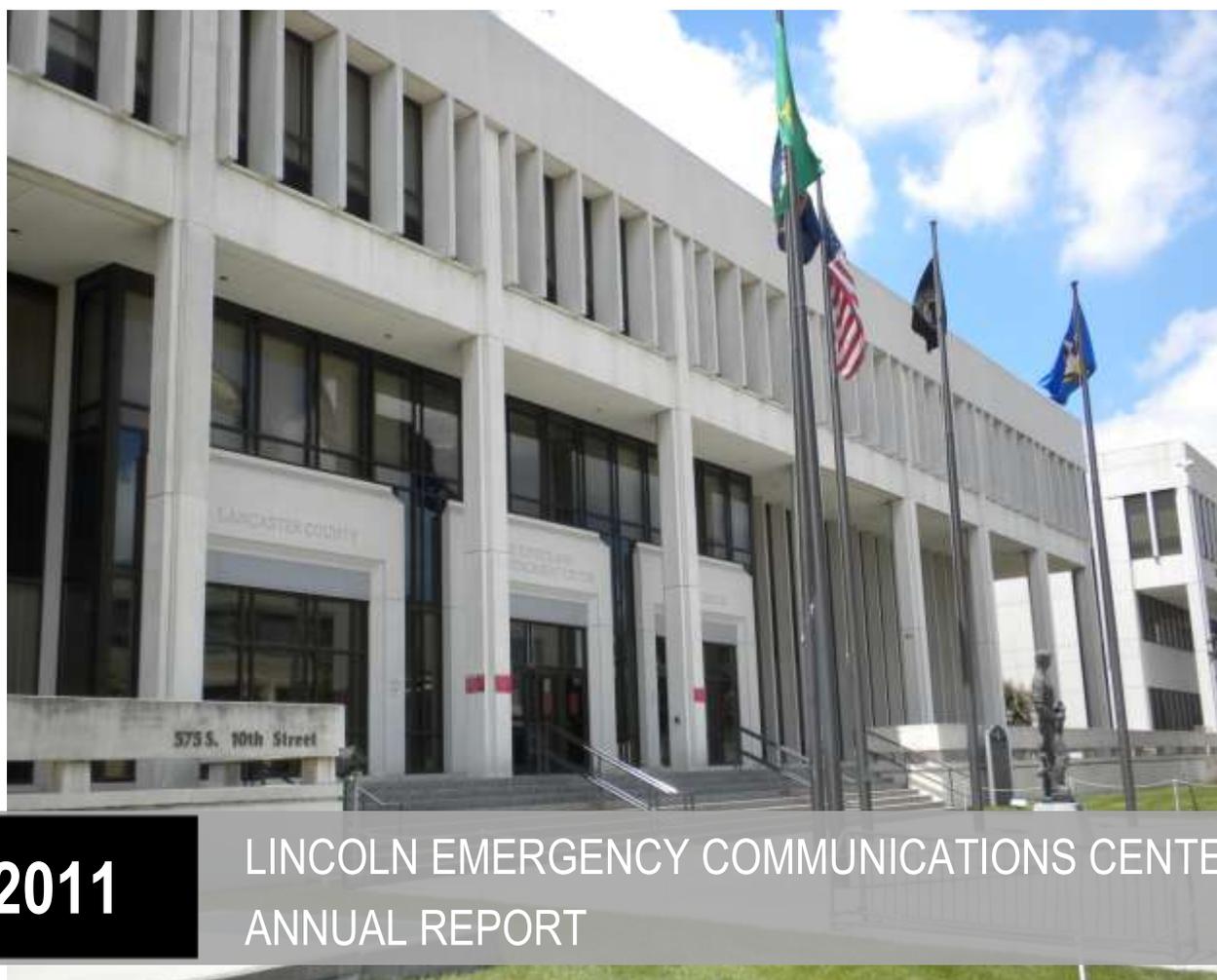


JULIE RIGHTER, COMMUNICATIONS COORDINATOR



**2011**

LINCOLN EMERGENCY COMMUNICATIONS CENTER  
ANNUAL REPORT

Communications, Service, and Education for Lincoln and Lancaster County

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**CITY OF LINCOLN**  
**NEBRASKA**

**MAYOR CHRIS BEUTLER**

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January 2012

Dear Citizens and Members of the City Council,

As Mayor of Lincoln, I am pleased to present the 2011 annual report of the Lincoln Emergency Communications / 911 Center, a division of the City Finance Department. The Center and Radio Shop provide outstanding service to public safety agencies in the City, County and surrounding area. This report highlights the personnel, activities and accomplishments of the division over the past year.

The residents of Lincoln have identified safety and security as the top priority for City government, and the Emergency Communications Center plays an important role in protecting our community. The Center is nationally accredited along with our Police and Fire departments, and Lincoln is one of the few U.S. cities with that distinction.

As you review this annual report, I am sure that you will agree that Lincolnites are very fortunate to have these dedicated professionals working 24-7-365 to keep us safe. On behalf of all residents, I want to thank our call takers, dispatchers, technicians and administrators for their excellent service to the Lincoln area.

Sincerely,

Chris Beutler  
Mayor of Lincoln





Mayor Beutler,  
City Council members,  
Fellow citizens:

I am pleased to submit our 2011 Annual Report. It was another productive year for the Lincoln Emergency Communications Center.

Just a few of the accomplishments in 2011 were –

- The Division was reaccredited by CALEA in 2011 and received the coveted “Award of Excellence” in Colorado Springs, CO in November.
- The Division was recognized as a Call Center Partner by the Center for Missing and Exploited Children (NCMEC) at the APCO International Conference in Philadelphia, PA in August.
- The Division awarded the sixth annual Capital City Footprinter’s Dispatcher of the Year Award to Emergency Service Dispatcher III Brent Molthan.
- The Division processed 16 citizen complaints down six from 2010. Of these 16, seven were sustained or determined to be a violation of policy. The number of sustained complaints is down one from 2010.
- The Division averaged approximately 34,000 incoming/outgoing telephone calls per month in 2011.
- The Division successfully operated from the Emergency Communications Back-Up Center five times during 2011, four planned exercises and one emergency activation.
- The Division processed 323,318 incidents in 2011 for the Center’s User agencies including the Lincoln Police Department, Lincoln Fire & Rescue, and the Lancaster County Sheriff’s Office.
- The Division processed 971 records requests for evidentiary purposes related to case work for User Agencies, County and City Attorneys, Public Defender and other local attorneys. This is an increase of 28.9% from 2010 (753).
- The Division continued to operate efficiently with existing staff and steady call volume of which over 72% of the 911 calls are consistently cellular/wireless.

While 2011 presented some challenges, none were too great to overcome and we look forward to the future, fulfilling our mission of providing a high level of service to the community as well as our Users.

Sincerely,

Julie J. Righter, ENP  
Communications Coordinator



# MISSION AND GOALS

## Vision

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

## Mission

Personnel of the Lincoln Emergency Communications Center will strive to deliver the highest level of professional service to the public, external agencies and internal units, and carry out this function by providing professional, courteous and immediate responses, accurate records, timely service and quality training with the highest standards of integrity and performance.

## Value Statement

The Values of the Lincoln Emergency Communication Center and its employees are stewardship, integrity, compassion, goodness, and honor.

## 2012 Strategic Goals and Objectives

### Operations

- Provide an ergonomically efficient and pleasant work environment.
- Respond to calls for service and other public needs promptly.
- Develop and maintain open relationships with other agencies, organizations and the public at large.
- Solicit information from staff concerning service provided by the division.
- Promote consistency in all processes 24 hours a day, seven days per week.
- Maintain a contingency plan.
- Continue to support operations with contemporary policies and procedures.

### Technical

- Upgrade systems and equipment as needed and continuously explore technological advances toward the enhancement of services provided.
- Continue to explore partnerships related to space and technology needs.

### Administration

- Educate our customers by enhancing Public Education committee activities and involvement in the community.
- Manage the fiscal, capital, information and personnel resources of the Emergency Communications Center with efficiency and care.
- Determine future space and equipment requirements for the Communications Center and Technical Services.
- Enhance annual report for division.
- Maintain accredited status.

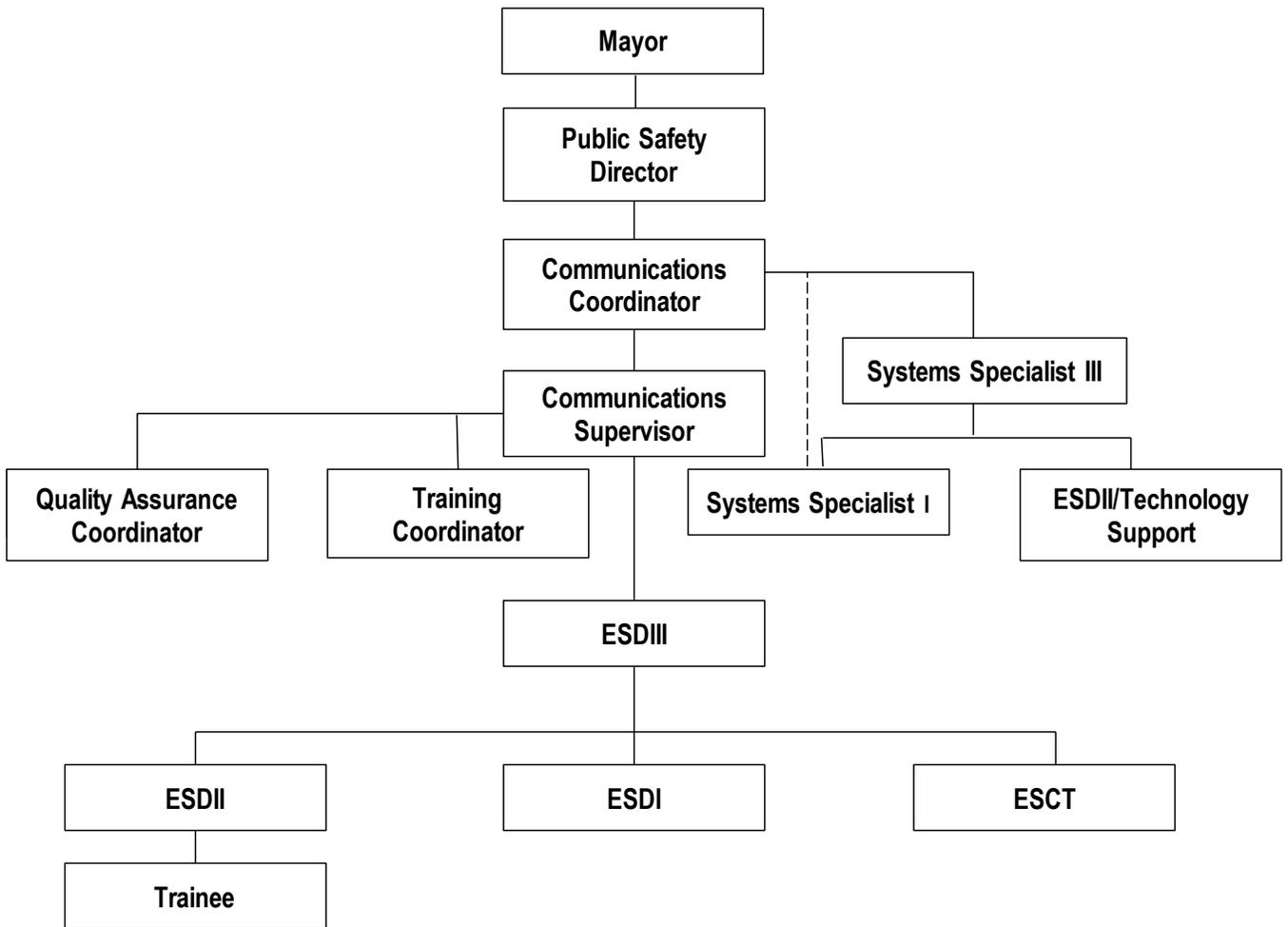
## **Training**

- Retain appropriate level of staff within the division.
- Minimize liability by providing training academy for new hires and quality continuing education for all personnel.
- Recruit and retain quality employees, reflecting the diversity of our population.

## **Quality Assurance**

- Process calls for service appropriately in order to provide services which protect persons and property and resolve problems.
- Solicit information from customers concerning service provided by the division.
- Promote consistency in all processes 24 hours a day, seven days per week.
- Increase protocol compliance by providing continuing education opportunities for personnel related to the EMD process.

