CATAWBA COUNTY E-911 COMMUNICATIONS CENTER

Annual Report

FISCAL YEAR 2003/2004

Prepared By:

Jerry W. Boggs, Administrator
Donna Stikeleather, Administrative Assistant
Mark D. Wireman, Training Officer

Catawba County E-911 Communications Center Management Team

Jerry Boggs, Communications Administrator
Donna Stikeleather, Administrative Assistant
Toni Gortney, Project Manager
Mark Wireman, Training Officer

E-911 Communications Center Telecommunications Staff

Supervisory Team

Brian Drum, First Shift
Larry Simpson, Second Shift
Larry Marlow, Third Shift

Senior Telecommunicators

Carl "Mitch" Campbell
Michael Cline
Marty Huffman

Telecommunicators

Cynthia Byrd, Laurie Dial, Brandon Edwards,
Amy Gosnell, Alena Greer, Bryan Jolly,
Cindy Lester, Jessie Kale, Randal Manning
Scottie Meadows, Steven Parkhurst
Jonathon Pate, Alan Pope
Tamara Saunders, Lori Sigmon

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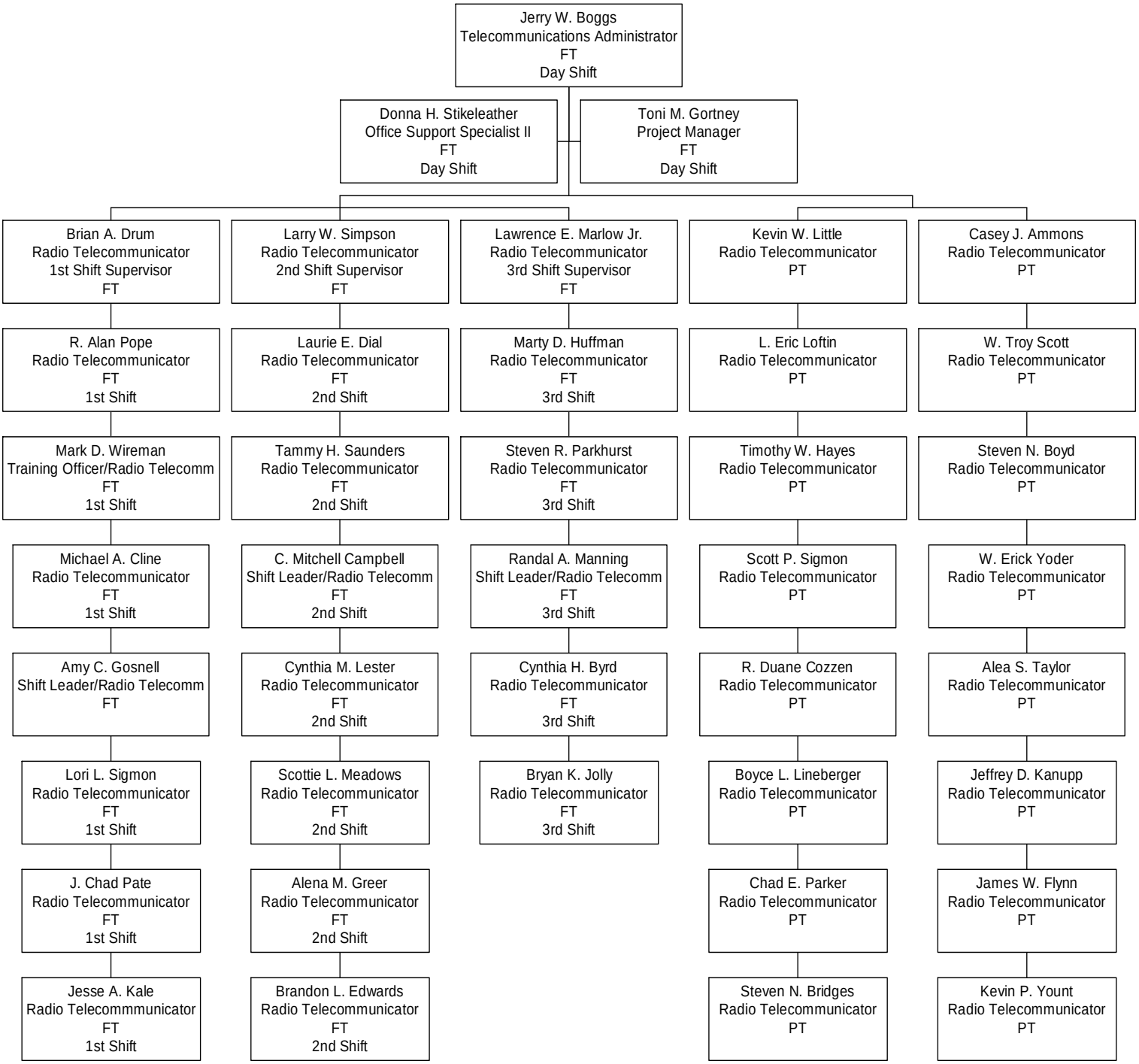
E-911 Communications
Organizational Chart
2005/2006



