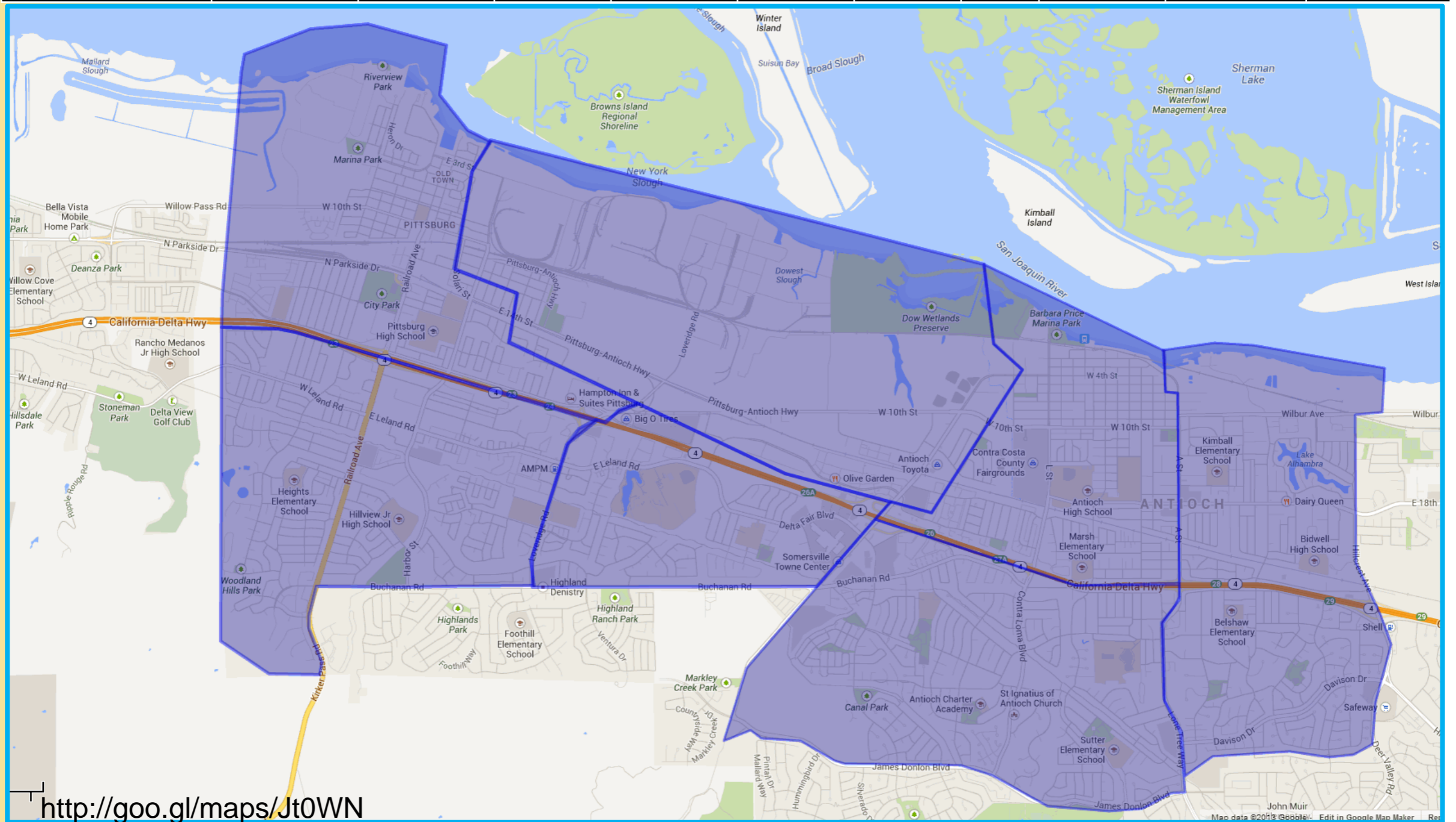
- Voice calls to landlines in predetermined areas
- Voice calls, SMS and email notification to devices pre-registered with the CWS

County residents received alerts via automated voice calls, SMS and email

County residents were advised of this test by news media and CWS website

CWS System Test – Pittsburg / Antioch DOW Area

Time of test	Total Phones	Successful Calls 94%				Errors		Success Rate		
		Answered/Voicemail	No Answer	55%	75%			94%		
5:30-7:00pm	21,941	15,802	72%	4,904	22%	1,235	6%	5 min	37* min	85** min



