

Joint Emergency Communications Services Association

FY2016 Annual Report



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Message from Executive Director

December 12, 2016

Dear Policy Board and 28E member entities;

I am pleased to present the 2016 annual report of the Joint Emergency Communications Center. This report contains 12 months of statistics for fiscal year 2016.

Fiscal year 2016 was the sixth (6th) year of operation for the Joint Emergency Communications Center. We have continued to streamline and improve our processes as we work with the member agencies to process emergency calls quicker and dispatch them more efficiently.

A few notable accomplishments from fiscal year 2016 was the implementation of ProQA for Emergency Medical Dispatching, the final phase of an upgrade of our Viper E-911 phone system and an upgrade of our logging recorder. The phone system upgrade was a two phase project that occurred over two years utilizing grant funds from the State of Iowa wireless carryover grant. The logging recorder upgrade was also paid for using wireless carryover grant funds. The ProQA implementation was paid for using E-911 surcharge funds.

We experienced an approximate 4% increase in the number of overall emergency and non-emergency telephone calls in fiscal year 2016, which resulted in an approximate 6% increase in the number of calls for service that were created in fiscal year 2015. We continued to see cellular 911 call volume increase with an approximate 10% increase in calls over fiscal year 2015. Wireline 911 calls decreased by approximately 10% compared to fiscal year 2015, which was the lowest amount of calls received in the past 5 years. In fiscal year 2016 came along the largest increase in VoIP calls (287%) that we have seen in the past 5 years.

We continue to look forward to the challenges that will be presented to us in the future and continuing to provide the highest level of emergency communications to the residents of Johnson County.

Sincerely,



Tom Jones
Executive Director

Vision

To serve and support the public safety communications needs of our customers in the most efficient and responsive manner possible.

Mission Statement

To provide all residents of Johnson County a single answering point for processing their calls for emergency and non-emergency assistance for police, fire, medical and general service responders. To provide primary communications for all public safety agencies responding within our jurisdictional boundaries through use of 2-way radios, telephones and/or teletype equipment. To maintain up-to-date and continuous training for all employees to insure prompt, professional and efficient services.

Services Provided by the JECC

- Enhanced Wireless and Wireline 911 services to all Citizens of Johnson County.
- Radio Communications/Computer Aided Dispatch to 5 Law Enforcement Agencies.
- Radio Communications/Paging Communications/Computer Aided Dispatch to 14 Fire Departments, Johnson County Ambulance Service and Johnson County HAZMAT team.
- Radio Communications only to the following:
 - University of Iowa Department of Public Safety
 - Iowa Department of Corrections High Risk Unit
 - U.S. Army Corps of Engineers
 - Iowa DNR-Lake McBride and Conservation
 - Johnson County Conservation
 - UIHC
 - Mercy Hospital
 - VA Hospital
 - North Liberty Public Works
 - Coralville Public Works
 - Johnson County Secondary Roads
 - University of Iowa Parking and Transportation
- Activates and monitors the Johnson County Outdoor Warning Systems.
- Notification and monitoring point for Severe Weather activity for the National Weather Service-Quad Cities
- Alert Iowa

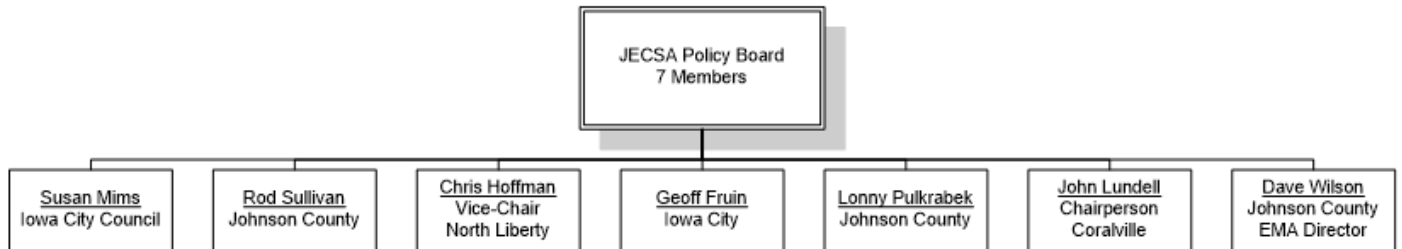
Overview

The Joint Emergency Communications Center of Johnson County (JECC) is the clearing house for all 9-1-1 calls and all Emergency Communications for Johnson County. With nearly 140,000 citizens, Johnson County is Iowa's fourth most populated county and covers 632 square miles. The JECC serves as the epicenter for emergency communications for all citizens of Johnson County. The Johnson County Emergency Management Agency (EMA) is also located in the same facility.