# 9-1-1 EMERGENCY COMMUNICATIONS ORGANIZATIONAL CHART



## PERSONNEL ALLOCATION - 2011

	<u>Management</u>	<u>Operations</u>	<u>Support</u>	<u>Total</u>
Communications Coordinator	1			1
Communications Supervisor	1			1
Operations Training Coordinator	1			1
Operations QA Coordinator	1			1
Systems Specialist III			1	1
Systems Specialist I			1	1
ESD III		4		4
ESD II		16		16
ESD II/Tech Support			1	1
ESD I		13.5		13.5
ESCT		1		1
		<b>TOTAL</b>		<b>41.5</b>

# **POSITION FUNCTIONS AND RESPONSIBILITIES**

## **Mayor**

The Mayor is granted the power to exercise control over the enforcement of ordinances and applicable laws, the appointment and removal of certain officers or employees with the ultimate goal of protecting the health and safety of our citizens.

## **Public Safety Director**

The Public Safety Director is responsible for the direction and oversight of the Lincoln Emergency Communications Center, the Lincoln Police Department, and the Lincoln Fire Department. This position reports directly to the Mayor.

## **Communications Coordinator**

The Communications Coordinator reports directly to the Public Safety Director. This position assumes responsibility for administrative and technical work supervising and coordinating the total operation of the Emergency Communication Center and the City's radio communication system. This position is also referred to as Manager both internally and by other agencies.

## **Communications Supervisor**

The Communications Supervisor reports directly to the Communications Coordinator. This position is responsible for the operational components of the Communications Center and provides oversight of the training and quality assurance functions. Work involves developing improved methods and procedures for department operation, workflow, reporting structures, and cost control, prepares and submits operational reports and acts as liaison to user agencies. The Communications Supervisor may act for the department head as required as well as exercising supervision over subordinate staff. This position is referred to as Operations Coordinator both internally and by other agencies.

## **Operations Training Coordinator**

This is an administrative and technical position directing the development and implementation of on the job training and continuing education for emergency services dispatchers and call takers. Supervision is received from Communications Coordinator with work being reviewed in the form of reports, conferences, and effectiveness of the training program for Emergency Services Dispatchers.

## **Operations Quality Assurance Coordinator**

This position performs the duties related to the administration of the Emergency Medical Dispatch Quality Assurance Program, Overall Quality Assurance Program and other administrative duties as assigned by Center Management. Supervision is received from the Communications Coordinator with work being reviewed in the form of reports, conferences, and effectiveness of EMD and quality assurance programs.

## **Systems Specialist III**

This position is responsible for guiding the agency's technical work that is performed by them and subordinates directly related to the technology employed by the agency. This position while of management level with direct reports also routinely performs call take/dispatch duties. General supervision is provided by the Communications Coordinator with work being reviewed through effectiveness of programs, plan review and efficiencies.

## **Systems Specialist I**

This position is responsible for technical work using computer programs and programming techniques in the development and maintenance of a program for a specific area within a total departmental operation. This is a support position for all facets of the organization, including clerical support. General supervision is received from the Communications Coordinator when performing routine duties and from the Systems Specialist III for technology related duties with work being reviewed through effectiveness of programs and accuracy of daily work.

## **Emergency Services Dispatcher II/Technical Support**

The employee assigned to this classification splits their time performing duties of Emergency Services Dispatcher II and Technology Support. Responsibilities of this position include routine CAD administration, geobase maintenance, back-up and restoration of the CAD system, MSAG management, and GIS development and maintenance relative to public safety communications. In addition, this employee must have extensive knowledge of the computer hardware and software used by the Center, maintain various reference files for use as a back-up system, and consult with management and staff on design and implementation of new technology projects, including but not limited to CAD. Supervision is received from Emergency Service Dispatcher III when performing call receiving/dispatch duties and from the Systems Specialist III for technology related duties.

## **Emergency Services Dispatcher III**

This is a supervisory position, which coordinates the activities of the Emergency Communications Center on an assigned shift, including the supervision of Emergency Services Dispatchers and Call Takers. This position works closely with administration to ensure the goals of the organization are met. Supervision is received from the Operations Coordinator with work reviewed in the form of performance, reports and conferences.

## **Emergency Dispatcher II**

Work involves operating an emergency services console and other emergency services equipment, receiving and dispatching calls for police, sheriff units, and fire/rescue companies within the emergency medical system. Responsibilities include operating radio consoles; CAD (computer aided dispatch); receiving calls via 911 emergency and non-emergency phone lines; performing emergency medical dispatch (EMD) screening and prioritization of all EMS calls; performing radio tests on communication equipment; maintaining logs and records of calls received with nature and disposition of each dispatch; maintaining CAD status monitor of units in/out of service; transferring referral calls to the proper local, state or federal agencies. In the absence of an Emergency Services Dispatcher III, the most senior employee on duty will assume the responsibility of supervisor for the shift. Work requires the prompt, efficient, and accurate receiving, dispatching and processing of emergency services calls over 911 and related seven-digit system from the general public and other authorized personnel requiring emergency actions by the police, sheriff, fire, EMS units, fire/rescue squads and other emergency services. All ESD II employees will be required to train probationary employees as assigned to them by management. Supervision is received from the shift supervisor.

## **Emergency Services Dispatcher I**

Work involves operating an emergency services radio console and other emergency communication equipment, receiving and dispatching calls for police, sheriff units, fire/rescue companies, and emergency medical system. Responsibilities include operating radio consoles; CAD (computer aided dispatch); receiving calls via 911 emergency and non-emergency phone lines; performing emergency medical dispatch (EMD) screening and prioritization of all EMS calls; performing radio tests on communication equipment; maintaining logs and records of calls received including nature and disposition of each dispatch; maintaining CAD status monitor of units in/out of service; transferring referral calls to the proper local, state or federal agencies. Work requires the prompt, efficient, and accurate receiving, dispatching and processing of emergency services calls over 911 and related seven-digit system from the general public and other authorized personnel requiring emergency actions by the police, sheriff, fire, EMS units, fire/rescue squads and other emergency services. Employees may be promoted to the classification of Emergency Services Dispatcher II after two years of services and successful completion of the promotion exam. Supervision is received from the shift supervisor.

### **Emergency Services Call Taker**

Work involves operating a computer aided dispatch (CAD) console, receiving and dispatching calls for fire/rescue companies, and emergency medical system. Responsibilities include operating radio consoles and related emergency communication equipment; receiving calls via 911 emergency and non-emergency phone lines; performing emergency medical dispatch (EMD) screening and prioritization of all EMS calls; performing radio tests on communication equipment; maintaining logs and records of calls received including nature and disposition of each dispatch; maintaining CAD status monitor of units in/out of service; transferring referral calls to the proper local, state or federal agencies. Requires prompt, effective and accurate receiving, dispatching and processing of emergency service calls over the 911 and related emergency system, from the general public and other authorized personnel requiring emergency action from fire, medical rescue squads or related emergency services. Supervision is received from the shift supervisor.

### **Emergency Services Trainee**

Newly hired employees perform the duties of an Emergency Services Dispatcher I under the supervision of an Emergency Services Dispatcher II or Emergency Services Dispatcher III. Newly hired employees will have a probation period of six months during which they will work several different shifts to provide exposure to all aspects of the working environment of the center. Supervision is received from the ESDII Trainer when assigned and shift supervisors as coordinated by the Operations Training Coordinator.

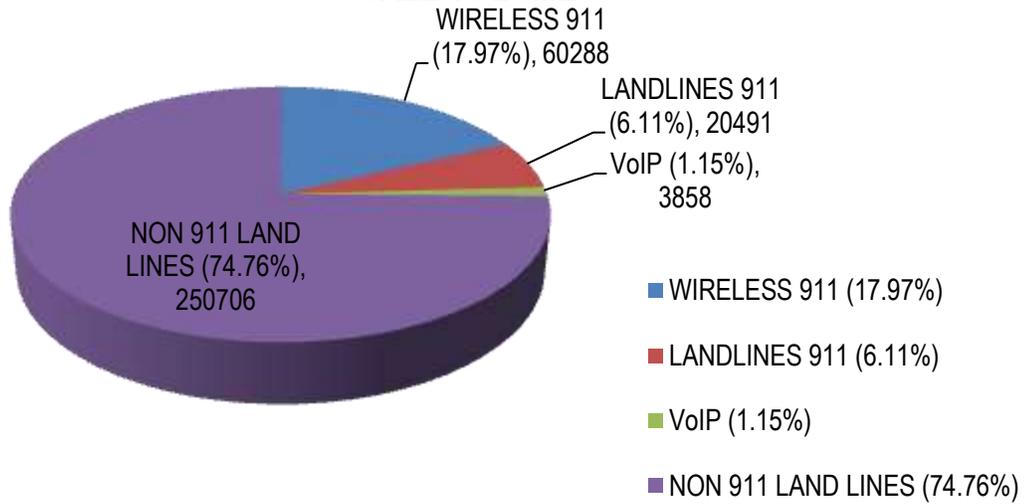


# ***9-1-1 Emergency Communications***

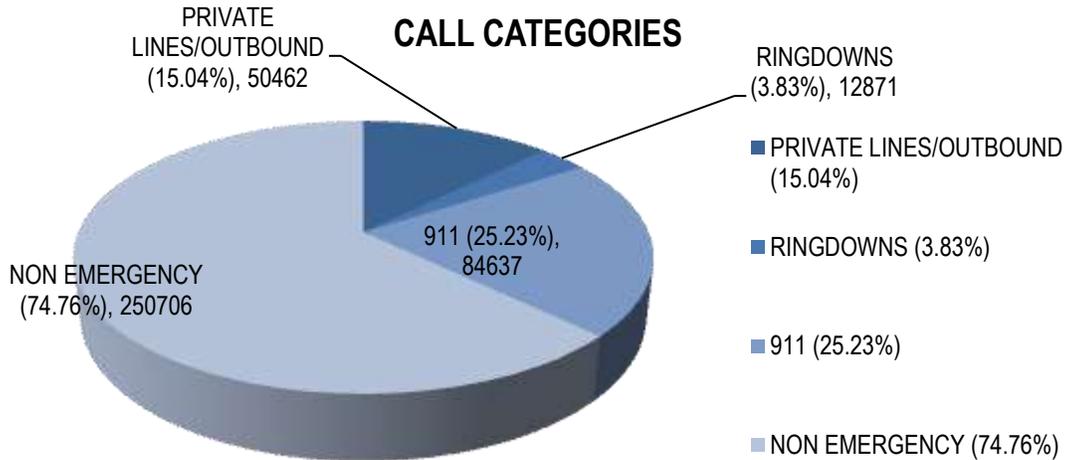


# ANNUAL PERFORMANCE ACTIVITIES SUMMARY

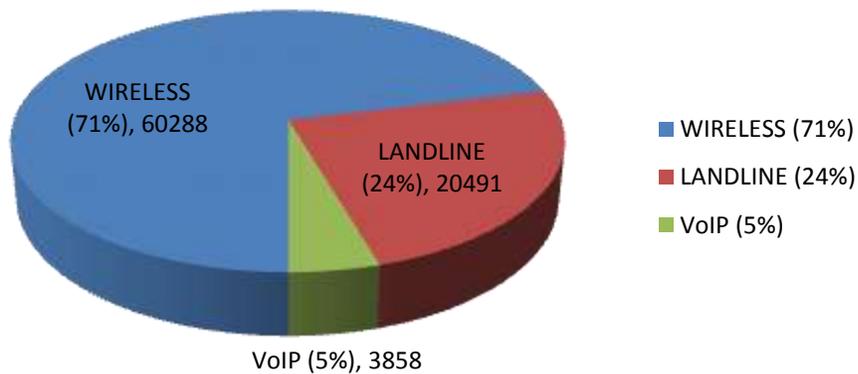
## CALL VOLUMES



## CALL CATEGORIES



## 911 CALLS



## COMPUTER AIDED DISPATCH SUMMARY (CAD) – 2011

2011 has proven to be another busy and productive year for our Center and has brought many enhancements to our Computer Aided Dispatch (CAD) system. In a continuing effort to provide the best possible service to the citizens of Lincoln and Lancaster County, we have installed new workstation computers in the Center as well as implemented new software to assist our dispatchers when providing medical dispatch and instructions to callers.

In September of 2011 after several months of planning and research, Lincoln Emergency Communications Center (LECC) implemented new computer software from Priority Dispatch called ProQA. ProQA is the electronic version of EMD (Emergency Medical Dispatch); providing on screen questions and pre-arrival instructions. When handling a medical emergency, the dispatcher can move smoothly between CAD and ProQA. All staff members received four hours of in-service training prior to actual implementation. We will continue to support our staff as they utilize the latest technology and programs to serve our community and our user agencies in providing the best service possible.

The Lincoln-Lancaster County 911 Center processes approximately 335,000 emergency and non-emergency telephone calls per year. During 2011, these telephone calls resulted in over 159,000 calls for service from user agencies and citizen requests and over 323,000 CAD incidents processed by Center staff. The Lincoln-Lancaster County 911 Center professionally handles calls for 14 agencies, including service in the City of Lincoln, Lancaster County and a portion of six surrounding counties.

