

# LINCOLN EMERGENCY COMMUNICATIONS ANNUAL REPORT

Communications, Service, and Education for  
Lincoln and Lancaster County

Julie Richter, Communications Coordinator

2009

A NATIONALLY ACCREDITED COMMUNICATIONS CENTER

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# CITY OF LINCOLN NEBRASKA

MAYOR CHRIS BEUTLER

[lincoln.ne.gov](http://lincoln.ne.gov)

Office of the Mayor  
555 South 10th Street  
Suite 208  
Lincoln, Nebraska 68508  
402-441-7511  
fax: 402-441-7120  
[mayor@lincoln.ne.gov](mailto:mayor@lincoln.ne.gov)

January 2010

Dear Citizens and Members of the City Council,

As Mayor of Lincoln, I am pleased to present the 2009 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:

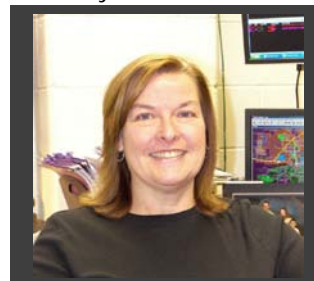
I am pleased to submit our 2009 Annual Report. It was a great year for the Lincoln Emergency Communications Center. Just a few of the accomplishments in 2009 were –

- The Division was recredited as a CALEA “Flagship” agency in 2008 and continues to prepare for our next reaccreditation in 2011.
- The Division awarded the fourth annual Capital City Footprinter’s Dispatcher of the Year Award to Emergency Service Dispatcher III Linda Thurber.
- The Division processed 32 citizen complaints, nine were sustained or determined to be a violation of policy. The number of sustained complaints is down one from 2008.
- The division averaged over 38,000 incoming/outgoing telephone calls per month in 2009.
- The Division successfully operated from the Emergency Communications Back-Up Center several times during 2009.
- The Division processed 331,516 incidents resulting in approximately 160,000 calls for service for the Center’s 12 primary User agencies and 11 secondary User agencies, including the Lincoln Police Department, Lincoln Fire & Rescue, and the Lancaster County Sheriff’s Office.
- The Division processed 776 record requests for evidentiary purposed related to case work for User Agencies, County and City Attorneys, Public Defender and other local attorneys. This is a decrease of 15.9% of 2008 (922).
- The Division continued to operate efficiently with existing staff and steady call volume of which over 68% is consistently cellular/wireless.

While 2009 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.

### 2010 Strategic Goals and Objectives

#### Operational

- Provide an ergonomically efficient and pleasant work environment.
- Retain appropriate level of staff within the division.
- Recruit and retain quality employees, reflecting the diversity of our population.
- Respond to calls for service and other public needs promptly.
- Process calls for service appropriately in order to provide services which protect persons and property and resolve problems in a professional and courteous manner.
- Develop and maintain open relationships with other agencies, organizations and the public at large.
- Minimize liability by providing training academy for new hires and quality continuing education for all personnel.
- Continue to support operations with contemporary policies and procedures.
- Continue to seek efficient operational alternatives while maintaining quality.
- Solicit information from customers concerning service provided by the division.
- Solicit information from staff concerning service provided by the division.

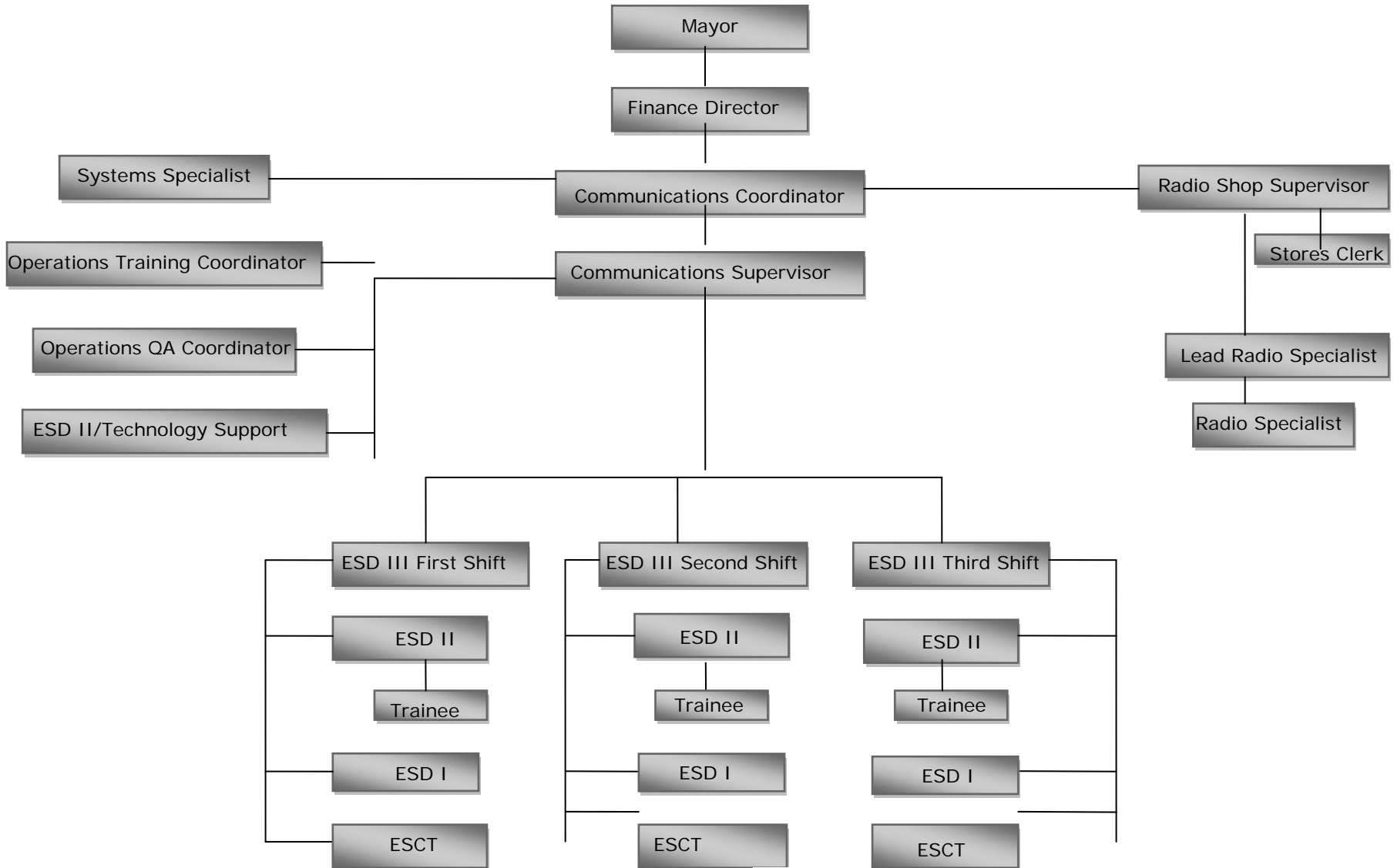
#### Technical

- Upgrade equipment as needed and continuously explore technological advances toward the enhancement of services provided.
- Determine future space and equipment requirements for the Communications Center and Technical Services.
- Continue to explore partnerships related to space and technology needs.