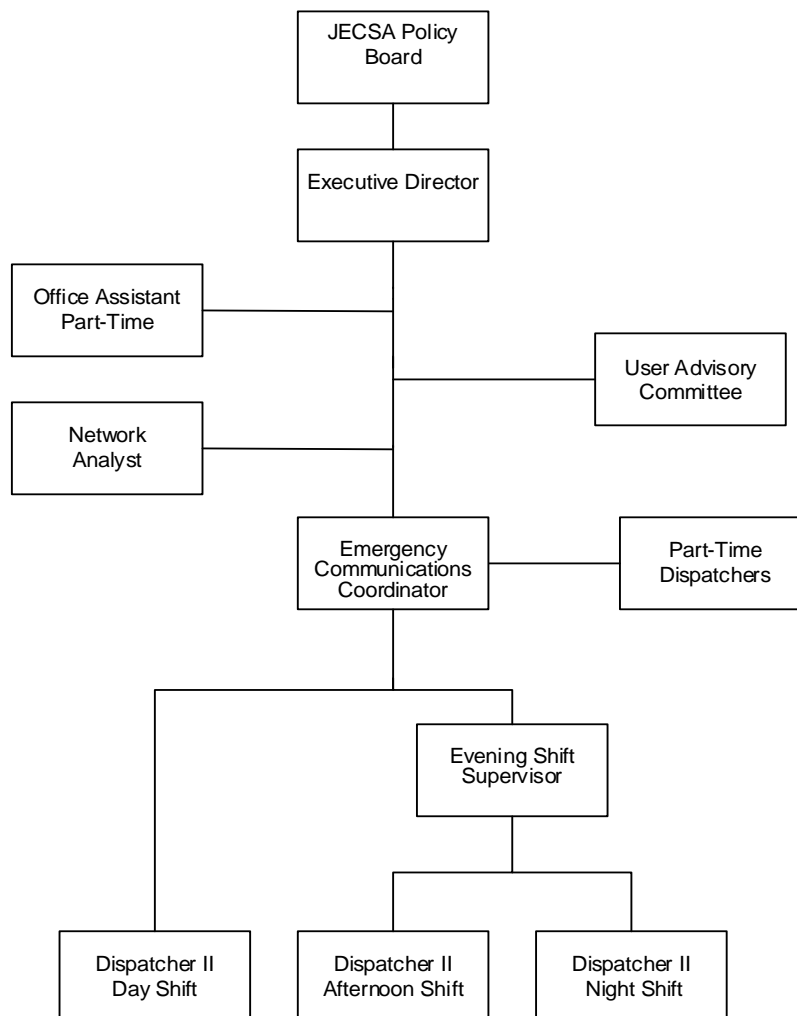
The JECC serves the public 24 hours a day, 7 days a week, and 365 days a year with specially trained dispatchers to answer all emergency calls for assistance. These operators receive and/or transmit emergency telephone, radio, alarm, and other types of data over multiple computer systems, then analyze it in a timely manner for the purpose of relaying the information between citizens and first responders during emergencies in order to preserve life and property.

Another important responsibility of Emergency Communications Personnel is the accurate entry and removal of wanted persons, articles and vehicles in NCIC. This includes providing, on demand, the results of NCIC queries made by field units.

Joint Emergency Communications Services Association Policy Board of Directors



Joint Emergency Communications Center (JECC) Organizational Chart



Personnel Allocation – FY2016

<u>Job Title</u>	<u>Management</u>	<u>Administrative</u>	<u>Operations</u>	<u>Total</u>
Executive Director	1			1
Emergency Communications Coordinator	1			1
Evening Shift Supervisor	1			1
Network Analyst		1		1
Office Assistant – Part-Time		1		1
Dispatcher II			24	24
Dispatcher II / Part-Time			4	4
			Total	33

Training and Events

The dedicated 911 Dispatch Staff continue to promote the 911 Center in a positive way through participation in a number of volunteer events:

- Johnson County Fair
- UIHC Emergency Medicine Resident Training Program
- Citizens Police Academy
- MATS Training
- Iowa City Chamber of Commerce Community Leadership Program
- UIHC Paramedic Program Orientation
- Non-Profit fund drives during the holiday season

The 911 Dispatchers took advantage of a number of training opportunities in fiscal year 2016 including:

- APCO/NENA Spring and Fall Conference
- CJIS Training
- Police Legal Sciences
- Pipeline Safety & Awareness
- WENS – Emergency Communications Network
- APCO Certified Training Officer Training
- Emergency Medical Dispatch Certification Class
- Emergency Medical Dispatch Quality Assurance Class
- Basic Iowa System Training
- State of Iowa 40 Hour Dispatch Class
- APCO Active Shooter Training
- Advanced Telecommunicator Training
- PSTC “The Golden Rule” (Location, Location, Location) (Punctuality)
- ProQA Training
- AQUA Training for EMD-Q’s
- Cardiac/Respiratory/Death Protocol Advancement Series