* Can be reduced by approx. 10 minutes

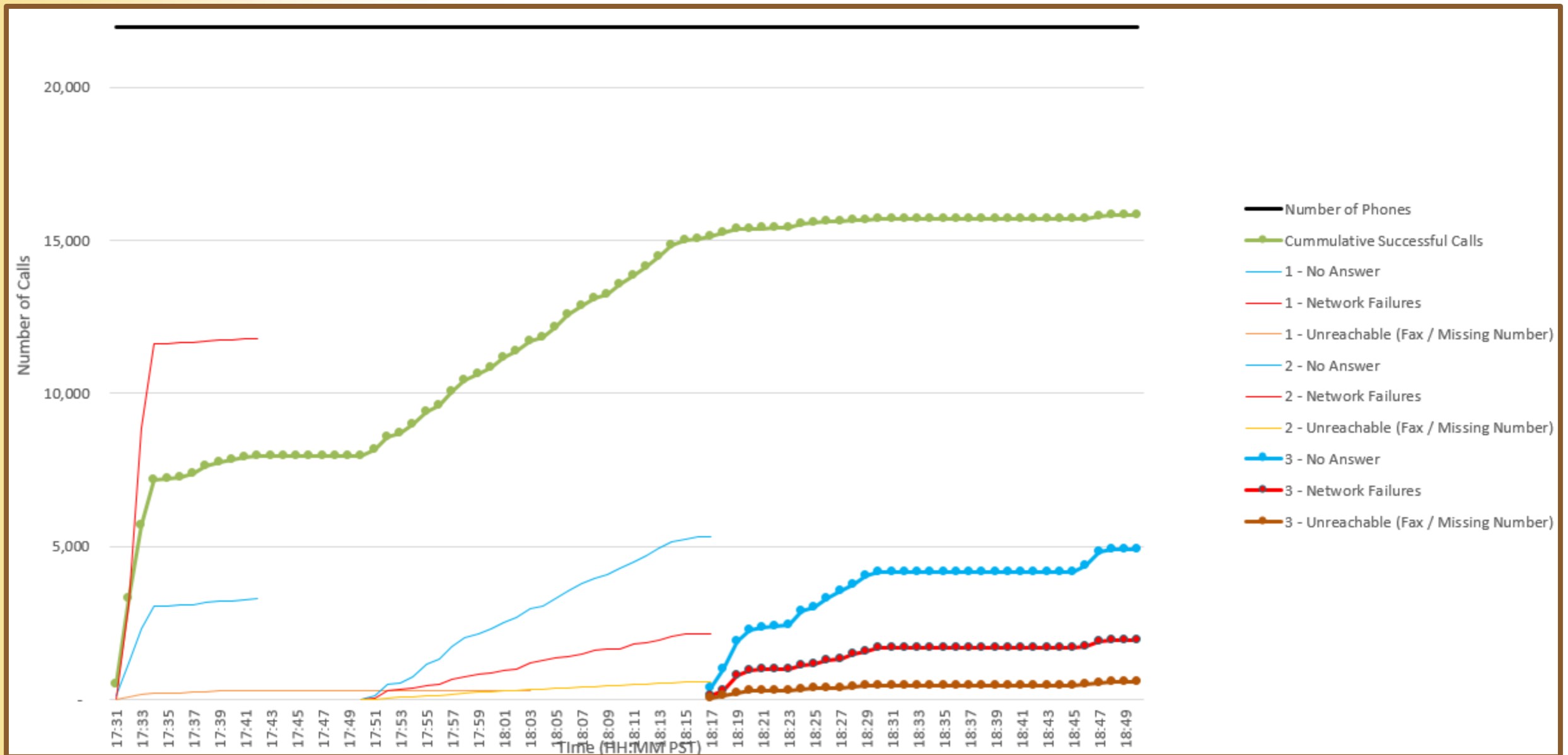
**Can be reduced by approx. 20 minutes

CWS System Test – Pittsburg / Antioch DOW Area

Test activated on 28 AUG 2013 at 5:30 PM PST

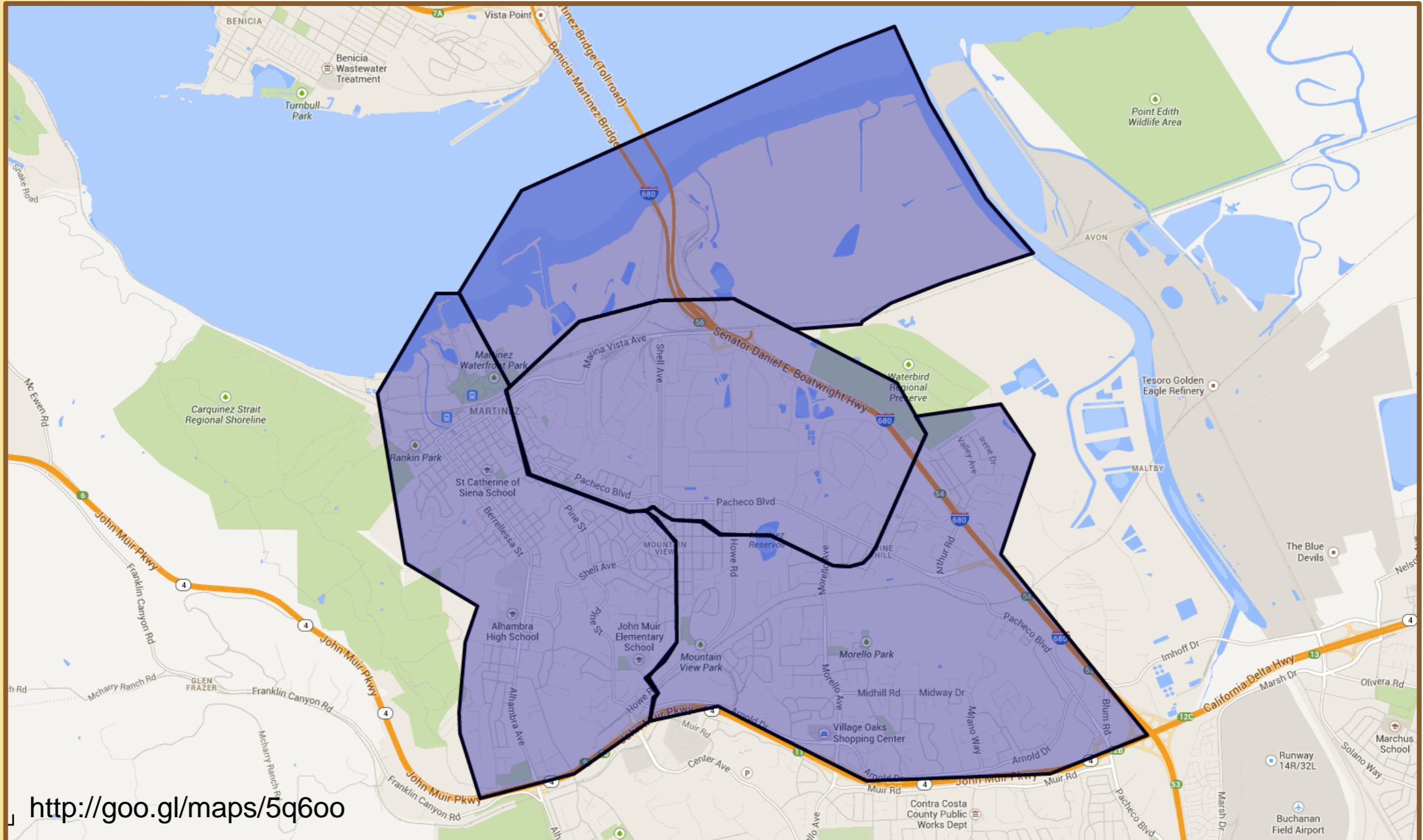
72% of residents received the call
 22% didn't answer
 6% were not reachable

Number of Phones Numbers	21,941	
Successful Calls	15,802	72%
No Answer	4,904	22%
Errors	1,235	6%
Total Number of Calls Attempted	47,724	
Ratio of Calls Made / Total Phones		2.18



CWS System Test – Martinez – Shell Area

Time of test	Total Phones	Successful Calls 89%				Errors		Success Rate		
		Answered/Voicemail	71%	No Answer	18%			55%	75%	89%
6:00-7:25pm	12,056	8,521	71%	2,170	18%	1,356	11%	5 min	34* min	57** min