#### Administrative

- Educate our customers by enhancing Public Education committee activities and involvement in the community.
- Maintain a contingency plan.
- Continue to support National Telecommunicator's Week
- Continue to support and enhance the Quality Assurance Program
- Manage the fiscal, capital, information and personnel resources of the Emergency Communications Center with efficiency and care.
- Make effective and timely preparations for re-accreditation through CALEA.
- Strive for off-line supervision for improved availability to staff and to the needs of the Center.

# ORGANIZATION CHART



## **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.

### **Finance Director**

The finance director reports to the Mayor for financial planning, budgeting, accounting, revenue administration, treasury management, purchasing for the City and is the department head for the Emergency Communication Center

### **Communications Coordinator**

The Communications Coordinator reports directly to the Finance 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**

This position performs administrative duties as ordered by the Communication Coordinator. This work involves developing improved methods and procedures for department operation, workflow, reporting structures, and cost control, participating in the preparation and administration of the budget, preparing and submitting statistical and operational reports and conducting research on assigned subjects. The Communications Supervisor may act for the department head as required as well as exercising supervision over subordinate staff.

### **Operations Training Coordinator**

This is an administrative and technical position directing the development and implementation of on the job training for emergency services dispatchers. Supervision is received from the Communications Supervisor and Communication 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, and other administrative duties as assigned by Center Management. Supervision is received from the Communications Supervisor and Communications Coordinator with work being reviewed in the form of reports, conferences, and effectiveness of EMD and quality assurance programs.

### **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. General supervision is received from an administrative superior with work being reviewed through effectiveness of programs.

## **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. Supervision is received from the Communications Supervisor with work reviewed in the form of reports and conferences

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

The employees assigned to this classification split their time performing duties of Emergency Services Dispatcher II and Technology Support. Responsibilities of this position include routine CAD administration, geo-base maintenance, back-up and restoration of the CAD system, MSAG management, and GIS development and maintenance relative to public safety communications. In addition, these employees 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 on 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 Communications Coordinator for technology related duties.

## **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.

### **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 evaluating radio specialists 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.

### **Lead Radio 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 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 Lead Radio Specialist and Radio System Supervisor.

### **Stores Clerk II**

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

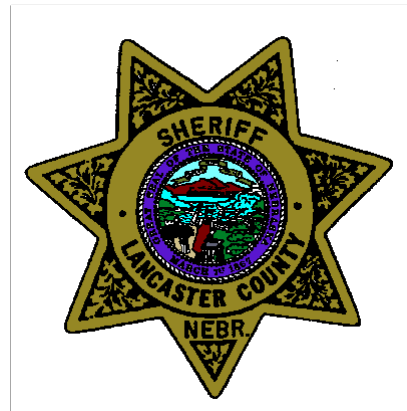
## PERSONNEL ALLOCATION - 2009

	Management	Operations	Support	Total
Communications Coordinator	1			1
Communications Supervisor	1			1
Operations Training Coordinator	1			1
Operations QA Coordinator	1			1
Systems Specialist			1	1
ESD III		3		3
ESD II		21		21
ESD II/Tech Support			2	2
ESD I		10.5		10.5
		<b>TOTAL</b>		<b>41.5</b>
Radio Shop Supervisor	1			1
Lead Radio Specialist			1	1
Radio Specialist			3	3
Stores Clerk II			1	1
		<b>TOTAL</b>		<b>6</b>



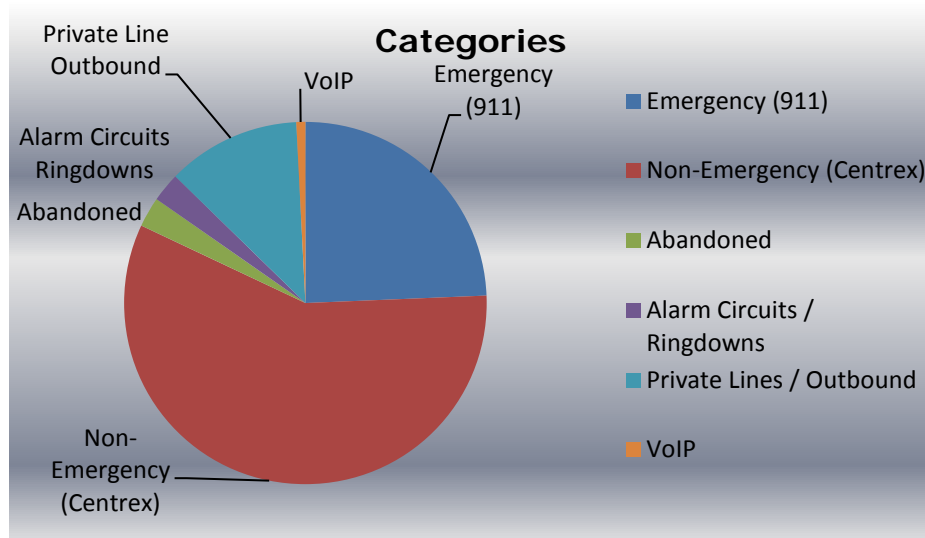
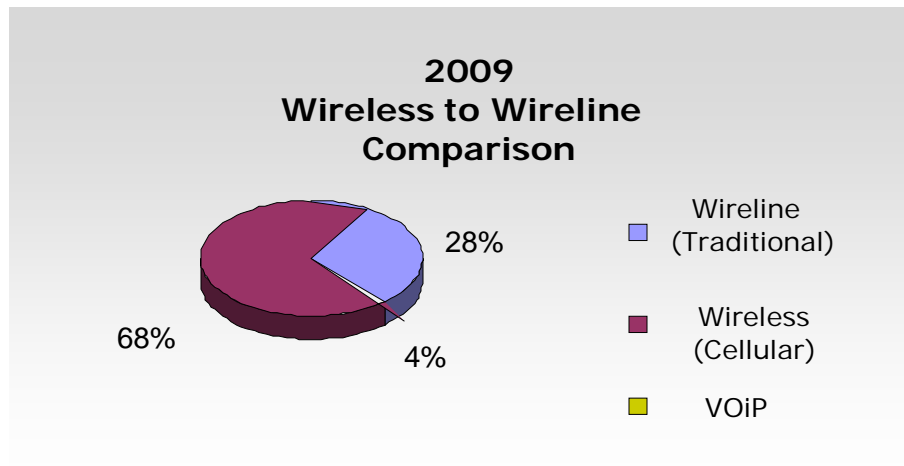
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## *Emergency Communications*



# ANNUAL ACTIVITY SUMMARIES

## CALL CATEGORIES AND VOLUMES



Category	Volume
Emergency (911)	(23.30%) 87,356
Non-Emergency (Centrex)	(76.70%) 287,526
Next 4 included in Emergency and Non-Emergency Totals	
Abandoned	(3.9%) 14,834
Alarm Circuits/Ringdowns	(3.2%) 11,844
Private Lines/Outbound	(14.49%) 54,337
VoIP	(1.06%) 3,974

