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# **MERCED COUNTY 9-1-1 PROGRAM**

## **SUMMARY**

The 2012-2013 Merced County Civil Grand Jury found that the County of Merced spent \$351,783 in 2007 on a reverse 9-1-1 system that was never operational. The recently purchased Everbridge Emergency Notification System (ENS) requires individuals to register cell phones. Over a four month time period approximately 1,500 people in Merced County registered. The ENS can be upgraded to implement geographically targeted messaging for approximately \$2,000 annually. This would make current campaigns for individual registration unnecessary and obsolete.

Responders sometimes find themselves in locations where their radio systems and/or cell phones do not have an adequate signal. Budget cuts have reduced the number of dispatchers and responders while Assembly Bill (AB)109 Public Safety and Realignment Act has increased the number of criminals on the street.

The Civil Grand Jury recommends that the County should upgrade the ENS to send messages to residents' mobile phones within proximity of an emergency event, and ensure that public money is spent on services that serve the needs of the citizens of Merced County. The Civil Grand Jury further recommends addressing issues with inadequate emergency responder radio systems and increasing responder and dispatch staff as budget allows.

## **INTRODUCTION/BACKGROUND**

The 2012-2013 Merced County Civil Grand Jury decided to investigate and ensure that the 9-1-1 emergency systems and management in Merced County are adequately serving county citizens. The Civil Grand Jury was made aware of an incident where citizens had dialed 9-1-1 only to be transferred back and forth between two separate jurisdictions, neither believing they were the ones responsible to take the phone call. Merced County's 9-1-1 systems haven't been fully looked at by the Civil Grand Jury since before 2007. We focused on the following: emergency notification services and first responder radio systems. It was the general consensus of the law enforcement personnel interviewed that AB109 and fewer emergency responders have negatively impacted the crime rate and 9-1-1 call response time.

The Merced County Sheriff's Department maintains correctional facilities and operates correctional programs, while responding to calls and protecting the residents of Merced County. Other law enforcement jurisdictions that serve solely in Merced County are the police departments of Merced, Atwater, Los Banos, Livingston, Dos Palos, Gustine, and University of California Merced.

The Merced County Office of Emergency Services (OES) provides preparedness before, and coordination during, large-scale emergencies and disasters. OES coordinates with partner agencies including the six incorporated cities within the county, special districts, and key private agencies in providing planning, response, recovery and mitigation

activities as a result of disaster related incidents. OES is in charge of implementing the ENS.

## **METHODOLOGY**

The 2012-2013 Merced County Civil Grand Jury uses the investigation method of triangulation, which involves research, observation, and interviews.

### **RESEARCH**

The Civil Grand Jury reviewed websites and documents received from various sources which can be viewed at the end of the report in the footnotes.

### **OBSERVATION**

During this investigation, the Civil Grand Jury inspected and observed 9-1-1 responders and dispatch locations in various Merced County jurisdictions.

### **INTERVIEWS**

The Civil Grand Jury interviewed numerous individuals, including a police chief, a fire battalion chief, an OES Director of Administration, a previous Merced County dispatch supervisor, and current County dispatch supervisor. The Civil Grand Jury asked questions of various 9-1-1 responders and ranking staff on our observation tours. In addition, the Civil Grand Jury received information from County contacts for the Everbridge system, along with information from the Auditor's Office.

## **DISCUSSION**

### **1) EMERGENCY NOTIFICATION SYSTEM (ENS)**

- An ENS alerts residents and businesses about natural disasters and other crises. Merced County has many characteristics that make having an operating ENS necessary; these include water dams, chemical plants, major freeways, and railway systems that are all within close proximity to populated residential and commercial areas.

In fiscal year 2007, Merced County received funds from the State Homeland Security Grant Program to cover the cost of an ENS, called Reverse 9-1-1. Due to technical difficulties and the structure of the County's existing communication trunk lines, and compatibility issues with the different cities, the new system never worked. The total cost for the Reverse 9-1-1 system hardware, software and licensing, setup, implementation, and county administration services was \$351,783. These funds were never recovered, and according to OES, the system has never worked.

In November of 2012, Merced County OES purchased a new web based ENS called the Everbridge System. The new ENS enables Merced County and participating cities to provide essential information quickly in a variety of

situations, such as earthquakes, severe weather, fires, floods, or evacuation of buildings or neighborhoods. The Everbridge system is designed to be utilized anywhere from a fully staffed dispatch center to just a cell phone.