Mission Statement

The Catawba County E-911 Communications Center is dedicated to serving as the vital link between the public and public safety organizations through *responsiveness* and *technical excellence* while in *partnership* with its users and employees.

Catawba County Communications provides 9-1-1 and public safety dispatch services for:

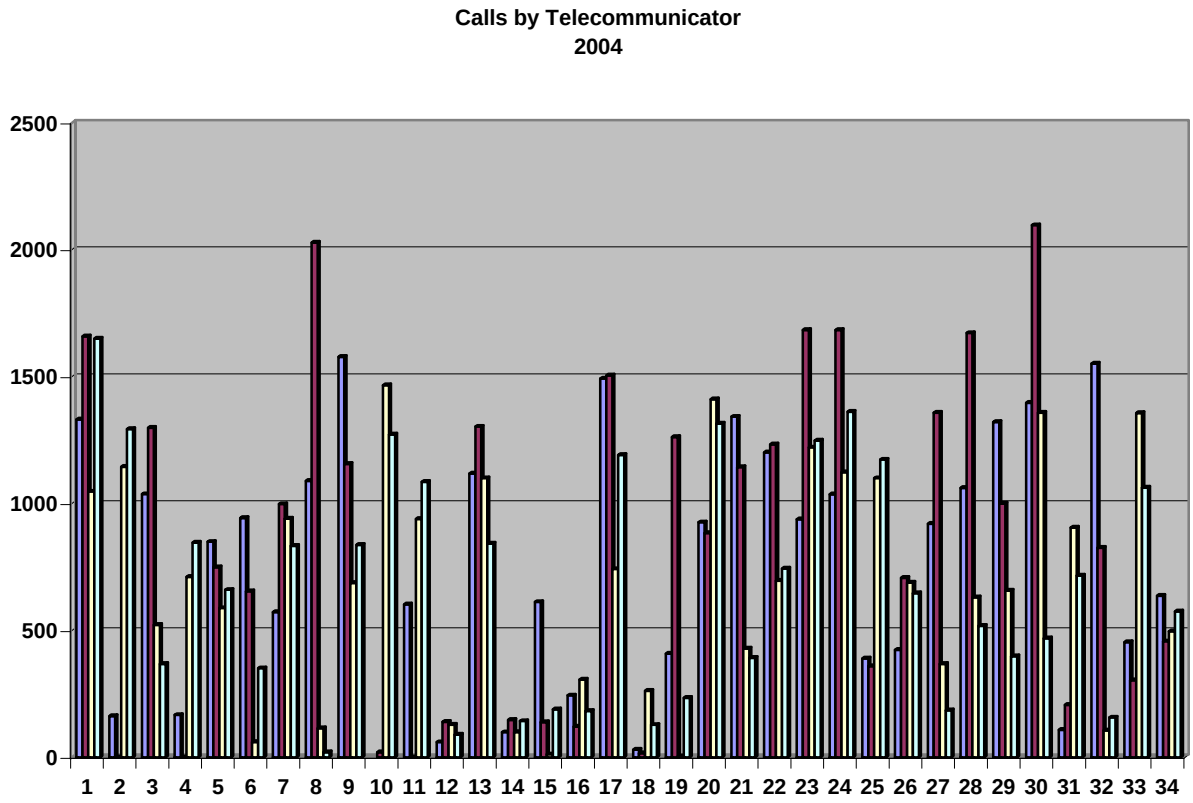
County of Catawba, Town of Brookford, Town of Catawba
City of Claremont, City of Conover, City of Hickory,
City of Longview, City of Maiden, City of Newton

Law • Fire • Medical

II. WORKLOAD AND CALL VOLUME STATISTICS

FISCAL YEAR 2003/2004

The Catawba County E-911 Emergency Communications Center began gathering statistical information late in 2003. Therefore, the 2003/2004 fiscal year are really the **first** time statistical information was available.