## COMPUTER AIDED DISPATCH SUMMARY – 2009

The Lincoln-Lancaster County 911 Center processes approximately 450,000 emergency and non-emergency telephone calls per year. During the year **2009**, these telephone calls resulted in over 159,000 calls for service from user agencies and citizen requests and over 331,000 Computer Aided Dispatch (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	24,226	24,226	1,667	1667	25,893	25,893
February	23,011	47,237	1,470	3,137	24,481	50,374
March	26,525	73,762	1,823	4,960	28,348	78,722
April	25,390	99,152	1,732	6,692	27,122	105,844
May	27,803	126,955	1,893	8,585	29,696	135,540
June	26,299	153,254	1,830	10,415	28,129	163,669
July	27,543	180,797	1,823	12,238	29,366	193,035
August	27,740	208,537	1,893	14,131	29,633	222,668
September	29,383	237,920	1,726	15,857	31,109	253,777
October	25,318	263,238	1,874	17,731	27,192	280,969
November	24,239	287,477	1,658	19,389	25,897	306,866
December	22,840	310,317	1,810	21,199	24,650	331,516
<b>TOTAL</b>	<b>310,317</b>	<b>310,317</b>	<b>21,199</b>	<b>21,199</b>	<b>331,516</b>	<b>331,516</b>

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 2009 there were 776 requests for recordings representing a decrease of 15.9% over 2008. At an average of 15 minutes per tape to create the resulting file, that equates to 194 hours or 24.25 8 hour shifts to provide these recordings to the public and law enforcement.

# PERFORMANCE MEASUREMENTS FOR EMERGENCY CALL PROCESSING

The Lincoln Emergency Communications Center 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 Lincoln Emergency Communications Center has been accredited by CALEA since 2002.

The Lincoln/Lancaster County 9-1-1 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). PlantCML MagicXL 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.

All data is reported monthly and quarterly and is a component of our Annual Report. <sup>1</sup>

## TOTAL CALL COUNTS AND SOURCE BY MONTH

MONTH	TOTAL INBOUND	WIRELESS 911	LANDLINE 911	911 VOIP	911 TOTAL	LANDLINE (6000)	LANDLINE (OTHER)	NON 911 LAND LINES TOTAL	PRIVATE LINES/ OUTBOUND	ALARM CIRCUITS/ RINGDOWNS
JAN	27011	4171	2119	376	9377	17861	2484	20345	4798	1215
FEB	25404	4201	1834	254	6289	16896	2219	19115	3796	981
MAR	29088	4925	2204	390	6121	20235	2732	22967	5201	1113
Quarter totals	81503	13297	6157	1020	21787	54992	7435	62427	13795	3309
APR	33924	4637	2057	341	7035	17862	9027	26889	4094	1015
MAY	30965	5540	2206	372	8118	12040	10807	22847	4386	1148
JUN	30691	5384	2251	392	8027	11744	10920	22664	4605	1213
Quarter totals	95580	15561	6514	1105	23180	41646	30754	72400	13085	3376
JUL	30464	4815	2046	361	7222	12095	11147	23242	5098	665
AUG	34755	5604	2178	350	8132	21795	4828	26623	5344	1267
SEP	32752	5421	2074	346	7841	20071	4840	24911	5154	1182
Quarter totals	97971	15840	6298	1057	23195	53961	20815	74776	15596	3114
OCT	29937	4878	1980	323	7181	18123	4633	22756	4801	658
NOV	17736	2932	1203	188	4323	11046	2367	13413	2547	308
DEC	31608	5404	1941	345	7690	19298	4620	23918	4513	1079
Quarter totals	79281	13214	5124	856	19194	48467	11620	60087	11861	2045
TOTAL	374882	59220	24162	3974	87356	193553	93973	287526	54337	11844

<sup>1</sup> 2 weeks of data missing for November due to technical difficulties

## ABANDONED 911 INCOMING CALLS BY SOURCE

Monthly average call abandonment rate is gathered utilizing PlantCML MagicXL 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	INCOMING CALLS ABANDONMENT PERCENTAGE
JAN	LANDLINE	617	
	WIRELESS	521	
	VOIP	N/A	
			3.25
FEB	LANDLINE	545	
	WIRELESS	536	
	VOIP	N/A	3.60
MAR	LANDLINE	659	
	WIRELESS	633	
	VOIP	N/A	3.50
1ST QUARTER		3511	3.45
APR	LANDLINE	585	
	WIRELESS	592	
	VOIP	N/A	3.47
MAY	LANDLINE	553	
	WIRELESS	701	
	VOIP	N/A	4.05
JUN	LANDLINE	619	
	WIRELESS	741	
	VOIP	N/A	4.43
2ND QUARTER		3791	3.98
JUL	LANDLINE	574	
	WIRELESS	645	
	VOIP	N/A	4.00
AUG	LANDLINE	603	
	WIRELESS	776	
	VOIP	N/A	3.97
SEP	LANDLINE	528	
	WIRELESS	696	
	VOIP	N/A	3.74
3RD QUARTER		3822	3.90
OCT	LANDLINE	527	
	WIRELESS	633	
	VOIP	N/A	3.87
NOV	LANDLINE	540	
	WIRELESS	735	
	VOIP	N/A	7.19
DEC	LANDLINE	525	
	WIRELESS	750	
	VOIP	N/A	4.03
4TH QUARTER		3710	5.03
2009 AVERAGE		14834	4.09

## 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 PlantCML MagicXL 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 (IN SECONDS)	AVERAGE CALL DURATION (IN SECONDS)	AVERAGE CALL DURATION (IN SECONDS)
JAN				
	LANDLINE	5	20	
	WIRELESS	5	90	
	VOIP	5	87	65.67
FEB				
	LANDLINE	5	50	
	WIRELESS	5	83	
	VOIP	5	89	73.89
MAR				
	LANDLINE	5	61	
	WIRELESS	5	82	
	VOIP	5	84	75.67
1ST QUARTER		5		71.74
APR				
	LANDLINE	5	49	
	WIRELESS	5	57	
	VOIP	5	80	61.89
MAY				
	LANDLINE	5	58	
	WIRELESS	5	82	
	VOIP	5	72	70.67
JUN				
	LANDLINE	5	70	
	WIRELESS	5	64	
	VOIP	5	70	68.00
2ND QUARTER		5		66.85
JUL				
	LANDLINE	5	56	
	WIRELESS	5	75	
	VOIP	5	81	70.66
AUG				
	LANDLINE	5	46	
	WIRELESS	5	81	
	VOIP	5	80	69.00
SEP				
	LANDLINE	5	73	
	WIRELESS	5	84	
	VOIP	5	82	73.11
3RD QUARTER		5		71.03
OCT				
	LANDLINE	5	71	
	WIRELESS	5	83	
	VOIP	5	79	77.66
NOV				
	LANDLINE	5	73	
	WIRELESS	5	73	
	VOIP	5	74	73.33
DEC				
	LANDLINE	5	77	
	WIRELESS	5	73	
	VOIP	5	75	77.83
4TH QUARTER		5		76.06
2009 TOTAL		5	71.77	71.42