	LAW ENFORCEMENT		FIRE/MEDICAL		COMBINED ACTIVITY	
	Monthly	Cumulative Monthly	Monthly	Cumulative	Monthly	Cumulative Total
January	24,439	24,439	1,636	1,636	26,075	26,075
February	21,588	46,027	1,702	3,338	23,290	49,365
March	24,446	70,473	1,682	5,020	26,128	75,493
April	26,110	96,583	1,837	6,857	27,947	103,440
May	26,568	123,151	1,911	8,768	28,479	131,919
June	26,616	149,767	1,960	10,728	28,576	160,495
July	26,785	176,552	2,103	12,831	28,888	189,383
August	27,283	203,835	2,242	15,073	29,525	218,908
September	27,387	231,222	2,001	17,074	29,388	248,296
October	24,556	255,778	1,923	18,997	26,479	274,775
November	22,774	278,552	1,758	20,755	24,532	299,307
December	22,193	300,745	1,817	22,573	24,010	323,318
TOTAL	300,745	300,745	22,573	22,573	323,318	323,318

As a further service the 9-1-1 center routinely provides copies of audio recordings of calls for use in training, methods improvement, and legal proceedings. In 2011 there were 971 requests for recordings representing an increase of 28.9% over 2010 (753). At an average of 15 minutes per audio request to create the resulting file that equates to 242.75 hours or 30.43 - 8 hour shifts to provide these recordings to the public and law enforcement.

## PERFORMANCE MEASUREMENTS FOR EMERGENCY CALL PROCESSING

The Lincoln Emergency Communications Center (LECC) is dedicated to providing the best service possible to all customers. The performance measurement program shall provide timely, accurate and useful information regarding the quality and efficiency of service and is a component of outcome based budgeting adopted by the City of Lincoln. Information gathered is evaluated and reviewed in a continuous effort to improve customer service and operations. Performance measurement is also one of over 200 standards required by the Commission on Accreditation for Law Enforcement Agencies (CALEA). The LECC has been accredited by CALEA since 2002.

The Lincoln Emergency Communications Center collects and reports statistics on a monthly, quarterly, and annual basis reflecting the various calls; their incoming source (landline, wireless, or VoIP), and duration (ring time before answer and length of call). CASSIDIAN's Vesta software provides detailed reports on line usage, ring time, call duration, call abandonment and other data related to telephone reporting.

Call receiving performance is measured in three ways. The first is the overall Center EMD average compliance score with a goal of 90% compliance. The second is a monthly average of 40 seconds or less for the "Time Received" to "Time Dispatched" on all ECHO medical responses (the highest level of medical response). The third is call duration. All of these are indicators of the level of service being provided from call handling to dispatch.

### TOTAL CALL COUNTS AND SOURCE BY MONTH

MONTH	TOTAL INBOUND	WIRELESS 911	LANDLINE 911	VOIP 911	LANDLINE (6000)	LANDLINE (OTHER)	TOTAL NON 911 LAND LINES	PRIVATE LINES/ OUTBOUND	RINGDOWNS
JAN	19274	3533	1271	248	9309	4913	14222	2414	496
*FEB	26552	4522	1735	338	15601	4356	19957	3862	941
MAR	28536	4618	1777	334	17171	4636	21807	4652	1141
APR	30068	5310	1745	285	18134	4594	22728	4502	1080
**MAY	20633	3840	1307	239	12532	2715	15247	3656	789
***JUN	32074	5674	1965	393	19706	4336	24042	4663	1283
JUL	31459	5358	1778	395	19834	4094	23928	4779	1232
AUG	34669	6415	1963	378	21339	4574	25913	5322	1638
SEP	30231	5532	1671	324	18996	3708	22704	4026	1084
OCT	29941	5118	1814	309	18672	4028	22700	4626	1187
NOV	27575	5020	1702	278	16537	4038	20575	4325	1045
**** DEC	24331	5348	1763	337	13598	3285	16883	3635	955
<b>TOTAL</b>	<b>335343</b>	<b>60288</b>	<b>20491</b>	<b>3858</b>	<b>201429</b>	<b>49277</b>	<b>250706</b>	<b>50462</b>	<b>12871</b>

\* Includes call counts from Backup Center Feb 9 thru Feb 11: Wireless 281, Landline 201, VoIP 59

\*\*Low counts are indicative of VESTA count problems from May 12th to May 24th

\*\*\*Includes call counts from Backup Center June 2<sup>nd</sup> and 3<sup>rd</sup>: Wireless 263, Landline 112, VoIP 23. June 9<sup>th</sup> reboot server, counts lost 306

\*\*\*\* Includes call counts from Backup Center December 13 thru 20. Wireless 1196, Landline 475, VoIP 99

## ABANDONED 911 INCOMING CALLS BY SOURCE

Monthly average call abandonment rate is gathered utilizing CASSIDIAN's Vesta software and forwarded to the Communications Coordinator on a monthly basis. Call Abandonment is a good indicator of the level of service being provided. An increase in abandoned calls or "hang up" calls can indicate a need for additional staffing during peak calling periods.

MONTH	SOURCE	COUNT	ABANDONMENT %
JAN	LANDLINE	492	
	WIRELESS	685	
	VOIP	46	6.11
FEB	LANDLINE	461	
	WIRELESS	508	
	VOIP	33	3.77
MAR	LANDLINE	481	
	WIRELESS	573	
	VOIP	43	3.69
<b>1ST QUARTER</b>			<b>4.52</b>
APR	LANDLINE	491	
	WIRELESS	632	
	VOIP	35	3.85
MAY	LANDLINE	506	
	WIRELESS	652	
	VOIP	44	5.61
JUN	LANDLINE	489	
	WIRELESS	762	
	VOIP	44	4.04
<b>2ND QUARTER</b>			<b>4.5</b>
JUL	LANDLINE	445	
	WIRELESS	802	
	VOIP	51	4.13
AUG	LANDLINE	495	
	WIRELESS	797	
	VOIP	51	3.87
SEP	LANDLINE	369	
	WIRELESS	620	
	VOIP	38	3.4
<b>3rd QUARTER</b>			<b>3.8</b>
OCT	LANDLINE	436	
	WIRELESS	650	
	VOIP	32	3.73
NOV	LANDLINE	412	
	WIRELESS	594	
	VOIP	23	3.73
DEC	LANDLINE	307	
	WIRELESS	508	
	VOIP	32	3.48
<b>4TH QUARTER</b>			<b>3.98</b>
<b>2011 AVERAGE</b>			<b>4.2</b>

## 911 RINGTIMES AND CALL DURATION

Monthly average 911 ring time (with an expectation of 10 seconds or less) and average call duration (with an expectation of 70 seconds or less) on all calls (wireline, wireless and VoIP) is also gathered using CASSIDIAN's Vesta software and forwarded to the Communications Coordinator on a monthly basis. Call Ring Time and Call Duration are indicators of how quickly emergency calls are being answered and how efficiently they are being processed.

MONTH	SOURCE	AVERAGE RING TIME	AVERAGE CALL DURATION	QUARTERLY AVERAGE CALL DURATION
JAN	LANDLINE	5	41	71.33
	WIRELESS		88	
	VOIP		85	
FEB	LANDLINE	5	77	79.67
	WIRELESS		76	
	VOIP		86	
MAR	LANDLINE	5	64	71.66
	WIRELESS		63	
	VOIP		88	
<b>1ST QUARTER</b>		<b>5</b>		<b>74.22</b>
APR	LANDLINE	6	43	65.83
	WIRELESS		91	
	VOIP		64	
MAY	LANDLINE	6	77	67.00
	WIRELESS		80	
	VOIP		44	
JUN	LANDLINE	6	36	80.00
	WIRELESS		94	
	VOIP		110	
<b>2ND QUARTER</b>		<b>6</b>		<b>70.94</b>
JUL	LANDLINE	6	45	86.00
	WIRELESS		101	
	VOIP		112	
AUG	LANDLINE	7	64	85.67
	WIRELESS		85	
	VOIP		108	
SEP	LANDLINE	5	52	83.66
	WIRELESS		86	
	VOIP		113	
<b>3RD QUARTER</b>		<b>6</b>		<b>85.11</b>
OCT	LANDLINE	6	45	86.68
	WIRELESS		89	
	VOIP		126	
NOV	LANDLINE	5	72	97.67
	WIRELESS		91	
	VOIP		130	
DEC	LANDLINE	5	71	92.33
	WIRELESS		96	
	VOIP		110	
<b>4TH QUARTER</b>		<b>5.3</b>		<b>92.22</b>
<b>2011 TOTAL</b>		<b>5.58</b>		<b>80.62</b>

## EMERGENCY MEDICAL DISPATCHER (EMD) DEPARTMENTAL AVERAGE COMPLIANCE RATING

Monthly average EMD Compliance is based upon individual Emergency Medical Dispatch Quality (EMDQ) reviews performed by the Quality Assurance Coordinator. EMD is the process for screening all requests for Emergency Medical Services (EMS) resulting in prioritization of EMS calls resulting in the dispatch of the appropriate resources.

MONTH	COMPLIANCE	QUARTERLY AVERAGE
JAN	88.19%	
FEB	89.45%	
MAR	88.01%	88.55%
APR	84.93%	
MAY	84.93%	
JUN	87.18%	86.90%
JUL	88.58%	
AUG	88.82%	
SEP	89.89%	88.93%
OCT	90.67%	
NOV	92.02%	
DEC	92.14%	91.61%
<b>ANNUAL AVERAGE</b>		<b>88.99%</b>

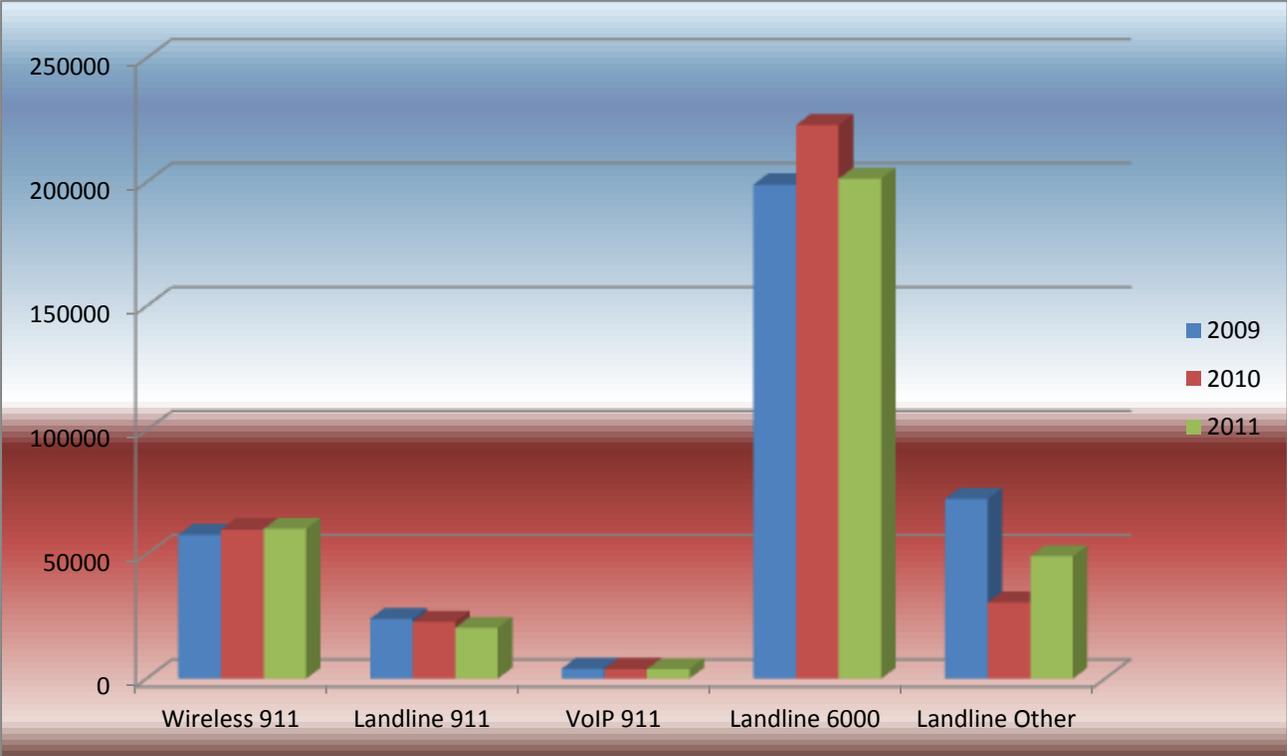
## AVERAGE ECHO MEDICAL CALL DISPATCHING TIME

The Center's goal is a 40 second or less Call Received to Call Dispatch time on all Echo Medical responses. All responses not meeting this measurement are forwarded by the Communications Coordinator to the Quality Assurance Coordinator for Dispatch Quality Review, reporting and possible action.