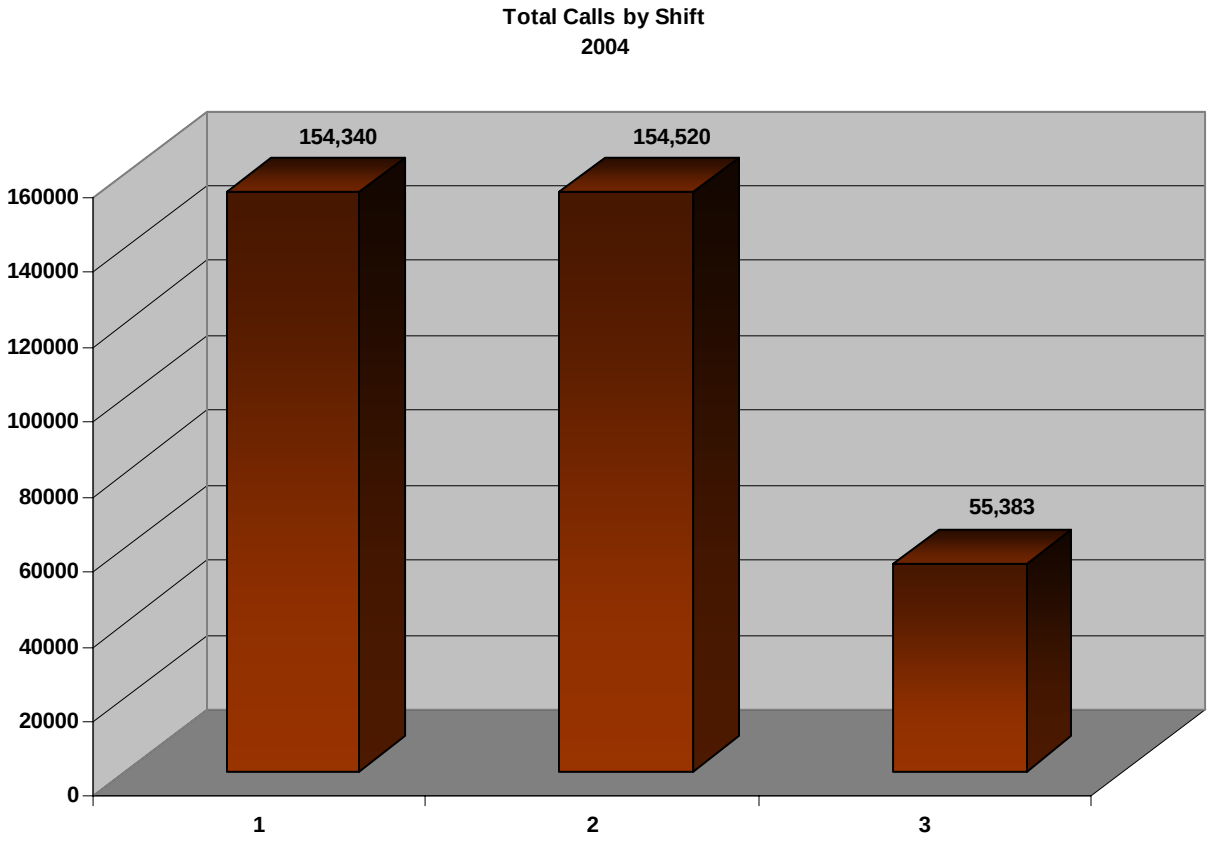
TELECOMMUNICATORS

Telecommunicators are the personnel who handle the calls in the Center. Telecommunicators receive specialized training and on-going In-service education. They work on shift schedule that allows 24 hours a day, 7 days a week coverage.
This performance measure shows the workload (number of calls taken and dispatched) of the Telecommunicators, both full-time and part-time.

CALLS BY SHIFT

The Catawba County E-911 Emergency Communications Center operates with personnel assigned to one of three shifts, thus ensuring 24 hours a day coverage.