Awards



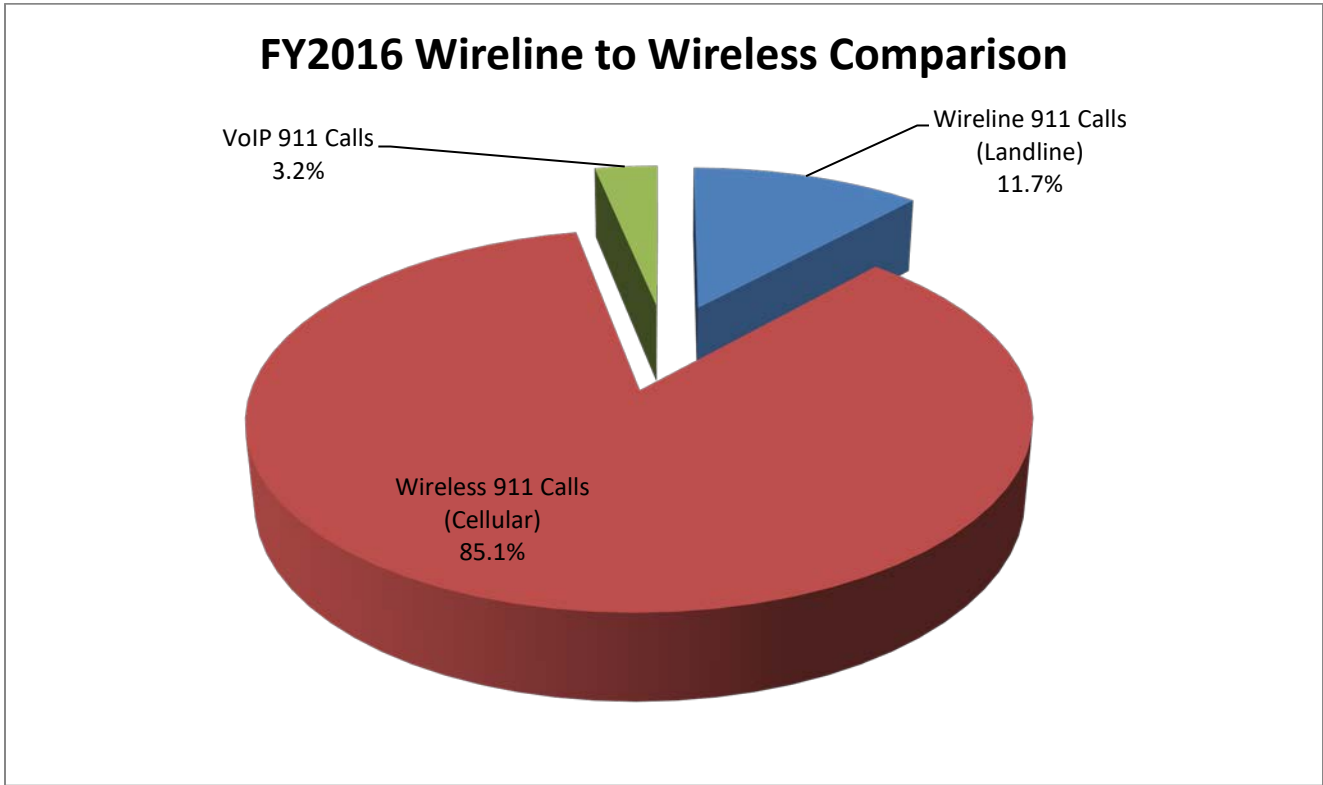
Iowa APCO Team Telecommunicator of Year Award 2015

(Dispatchers: Lori S., Tiffany R., Kelsey M., Rick G. and Logan H.)

The staff of the Johnson County Joint Emergency Communications Center (JECC) was presented with the Team Telecommunicator of the Year Award for 2015 at the Iowa APCO Spring Conference in Des Moines on April 12, 2016. The team was presented with the award for their teamwork displayed during a tragic shooting that occurred at a local shopping mall.

The team of dispatchers immediately took control of the situation, utilizing their skills and abilities of quick thinking and prioritization to assure that everyone remained safe and get a description of the suspect. The primary law dispatcher's calm voice on the radio brought reassurance to responders. During this incident, there was such a high volume of emergency 911 calls being placed that calls rolled over to our backup PSAP in Cedar Rapids. In total over there were over fifty-three (53), 9-1-1 calls that were answered in a 12 minute period from the start of the incident. Of those 53 calls, forty-one (41) were in the first 3 minutes. During those first 3 minutes, 21 calls were answered by Jonson County and 20 calls were answered by Cedar Rapids. Over the next 90 minutes, the staff received and processed a total of 215 phone calls. In addition to the phone calls in the first 3 minutes, three dispatchers handled a total of 46 radio transmissions from responding officers.