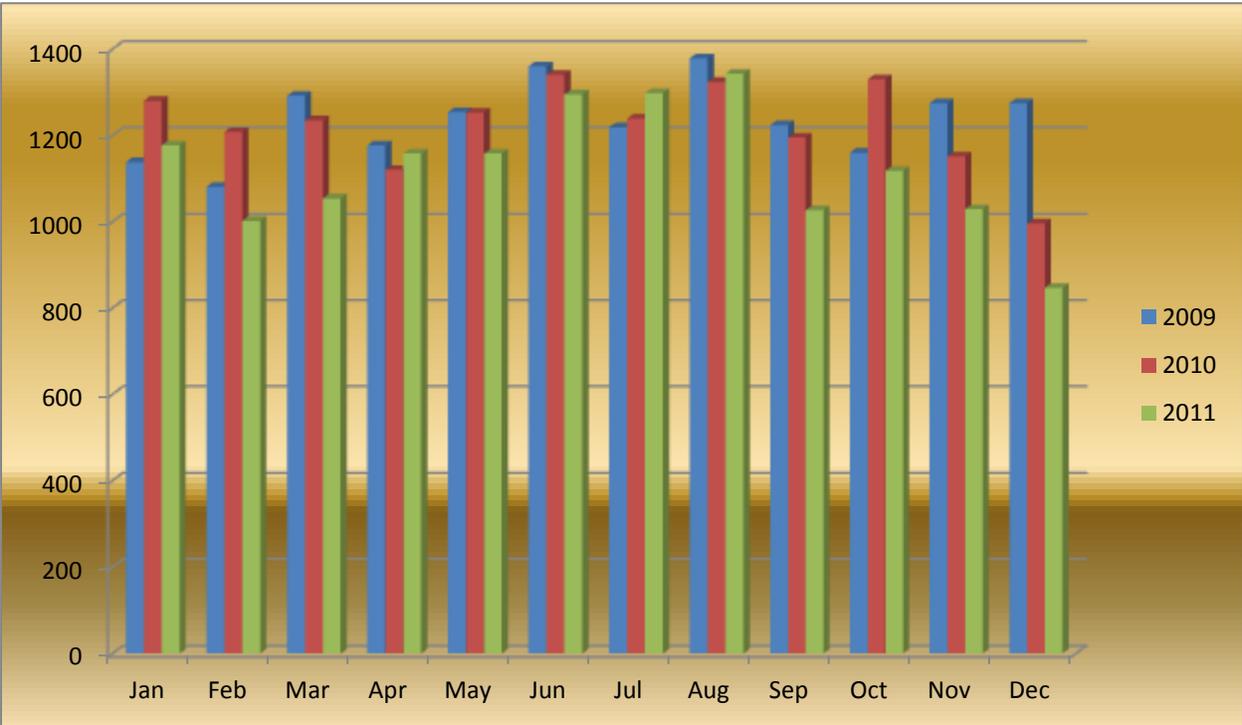
MONTH	DISPATCH TIME IN SECONDS	QUARTERLY AVERAGE
JAN	21.05	
FEB	31.42	
MAR	26.00	25.16
APR	26.48	
MAY	30.35	
JUN	25.22	27.35
JUL	30.45	
AUG	30.82	
SEP	25.96	29.08
OCT	24.39	
NOV	30.32	
DEC	34.92	29.87
<b>ANNUAL AVERAGE</b>		<b>27.86</b>

# PERFORMANCE MEASUREMENT COMPARISONS

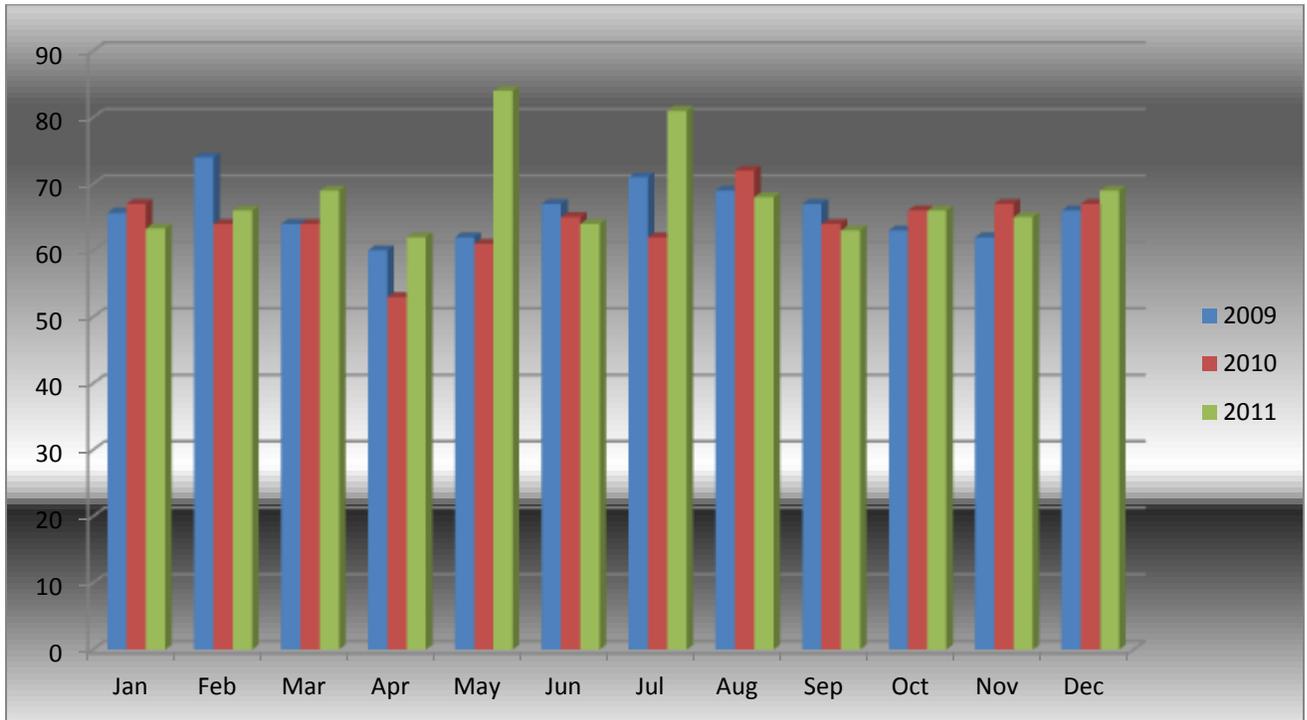
## CALLS BY CATEGORY



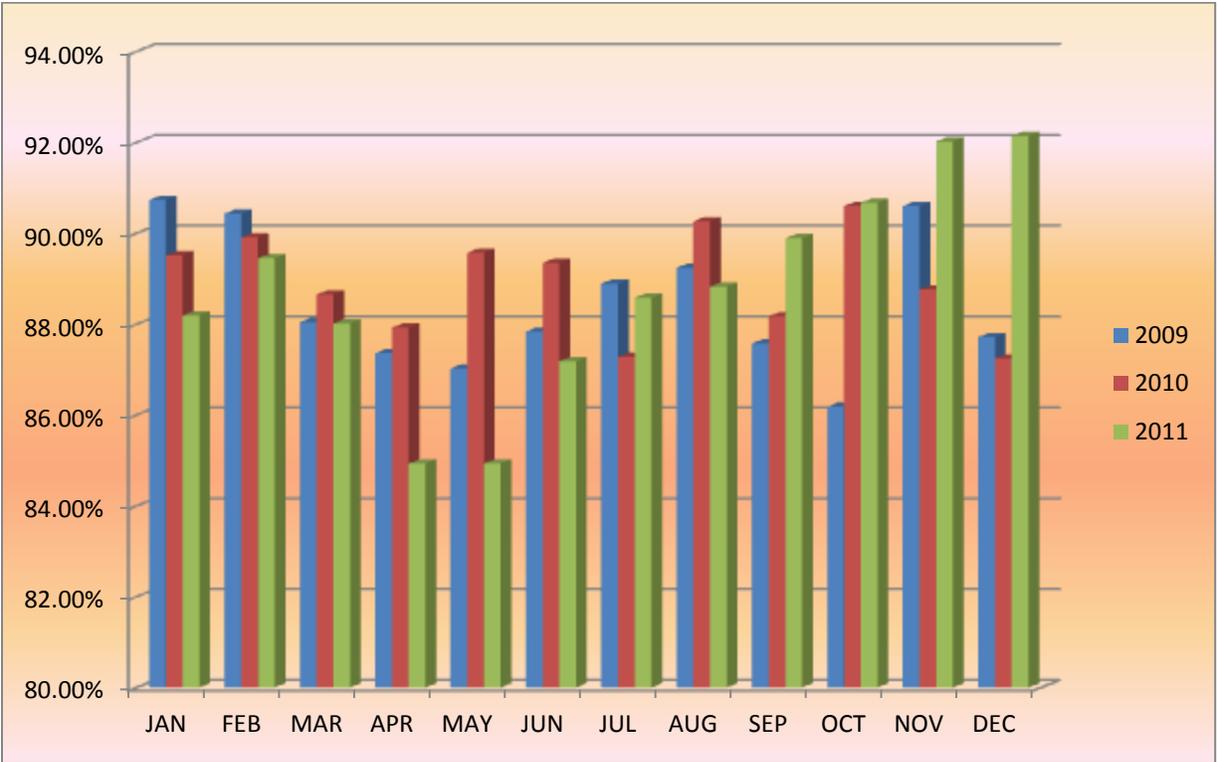
## ABANDONED CALL RATE BY MONTH



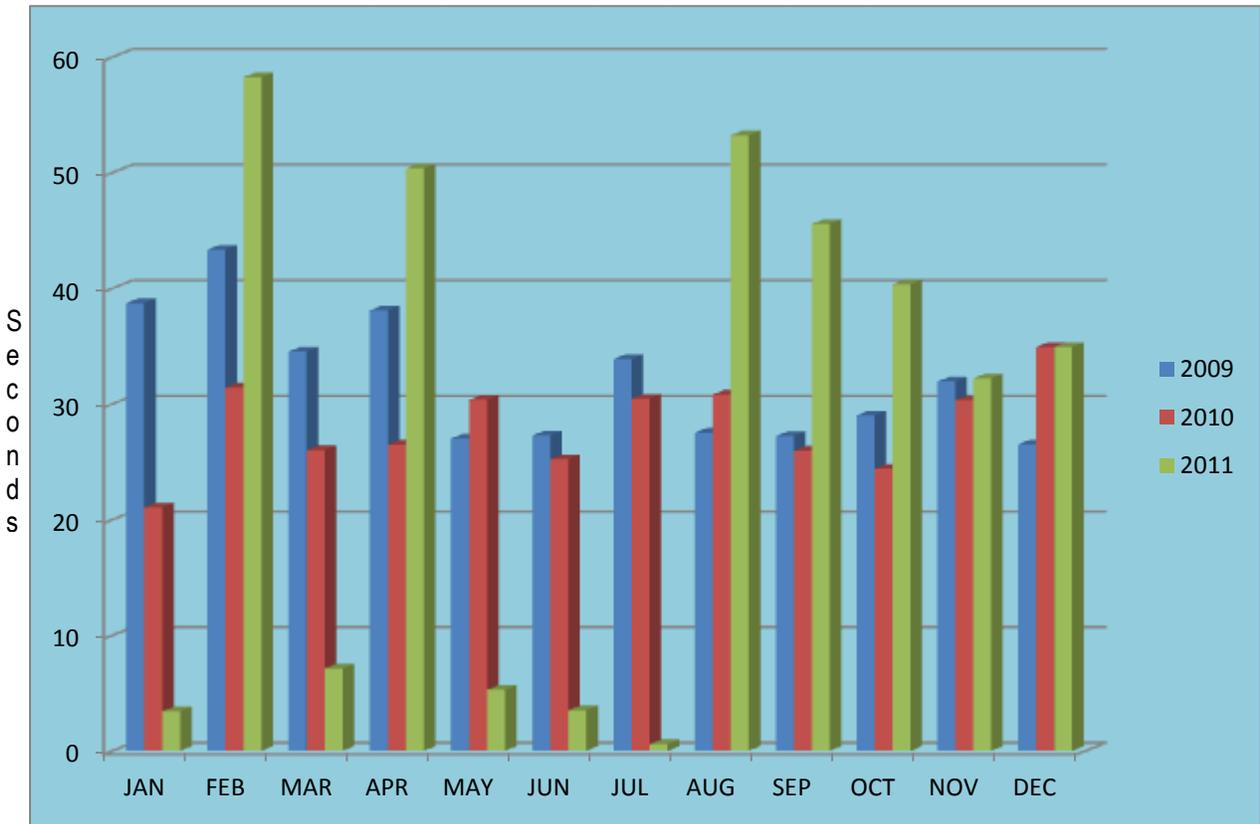
## AVERAGE CALL DURATION (IN SECONDS)