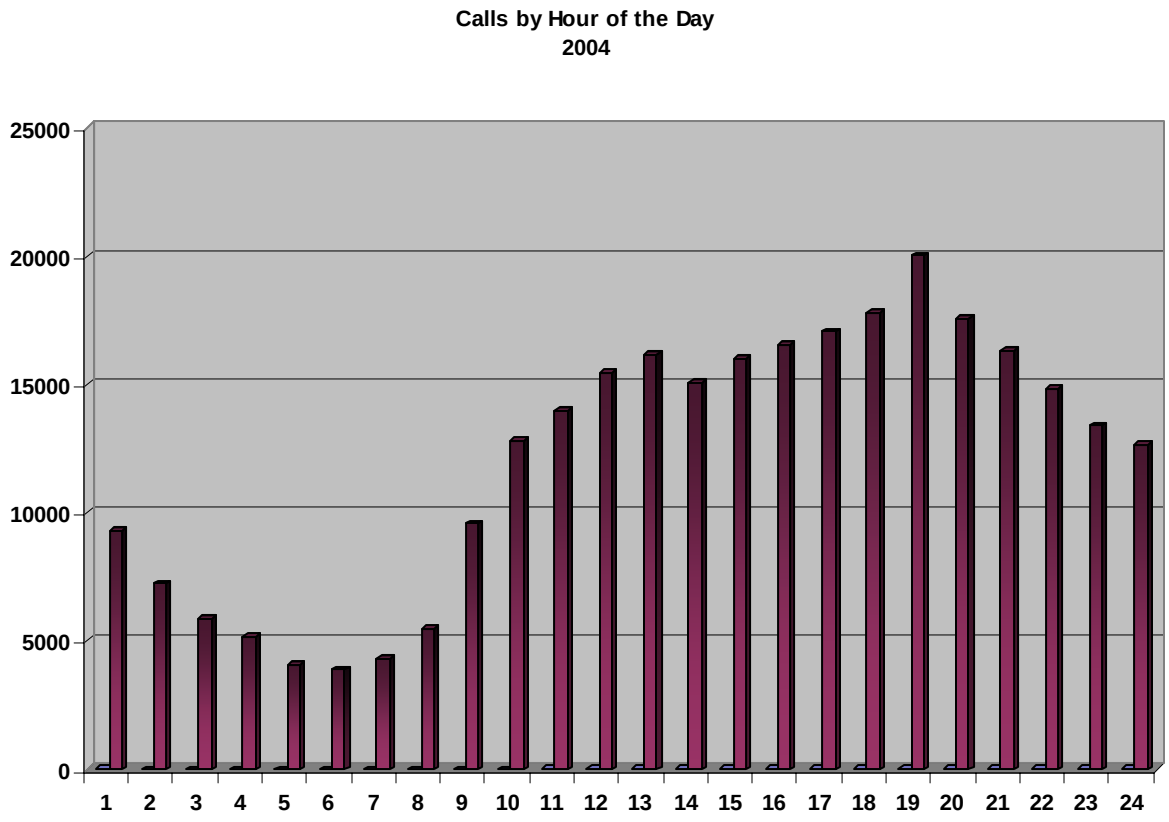
This performance measure shows the workload of the three shifts and the need for staffing on those shifts.



CALLS BY HOUR OF THE DAY

While the Catawba County E-911 Emergency Communications Center is staffed by three shifts, management soon realized that there are certain hours of the day, which the workload has almost become uncontrollable.

This performance measure is used as a tool for management to find those hours of the day and prepare for them by providing additional Telecommunicator coverage.