* Can be reduced by approx. 10 minutes

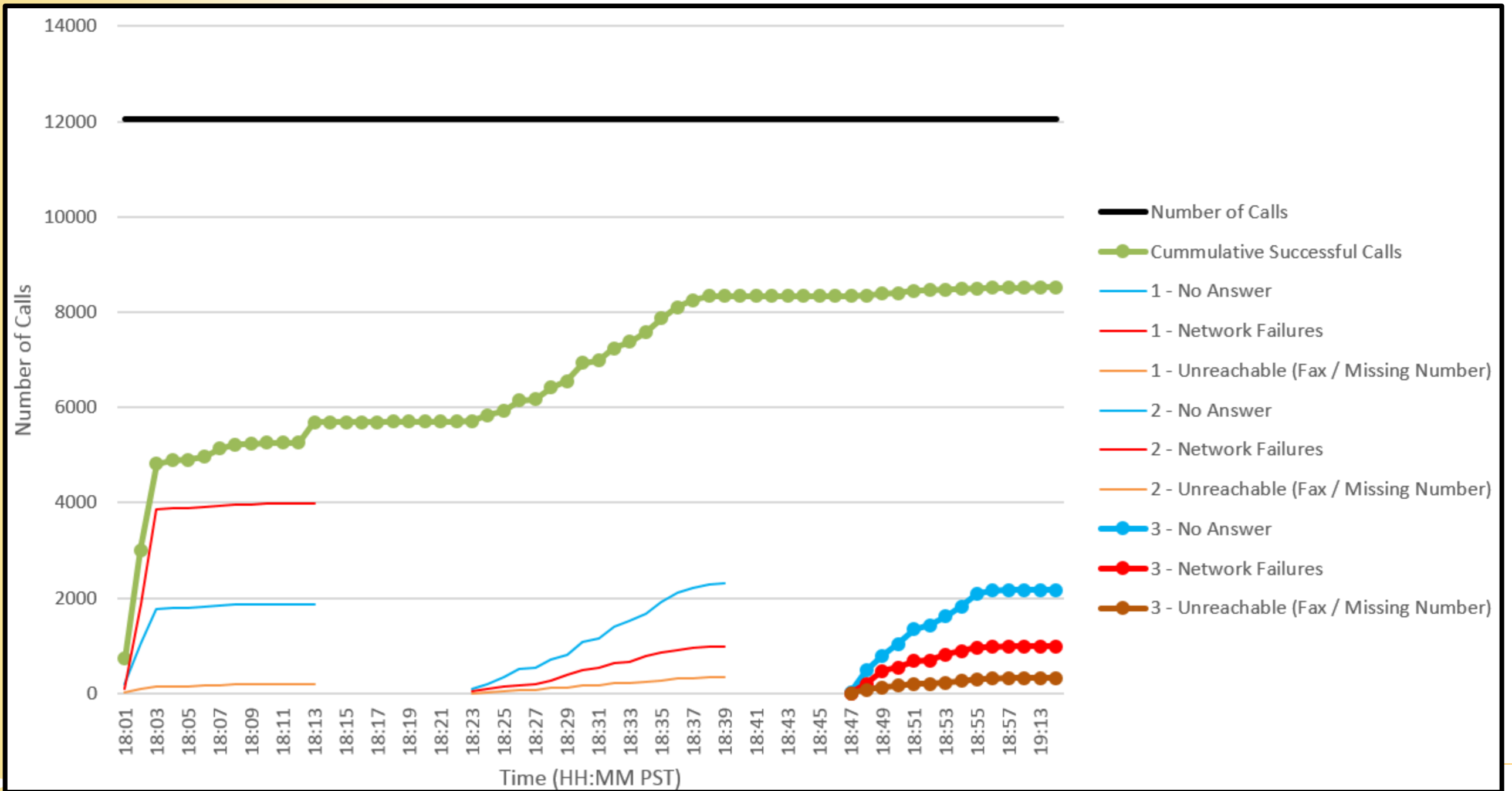
**Can be reduced by approx. 20 minutes

CWS System Test – Martinez – Shell Area

Test activated on 28 AUG 2013 at 6:00 PM PST

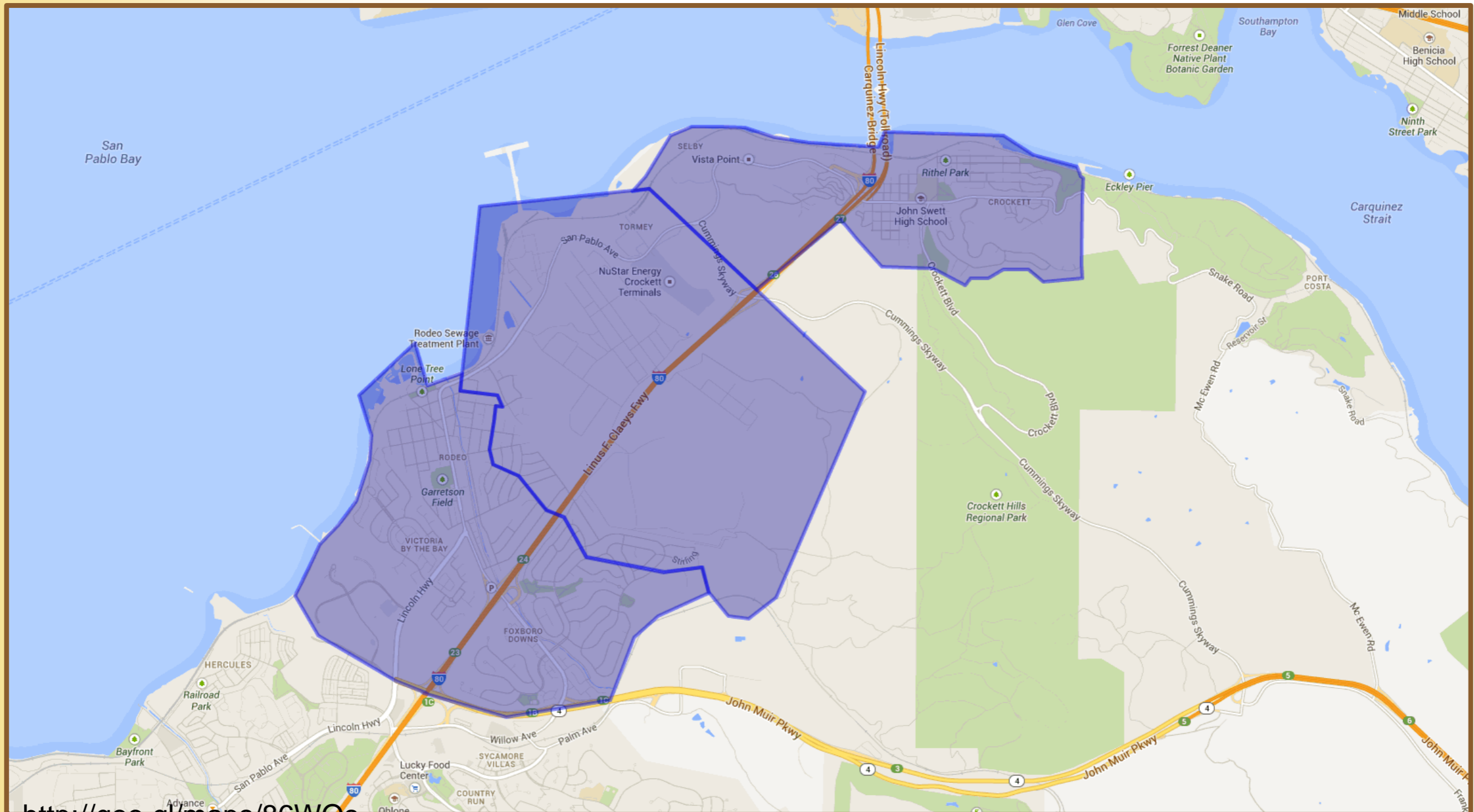
71% of residents received the call
 18% didn't answer
 11% were not reachable