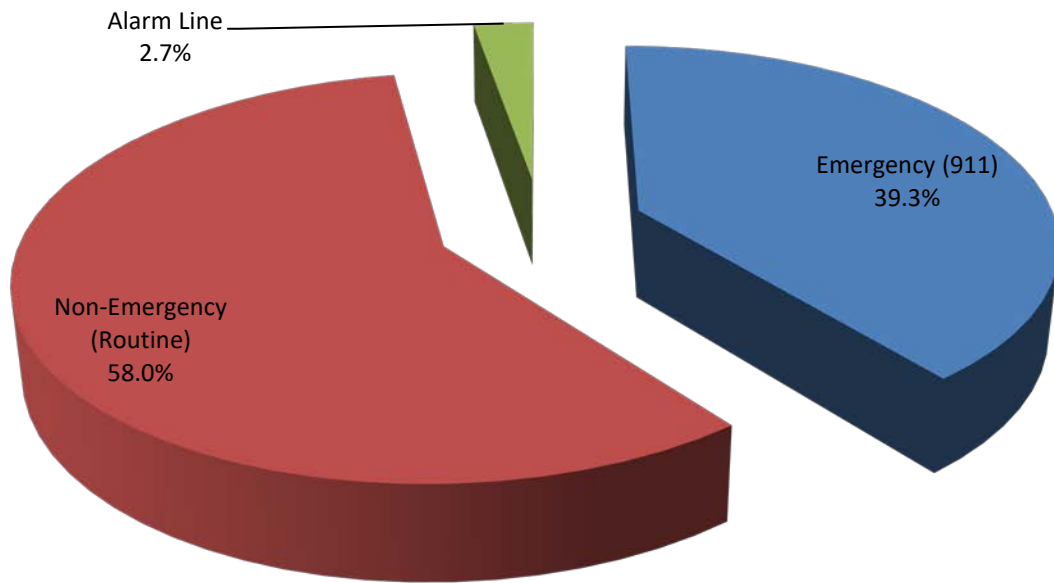
Calls of this magnitude bring a great deal of stress and anxiety to the dispatchers and responders both personally and professionally. This group of Dispatchers did not waiver from their responsibilities of keeping both the public and public safety responders informed and safe.



Call Type	Total	Percent
Wireline 911 Calls	5,860	11.7%
Wireless (Cellular) 911 Calls	42,623	85.1%
VoIP 911 Calls	1,601	3.2%
Total	50,084	100%

This summary shows the total of Emergency 911 calls received in fiscal year 2016.

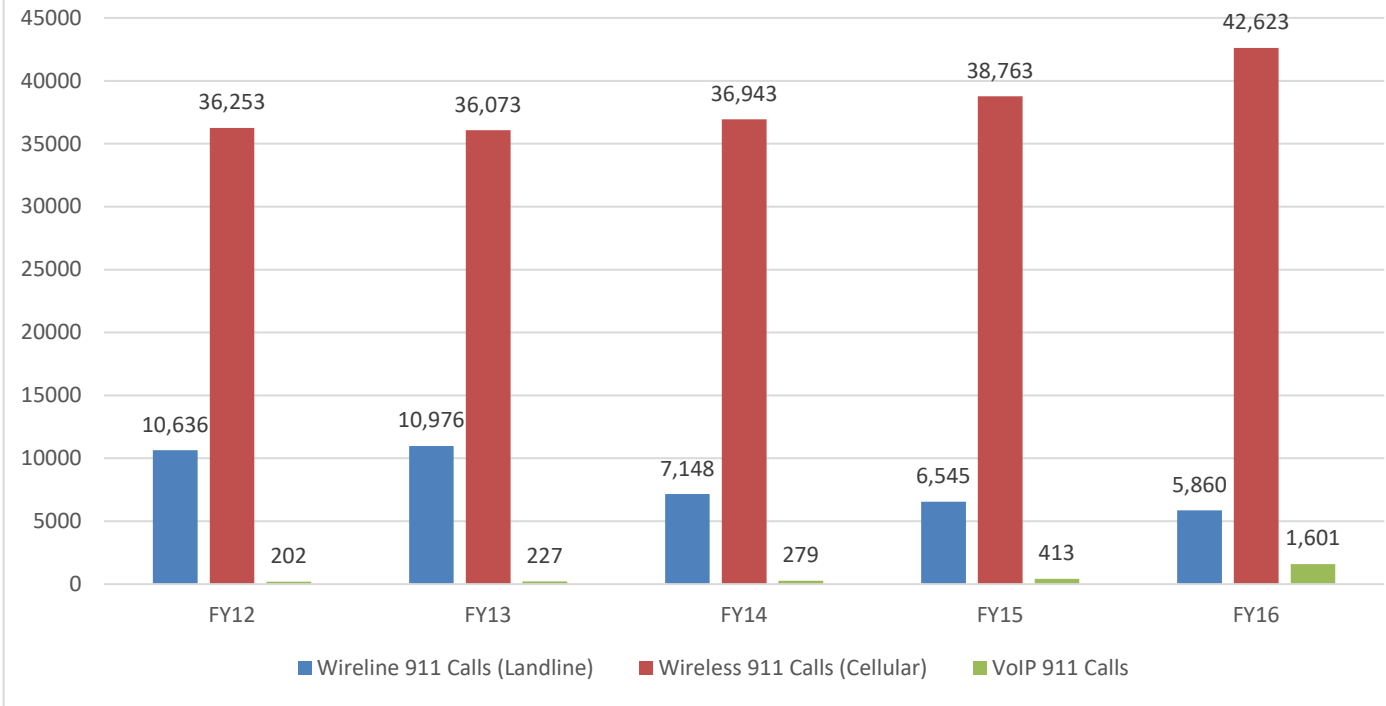
FY 2016 Call Type Categories



Categories	Volume	Percent
Emergency (911) including VoIP	50,084	39.3%
Non-Emergency (Routine)	73,841	58.0%
Alarm Line	3,462	2.7%
Total	127,387	100%

This summary shows the overall total volume and percentage of call types received in fiscal year 2016.