## EMERGENCY MEDICAL DISPATCHER (EMD) AVERAGE COMPLIANCE RATING



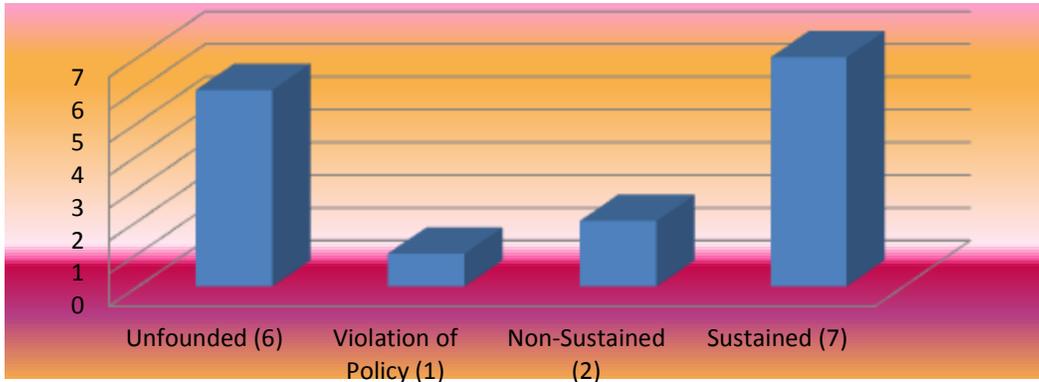
## AVERAGE ECHO MEDICAL CALL DISPATCHING TIME



# COMPLAINTS

The Emergency Communications Center received 16 citizen complaints during 2011. Allegations of misconduct or error on the part of Communications Center personnel require a conclusion of fact. The findings of fact are listed below with the chart of complaints. Appropriate training and/or corrective action is taken for those complaints that qualify as “sustained”, or “misconduct/error not based on complaint.” The Lincoln Emergency Communications Center prides itself on providing high quality customer service to those it serves. Your feedback is very important to us.

**Citizen Complaints 2011**



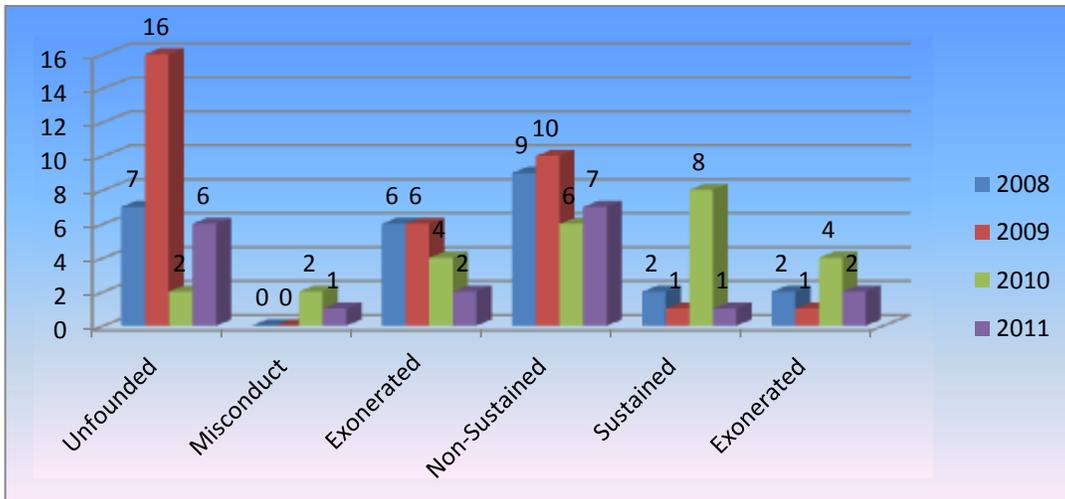
**Unfounded**-The complaint is false or not factual; the incident did not occur as reported and there was no misconduct/error.

**Violation of Policy**- Minor violations, generally unintentional, due to lack of experience or training.

**Non-Sustained**-The investigation has been unable to substantiate the complaint. There was insufficient evidence to prove or disprove the allegation.

**Sustained**-The investigation has disclosed sufficient evidence to determine the complaint is substantiated.

**Comparison by Year**

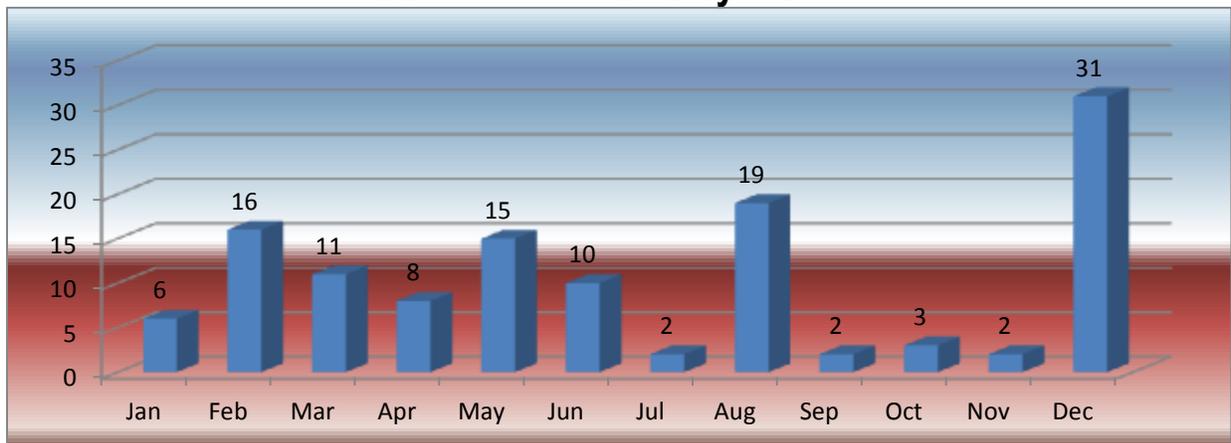


## COMMENDATIONS

There were 127 commendations received by Lincoln Emergency Communications Center personnel during 2011 with some employees receiving numerous commendations as indicated. These commendations can be generated internally, by user agencies or from citizens in recognition of superior performance. Personnel receiving commendations were:

Amy Meier	7	Jen Quade	6	Lisa Pachunka	3
April Tucker	2	Jennifer McLaughlin	1	Lori Yaussi	1
Becky Lyons	7	Jodi Standley	1	Mark Murphy	3
Becky Pierzina	2	Josh Hruby	3	Matt Buser	3
Brenda Roby	2	Justin Cerra	4	Megan Ellis	4
Brent Molthan	4	Karen Cates	5	Micki Rotert	2
Bryan Kelly	2	Kari Byers	4	Shara Scattergood	3
Cary Steele	7	Kelly Davila	1	Steve Phillips	10
Chad Schmidt	4	Kevin Campbell	2	Tara Garza	3
Dave Rood	4	Leslie Novak	6	Terri Heiser	1
Gregg Witfoth	1	Linda Flaherty	1	Tim Sabaliauskas	1
Jaime Johnson	4	Lindsay Scheer	2	Troy Cordle	6
Jamie Russell	2	Lisa Brown	3		

## COMMENDATIONS by MONTH



All personnel are instructed as to the procedures in place to facilitate the handling of complaints and commendations in order to gain public confidence. The survey is designed to assist in gaining information on the level of satisfaction and how services may be improved. In addition, citizens may contact the LECC with feedback or questions at any time, by telephone at 402-441-7005 or email through the city 9-1-1 website using the "Email Feedback Form." The Communications Center provides ongoing continuing education opportunities for staff in order to maintain and enhance job performance and to best utilize this feedback information

## AWARD RECIPIENTS - 2011

### FOOTPRINTER'S DISPATCHER OF THE YEAR

*Brent Molthan*

### TRAINER OF THE YEAR

*Bryan Kelly*

### EMERGENCY MEDICAL DISPATCHER OF THE YEAR

*Megan Ellis*

### PHOENIX AWARDS

*April Tucker*

*Becky Lyons*

*Brent Molthan*

*Bryan Kelly*

*Cary Steele*

*Dave Rood*

*Gregg Witfoth*

*Jaime Johnson*

*Jennie McLaughlin*

*Jodi Standley*

*Joshua Hruby*

*Kari Byers*

*Kelly Davila*

*Leslie Novak*

*Linda Flaherty*

*Linda Thurber*

*Lisa Pachunka*

*Matt Buser*

*Shara Scattergood*

*Steve Phillips*

*Tara Garza*

*Terri Heiser*

*Tim Flaherty*

*Troy Cordle*

## FOOTPRINTER'S "DISPATCHER OF THE YEAR"

Brent Molthan, a Dispatch Supervisor with the LECC, was recognized on April 16, 2011 with the seventh annual Footprinter's "Dispatcher of the Year" award at the Capital City Footprinter's Association Banquet. The award was also celebrated during National Telecommunicator's Week.



(l to r) Kevin Campbell, Training Coordinator, Julie Righter, Communications Coordinator, Brent Molthan, Dispatcher of the Year, Sharon Codr, Communications Supervisor, and Lindsay Scheer Quality Assurance Coordinator.

The award's selection criteria includes a formula of Emergency Medical Dispatcher scores, commendations received, most recent performance rating score and overall relationship with superiors and co-workers.

"Brent is an ESDIII and Shift Supervisor and does a great job in this capacity. In the time Brent has worked in our center, he strives to make sure things are done properly and this is evidenced by his high performance scores," said Julie Righter, LECC Manager.

## TRAINER OF THE YEAR

The 2010 'Trainer of the Year' was awarded in 2011 to Bryan Kelly. Bryan has worked hard to ensure our trainees are provided with accurate information giving them every opportunity to learn valuable skills. Bryan's proactive approach to training and quality instruction shows his dedication to helping new staff succeed. Bryan's active engagement in the training program is truly appreciated.



2010 Trainer of the Year Bryan Kelly

## EMERGENCY MEDICAL DISPATCHER OF THE YEAR

Megan Ellis, a Dispatch Supervisor with the LECC, was selected as the 2010 Emergency Medical Dispatcher of the Year and received her award at the Phoenix Awards presentation in March of 2011. Megan has shown consistent high scores in performing Emergency Medical Dispatch (EMD) on incoming medical calls and has the highest overall annual average score of all employees of the Center. Megan is an excellent example of an employee who knows her job well and performs at the highest level possible. This is the second time Megan has received this award. We congratulate Megan for her continued dedication and professionalism.



2010 Emergency Medical Dispatcher of the Year, Megan Ellis (right) with Julie Righter, Communications Coordinator (left), and Lindsay Scheer, Quality Assurance Coordinator, (c)

## PHOENIX AWARDS



Some of the 2010 Phoenix Award recipients.  
(front row l to r) Greg Witfoth, Julie Righter (Communications Coordinator), Megan Ellis, Brent Molthan, Linda Thurber, Lindsay Scheer  
(back row l to r) Kevin Campbell, Josh Hruby, Troy Cordle, Jennie McLaughlin, Mark Murphy

Lincoln Fire & Rescue hosts an annual Awards event that includes the Phoenix Awards. The Phoenix Awards are lifesaving awards that are given to those employees who played a part in the survival of someone who was in cardiac arrest. The Emergency Communications Calltakers and Dispatchers as well as the LFR crews who responded to these calls are all honored at this event. In addition to the Phoenix Awards, the Emergency Medical Dispatcher of the Year is awarded at this event along with many of the Fire Departments annual awards. The Emergency Communications Center Staff attending the 2010 event are shown above.

## COMMUNITY ACTIVITIES

**9-1-1 Received Four New Resusci-Anne CPR Manikins through a donation of equipment from the National Automobile Dealers Charitable Foundation and the Nebraska New Car & Truck Dealers Association.**



(l to r) Kevin Campbell, 9-1-1 Training Coordinator, Tara Garza, CPR Site Coordinator, and Pat Sullivan, Vice President of Dealer Relations for Nebraska New Car and Truck Dealers Association

The Lincoln Emergency Communications Center prides itself on being able to provide in-house training in cardiopulmonary resuscitation (CPR) for all dispatchers as well as assisting with training for the Lincoln Police Department and Lincoln Fire and Rescue. All staff of the 911 Center must have current certification in CPR as part of the requirement for utilization of the Emergency Medical Dispatch protocols. CPR instructions are provided over the phone to callers who are with a victim of sudden cardiac or respiratory arrest. These instructions can and have saved lives and are vital to the operations of the 911 Center.