## 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	90.73%	
FEB	90.43%	
MAR	88.04%	87.73
APR	87.36%	
MAY	87.02%	
JUN	87.83%	87.40
JUL	88.89%	
AUG	89.24%	
SEP	87.57%	88.57
OCT	86.18%	
NOV	90.60%	
DEC	87.71%	88.16
ANNUAL AVERAGE		87.96

## AVERAGE ECHO MEDICAL CALL DISPATCHING TIME

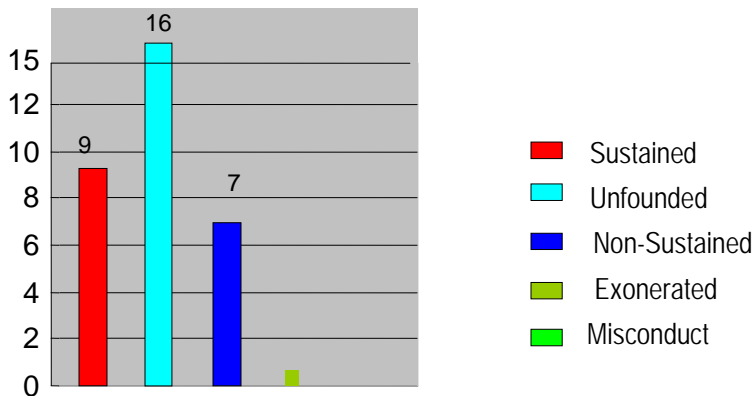
The Center's goal is a 40 second or less Call Received to Call Dispatch time on all Echo Medical responses. All responses not meeting this measurement are forwarded by the Communications Coordinator to the Quality Assurance Coordinator for Dispatch Quality Review, reporting and possible action.

MONTH	DISPATCH TIME IN SECONDS	QUARTERLY AVERAGE (seconds)
JAN	38.71	
FEB	43.33	
MAR	34.52	38.85
APR	38.08	
MAY	27.00	
JUN	27.28	30.79
JUL	33.89	
AUG	27.50	
SEP	27.22	29.54
OCT	29.00	
NOV	31.94	
DEC	26.50	29.14
ANNUAL AVERAGE		32.08

## COMPLAINTS

The Emergency Communications Center received 32 citizen complaints during 2009. 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-Lancaster County 911 Center prides itself on providing high quality customer service to those it serves. Your feedback is very important to us.

### 2009 Citizen Complaints



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

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

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

**Exonerated**-The investigation has determined the incident did occur, but the employee involved acted properly in accordance with policy.

**Misconduct/error not based on Complaint**-Substantiated employee misconduct not previously alleged in the complaint, but determined through the investigation.

## AWARD RECIPIENTS - 2009

### EMERGENCY MEDICAL DISPATCHER OF THE YEAR

*Sarah Kate Sandquist*

### FOOTPRINTER'S DISPATCHER OF THE YEAR

*Linda Thurber*

### TRAINER OF THE YEAR

*Troy Cordle*

### PHOENIX AWARDS

*Shelly Becker*

*Matt Buser*

*Kari Byers*

*Karen Cates*

*Troy Cordle*

*Kelly Davila*

*Megan Ellis*

*Linda Flaherty*

*Tim Flaherty*

*Tara Garza*

*Jamie Johnson*

*Bryan Kelly*

*Becky Lyons*

*Brent Molthan*

*Mark Murphy*

*Steve Phillips*

*Becky Pierzina*

*Jen Quade*

*Brenda Roby*

*Dave Rood*

*Shara Scattergood*

*Jodi Standley*

*Chad Schmidt*

*Linda Thurber*

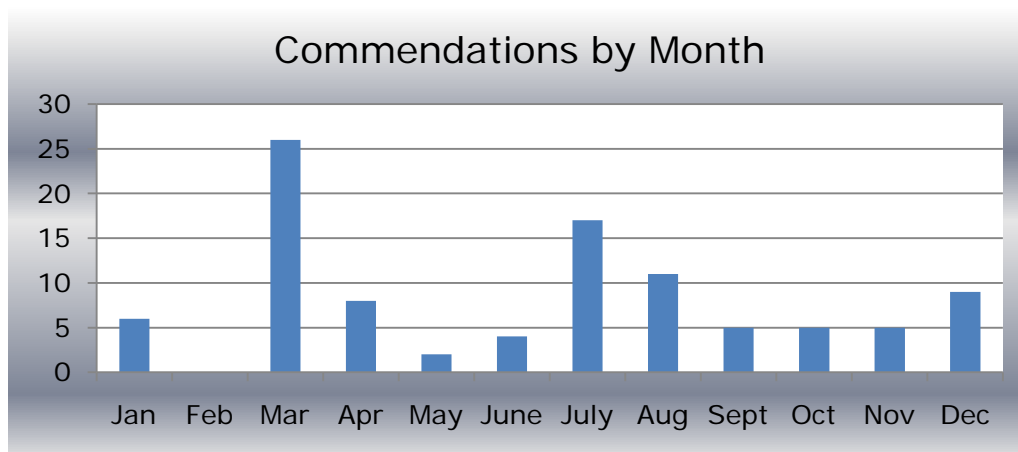
*Gregg Witfoth*

*Lori Yaussi*

## COMMENDATIONS

There were 98 commendations received by Emergency Communications Center personnel during 2009 with some employees receiving numerous commendations indicated in parenthesis. These commendations can be generated internally, by user agencies or from citizens in recognition of superior performance. Personnel receiving commendations during 2009 were:

<i>Becky Lyons (4)</i>	<i>Jodi Standley (4)</i>	<i>Mark Murphy (5)</i>
<i>Becky Pierzina</i>	<i>Josh Hruby</i>	<i>Matt Buser (3)</i>
<i>Brenda Roby (2)</i>	<i>Kari Byers (3)</i>	<i>Megan Ellis (3)</i>
<i>Brent Molthan</i>	<i>Kelly Davila (3)</i>	<i>Sarah Kate Sandquist (6)</i>
<i>Bryan Kelly (2)</i>	<i>Kevin Campbell</i>	<i>Shara Scattergood (6)</i>
<i>Cary Steele (5)</i>	<i>Leslie Novak (3)</i>	<i>Shaun Province</i>
<i>Chad Schmidt (3)</i>	<i>Linda Flaherty (2)</i>	<i>Shelly Becker (4)</i>
<i>Dave Rood (3)</i>	<i>Linda Thurber (8)</i>	<i>Steve Phillips (2)</i>
<i>Greg Witfoth (2)</i>	<i>Lindsay Scheer</i>	<i>Tara Garza</i>
<i>Jaime Johnson</i>	<i>Lisa Pachunka</i>	<i>Terri Heiser</i>
<i>Jen Quade</i>	<i>Lori Yaussi</i>	<i>Tim Flaherty (5)</i>
<i>Jennie McLaughlin (5)</i>	<i>Luann Hamilton</i>	<i>Troy Cordle (2)</i>



All personnel are instructed as to the procedures in place to facilitate the handling of complaints and commendations in order to gain public confidence. A customer service survey is completed at a minimum of once per calendar year. 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 Lincoln-Lancaster 911 Center 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

## FOOTPRINTER'S "DISPATCHER OF THE YEAR"

Linda Thurber, a Dispatch Supervisor with the 911 Center, was recognized on April 20, 2009 with the fifth 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.