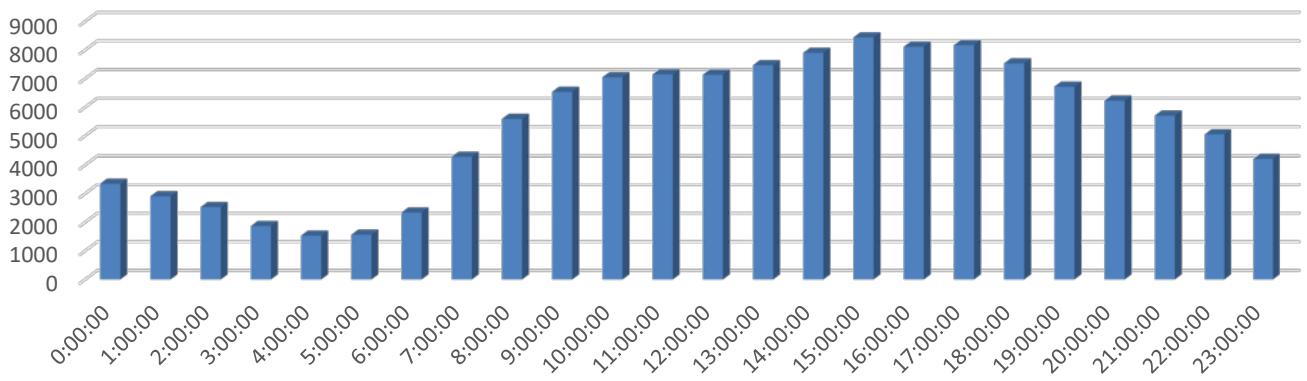
5-Year Emergency 911 Call Volume Comparison



Call Type	FY12	FY13	FY14	FY15	FY16
Wireline 911 Calls (Landline)	10,636	10,976	7,148	6,545	5,860
Wireless 911 Calls (Cellular)	36,253	36,073	36,943	38,763	42,623
VoIP 911 Calls	202	227	279	413	1,601
Totals	47,091	47,276	44,370	45,721	50,084

We continued to see cellular 911 call volume increase with an approximate 10% increase in calls over fiscal year 2015. Wireline 911 calls decreased by approximately 10% compared to fiscal year 2015, which was the lowest amount of calls received in the past 5 years. In fiscal year 2016 came along the largest increase in VoIP calls (287%) that we have seen in the past 5 years.

Daily Call Volume Per Hour of the Day



In fiscal year 2016, our highest call volume was between the hours of 9:00 a.m. and 8:00 p.m.

Call Taking Standards

A ringing 9-1-1 line is considered the highest priority until proven otherwise. Quick reaction and answer time is essential.

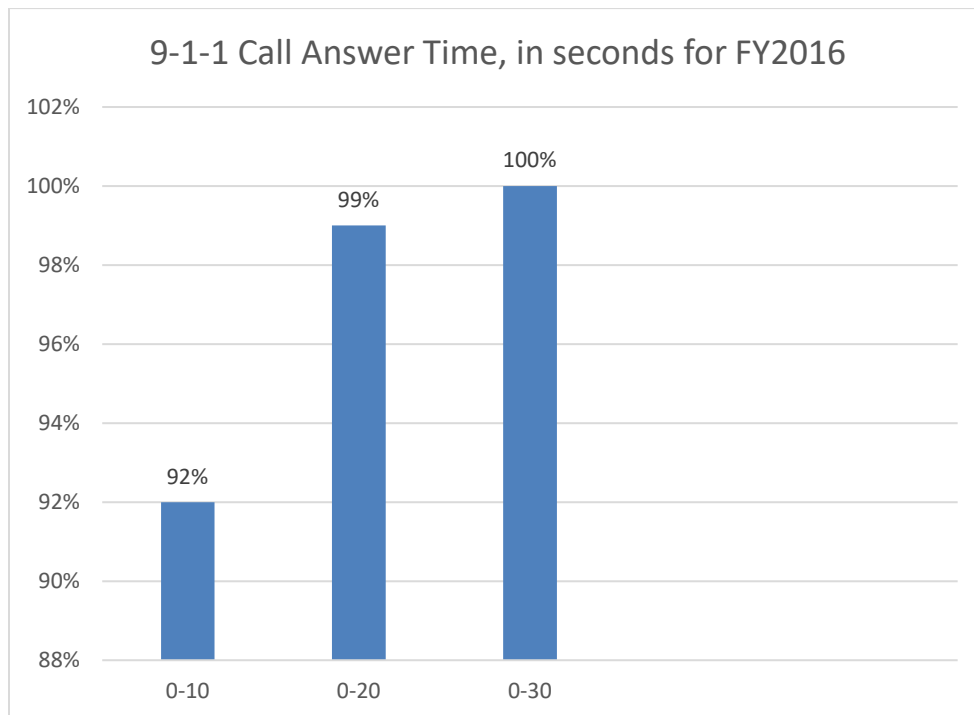
We continue to meet the National Emergency Number Association (NENA) Call Answering Standard Recommendation of:

- 90% of all 9-1-1 calls shall be answered within ten (10) seconds.
- 95% of all 9-1-1 calls shall be answered within fifteen (15) seconds.
- 95% of all 9-1-1 calls shall be answered within twenty (20) seconds.

JECC dispatchers answered 92% percent of 9-1-1 calls within ten (10) seconds.

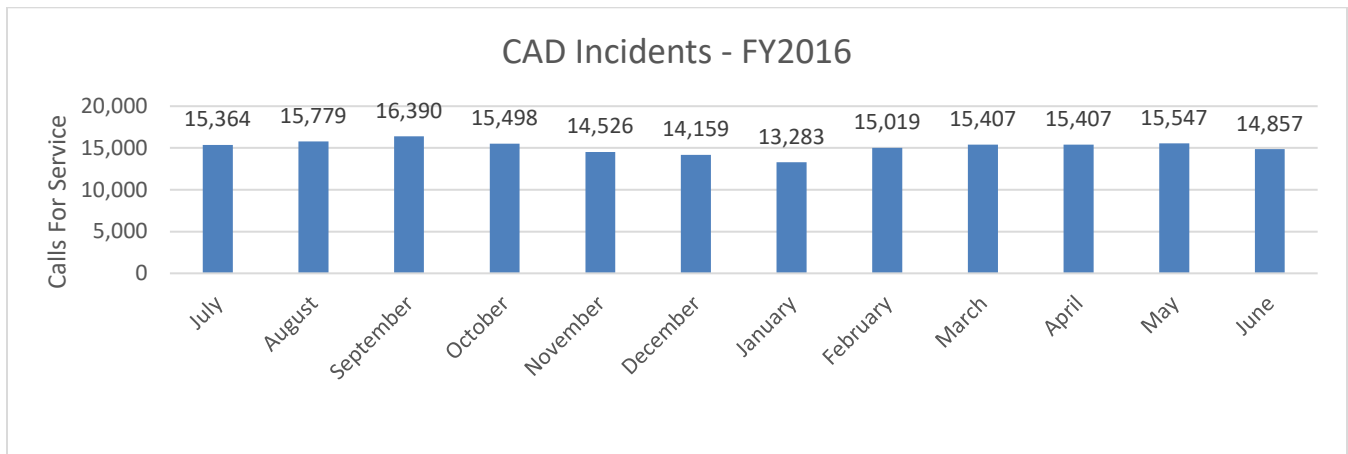
The average call answer time was six (6) seconds for all 911 calls answered.

From time to time there are situations that are out of our control that can affect our call answering time. These situations include times where simultaneous emergency lines ring into the center and there are more lines ringing than there are staff to answer them. This is very common when accidents along the interstate occur and during severe weather events.



Statistics – Calls for Service

The Joint Emergency Communications Center processed approximately 127,387 emergency and non-emergency telephone calls for service in fiscal year 2016. During the fiscal year, these phone calls in addition to field initiated activity resulted in the creation of 181,236 Computer Aided Dispatch (CAD) incidents processed by JECC staff. Overall we experienced an approximate 4% overall increase in the number of overall emergency and non-emergency telephone calls in fiscal year 2016, which resulted in an approximate 6% increase in the number of calls for service that we created in fiscal year 2015. The Joint Emergency Communications Center professionally handles calls for 15 Public Safety Agencies throughout Johnson County and surrounding counties.