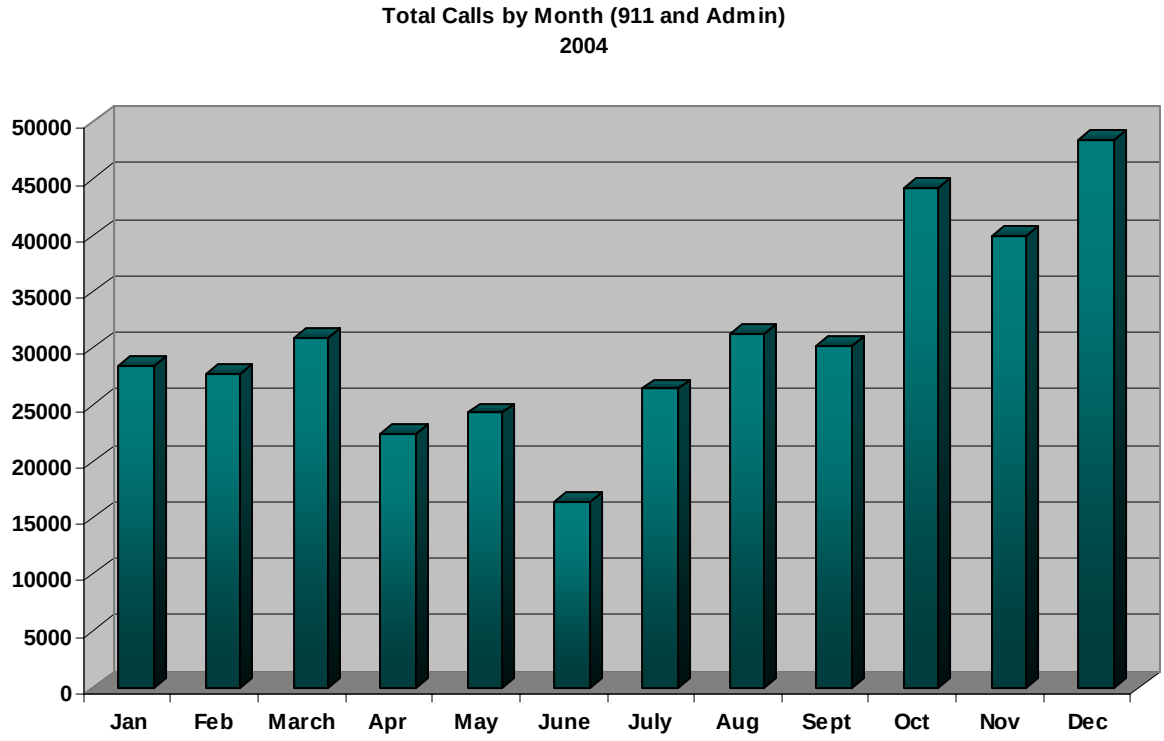
Incoming Telephone Calls Handled and Processed

TOTAL CALLS BY MONTH

Some calls to 911 results in a dispatch of a public safety agency to an emergency situation. Other calls to 911 results in a dispatch of an assisting agency (Mental Health, Social Service, Animal Control, etc.) While still other calls to 911 require information only.

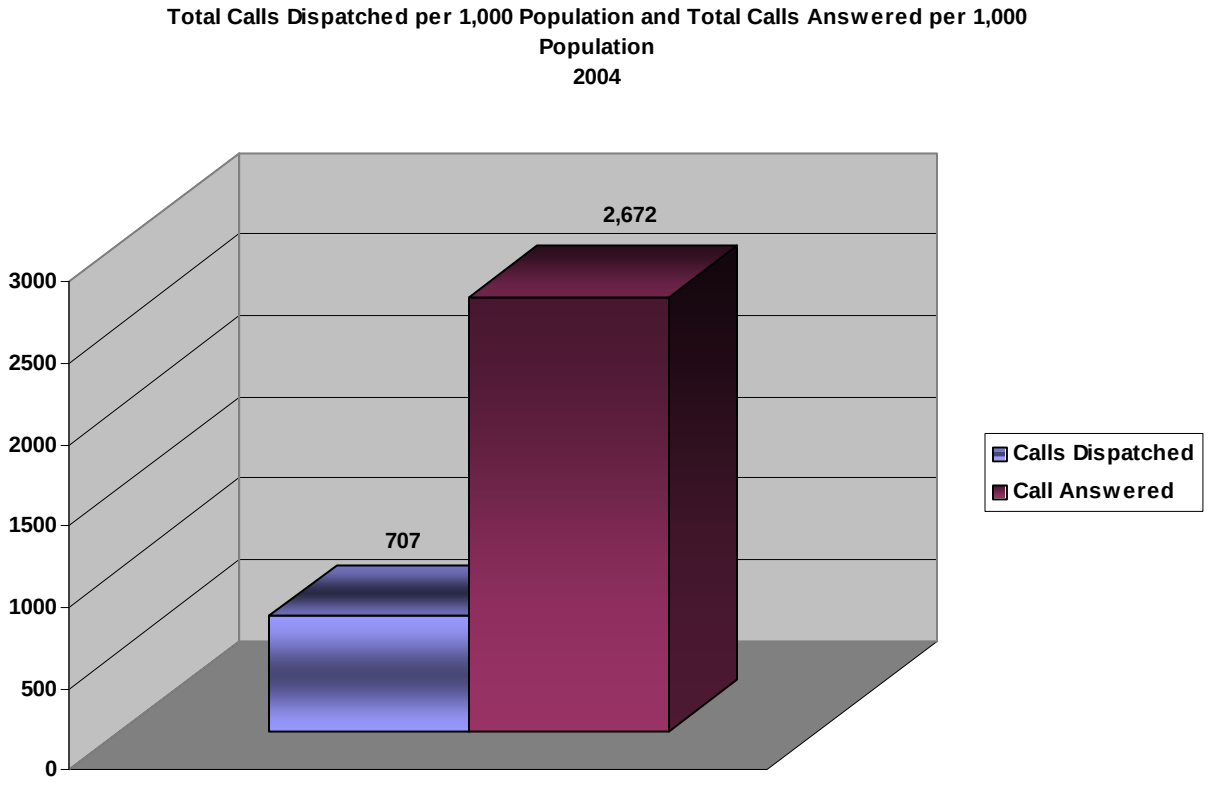
Accordingly, some calls to the administrative lines (Admin) result in dispatch of a public safety agency to an emergency situation. Other calls to the Admin lines results in a dispatch of an Assisting Agency. While still other calls to the Admin lines require information only.