Linda Thurber (left) 2009 Footprinter's Dispatcher of the Year  
with Julie Righter, Communications Coordinator (right)

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.

"Linda is a very deserving recipient, having worked many years as an ESD II and now a Shift Supervisor," said Julie Righter, 911 Center Communications Manager. "In addition to her regular duties her leadership in the CALEA Accreditation process is very evident throughout our operations."



The BryanLGH Trauma Center stands ready to serve at a moment's notice, providing life-saving care to our region's most critically injured patients. This level of care does not happen without a high degree of teamwork, dedication and expertise. The Tribute to Trauma Champions banquet held on February 18<sup>th</sup>, 2010 at the Nebraska Champions Club recognized the many individuals involved in providing care to trauma Elisabeth Lemp of Central City and Derek Ruth of Malcolm.



Linda Flaherty, ESDII and Jodi Standley, ESDI were among the 101 individuals honored at the 2009 Trauma Champions banquet. Linda and Jodi handled the initial calltake and medical dispatch when Derek Ruth suffered severe head trauma during his Jr. High football game. Honorees included everyone from the initial calltaker to the rehabilitative care givers.

## STAFF RECOGNITION

Many of the calls that the 911 Center staff receive can become routine or business as usual. As recognition of when an employee takes a phone call or dispatches an incident that is unusual or significant the Center began a recognition program for these types of calls. This recognition is in the form of a lapel pin that visually displays the type of call the employee processed or dispatched. For example four pink stork pins were awarded last year for those staff who assisted with the birth of four baby girls in our community. There are a variety of pins that can be awarded including a pin for instructing someone in how to perform CPR, how to perform the Heimlich maneuver, working during a major storm when call volume increases dramatically and major fires which require multiple resources.



ESDII Tim Flaherty receives the first staff recognition lapel pin  
from Shift Supervisor Linda Thurber



## PUBLIC EDUCATION

Thanks to funds granted from the Community Health Endowment of Lincoln, the Lincoln 911 Emergency Communications Center was able to purchase an Interactive 911 Simulator. This piece of equipment provides our staff the ability to teach young and old alike the how-to's of making an emergency call. We were able to demonstrate its use at 100 community health fairs and preschools in 2009. Our goal is to reach new citizens from other countries, as well as continuing to network with all community agencies that will benefit from its use.



Adah Svendsen learns about 911 on the new simulator



ESD III Mark Murphy mans the 911 booth at a Bennet Rural Fire Department open house

As is our tradition, we hosted numerous tour groups including scout troops, user agencies and school aged children. Throughout the year we provide tours for high school students involved in County Government Day. Students from the Bryan School of Nursing are required to sit with a Dispatcher for several hours so they understand the processes the 911 Center staff must follow to get medical assistance to those calling on emergency lines. This year we hosted approximately 1700 people.

Members of our Public Education Committee travelled to more than a dozen schools, both public and private to educate our children on how to use 911. Our discussions involved identifying an emergency and what information will be needed when you call 911.

Members of the 2009 911 Center Public Education Committee are: Alissa Gunning, Brenda Roby, Chad Schmidt, Mark Murphy, Tara Garza, Sarah Kate Sandquist, Jennie McLaughlin, Leslie Novak and Becky Lyons, Public Education Coordinator.



## COMMUNITY INVOLVEMENT

For the fifth consecutive year, Lincoln's 911 dispatchers gathered mittens, scarves, and stocking caps for Lincoln children in need. For 2009 we found that Hartley School had some dire need. Supervisor Mark Murphy spoke with Counselor Mandy Nicolite and she indicated that they had a new family that had just arrived from Thailand that didn't have any winter weather clothing and were unable to purchase coats for the winter. Many other students didn't have sufficient hats and mittens for the winter weather as well.

Dispatchers and other staff initially hung their donations on a small Christmas tree in the 911 center. This year the project raised \$830 in cash and at least \$500 dollars in mittens and other donations. On December 14<sup>th</sup> after a sudden severe cold snap we made our first delivery the day before school was closed for 4 days due to the cold weather. On December 21<sup>st</sup> we delivered the remainder of over \$1300 worth of mittens and coats to the school. With the assistance of Hampton Inn South we were able to outfit the entire family of 6 from Thailand with coats, hats, gloves, and boots. A special thanks to Hampton Inn South for taking on the task of outfitting the new family with appropriate winter gear.

Business's that contributed to this year's drive were:

WalMart (North and South), Telcor, Target Stores South, Midwest Medical, People's Choice Credit Union, Farmers Mutual Insurance, and Hampton Inn South

# TELECOMMUNICATIONS

Once again in 2009, we continued to see more growth in incoming cellular call verses landline phone calls. We also have 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 Lincoln 911 Center will receive 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, addresses, and names to assist them in pinpointing a caller's location. This is called Automatic Location Identification or ALI.

Specially designated telephone trunks are installed for cellular phone calls received at the 911 Center as well. Depending on the type of cellular phone that is being used, the dispatcher may or may not be able to locate you in an emergency. By the end of March 2007, all cellular carriers serving Lancaster County were upgraded to the Phase II location system. Phase II provides 911 dispatchers with the telephone number and location by plotting the latitude and longitude that appears on the ALI screen when a cellular 911 call is received. Dispatchers have the ability to retransmit a call, if necessary, (as long as the cell phone call remains connected) to continue to update and re-plot the location within 100 meters or 328 feet. If a caller is using a prepaid cellular phone with Phase II 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 Lincoln 911 Center has also installed dedicated trunks for VoIP calls. Some examples of VoIP phone companies are Time Warner, 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 vendors 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, video, and interoperability with other Public Safety Answering Points (PSAP's) and Internet based integrated application 911 networking.

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. New wireless and IP-based devices that are capable of delivering messages via text and video are being developed and utilized at a steadily increasing rate, thus greatly expanding the need for 911 centers to be able to accept these and other sources of emergency data.<sup>2</sup>



A dispatch console in the 911 Center

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<sup>2</sup> NENA's Blueprint Steers 911 Into The Future: by Roger Hixson, Bob Cobb, and Patrick Halley National Emergency Number Association (NENA) 2008

## TRAINING DIVISION

The Lincoln 911 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), 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 Service Dispatcher I (ESDI) on two separate occasions during 2009. In December 2008, 210 applications were submitted for testing held on January 16th, 2009. Of those applicants, 57 completed the testing and eight were interviewed. Utilizing applications from the January 16th testing, seven applicants were interviewed in April 2009. In September 2009, 287 applications were submitted for testing held on October 8th, 2009. Of those applicants, 131 completed the testing process and 20 were interviewed.

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 scoring well on these tests 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>.

The January testing initially resulted in one applicant being placed on a hiring eligibility list for future openings. When positions became available in April 2009, three candidates from the January testing were offered positions. They started their Classroom phase of training on May 28th, 2009. The October testing resulted in three new employees, or trainees, beginning Classroom training on November 19th, 2009.

### New Employee Training

The Lincoln Emergency Communications Center New Employee Training Program consists of four program phases: Classroom, Phones, 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 Phones 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. In 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 usually takes two months to complete.