The system is able to call all listed landlines, and all manually registered cell phones. The OES can send an alert with one call or a few clicks of a computer mouse, and can communicate with thousands of residents and businesses anywhere, anytime, via home phone, cell phone, business phone, or e-mail address. However, if residents desire to receive messages via cell phone, or e-mail, they have to go through a process of signing up online via the County's registration page.<sup>7</sup>

The new system was put to the test in Atwater, California on December 4<sup>th</sup>, 2012, when an ammonia leak was reported at the Dole plant. Approximately eleven homes in close proximity were alerted to evacuate using the new Everbridge notification service. Ten residents showed up at the community center until the all clear was given that it was safe to return home.

Since implementation in November, the OES has implemented an advertising campaign in the local newspapers, radio and on the OES website<sup>8</sup> to get residents to register their cell phones and unlisted numbers to receive phone calls or e-mails in the event of an emergency. From the beginning of November 2012, to the end of February 2013, approximately 1,500 county residents had registered according to OES. This is negligible compared to the 258,000 people that reside here in Merced County. The OES continues to encourage more resident registration by conducting a larger media campaign on April 4<sup>th</sup>, 2013. According to the Centers for Disease Control, in 2010 approximately eighteen percent of homes in California had only a cell phone, and no landline.<sup>9</sup> This percentage appeared to be increasing three to six percent annually.

Individuals who are not connected to a registered landline in Merced County whether at work, doing errands, visiting Merced, or those simply with just a cell phone are unable to be reached in the event of an emergency unless they register their cellular number.

The Civil Grand Jury has found that eighty-two state and local authorities in the United States have implemented notification systems that send geographically targeted messages to compatible mobile phones by cell tower proximity.<sup>10</sup>

This new technology is primarily covered by a Federal program known as the Integrated Public Alert and Warning System (IPAWS) and establishes itself as a

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<sup>7</sup> Office of Emergency Services, Merced County Emergency Notification Implementation Plan, November, 2012.

<sup>8</sup> Merced County Notification System Sign Up Page <http://www.co.merced.ca.us/index.aspx?nid=1922>

<sup>9</sup> CDC, National Health Statistics Reports, Number 39, April 20, 2011.

<sup>10</sup> AWARE Forum Organization, <http://www.awareforum.org/2012/11/update-on-ipaws-and-cmas-usage/>

proximity notification system under the Commercial Mobile Alert System (CMAS) program.

According to the Federal Communications Commission (FCC)<sup>11</sup>, Federal alerts can be sent to targeted counties; if Merced County wants access to send alerts to specific areas in the County, they can apply to the Federal program. Once registration is completed, they can then use the given account number to launch proximity based notifications via the CMAS system. This can be supplemented by the free Everbridge Mobile Member application should the County choose to implement the following upgrades on technology. According to the County's Everbridge contact, the technical service upgrades to the existing Everbridge system would cost Merced County approximately \$2,000 annually. This upgrade would enable the County to have the ability to alert the affected residents with precision. Merced County could apply for and acquire the Federal access code. According to Merced County's Everbridge contact, in mid-April 2013, the County system will be able to work with CMAS if they upgrade the Everbridge module. The upgrades would make individual registration for alerts unnecessary; and all registration media campaign funds could be allocated towards paying for Everbridge upgrades.

## **2) FIRST RESPONDER RADIO SYSTEMS**

According to various interviewees, tours, and police ride-alongs, the 2012-2013 Merced County Civil Grand Jury found that many Merced County local first responders' radio equipment is inadequate. It was noted multiple times in various locations that the radio systems do not have sufficient signal strength. The Civil Grand Jury experienced, and were told of, multiple "dead zones" within Merced County that would leave responders stranded with no ability to communicate with other responders or their dispatch base.

## **3) FEWER RESPONDERS AND MORE CRIMINALS**

During our investigation, the 2012-2013 Merced County Civil Grand Jury noted that county law enforcement jurisdictions are struggling to deal with the impact of budget constraints and AB109. There has been a 17% decrease in total annual revenue comparing the years 2009 and 2011 in Merced County. From 2007 to 2011 there was a decrease in property tax revenue of 15%.<sup>12</sup> Budget constraints have forced jurisdictions to employ fewer officers, and AB109 has increased the number of criminals that are on the street. The result has been higher crime. According to FBI crime statistics, from 2010 to 2011, crime in Merced County went up 8%.<sup>13</sup>

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<sup>11</sup> FCC.GOV Commercial Mobile Alert System, <http://www.fcc.gov/guides/commercial-mobile-alert-system-cmas>

<sup>12</sup> Merced County Comprehensive Annual Financial Report, 2007 through 2011. <http://www.co.merced.ca.us/Archive.aspx?AMID=38>

Some of the causes and possible solutions are listed below.