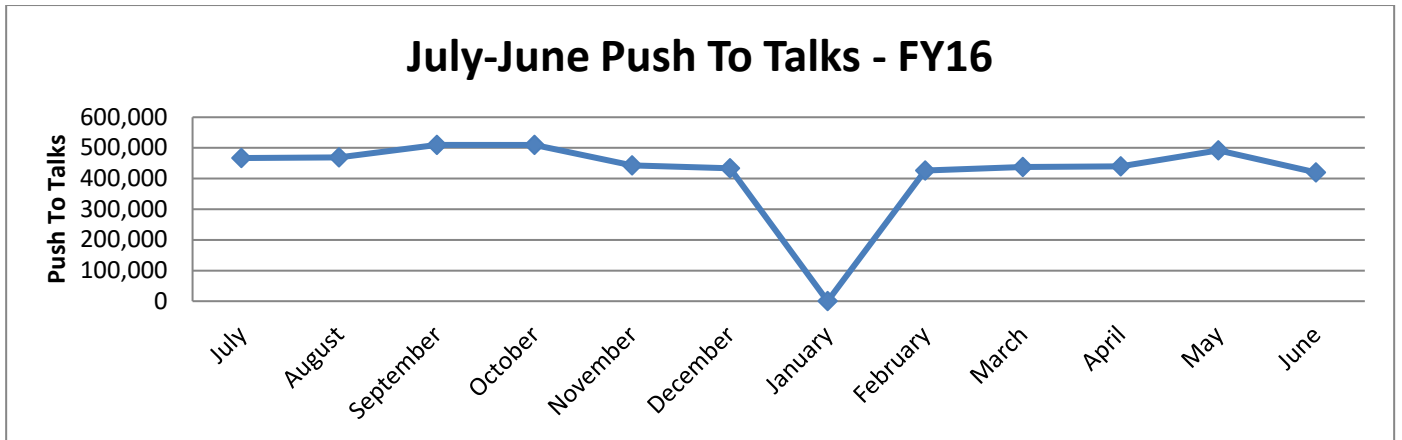


	LAW ENFORCEMENT		FIRE/MEDICAL		COMBINED ACTIVITY	
	Monthly	Cumulative	Monthly	Cumulative	Monthly	Cumulative Total
July	13,448	13,448	1,916	1,916	15,364	15,364
August	13,985	27,433	1,794	3,710	15,779	31,143
September	14,306	41,739	2,084	5,794	16,390	47,533
October	13,464	55,203	2,034	7,828	15,498	63,031
November	12,559	67,762	1,967	9,765	14,526	77,557
December	12,321	80,083	1,838	11,633	14,159	91,716
January	11,386	91,469	1,897	13,530	13,283	104,999
February	13,203	104,972	1,816	15,346	15,019	120,018
March	13,343	118,015	2,064	17,410	15,407	135,425
April	13,275	131,290	2,132	19,542	15,407	150,832
May	13,673	144,963	1,874	21,416	15,547	166,379
June	12,834	157,797	2,023	23,439	14,857	181,236
TOTAL	157,797	157,797	23,439	23,439	181,236	181,236

*The number of calls for service processed is not a direct result of the number of telephone calls that we receive. Our staff also creates calls for service for officer initiated activity and incidents received via radio or teletype from surrounding counties.

Statistics – Radio System Usage

The Joint Emergency Communications Services Association (JECSA) for Johnson County owns and operates a 7-site, Harris Linear Simulcast P25 Radio System. In fiscal year 2016 there were approximately 5,048,832 total push to talk (PTT) radio calls processed on the system utilizing up to 255 talk groups. This includes talk groups from the Linn County radio system that were utilized on the Johnson County system.



	<u>Push to Talks</u>	<u>Air Time (Seconds)</u>	<u>Duration (Minutes)</u>
July	467,446	1,831,272	30,521.20
August	468,619	1,823,841	30,397.35
September	509,308	1,993,861	33,231.01
October	509,637	2,003,503	33,391.71
November	443,350	1,739,644	28,994.07
December	433,854	1,698,422	28,307.03
January	*	*	*
February	426,650	1,647,551	27,459.18
March	437,742	1,686,953	28,115.88
April	440,238	1,702,744	28,379.06
May	491,946	1,775,476	29,591.27
June	420,042	1,647,808	27,463.47
TOTAL	5,048,832	19,551,074	325,851.23

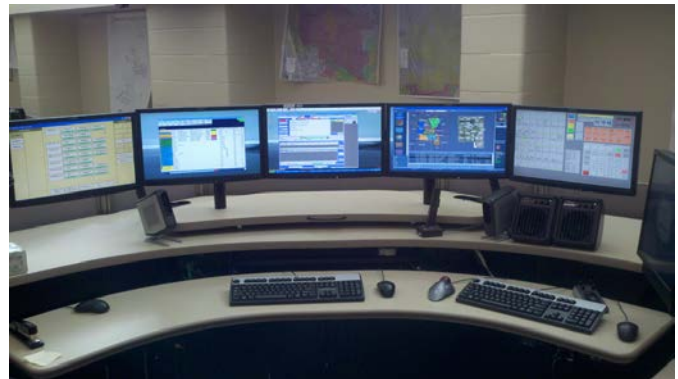
*January statistics were not available due to archiving before they could be downloaded.

Telecommunications

In fiscal year 2016, we continued to see more growth in incoming cellular 911 calls versus landline 911 phone calls. There is also an increasing number of VoIP (Voice over Internet Protocol) calls that come into the 911 Center as that technology is expanding into the homes. The heaviest volume of calls that we receive continue to come in on the non-emergency number 356-6800. Please remember that 911 should only be used for true emergencies.

911 and the non-emergency number 356-6800 are dedicated telephone lines that provide emergency dispatchers with the ability to see phone numbers, addresses, and names to assist them in pinpointing a caller's location. This is called Automatic Location Identification or ALI.