## Continuing Education Training

Continuing education training is conducted regularly for all staff members. Over the course of 2009 there were 47 staff employed with the Lincoln 911 Emergency Communications Center, including management staff. At the end of 2009 there were a total of 41 employees. It is of importance to note our agency benefited from a grant which provided no-cost training for Lincoln 911's TERT and IDT members. The result of this grant provided many of our staff with a higher than normal number of training hours for this year. The average number of training hours per employee for 2009 was 63.69 hours.

Using a variety of local and national resources, some of the training topics offered during 2009 included:

- Active Shooter training conducted by the nationally renowned Kevin Willett with Public Safety Training Consultants.
- Von Maur Shooting and After Action presented by the Omaha Police Department
- Communication for Leaders presented by Joe Gerstandt
- COML Training presented by SAFECOM
- Radio 101 Training presented by Pete Crawford with the City Radio Shop and LPD Sgt. Todd Beam
- Professionalism: Contributing to a Culture of Respect presented by Kevin Mattran
- TTY Refresher Training
- Crisis Mgmt for School-based incidents partnering rural Law Enforcement and the Local School Systems
- Improving Community Response to Domestic Violence in NE coordinated by VAWA and the NE Attorney General's office
- Aircraft Accident Workshop conducted by the Lincoln Airport Authority, Lancaster County Emergency Management and the NE Air National Guard
- Nonverbal Communication and Culture hosted by the NE Commission on Human Rights Diversity Film Series
- Review of our Facility Emergency Plan
- Threat & Risk Assessment Training presented by TEEX

## 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 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.

The '2008 Trainer of the Year' was awarded in 2009 to Troy Cordle. Troy has worked hard to ensure our trainees are provided with the correct information and gives them every opportunity to learn valuable skills. Troy's proactive approach is refreshing and shows his dedication to helping new staff succeed. Troy's active engagement in the training program is truly appreciated.



2008 Trainer of the Year Troy Cordle with Operations Coordinator Sharon Codr (left) and Operations Training Coordinator Alissa Gunning (right)

## EMERGENCY MEDICAL DISPATCH

## Introduction:

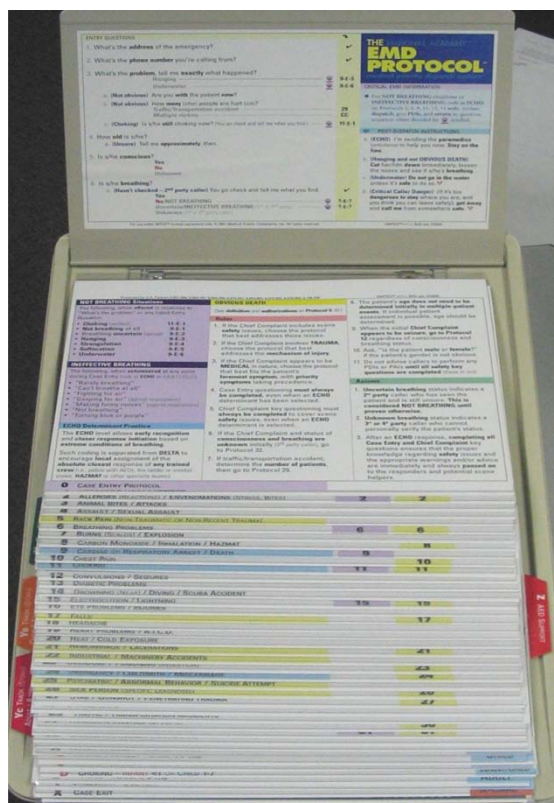
The Lincoln/Lancaster County 911 Emergency Communications Center (LECC) utilizes the Priority Dispatch System's Emergency Medical Dispatch Program (EMD) in handling requests for emergency medical assistance. All of our dispatcher's are EMD certified. The EMD program is a set of cards that direct the 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.

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.

## Overview:

The EMD card set 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 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. 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 medical skill and knowledge.



### Results:

In 2009, Quality Assurance reviews were completed on approximately 8.71% of the total call volume, 1300 randomly chosen requests for emergency medical assistance. This is an average of 37 reviews per dispatcher. In addition, 8 Action Plan reviews were conducted to assist specific staff with increasing their overall EMD compliance. This is a significant decrease from the 40 Action Plan reviews completed in 2008. The goal compliance average is 90% for each individual dispatcher and for the agency as a whole.

## Action:

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 are required to recertify every two years. This includes the successful completion of a written examination, twenty-four (24) hours of training and CPR certification.

Sarah Kate Sandquist received this year's Emergency Medical Dispatch (EMD) of the Year award for her exceptional compliance to the EMD protocols. We congratulate Sarah Kate for her continued dedication and professionalism.



2008 Emergency Medical Dispatcher of the Year Sarah Kate Sandquist (center)  
with Communications Director Julie Righter (left)  
and Quality Assurance Coordinator Lindsay Scheer (right)

# QUALITY ASSURANCE

## Introduction:

The vision statement of the Lincoln 911 Emergency Communications Center (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.

## 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 covers call taking and radio dispatch communications for law enforcement and fire department services, including customer service. Note: Emergency medical services are reviewed in a separate Emergency Medical Dispatch (EMD) QA process.

## Action:

During 2009, the number of reviews was reduced significantly in order for the QA process to be completely revised. The Quality Assurance Coordinator, in conjunction with the Shift Supervisors, took an in-depth look at the previous QA program to see how it could be modified to enhance use and manageability. This process resulted in completely redesigning the QA program and procedures. Implementation of the new QA program began January 7th, 2010.

## Results:

In 2009, a random Quality Assurance review was completed for each dispatcher. The goal compliance average is based on a rating scale of zero to one hundred percent with 80 to 100% being the desired performance standard. Thirty five reviews were completed, averaging 1 review per employee. Each review is completed using standardized rating guidelines based on our standard operating procedures.

The results of this review showed the dispatchers as meeting the desired performance standard in all areas of work performance and customer service.





## LINCOLN INCIDENT DISPATCH TEAM

The Lincoln Emergency Communications Center Incident Dispatch Team (IDT), now in its sixth year of operation, continues to grow and evolve. The IDT provides unified command communications and support during major events by integrating into the existing command post and operating under the National Incident Management System (NIMS) fulfilling a vital role.

Operating under a Homeland Security grant, Lincoln completed the development of a state TERT team in 2009. The Nebraska Telecommunicator Emergency Response Team (NE-TERT) is comprised of 24 dispatchers from across the state. TERT is a national initiative created to provide personnel to support Communications Centers either in-state or out of state during times of disaster such as Hurricane Katrina, where employees are overwhelmed, affected by personal loss or both. The Lincoln IDT/TERT members are now fully deployable to respond and assist other Communications Center's during a natural or manmade disaster under the Emergency Management Assistance Compact (EMAC). At this time, there are 37 states in some phase of developing TERT teams in their own states. Currently, nine teams, including Nebraska are considered fully deployable under EMAC. Sharon Codr and Megan Ellis serve as the NE-TERT State Coordinators. Incident dispatching provides new avenues for career development while enhancing the dispatcher's role within the public safety system.