Until this year, the equipment needed to train staff in CPR was borrowed from Lincoln Fire and Rescue. The 911 Center applied for a donation of equipment from the National Automobile Dealers Charitable Foundation and the Nebraska New Car & Truck Dealers Association. The Center received approval on December 1, 2011 and a donation of four new Resusci-Anne CPR manikins were formally presented to Kevin Campbell, Operations Training Coordinator and Tara Garza, CPR Site Coordinator on January 10, 2012.

This equipment, along with equipment purchased through budgetary means, will allow staff to more easily and efficiently train in life-saving CPR thereby providing the best possible service to the citizen of Lincoln and Lancaster County.

## 911 CENTER RECOGNIZED FOR CHILD PROTECTION EFFORTS



Julie Righter, Communications Coordinator, accepting the 2011 National Center for Missing and Exploited Children Partner Award.  
With Julie ,(l to r), William Hinkle, NCMEC Call Center Program Executive Committee Chairman, Peter Bellmio, Senior Policy Advisor to NCMEC, and William Carrow, Past President APCO International

In 2011 the Lincoln Emergency Communications Center has been recognized by the National Center for Missing and Exploited Children (NCMEC) as an NCMEC 911 Call Center Partner. To become a partner, the Center completed training and adopted best practices to be ready to respond to a call reporting a missing, abducted or exploited child. The Center was recognized in August of 2011 at the Association of Public Safety Communications Officials Conference in Philadelphia.

NCMEC officials said the Lincoln Emergency Communications Center is one of a growing list of professional 911 agencies who have demonstrated a commitment to improving the standard of care for children in across the country. More information on NCMEC is available at [www.missingkids.com](http://www.missingkids.com).

## ACCREDITATION

During 2011 the Accreditation Team for the Lincoln Emergency Communications Center continued to gather proofs of compliance for the 218 standards required by the Commission on Accreditation for Law Enforcement Agencies (CALEA). Accreditation is awarded for three years, during which time LECC must submit annual reports attesting to continued compliance with the standards.

The Accreditation Team is made up of Center employees Linda Thurber, Linda Flaherty and Brenda Roby. Together they continually review the standards which are broken down into seven basic areas: organization, direction and authority, human resources, recruitment and selection, training, operations, and critical incidents.



(l to r) Sylvester Daughtry- Executive Director CALEA, Bill Carrow- Past President APCO International, Brenda Roby, Linda Flaherty, Linda Thurber, and Chief Louis Dekmar- President CALEA

LECC brought in two Accreditation Managers, Kathy Strickland and Mary Sue Robey, to conduct a mock assessment of their files the first week of February. The mock assessors reviewed each file, making suggestions for enhancements to be made prior to the official CALEA on site assessment.

The official CALEA on site assessment began on April 30. The assessors were Chief Timothy Fitch of the St. Louis County Police Department, St. Louis, Missouri and Communications Director William Shanley of Southwest Central Dispatch, Palos Heights, IL. The assessors reviewed written materials, interviewed individuals, and visited offices, tower sites, and other locations where compliance was witnessed.

LECC's accreditation team attended the November CALEA conference in Colorado Springs. They appeared before a panel of CALEA Commissioners and were subsequently awarded Accreditation with Excellence.

CALEA appointed LECC Communications Manager, Julie Righter, to the position of CALEA Commissioner. She will serve a three year term that will begin in January of 2012. In addition, Ms. Righter serves on the Association of Public Safety Communications Officials (APCO) Standing Committee that coordinates the accreditation process with CALEA.

## PUBLIC EDUCATION

Members of the Public Education Committee were able to attend six community resource fairs and three Rural Volunteer Fire Department Open Houses this year, serving children to senior citizens. Hundreds of citizens were able to use the 911 Call Simulator to make "practice" 911 calls. The Center provided education in the areas of identifying an emergency, how to dial 911 and what to expect once 911 has been dialed.



Kevin Campbell, Operations Training Coordinator for 911 teaching a "What we do at 911" class at the Lancaster County Youth Services Center



Public Education Coordinator ESDII Becky Lyons (seated) and committee member ESDI Leslie Novak demonstrate the 911 Call Simulator to a group of children at the annual Safety Day at the Zoo.

The Center hosted numerous tours including school groups, scout troops, user agencies and community organizations. Our staff travelled to schools, in both the city and county, to provide presentations comprised of valuable information on how to use the 911 system. This year, the Center contacted approximately 2700 citizens.

The Center continues efforts to expand our community outreach to include citizens who use English as their second language. This year, we were invited to speak with groups through the Lincoln Literacy program and the Refugee Network. Information on how to use 911 was provided as well as an opportunity to use the 911 Call Simulator.

This year, there were no problems or concerns received by Becky Lyons, the Center's Public Education Coordinator. Many citizens made a point of thanking us for doing an excellent job.

Members of the 911 Center Public Education Committee in 2011 were; Brenda Roby, Chad Schmidt, Mark Murphy, Jennie McLaughlin, Leslie Novak, Amy Meier, Steve Phillips, Megan Ellis, Jamie Russell and Becky Lyons, Public Education Coordinator.

## TELECOMMUNICATIONS

Once again in 2011, we continued to see more growth in incoming cellular calls verses landline phone calls. We have also seen a continued growth in the number of VoIP (Voice over Internet Protocol) calls that come into the 911 Center.

On an average day, the LECC receives approximately 1,000 calls. The heaviest volume of calls is received on the non-emergency number 441-6000. 911 should be used for true emergencies. The 911 and 441-6000 lines are dedicated telephone trunks that provide 911 dispatchers with the ability to see phone numbers, names and addresses on land line and VoIP calls to assist them in pinpointing a caller's location. This is called Automatic Location Identification or ALI.

Specially designated telephone trunks are also installed for cellular phone calls received at the LECC as well. Most cellular phone devices currently on the market are GPS capable and have the ability to be tracked within a few meters of their exact location. Modern cellphones and smartphones provide 911 dispatchers with telephone number as well as location (latitude and longitude) on the dispatchers screen when a cellular 911 call is received. Dispatchers have the ability to retransmit a location request to the cell phone if necessary and as long as the call remains connected, the location will update and re-plot the location within a few meters. If a caller is using a prepaid cellular phone with GPS capability, their location can also be plotted; however, they cannot be called back because there is no telephone number associated with prepaid wireless phones.

The LECC has also installed dedicated trunk lines for VoIP calls. Some examples of VoIP phone companies are Time Warner, Vonage and Magic Jack. 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 vendors how 911 calls are handled with their company. Users of these types of devices should be aware that some VoIP systems require them to "register" their device with their vendor's database of 911 location information. While these devices may be transported from location to location or even city to city, such as with a laptop computer, the VoIP system will not automatically track the user to their new location and would need to be re-registered with their vendor each time the device is moved.

We also continue to explore new technologies and Next Generation 911 (NG911) services such as receiving text messages, video, interoperability with other Public Safety Answering Points (PSAP's), and Internet based integrated application 911 networking.

Planned for in 2011 and scheduled to install in 2012 is the upgrade of the Vesta Pallas phone system from CASSIDIAN which will incorporate technology for NG911 as well as a new mapping program from CASSIDIAN called ORION which utilizes the most advanced NG9-1-1 mapping application available

In the past 15 years, innovations in communications technology have created the need for a more advanced system for the public to access emergency care. While the existing E911 system has been a success story for more than 30 years, technological advances have stretched it to its limit.

## TRAINING DIVISION

The Lincoln Emergency Communications Center's training division supports the development of knowledgeable, skilled staff from the moment of hiring, continuing throughout each employee's career as an Emergency Services Dispatcher. Along with our dedication to maintaining accreditation with the Commission on Accreditation for Law Enforcement Agencies (CALEA), as well as the Association of Public Safety Communications Officials (APCO) Project 33 Training Standard, our agency works hard to provide excellent training and opportunities for professional development for all of our staff. This begins with our hiring process.

### Hiring

The Lincoln Emergency Communications Center (LECC) accepted applications for Emergency Services Dispatcher I (ESDI) in January 2011. At that time, 211 applications were submitted for testing held on February 9<sup>th</sup>, 2011. Of those applicants, 113 completed the testing and 20 were interviewed. Three were offered positions and all three accepted. These new employees began their training on March 28<sup>th</sup>. In September 2011, applications were again accepted. Of the 149 applicants, 93 completed the testing in November, 16 were interviewed, and 5 were offered positions. Those 5 began their training on January 9<sup>th</sup>, 2012.

The LECC utilizes several mechanisms to screen applicants. The test packets are received from Profile Evaluations Inc. which includes the Wonderlic, Personality Profile Composite and Distraction Test. The LECC also utilizes the Predictive Index test, typing test and an oral hiring board consisting of supervisory and LECC personnel. Candidates meeting minimum requirements are interviewed. Once the applicant has successfully completed these steps, a conditional offer is given and additional screenings are completed. These screenings include vision and hearing tests, background investigation and a Psychological evaluation. For more information on the employment selection process, see our flowchart at:

<http://www.lincoln.ne.gov/city/finance/commc/employflow.htm>.

### New Employee Training

The LECC New Employee Training Program consists of four program phases: Classroom, Call Take, Law Enforcement Dispatching, and Fire/Emergency Medical Services (EMS) Dispatching. The second and fourth phases also include the processing of 911 Emergency telephone calls.

The Classroom phase is the initial training which provides the trainees with an introduction to: basic phone answering skills, our computer aided dispatch system, geography, stress management, liability and our policies and procedures. This intensive phase usually lasts three to four weeks and includes training in Emergency Medical Dispatching (EMD).

The Call Take phase begins on-the-job training. The trainee is scheduled at a console with a certified trainer and fields live call requests for assistance from law enforcement, fire and/or medical personnel. This phase is usually completed in five to six weeks.

The third phase is Law Enforcement dispatching. Utilizing the radio system, the trainer will assist the trainee in dispatching calls for law enforcement assistance and monitoring the status of law enforcement personnel. This phase may take anywhere from four to eight months to complete.

The final phase is Fire/EMS dispatching. During this phase, the trainee continues to work with a trainer in learning all aspects of dispatching fire and/or medical units to various types of rescue calls for service. The trainee is also monitored when handling 911 Emergency phone calls. This final phase normally takes six to eight weeks to complete.

## **Continuing Education Training**

Continuing education training is conducted regularly for all staff members. For the year 2011 there were 41 full time and 1 part time employees with the LECC, including management staff. The average number of training hours per employee for 2011 was 18.76.

Using a variety of local and national resources, some of the training topics offered during 2011 included:

- Guardians of Freedom Air Show Planning, Training, and Exercises. Preparations included several table-top exercises designed to prepare for any number of potential disasters related to the airshow. In addition, a full-scale exercise was executed which included an aircraft designed to re-enact a downed plane with hazardous materials, as well as injuries.
- Nebraska Infrastructure and Protection Conference co-hosted by Nebraska Homeland Security Director, Lt. Gov. Rick Sheehy and US Attorney for Nebraska Deborah Gilg
- ProQA (computerized version of Emergency Medical Dispatch) Software training presented by the National Academies of Emergency Dispatch.
- TTY (Telephone Typewriter – communication device for the deaf) Refresher Training
- Review of our Facility Emergency Plan

## **Certified Trainers**

All ESDII's & ESDIII's complete the APCO Communications Training Officer (CTO) certification which allows them to be assigned as a trainer to newly hired ESDI's. Trainers are responsible for following the training program guidelines by means of a checklist and trainer guide to ensure the trainee receives all required training and it is documented. Evaluations are completed using the agency 'Standardized Rating Guidelines' to determine when training objectives have been met.

A "Trainer of the Year" award is granted annually to a trainer for outstanding accomplishment based on efficient and effective performance as a trainer, overall attitude and communication with trainees, supervisors and the Training Coordinator. Input is solicited from all shift supervisors regarding nominations for this award.