This performance measure is used to gauge the workload from all the telephone calls received by the Center for an entire month.



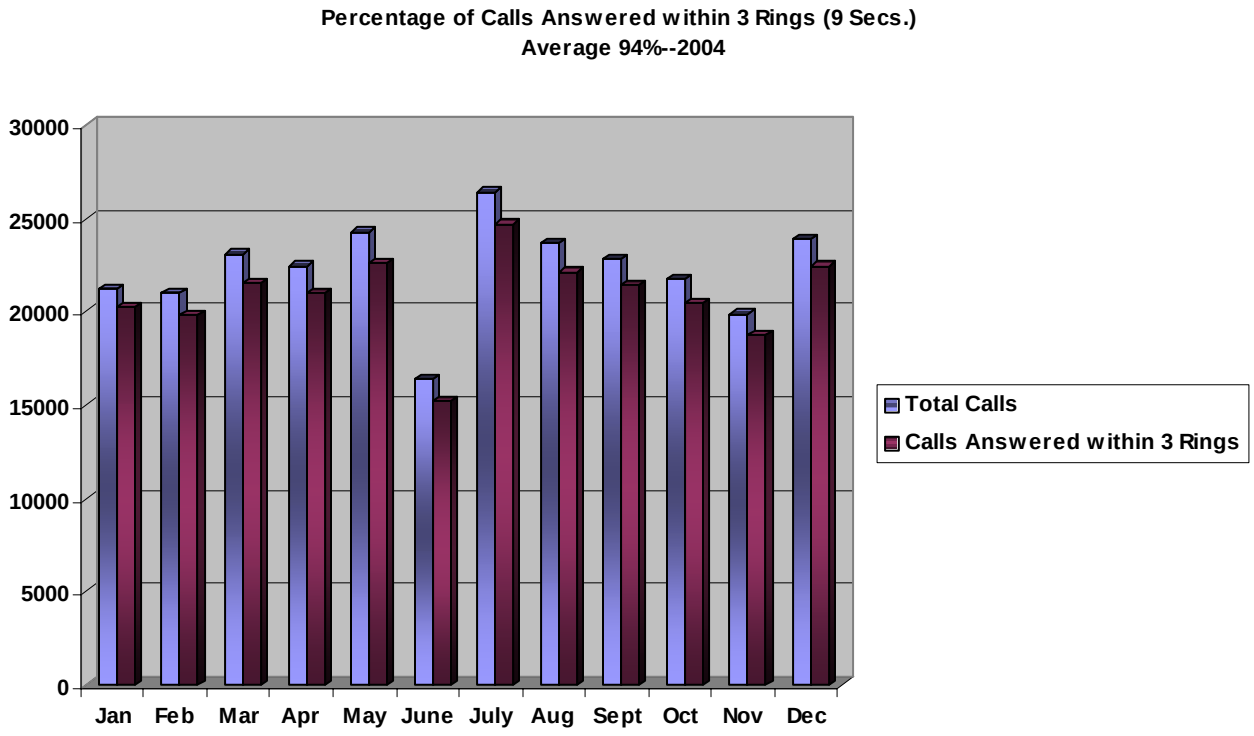
NUMBER OF CALLS ANSWERED AND NUMBER OF CALLS DISPATCHED PER 1,000 POPULATION

This performance measure is used to measure workload for the Catawba County E-911 Emergency Communications Center. All calls into the Center must be answered; therefore, this measure assesses workload.
Calls coming into the Center also reflect the actual or existing, if not full potential, need for emergency communications services.