#### ■ FEWER RESPONDERS

Departments are required to manage with fewer first responders. There are two main things that are affected by this downsizing.

- 1) Responders' overtime has increased. This can wear down a department and make employees do their work without being fully rested.
- 2) There are fewer first responders on the streets at any one time covering their jurisdiction. Response times to calls are potentially slower, especially non-emergency calls.

#### ■ MORE CRIMINALS

According to a Police Chief and ranking officials in the Sheriff's and Police Departments, one of the most concerning things for Merced County is the impact of AB109. The law's goal is to reduce California's prison population by 33,000 inmates by June 2014.<sup>14</sup> County law enforcement officials noted that it is now harder to keep criminals behind bars for breaking the law. One went so far as to call the jail booking station a "revolving door", and that criminals are beginning to realize that while they may be charged for a crime, they may not serve any jail or prison time. This puts all Merced County residents at greater risk.

## FINDINGS

- F1. The new ENS requires individuals to register all cell phones. In almost four months, approximately 1,500 people in Merced County have registered.
- F2. The Everbridge ENS can be upgraded to implement geographically targeted messaging for approximately \$2,000 annually. This would make current campaigns for individual registration unnecessary and obsolete.
- F3. Budget cuts have reduced the number of dispatchers and responders. AB109 has put more criminals back on the street. If one commits a minor crime, while they may be charged, they often will not see jail time. Criminals are often released as soon as they are processed.
- F4. In various jurisdictions in Merced County, responders will sometimes find themselves in locations where their radio systems and/or cell phones do not have an adequate signal.
- F5. The County of Merced spent \$351,783 on a reverse 9-1-1 system that was never operational.

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<sup>13</sup> <http://www.fbi.gov/stats-services/crimestats>

<sup>14</sup> <http://www.cdcr.ca.gov/news/docs/2011-05-23-three-judge-panel-background.pdf>

## RECOMMENDATIONS

- R1, R2. The 2012-2013 Merced County Civil Grand Jury recommends implementing the geographically targeted messaging system. This would make individual registration for alerts unnecessary; and all registration media campaign funds could be allocated towards paying for Everbridge upgrades. Until then the initial step of applying for and acquiring the Federal access code should be undertaken by Merced County.
- R3. The 2012-2013 Merced County Civil Grand Jury recommends that Merced County jurisdictions should increase the number of dispatchers and law enforcement responders as soon as budget allows.
- R4. The 2012-2013 Merced County Civil Grand Jury recommends that Merced County ensure that all emergency responder radio “dead zones” are located and the necessary actions are taken to ensure adequate radio signal strength.
- R5. The 2012-2013 Merced County Civil Grand Jury recommends the County of Merced require all departments in charge of purchasing for the County to have a clause in each contract that will allow the return of the equipment and a full refund if it does not work as advertised or with our systems. Also, enough research should be done prior to purchasing to ensure that the equipment will work with our systems.

## REQUEST FOR RESPONSES

Pursuant to Penal Code Section 933.05, the 2012-2013 Merced County Civil Grand Jury requests responses as follows:

From the following governing bodies:

- The County of Merced Administrative Services—Recommendation 5.
- The Merced County Office of Emergency Services—Recommendation 1, 2, 4.
- Merced County Law Enforcement Agencies—Recommendation 3, 4.
- The County Board of Supervisors—Recommendation 1, 2, 3, 5.

The governing bodies indicated above should be aware that the comment or response of the governing body must be conducted subject to the notice, agenda and open meeting requirements of the Brown Act.

## GLOSSARY

**ENS:** Emergency Notification Services

**OES:** Office of Emergency Services

**IPAWS:** Integrated Public Alert and Warning System

**CMAS:** Commercial Mobile Alert System

**FCC:** Federal Communications Commission

## **ATTACHMENTS**

**A** FBI Crime Statistics for Merced County 2010

**B** FBI Crime Statistics for Merced County 2011

## **DISCLAIMER**

Grand Jury reports are based on documentary evidence and the testimony of sworn or admonished witnesses, not on conjecture or opinion. However, the Grand Jury is precluded by law from disclosing such evidence except upon the specific approval of the Presiding Judge of the Superior Court, or another judge appointed by the Presiding Judge (Penal Code Sections 911, 924.1(a) and 929). Similarly, the Grand Jury is precluded by law from disclosing the identity of witnesses except upon an order of the court for narrowly defined purposes (Penal Code Sections 924.2 and 929).