Number of Phones Numbers	12,056	
Successful Calls	8,521	71%
No Answer	2,170	18%
Errors	1,365	11%
Total Number of Calls Attempted	22,098	
Ratio of Calls Made / Total Phones		1.83



CWS System Test – Crockett/Rodeo – Phillips 66 Area

Time of test	Total Phones	Successful Calls 83%				Errors		Success Rate		
		Answered/Voicemail		No Answer				50%	75%	83%
6:31-7:27pm	6,478	4,390	68%	963	15%	1,125	17%	5 min	35* min	53** min



<http://goo.gl/maps/86WQs>

* Can be reduced by approx. 10 minutes

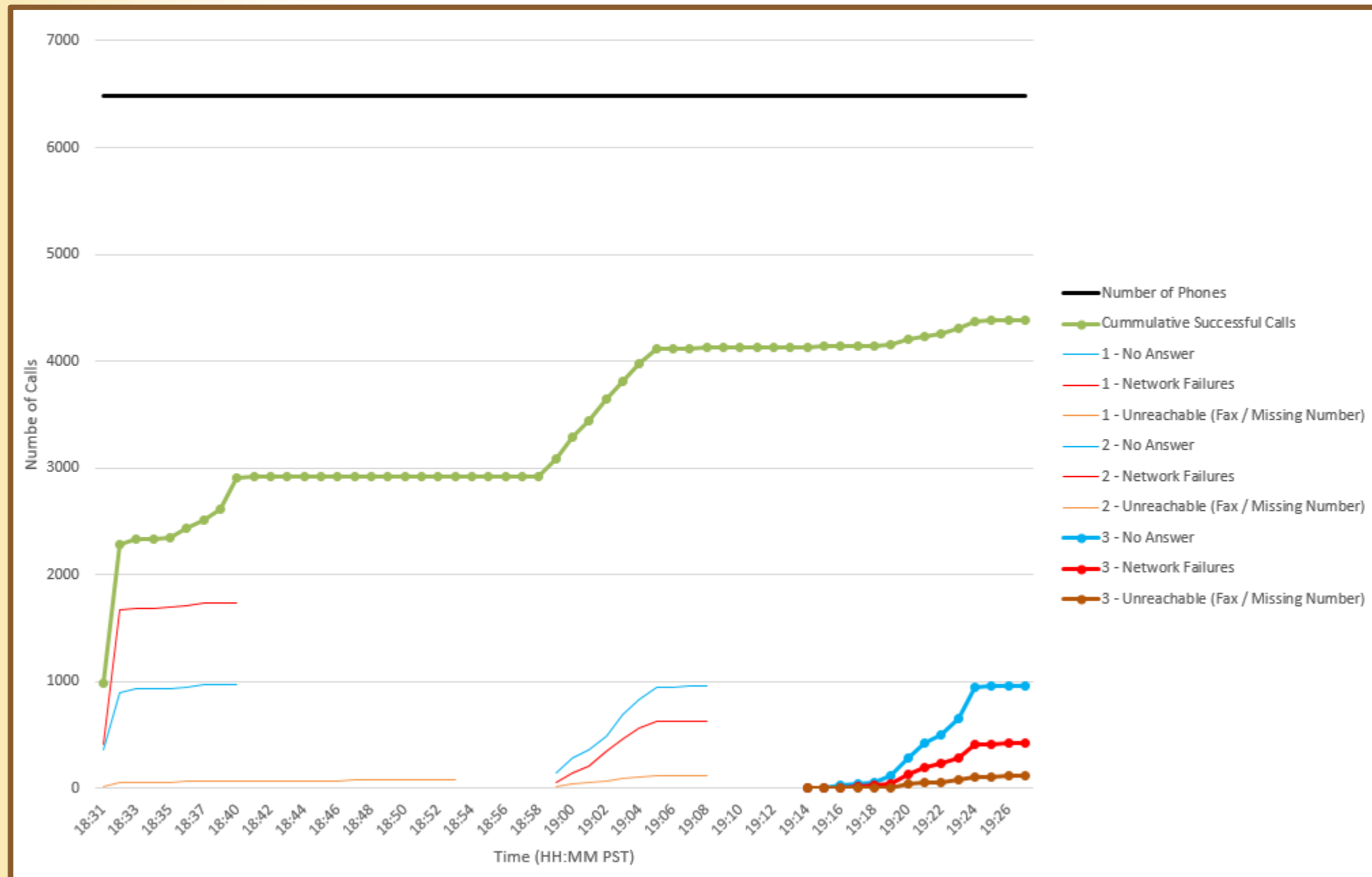
**Can be reduced by approx. 20 minutes

CWS System Test – Crockett/Rodeo – Phillips 66 Area

Test activated on 28 AUG 2013 at 6:30 PM PST

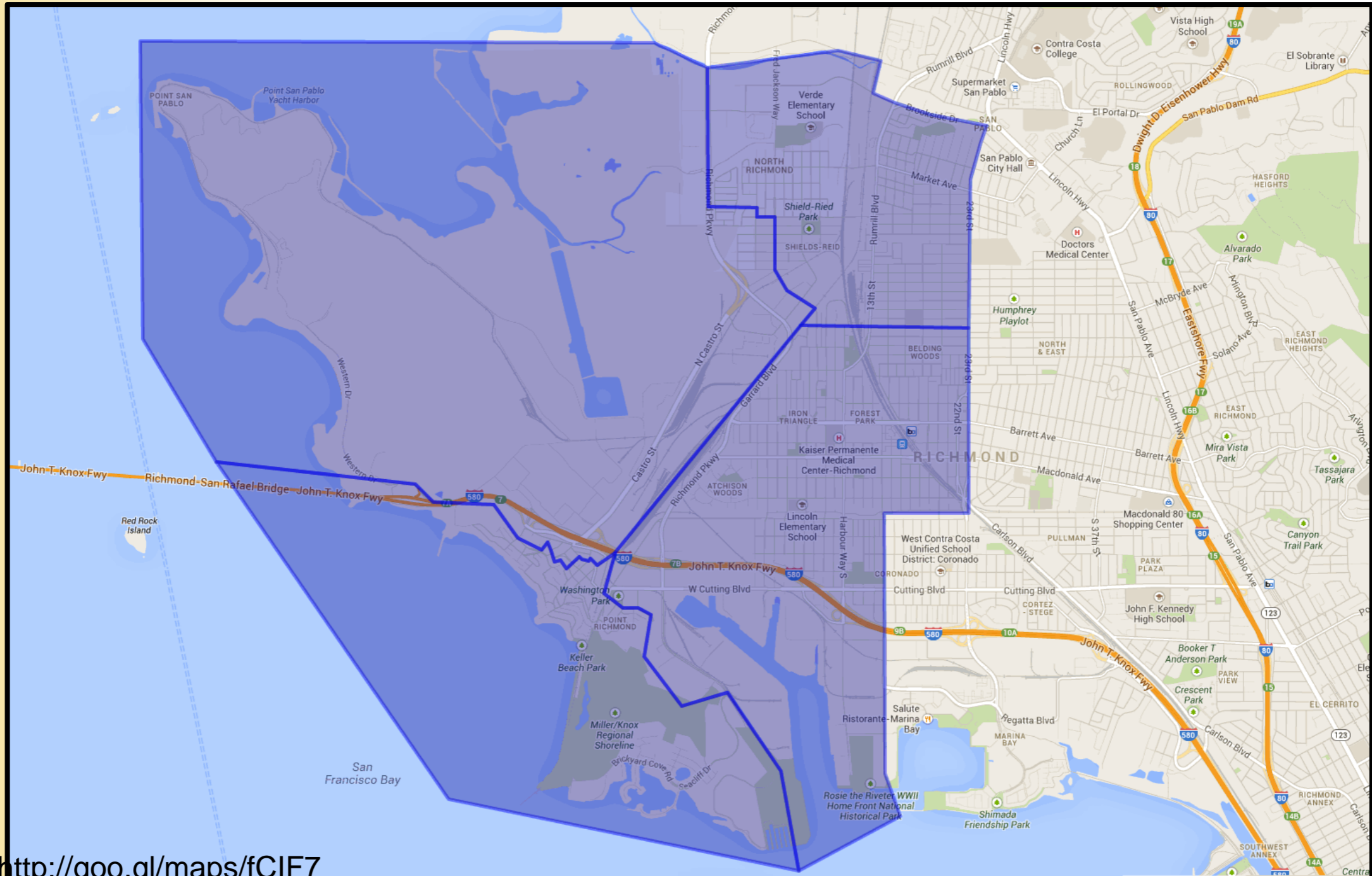
68% of residents received the call
 15% didn't answer
 17% were not reachable