AVERAGE NUMBER OF SECONDS FROM INITIAL RING TO ANSWER AND PERCENTAGE OF CALLS ANSWERED WITHIN THREE RINGS

These are effective measures that assess how quickly Telecommunicators answer calls. The time between the beginning of a ring and the next ring is almost null. Thus, three rings equal 9 seconds.



III. Business Division

Donna Stikeleather, Administrative Assistant, manages and supports the Catawba County E-911 Emergency Communications Center by handling the day-to-day activities associated with a dynamic organization.

PURCHASING

The Center issues and tracks its own purchase orders. In our fourth year of operation as a separate agency, the Center has issued 102 purchase orders.

PERSONNEL

In FY 2003/2004, the Center conducted several recruitments. Those recruitments resulted in the hiring of two full-time and five part-time Telecommunicators.

PAYROLL

The Catawba County E-911 Emergency Communications Center's payroll is based on a 14-day reporting period for the 34 employees. Administrative staff verifies and processes the electronic timesheets from the supervisors. Timesheets are then submitted to and paychecks issued from the Catawba County Finance Department. Administrative staff also tracks employee vacation, holiday and compensatory time accrued and taken.

ACCOUNTING

Accounting is performed according to general government accounting standards. All expenditures are tracked in accounts and reconciled with the County's Finance Department. Claims are generally submitted to the Business Division, where they are reviewed and submitted to the County's Finance Department using various methods. Administrative staff also prepares routine disbursement vouchers and procurements, and tracks 911 surcharge revenues that are identified in the Operating and Capital budgets. The Catawba County E-911 Emergency Communications Center also maintains an inventory of all fixed asset equipment, which is reviewed annually.

BUDGET

The budget for each fiscal year is prepared and recommended by the Administrator. The Operating Budget for Fiscal Year 2003/2004 is divided into two major pieces: 1) Salary and Benefits, and 2) Operating Expenses. The Operating Expenses are broken down into categories that encompass all the expenditures of supplying, maintaining and operating the Center.

The Capital Budget is primarily comprised of categories that are directly related to the procurement of major project items. The Catawba County E-911 Emergency Communications Center Fiscal Year 2003/2004 Capital Budget funded several purchases, some of which were:

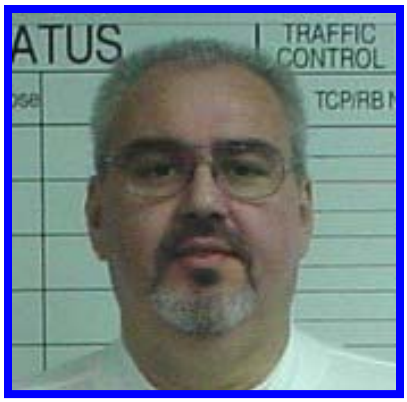
- Netclock Master Clock System
- Seven 42" plasma Screens for the Center's Mapping System (PowerMap)
- Completion of the Bellsouth PowerMap installation Project

SAFETY

The Catawba County E-911 Emergency Communications Center had a safe year with no accidents and only one Worker's Compensation claim. The Center also received the "Silver Award" from the N.C. Department of Labor in recognition of the outstanding safety and health efforts, which resulted in a substantial reduction of injuries and illnesses and the promotion of safer working conditions in 2003.

IV. TRAINING DIVISION

The Training Division includes the **Training Unit** (Continuing Education Program, Communications Training Officer Program and New-Hire Training Program), and the **Quality Unit** (Quality Assurance/Improvement and Customer service).



Mark Wireman, Training Officer

QUALITY UNIT

The Quality Improvement Unit is responsible for assessing the quality of the Center's performance; facilitating analysis of the quality data to identify equipment, procedural and/or training needs; and for facilitating policy and procedure development, approval and implementation.