Steve Phillips, Kevin Campbell, Troy Cordle,  
Chad Schmidt, Dave Rood, Cary Steele,  
Megan Ellis, Sharon Codr, Tara Garza

## NE - TERT



NE-TERT Team with members representing, Douglas County, Sarpy County, Lancaster County, Cuming County, Colfax County, Dodge County, Hamilton County and the University of Nebraska Lincoln Police Department

In recent years, a trend has spread across the nation to develop specialized on-scene, field dispatchers as well as recognizing the need to provide assistance to Communications Centers involved in handling incidents of great magnitude.

The IDT is currently available to assist Fire/EMS and Law Enforcement operations during special events or other extended operations where an Incident Commander believes IDT support may be of assistance, while NE-TERT is fully deployable anywhere in the nation. All Lincoln IDT members are currently credentialed as NE-TERT members.

During 2009, the Incident Dispatch Team participated in – 1 LPD Pre-Planned Event, 1-Hazardous Materials, 1 Funeral Detail, 1 Working Fire, 1 Full-scale exercise, 2 Tabletop exercises (NEMA and UNLPD), 1- Active Shooter Training (LSO), 1 Airport Accident Workshop and miscellaneous specialized training. Seven members have attended the 3-day COM-L NIMS certification course.



Tara Garza prepares maps  
On-site at Airpark - April 2009

Although activation of IDT/ TERT usually occurs during significant and rare events of long-term duration, it is integral that the team maintain training and awareness to ensure operational readiness for rapid deployment. Therefore, the team participates in ongoing training that includes periodic full-scale training exercises with user agencies, Emergency Management, TERT and outside agencies.



## ACCREDITATION

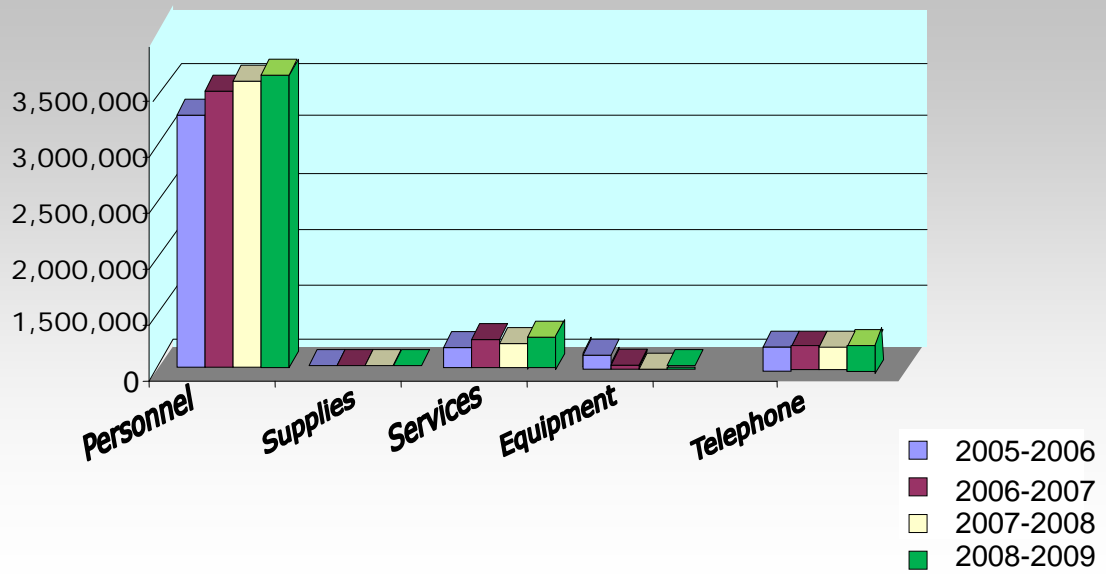
Lincoln Emergency Communications Center began its initial accreditation process with the Commission on Accreditation for Law Enforcement Agencies, Inc. (CALEA) in August 2001. The accreditation program requires agencies to comply with up to 218 standards in seven basic areas: organization, direction and authority, human resources, recruitment and selection, training, operations, and critical incidents. Lincoln is one of the few cities in the United States that Police, Fire and Communications have received national accreditation. The LECC became the 13th Public Safety Answering Point to receive national accreditation at the Cleveland conference in July 2002.

Accreditation is awarded for three years, during which time co-managers Linda Thurber and Linda Flaherty must submit annual reports attesting to continued compliance with the standards under which we were initially accredited. Communication Coordinator Julie Righter describes accredited status as having brought greater consistency to LECC operations and services. Noting "We've put into place what we said we were going to do." Coordinator Righter cited as an example the implementation of the Employee Incident Report and the resulting consistency among supervisors in their disciplinary responsibilities.

In May 2008 we began transitioning to the updated CALEA standards. This required an in-depth review of the newly revised standards as well as our existing standard operating procedures. In anticipation of the upcoming onsite in April of 2011, we plan to have one if not two mock assessments to verify compliance with the new and revised standards.

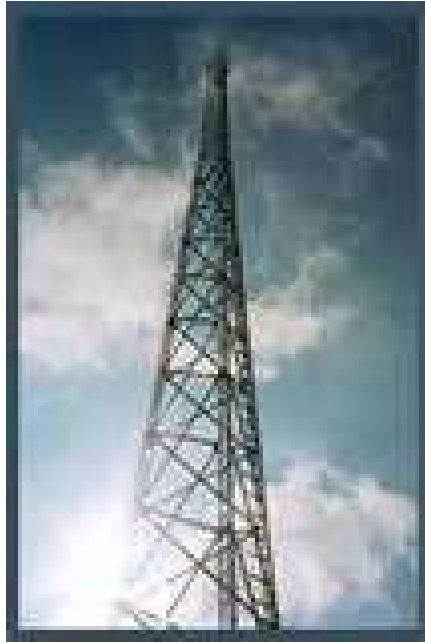
LECC is a member of the Public Safety Communications Support Network (PSCASN) which was created as a support system for agencies in the accreditation program. Coordinator Julie Righter is a CALEA Assessor and has traveled throughout the United States performing on-site evaluations. In 2009 Julie Righter and Linda Thurber assisted in a mock assessment for the Lincoln Police Department to assist them in the process of qualifying for continuing accreditation.

## 9-1-1 CENTER BUDGET



2005-2006	\$3,029,912	
2006-2007	\$3,062,170	+1.06%
2007-2008	\$3,478,520	+11.97%
2008-2009	\$3,510,520	+0.92%

# ***RADIO MAINTENANCE***



## ANNUAL ACTIVITY SUMMARY

In the previous year the Radio Maintenance Section's work mostly followed one theme: 800 MHz Rebanding. But much of that is behind us now and we are able to look towards the future and examine ways we can continue to partner with City, County, State, and other local subdivisions that make up our customers.

Rebanding is the process which Public Safety licensees across the U.S. adjusted their 800 MHz spectrum to mitigate interference with users of bandwidth. Sprint provided the City of Lincoln with the funding to reconfigure current equipment and replace equipment that could not function in the new band. Much of this work is done and we are currently "cleaning up" the few radios that have not come through the door or technical issues that have arisen from the new equipment.