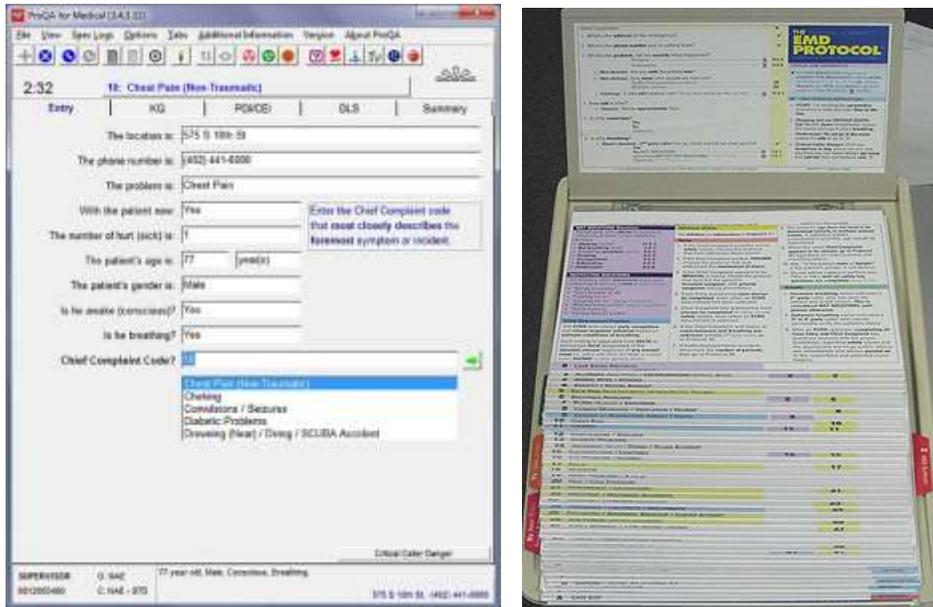
# EMERGENCY MEDICAL DISPATCH

## Introduction

The vision statement of the LECC is:

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

In support of our vision, we have maintained a Quality Assurance (QA) program to assist in providing our trained dispatchers with supportive tools to meet this goal. The LECC utilizes the Priority Dispatch System's Emergency Medical Dispatch (EMD) Program in handling requests for emergency medical assistance. All dispatchers are required to certify and maintain EMD certification. The EMD program consists of either a set of protocol cards or a computer program called ProQA that directs the dispatcher to ask the caller a series of questions based on the nature of the medical emergency. The card set is used as a backup method to the computer program.



The EMD program enables the dispatcher to determine the most appropriate medical response priority. It also provides written Post-Dispatch and Pre-Arrival instructions to give to callers when appropriate and possible. 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 Emergency Medical Services Oversight Authority (EMSOA). The purpose of Quality Assurance is to provide a non-punitive means of assisting staff in maintaining a high level of performance.

## **Overview**

The EMD card set and ProQA Program is made up of thirty-three (33) protocols including specific Post-Dispatch and Pre-Arrival instructions. The first thirty-two (32) protocols are geared toward the general public by addressing medical emergencies such as difficulty breathing, seizures, chest pain and traumatic injuries. These protocols include specific Post-Dispatch instructions based on the Chief Complaint and lead the dispatcher to detailed Pre-Arrival instructions as needed. A few examples of Pre-Arrival instructions include: step-by-step directions on how to perform CPR and childbirth delivery.

The remaining protocol is geared toward skilled care facilities. This protocol does not require specific Post-Dispatch and/or Pre-Arrival instructions as staff in these facilities possess the necessary medical skills and knowledge.

## **Action**

In addition to ongoing feedback, our staff receives individual and group training and education throughout the year based on the overall findings of these reviews. In order to maintain EMD certification, all staff are required to recertify every two years including the successful completion of a written examination, twenty-four (24) hours of training and CPR certification.

## **Results**

In 2011, Quality Assurance reviews were completed on approximately 8.2% of the total call volume, 1300 randomly chosen requests for emergency medical assistance. This is an average of 40 reviews per dispatcher.

There were two staff members on Action Plans in 2011. The goal compliance average is 90% for each individual dispatcher and for the agency as a whole. Our agency as a whole has been over the compliance goal of 90% since implementation of ProQA, which was in mid-October 2011

# QUALITY ASSURANCE

## Introduction

The vision statement of the LECC is:

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

In support of our vision, we have maintained a Quality Assurance (QA) program to assist in providing our dispatchers with supportive tools to meet this goal through continued training and feedback.

## Overview

The purpose of the Quality Assurance program is to assess the efficiency and effectiveness of service delivery. This program promotes the setting of goals and objectives, and monitors the extent to which they are met. The QA program evaluates call taking procedures and radio dispatch communications for law enforcement and fire department services, including customer service. Call take for emergency medical services are also reviewed, but they are reviewed in a separate Emergency Medical Dispatch QA process.

## Action

During 2011, the Quality Assurance Coordinator and the Shift Supervisors performed monthly reviews on all staff. The compliance goal is based on a pass/fail rating scale. In addition to ongoing feedback, our staff receives individualized education and group training throughout the year based on the overall findings of these reviews. The program was considered successful, however, the QA Coordinator in conjunction with the Shift Supervisors have reviewed the forms used and made adjustments for the upcoming year to reduce redundancy and to focus on training deficiencies.

## Results

In 2011, a random Quality Assurance review was completed for each dispatcher. Providing there were no extenuating circumstances, all employees received one call take review on a monthly basis and one dispatch review bimonthly. Each review is completed using standardized rating guidelines based on our standard operating procedures. If a review was failed, the matter was discussed with the employee and filed. If the matter continued, an Action Plan with remedial training was assigned.

The results of these reviews indicate the dispatchers are achieving a desired level of work performance and overall satisfactory customer service.



## INCIDENT DISPATCH TEAM

The Lincoln Emergency Communications Center has an established Incident Dispatch Team for rapid deployment to localized major incidents and on-scene communications support for pre-planned events and special details.

During 2011, the team recorded the following activity: 1-Hazardous Materials Call Out, 1- 2<sup>nd</sup> Alarm Fire, 1-LPD Special Warrant Detail, 1 Pre-Planned Special Event (3 day duration), 2-Full Scale training exercises, 1 Tabletop exercise and 8 hours of TERT training.

The IDT provides communications support on-scene during major incidents by integrating into the existing command post structure and operating under the National Incident Management System (NIMS). In addition, the team receives specialized training in tactical dispatching and members frequently serve as tactical dispatchers for various special events and law enforcement special details.



Kevin Campbell (l) and Chad Schmidt (c) handle communications at the Air Show Command Post

Although activation of IDT will normally occur during significant and rare events of extended duration, it is integral that members maintain training and awareness to ensure operational readiness for rapid deployment.



Steve Phillips works LPD Warrants Detail



## GUARDIANS OF FREEDOM AIR SHOW

The City of Lincoln was the home of the Guardians Freedom Air Show September 9<sup>th</sup> through 11<sup>th</sup>, 2011. The Air Show commemorated the 10<sup>th</sup> Anniversary of 9/11. On September 10<sup>th</sup>, a crowd of nearly 100,000 attended the Guardians of Freedom Air Show while Sunday's events included a 9/11 ceremony and attracted nearly 200,000 people. The event kicked off on Friday, September 9<sup>th</sup> with an invitation only Special Needs show.

Incident Dispatchers from the Lincoln Emergency Communications Center managed communications for the Air Show from the bay of Lincoln Fire & Rescue Station 11, coordinating multiple public safety support resources.



Air Show Ground Control located in LF&R Station #11. Incident Dispatchers Chad Schmidt and Kevin Campbell coordinate Law Enforcement/ Security Forces, Fire and EMS resources from Show Control.

The planning took several months with the LECC participating heavily in planning meetings and developing the communications plan for the events. The primary role of the 911/Incident Dispatchers was to facilitate on-scene security and medical resource deployment and facilitate information sharing among agency representatives staffing Show Control.

Radio communications for the 2011 Guardians of Freedom Air Show were based on a two radio network arrangement for the security function. The Lincoln Airport Police, Lincoln Police Department, Lancaster County Sheriff's Office and the Nebraska State Patrol operated on the City of Lincoln 800 MHz trunked radio system. Military Security primarily operated on its own radio net with key personnel issued City of

Lincoln 800 MHz portable radios supplied by the City of Lincoln Radio Shop. This link was vital to ensure security efforts were timely and effective. Civilian and military Fire and EMS personnel operated on the City of Lincoln 800 MHz trunked radio system.

Computer Aided Dispatch stations were installed at two positions in Show Control providing a direct link to the primary 911 Center operating on the same Computer Aided Dispatch (CAD) network so requests could be acted upon quickly and coordinated with the primary 911 Center.

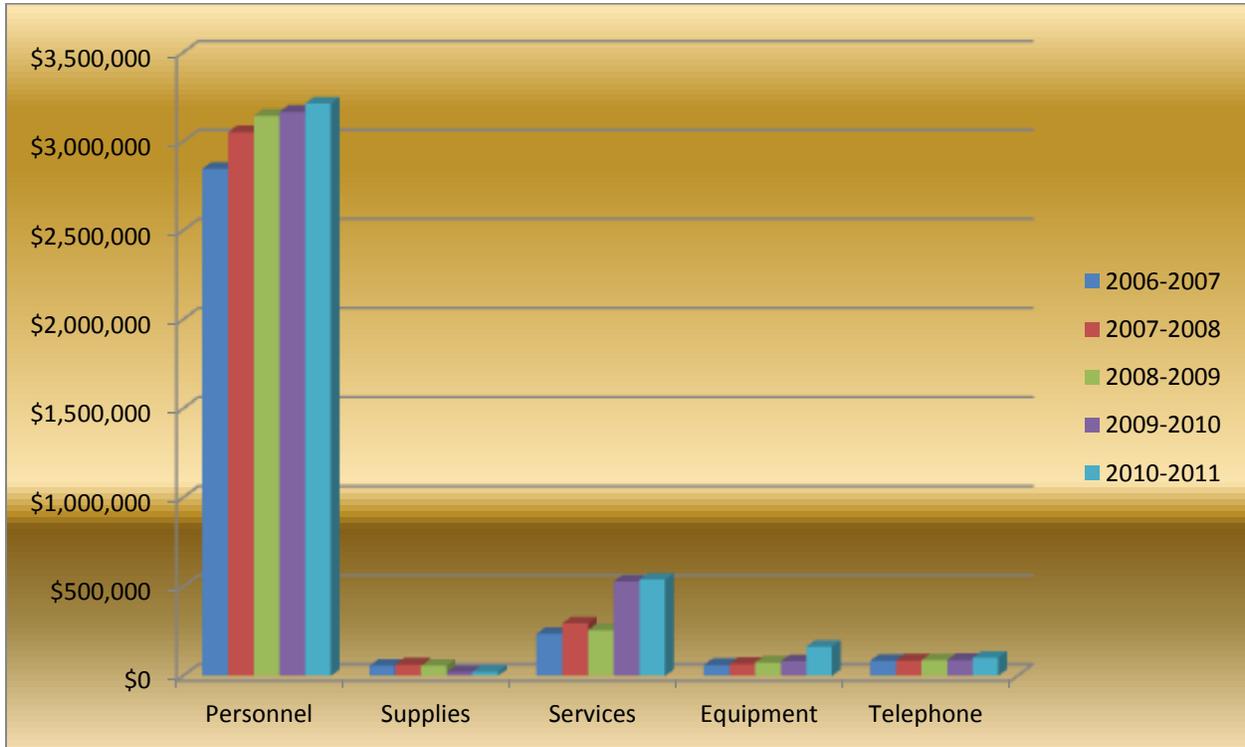


911 Incident Dispatcher, Megan Ellis coordinates with Military security forces in Show Control.

During the weekend LFR/ Air Guard EMS responded to 35 medicals at the Air Show, not inclusive of the walk-in treatment provided at the Red Cross trailers. LPD/LAA responded to 31 law enforcement/security related calls and 21 of the 35 medicals handled during the Air Show.



## EMERGENCY COMMUNICATIONS CENTER BUDGET



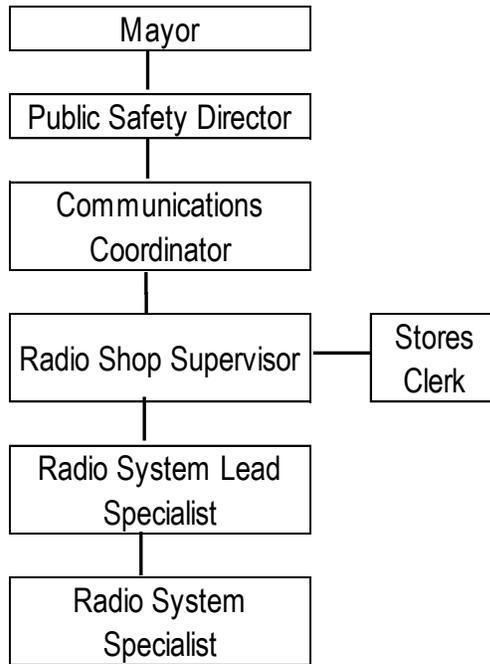
### TOTAL DEPARTMENT BUDGET

2006-2007	\$3,062,170
2007-2008	\$3,478,520
2008-2009	\$3,510,520
2009-2010	\$4,029,762
2010-2011	\$4,217,493

# Radio Shop



# RADIO SHOP ORGANIZATIONAL CHART



## PERSONNEL ALLOCATION - 2011

Radio Shop Supervisor	1
Lead Radio Specialist	1
Radio Specialist	3
Stores Clerk II	1
<b>TOTAL</b>	<b>6</b>

# POSITION FUNCTIONS AND RESPONSIBILITIES

## **Mayor**

The Mayor is granted the power to exercise control over the enforcement of ordinances and applicable laws, the appointment and removal of certain officers or employees with the ultimate goal of protecting the health and safety of our citizens.