This report was issued by the Grand Jury with the exception of two member who were recused due to a potential conflict of interest. Those jurors were excluded from all parts of the investigation, including deliberations and the making and acceptance of this report.

**A) FBI Crime Statistics for Merced County 2010**

1 0	CRIME BY COUNTY 2010		02/17/12										UCRS5100				
	MO	CTY	SMA	ORI	G	AGENCY NAME	POPULATION	VIOLENT CRIME	PROPERTY CRIME	MURD	FORCIBLE RAPE	ROBBERY	AGGRAVATED ASSAULT	BURGLARY	LARCENY	MTR VEH THEFT	ARSON
12	023	CA02309	80	UPRR:	MENDOCINO	C		1	128				1		11	117	
12	023	CA02399	80	HP:	MENDOCINO	COU		488	1,518	4	43	45	396	515	829	174	25
						COUNTY TOTAL	87,841	488	1,518	4	43	45	396	515	829	174	25
12	024	522	CA02406	3	MERCED		78,958	549	2,808	7	33	141	368	633	1,934	241	23
12	024	522	CA02401	4	ATWATER		28,168	114	1,128	4	6	23	81	322	700	106	14
12	024	522	CA02402	6	DOS PALOS		4,950	48	171	1	3	5	39	58	105	8	6
12	024	522	CA02403	6	GUSTINE		5,520	8	175			1	7	69	85	21	1
12	024	522	CA02404	5	LIVINGSTON		13,058	103	346		4	13	86	163	151	32	6
12	024	522	CA02405	4	LOS BANOS		35,972	139	1,050	2	4	36	97	323	637	90	3
12	024	522	CA02412	7	UN OF CA:	MERCED		1	18				1		18		
12	024	522	CA02400	98	MERCED		89,167	484	2,026	12	22	49	401	778	1,227	21	7
12	024	522	CA02408	90	UPRR:	MERCED COUN			8						8		
12	024	522	CA02410	90	DPR:	FOUR RIVERS		1	7			1			7		
12	024	522	CA02499	90	HP:	MERCED COUNTY		1	507				1	1	72	434	
						COUNTY TOTAL	255,793	1,448	8,244	26	72	269	1,081	2,347	4,944	953	60

B) FBI Crime Statistics for Merced County 2011

FBI CRIME STATS 2011  
By County/City

CRIME BY COUNTY 2011		1/23/13																
MO	CTY	SMA	ORI	G	AGENCY NAME	POPULATION	VIOLENT CRIME	PROPERTY CRIME	MURD	RAPE	FORCIBLE	ROBBER	AGGRAVATED BUR-	GLARY	LARCENY	UCR5	5100	
							CRIME	CRIME					GLARY				MTR	ARSON
																	VEH	
																	THEFT	
12	24	522	CA02406	3	MERCED	79,886	503	3,159	8	20	149	326	802	2,044	313	42		
12	24	522	CA02401	4	ATWATER	28,499	129	1,230	5	37	37	87	355	773	102	14		
12	24	522	CA02402	6	DOS PALOS	5,008	40	177	3	3	3	37	50	105	22	2		
12	24	522	CA02403	6	GUSTINE	5,585	34	148	1	2	5	26	46	81	21	1		
12	24	522	CA02404	5	LIVINGSTON	13,212	75	350	5	10	10	60	180	135	35	2		
12	24	522	CA02405	4	LOS BANOS	36,395	168	1,177	3	7	29	129	397	676	104	1		
12	24	522	CA02412	7	UN OF CA: MERCED		1	39				1	2	37				
12	24	522	CA02400	98	MERCED	90,215	459	2,319	2	22	41	394	767	1,538	14	6		
12	24	522	CA02408	9D	UPRR: MERCED COUN			14						14				
12	24	522	CA02410	9D	DPR: FOUR RIVERS			8						2	6			
12	24	522	CA02499	9D	HP: MERCED COUNTY			511						3	87	421		
					COUNTY TOTAL	258,800	1,409	9,132	14	61	274	1,060	2,604	5,496	1,032	68		