Wall-mount stations, those used in office buildings, were replaced only to find that the existing remotes on the desks were not compatible and needed to be replaced. While Sprint has replaced these remotes for us, we are still searching for a solution to a tactical repeater no longer usable by the Sheriff's Office.

With Rebanding mostly behind us we have had the rare luxury of being able to focus internally on our own operations.

Though this is sure to be short-lived, with many of the radios only a few years old thanks to Sprint and a recent Homeland Security Grant, our repair volume has slowed significantly. Many of the failures occurring with the new equipment are predictable and usually quick to fix problems, like knobs getting sheared off, things that just happen in the line of Law Enforcement and Fire/Rescue. We know the calm in the storm will soon wear off as the age of the radio terminals increases and as they are exposed to more altercations and working fires.

For now we are able to focus on the future. For us, this is two-fold: we must look at the strengths and weaknesses for both our current radio technology as well as our staff's knowledge to stay in front of emerging technologies. By far the core strength of the Emergency Communications Division is our ability to self-guide and self-maintain the technologies we adopt. At times, this could mean sacrificing leading-edge solutions simply because they are not well aligned with our ability to support it. But by utilizing our own staff, costs are kept reasonable and we are careful in selecting products that are internally sustainable.

Our radio system is a prime example: the core EDACS air-protocol has been running non-stop for over 20 years. That means a radio purchased by a City agency over 20 years ago could still be used on our system. In fact, until Sprint came along

and forced out old equipment through rebanding, there were a number of radio terminals that old! The cost savings of not "churning" technologies over the many years has been substantial for agencies on our system. Interestingly, even new Project 25 Standards-based systems currently being installed by other metro areas have only a few features our EDACS system does not meet or surpass. Unfortunately there is now a down-side: the physical age of the entire infrastructure (circa 1997) and the fact that EDACS is a proprietary system in a time that is demanding open-standards-based everything.

20 YEARS APART

For these reasons there is no question that the Project 25 (P25) Standard protocol will be necessary in the very near future. Although licensees in 800 MHz are not in spectral duress as are others, most of our neighbors have been forced into new P25 systems for issues of spectral efficiency, demand for capacity, or to mesh together large





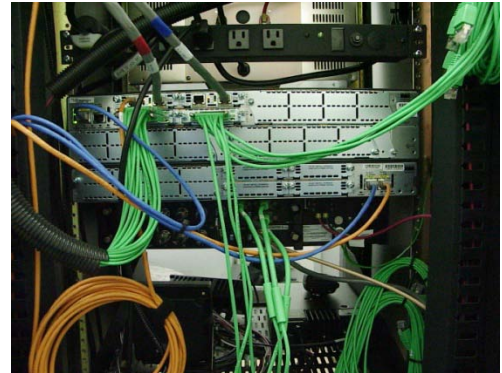
geographic areas. For the State of Nebraska, all of these issues forced them to create a wide-area P25 system. In time, it will become important for all communications systems to support inter-connection to achieve many of the goals demanded by our public-safety world.

With the exception of what we call the VIDA core, currently used by LPD for mid-speed mobile data to the cruiser, very little remains of our system that can be utilized in a P25 system. Of course the City's three communications towers will remain important assets, but much of the equipment at the towers and at Lincoln's 911 Center will not support future changes. Though a major upgrade of the system will be needed soon, present growth in the Emergency Communications Division cannot be delayed. Because of the VIDA core, we are able to support a small amount of growth without purchasing "legacy equipment" outmoded by P25. Specifically, Lincoln 911 is in need of several additional radio dispatch positions. Fortunately VIDA, the vision of Harris Public Safety Professional Communications supports some ability to leverage current technology without first finding a forklift.

Something else that is showing its age is staff training. Although we have adapted to our workload by spreading out and specializing in certain systems, little other than our core-electronics education will translate into newer technologies. The future will continue to dictate some specializing and more need for outside expertise, but it is imperative that all staff have the core knowledge needed to keep critical systems running on dark-stormy nights. Too much outside dependency or specializing could risk our ability to keep our responders communicating 24/7.

Regardless what our system looks like in the future some aspects are known. Heavy dependence on internet protocol (IP) networking is a given. IP networking can and is utilized in public safety systems but must be afforded protections and topologies somewhat different than a standard enterprise network.

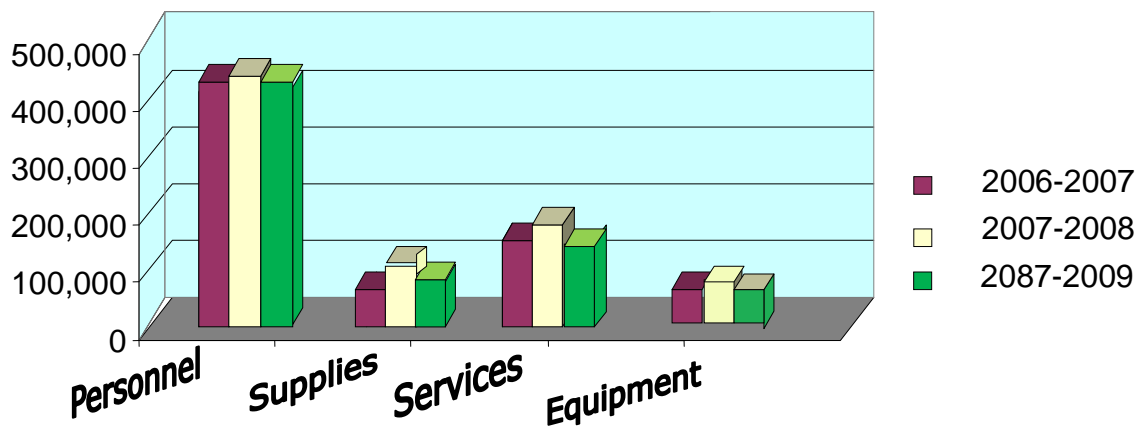
To help us all rise to the same knowledge level, our technical staff is in the process of formally learning IP networking-something we have been depending on for some time but not formally trained in that area. In fact, almost all mobile data applications now launched in Law Enforcement and Fire Equipment will utilize private IP connections for the ever-evolving data needs they have.



Lincoln Fire relies heavily on our staff to support vehicular systems used to provide mobile data for dispatch info and GPS sensing of vehicle status. This will become a major task as we migrate from temporary USB-based aircard systems to more permanent systems in the Fire Apparatus. IP is not only changing the "backroom" but it is changing the "office" for many of our first-responders.

Even as this goes to print the pace of equipment installs is increasing. Typically the New Year ushers in a number of fleet replacements that lead into the spring storm season. Along with the many tasks that will keep the Radio Maintenance section busy during 2010 we will continue our dialog on what path the Radio Maintenance Section follows with our customers to make sure the City of Lincoln's Radio Systems are as reliable and up to date as possible.

## RADIO SHOP BUDGET



2006-2007	\$725,797	
2007-2008	\$902,881	+19.7%
2008-2009	\$797,485	-17.7%





**A NATIONALLY ACCREDITED COMMUNICATIONS CENTER**