## **Public Safety Director**

The Public Safety Director is responsible for the direction and oversight of the Lincoln Emergency Communications Center, the Lincoln Police Department, and the Lincoln Fire Department. This position reports directly to the Mayor.

## **Communications Coordinator**

The Communications Coordinator reports directly to the Public Safety Director. This position assumes responsibility for administrative and technical work supervising and coordinating the total operation of the Emergency Communication Center and the City's radio communication system. This position is also referred to as Manager both internally and by other agencies.

## **Radio System Supervisor**

The Radio Shop Supervisor is responsible for coordinating the supervision of the operations of the City's radio shop and for hiring, training, supervising and evaluation radio technicians involved in the installation, maintenance, and repair of radio equipment. Work involved includes design and oversight associated to the City's 800 MHz20 Channel EDACS Simulcast Trunking Radio System. The Radio Shop Supervisor reports to the Communications Coordinator.

## **Radio System Lead Specialist**

Works involves the responsibility for programming, installing, testing, calibrating, repairing, and operating microprocessor controlled radio and associated electronic equipment; also ordering and maintaining a supply of spare parts needed for the repair of defective equipment. Some supervision is exercised over subordinate employees. Supervision is received from the Radio System Supervisor.

## **Radio System Specialist**

Works involves the responsibility for programming, installing, testing, calibrating, repairing, and operating microprocessor controlled radio and associated electronic equipment; also ordering and maintaining a supply of spare parts needed for the repair of defective equipment. Supervision is received from the Radio System Lead Technician and Radio System Supervisor.

## **Stores Clerk II**

This classification is a clerical position responsible for maintaining a storeroom and/or supply yard including the use of bookkeeping principles and practices. The stores clerk is responsible for ordering, receipt, storage, maintenance, and issuance of supplies materials and equipment. Supervision is received from the Radio Shop Lead Technician and Radio System Supervisor.

# ANNUAL ACTIVITY SUMMARY

## Radio Maintenance Section:

Changes are underway to the tasks being performed by the City of Lincoln Radio Maintenance for 2011 year and beyond. For several of the past years, client equipment such as mobile and portable radios and Lincoln Fire Mobile Data platforms have dominated the time we have spent helping those who depend on us for mission-critical voice PTT services. Now with 800 MHz rebanding behind us, much of the radio equipment is still early enough in its service-life to not require extensive maintenance. While this is welcome relief from frequent end-user equipment repairs, the harsh nature in which this equipment is used will make the break short-lived.

During this slowdown in end-user equipment service the City of Lincoln Radio Maintenance Shop has been able to focus greater attention to the 1997-era infrastructure that keeps Lincoln's Medics responding quickly and allows virtually all Federal, State and Local Law Enforcement to communicate seamlessly with one another. While 1997 was not that long ago, technology-wise systems like our Harris EDACs system never get to be shut off. The 24/7 nature of our communications infrastructure require numerous systems to work much harder than the workstation at your desk-which is likely less than half the age of Lincoln's current radio system. It is a paradox that systems can be made so dependable as to outlive the availability of the components that make it work.



Mark and Greg repairing a critical power system just minutes after it failed

Also in 2011 two of our four Radio Specialists retired or left for a different position leaving us several months short-handed. Fortunately in late September Clint Kaspar and Mark Bartak joined our team just as we began to focus extensively on site maintenance. Mark and Clint both have experience in the Public Safety Communication Industry and are welcome additions to our group. In spite of their short time with the City of Lincoln, they have become involved in many infrastructure related projects. The timing has worked well and we have been fortunate to learn from their new perspectives as we all work to improve preventative service procedures.

## Paraclete

A State of Nebraska initiative for communications interoperability is called Paraclete-the product of a company called Simulcast Solutions. Paraclete was "incubated" in Buffalo County, NE (Kearney) and the Nebraska Emergency Management Agency has adopted it as a State-wide communication solution. For rural communities, Paraclete can provide much-needed integration for their many and varied systems. With Lincoln/Lancaster County's nearly all-encompassing 800 MHz Edacs system, the advantages of Paraclete are perhaps less imperative, but in 2011 the Lincoln Emergency Communication Center (LECC) and the Radio Shop became host to a Paraclete Switch. Fortunately, both of our new staff had exposure to Paraclete from their previous employers. As we begin to define what challenges Paraclete can help us solve, we will add it to the tools 911 Dispatchers have available.

## EOC-233 S 10<sup>th</sup> Street

Lincoln/Lancaster Emergency Management has for many years been co-located with LECC. However, during 2011 the Radio Shop worked to move Emergency Management's communications systems from that area to a new facility down the street. Activation of the outdoor warning sirens has always been done from the Harris Maestro Radio Consoles either in the Emergency Operation Center or the LECC. Because of the move, Radio Maintenance had to relocate the Harris radio console as well as design and install a system to provide adequate coverage into the basement area where the EOC is located. IP network multiplexers, a recent innovation that leverages the existing City network, has benefited Emergency Management both in allowing remote radio consoles as well as enhanced base-station control helping them be ready for the severe weather seasons ahead.



Non-penetrating roof mount antenna system at new EOC facility

## 911 Support Activities

Virtually every piece of equipment at LECC is supported by a team from the Radio Shop and a few LECC Specialists. Everything from the mission-critical workstations and servers to the power protection systems are monitored and maintained by our staff. Over the last year the LECC Computer Aided Dispatch has transitioned from a minicomputer to a more modern PC based server. In addition to the server, many of the workstations have been replaced with newer Windows 7 PCs. Just like all systems operating in Emergency Communications, these PC's must run all the time with near constant use.

In Public Safety Communications, downtime just isn't an option. In December of 2011 a piece of electrical switchgear caused a power outage at the main LECC. Radio Shop staff was notified and LECC staff were quickly able to relocate to the backup facility. Uninterruptable power systems (UPS) kept the phones and radios running for the short time needed to call in additional staff and relocate.



Contractors in arc-flash suits examining moisture related failures in high-voltage 911 feeder circuit.

## PSIC Communications Tower

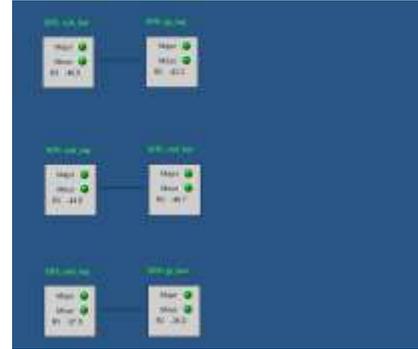
The Lincoln Police Department was awarded a Public Safety Interoperable Communications (PSIC) grant to construct a communications tower near the Southern Lancaster County line. The tower is under construction currently and will enhance an area of Southeast Nebraska currently not served adequately with Public Safety Wireless. Much of the project management continues to be done by the City of Lincoln Radio Shop Staff. Initially the tower will serve as a transmitter location for paging Lancaster County Rural Volunteer Fire/Rescue departments. Later, the facility will also serve as an interoperability hub to link several counties in southeast Nebraska as well as likely enhancing microwave and communications systems inside the City of Lincoln. Like the three other tower sites maintained by the City of Lincoln, this site will include standby power systems and FAA lighting to insure that systems continue safe operation even when utility power fails.

## Remote Site Monitoring

The spread-out nature and increasing number of tower sites requires us at times to be in several places at once. At two tower sites (Jensen Park and Military Tower) the City's Harris Radio System monitors alarm conditions and auto-dialers can notify technicians in the event something needs attention right away. But many of the less critical alarms occurred "in the dark" and the sites without an Enhanced Digital Accessed Communication System (EDACS) had no alarming at all. The City of Lincoln Radio Shop has now installed a system that allows better alarming and remote control. Now, on-call technicians receive and acknowledge via text message many conditions such as HVAC failures or if the generator at a facility starts. Certain security conditions will also alert technical staff and in some cases provide images of the condition. This will help us better understand and continue to improve security at our facilities in the future. This not only will keep our sites safer but also keep our staff safe working in the area after-hours as well. This option is much less costly than having technicians visiting sites or having a network operations center monitoring conditions 24/7 like Cellular providers do.



Cameras sense, alert and record unusual events

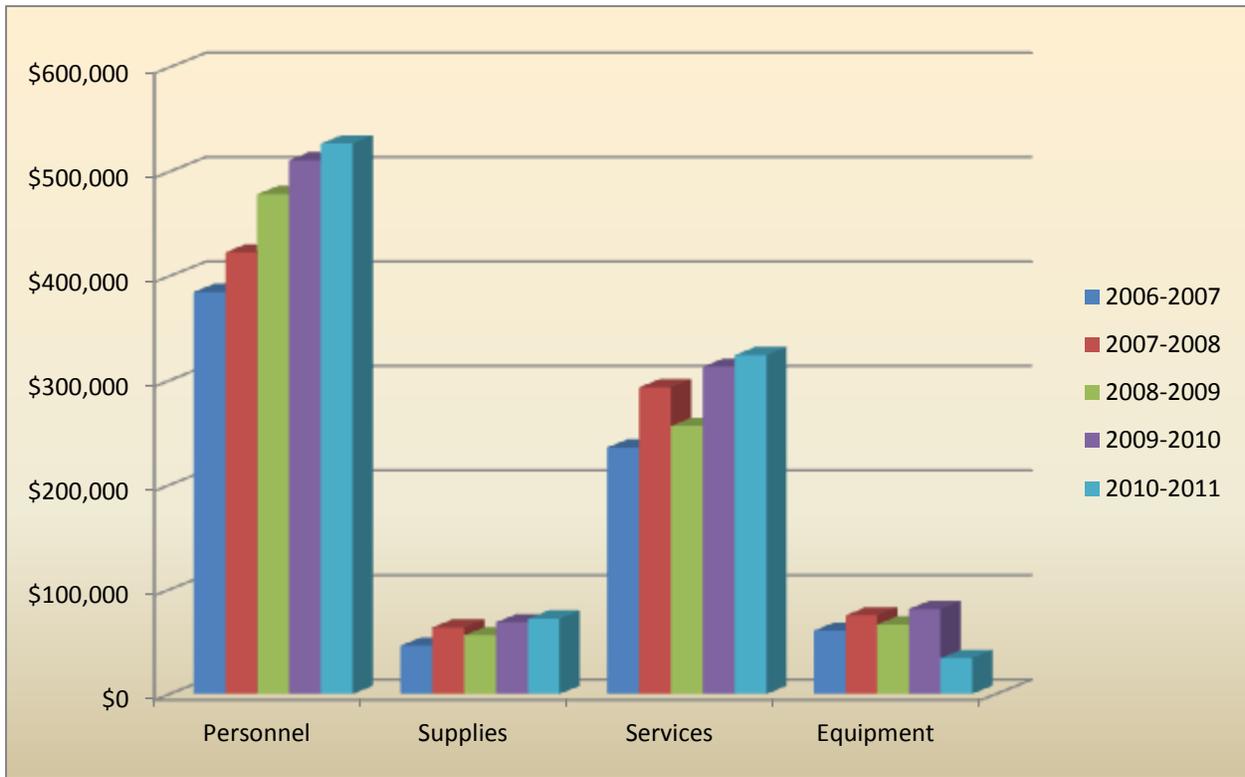


HMI Screen displays backhaul status

## We're moving!

March 31, 2012 is the date currently set for those agencies in the phase 1 move to the Municipal Service Center. Our area is taking shape and will likely be completed by April 1. Eventually the facility will have a collocated garage bay that can accommodate many of the vehicles we service that presently will not fit in our bay. For a period of time we will have to use a garage area in a separate area of the building. The Radio Shop area will also have walls to acoustically isolate our staff. While there are some advantages to all being in one large room, anyone who has visited us knows this can be a bustling place with many sources of noise-that is just the nature of what we do.

## RADIO SHOP BUDGET



### TOTAL DEPARTMENT BUDGET

2006-2007	\$727,147
2007-2008	\$854,874
2008-2009	\$857,490
2009-2010	\$973,773
2010-2011	\$957,347



A NATIONALLY ACCREDITED COMMUNICATIONS CENTER