Number of Phone Numbers	6,478	
Successful Calls	4,390	68%
No Answer	963	15%
Errors	1,125	17%
Total Number of Calls Attempted	10,766	
Ratio of Calls Made / Total Phones		1.66



CWS System Test – Richmond – Chevron Area

Time of test	Total Phones	Successful Calls 86%				Errors		Success Rate		
		Answered/Voicemail		No Answer				53%	75%	86%
7:00-7:54pm	13,664	8,537	63%	3,200	23%	1,927	14%	5 min	32* min	54** min



<http://goo.gl/maps/fCIE7>

* Can be reduced by approx. 10 minutes

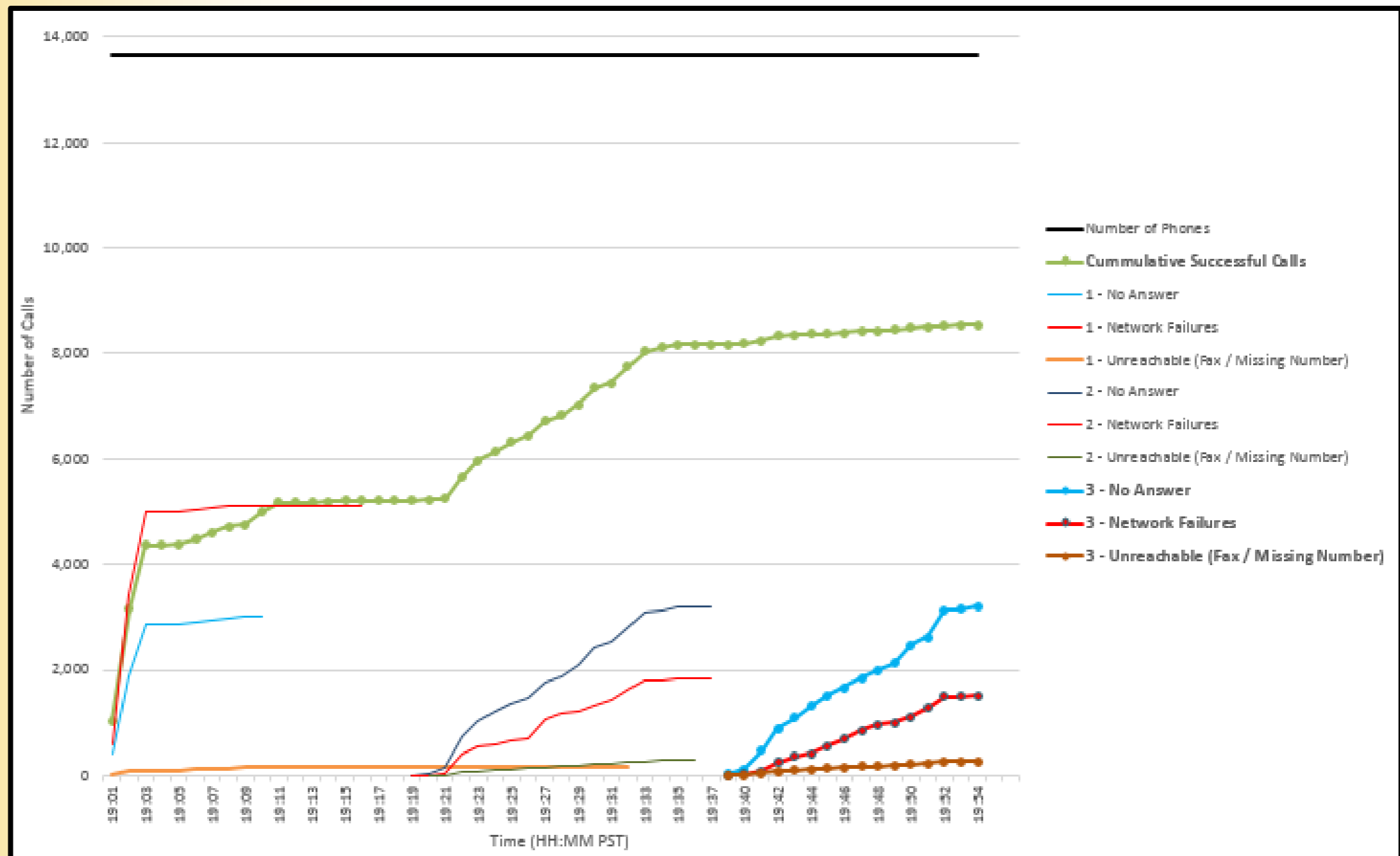
**Can be reduced by approx. 20 minutes

CWS System Test – Richmond – Chevron Area

Test activated on 28 AUG 2013 at 7:00 PM PST

63% of residents received the call
 23% didn't answer
 14% were not reachable

Number of Phones Numbers	13,664	
Successful Calls	8,548	63%
No Answer	3,200	23%
Errors	1,916	14%
Total Number of Calls Attempted	27,593	
Ratio of Calls Made / Total Phones		2.02



CWS System Test – Results Summary

How many residents were reached in the test?

54,139 phone lines were called

37,261 calls were answered or answering machine reached

108,181 total calls were attempted including retrials

How quickly did phone calls start?

Calls started within 1 minute of activation

Three attempts were made to reach phones (if unsuccessful on initial attempt)

	Number of Phones	Successful Calls (Calls Answered / Answering Machines)	No Answer	Errors	Call Attempts
Pittsburg / Antioch - Dow Area	21,941	15,802 72%	4,904 22%	1,235 6%	47,724
Martinez / Pacheco - Shell Area	12,056	8,521 71%	2,170 18%	1,365 11%	22,098
Crockett / Rodeo - Phillips 66 Area	6,478	4,390 68%	963 15%	1,125 17%	10,766
Richmond / San Pablo - Chevron Area	13,664	8,548 63%	3,200 23%	1,916 14%	27,593

Test Behavior & Observations

- The test was conducted with up to two retries after the initial call for phone numbers with either no answer or unsuccessful results
- Time interval between calls was 15 minutes, to relieve network load and to allow people to get to their homes/phones before another retry.
- After analyzing call process, retries could be reduced