The Joint Emergency Communications Center also supports VoIP calls. Some examples of VoIP phone companies are Mediacom and Vonage. When placing a call to 911 using this technology, caller information may or may not appear on the dispatchers screen. It is important for all subscribers of this technology to ask their providers how 911 calls are handled with their company.



We also continue to explore new technologies and Next Generation 911 (NG911) services such as receiving text messages to keep up with the technological advances in the field of 911 communications.

Callers with Language Barriers

The Joint Emergency Communications Center utilizes Language Line Services to assist dispatchers with over-the-phone translation services in over 200 different languages for non-English speaking callers. Our call takers conference in the caller with a translator to assist them with information gathering from the caller to determine what type of emergency they are reporting. This service is accessed by calling an 800 number with the caller on the line and you are connected to a translator within minutes.

Communications with Impaired Callers

The Joint Emergency Communications Center personnel are trained to answer and process calls from TTY users. Deaf, hearing and/or speech impaired callers receive the same level of service from our telecommunicators. Personnel use a TTY system that is integrated into the phone system to process these calls and then relay the information to the appropriate agency for the emergency type and location.

Emergency Medical Dispatch

The Joint Emergency Communications Center (JECC) utilizes the Medical Priority Dispatch System’s Emergency Medical Dispatch Program (EMD) to handle requests for emergency medical assistance. All of our dispatchers are EMD certified. The EMD program is a set of cards that direct the dispatcher to ask the caller a series of questions based on the nature of the medical emergency. This enables the dispatcher to determine the most appropriate medical response priority. EMD also provides written Post-Dispatch and Pre-Arrival instructions to give to callers when appropriate and possible.

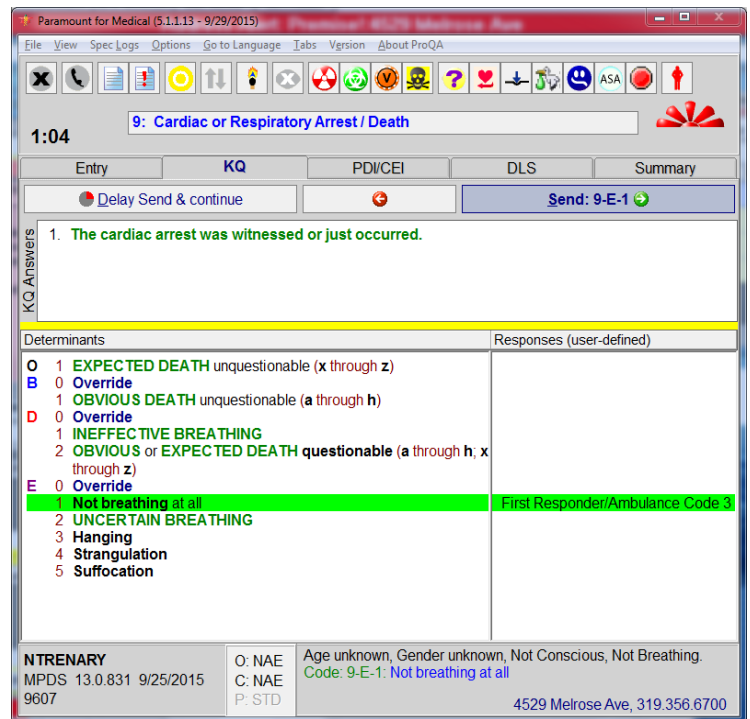
In November 2015, we migrated from the card sets to the ProQA Dispatch Software. ProQA is the computerized version of the Emergency Medical Dispatch protocols. ProQA helps emergency dispatchers move smoothly through the protocols and assists in quickly identifying the appropriate response code for each case. It also guides dispatchers in providing all relevant Post-Dispatch and Pre-Arrival Instructions, as well as important case completion information.

Included in this process is a Quality Assurance program. All certified EMD dispatchers receive ongoing feedback on their performance based on guidelines established by the National Academies of Emergency Dispatch and EMS, Inc. The purpose of Quality Assurance is to provide a non-punitive means of assisting staff in maintaining a high level of performance.

We also implemented the AQUA quality assurance/quality improvement software in conjunction with ProQA. AQUA automates the entire emergency dispatch case review process and assists in data entry, compliance scoring, record keeping and reporting. With AQUA, we can measure and document the quality of service that our call takers are providing to callers while also evaluating our level of compliance to International Academies of Emergency Dispatch (IAED) standards. AQUA has also streamlined the quality assurance process to allow the Quality Improvement Team to review 100 calls a month, compared to the 25 calls a month prior to implementation.

Since the migration to ProQA and the use of AQUA, we have seen a 38% increase in the percentage of compliant calls according to IAED standards over using the previous card system.

Our staff receives individual and group training and education throughout the year based on the overall findings of these reviews. All staff also has access to a variety of self-education tools to help them maintain their skills. In order to maintain their certification with the EMD program, all staff is required to recertify every two years. This includes the successful completion of a written examination, twenty-four (24) hours of training and CPR certification.



Budget Summary - FY2016

The total approved operating budget for fiscal year 2016 was \$3,227,225.00.