CCC CWS System Test - Summary

CCC CWS – Operated as expected:

- CWS system used to activate the alerts.
- Multiple devices contacted; SMS, Phone, Emails
- 911 Telephone database and self-signup information was used
- Community Warning System website (www.cococws.us) was used prior, during and after the test.
- The mass alert devices (Sirens, Radio, TV, social media etc.) are critical as telephone delivery takes time.

CCC CWS System Test - Summary

ALL	Total Phones	Successful Calls 90%				Errors		Success Rate		
		Answered/Voicemail	No Answer					54%	75%	-
5:30-7:54pm	54,139	37,261	69%	11,237	20%	5,641	10%	5 min	36* min	-

Pittsburg / Antioch	Total Phones	Successful Calls 94%				Errors		Success Rate		
		Answered/Voicemail	No Answer					55%	75%	94%
5:30-7:00pm	21,941	15,802	72%	4,904	22%	1,235	6%	5 min	37* min	85** min

Martinez	Total Phones	Successful Calls 89%				Errors		Success Rate		
		Answered/Voicemail	No Answer					55%	75%	89%
6:00-7:25pm	12,056	8,521	71%	2,170	18%	1,356	11%	5 min	34* min	57** min

Rodeo	Total Phones	Successful Calls 83%				Errors		Success Rate		
		Answered/Voicemail	No Answer					50%	75%	83%
6:31-7:27pm	6,478	4,390	68%	963	15%	1,125	17%	5 min	35* min	53** min

Richmond	Total Phones	Successful Calls 86%				Errors		Success Rate		
		Answered/Voicemail	No Answer					53%	75%	86%
7:00-7:54pm	13,664	8,537	63%	3,200	23%	1,927	14%	5 min	32* min	54** min

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Public Survey Results

Method

- Immediately following the test call, a short live public survey was conducted to 1,200 test call recipients:
 - Dow – 350 interviews
 - Shell – 300 interviews
 - Phillips66 – 250 interviews
 - Chevron – 300 interviews
- Interviews conducted in both English and Spanish

Key Findings

- Few respondents reported problems with call quality, comprehension, or completeness of recording
- About 2/3 of respondents listened to the entire recording
- Trust in the CWS is high in all TENS Zones
- While many hear about incidents from calls and sirens, television is where most people turn to learn more about the alert