This year the Quality Unit completed the customer satisfaction survey program. Customer satisfaction surveys are being mailed to randomly-selected callers representing the same discipline ratio as our calls for service. Survey recipients can respond in three ways: 1) by return mail via a self-addressed and stamped envelope, 2) completing the survey on our web site, http://www.catawbacountync.gov/depts/communic/communic.htm using a secure password which is provided in the mailings, and 3) by faxing the survey to the Center's Training Division. A detailed result of the customer satisfaction surveys are not yet available to give an overall picture of the Center's customer service, however, of the surveys returned thus far show that 80% of the respondents felt our Telecommunicators were "Professional and Courteous" and that 80% of the respondents felt they were "Very Satisfied" with our service. The customer satisfaction survey program will continue in the Fiscal Year 2005/2006.

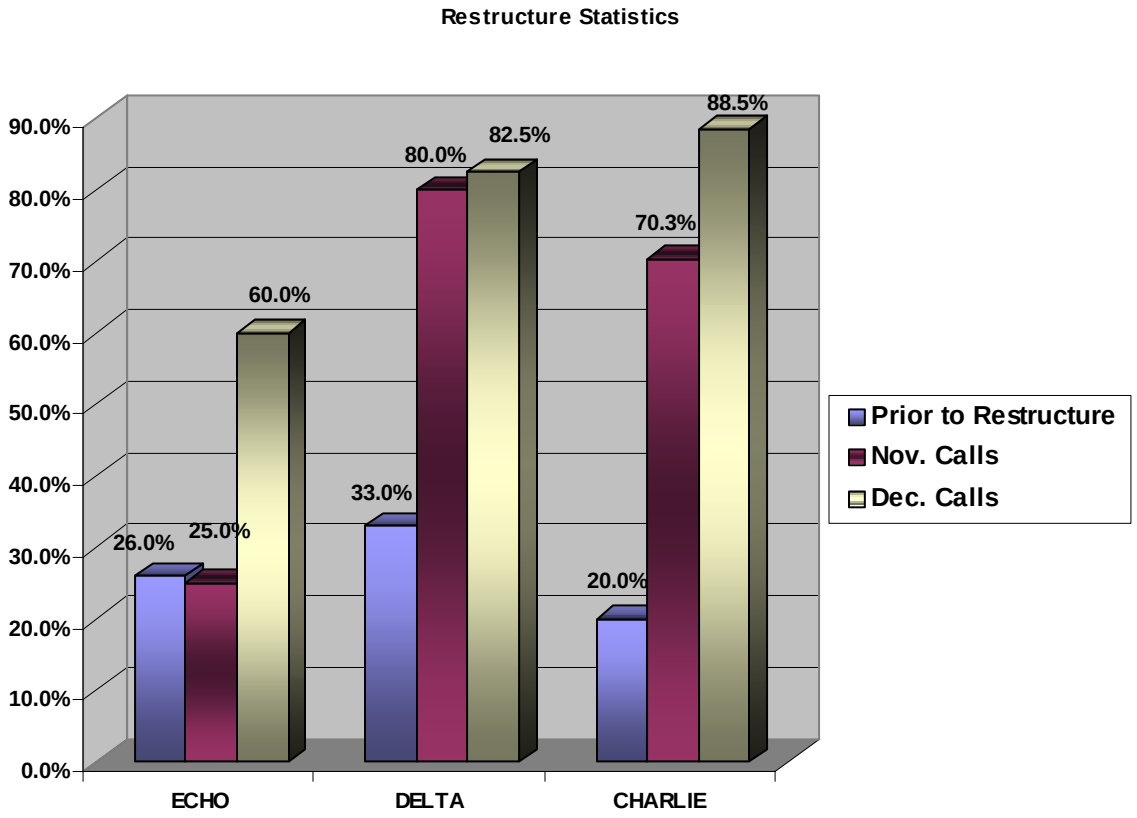
PERFORMANCE MEASUREMENTS

The dispatch process is measured in two parts: 1) time spent on the phone determining the appropriate response, and 2) elapsed time to dispatch after response has been determined. The performance criteria for time spent on the phone varies depending upon the general category of the call. Certain types of calls require different information be obtained in order to determine the appropriate response. If more is needed to determine the response, more time is needed on the phone.

Using the Restructuring Plan implemented on November 1, 2004, it is the goal of the Catawba County E-911 Emergency Communications Center to:

- **Complete the call taking process for 90% of the highest medical emergencies (ECHO level) received on "Wireline" E-911, within 60 seconds.**

- **Complete the call taking for 90% of emergent medical emergencies (CHARLIE and DELTA levels) received on "Wireline" E-911, within 90 seconds.**

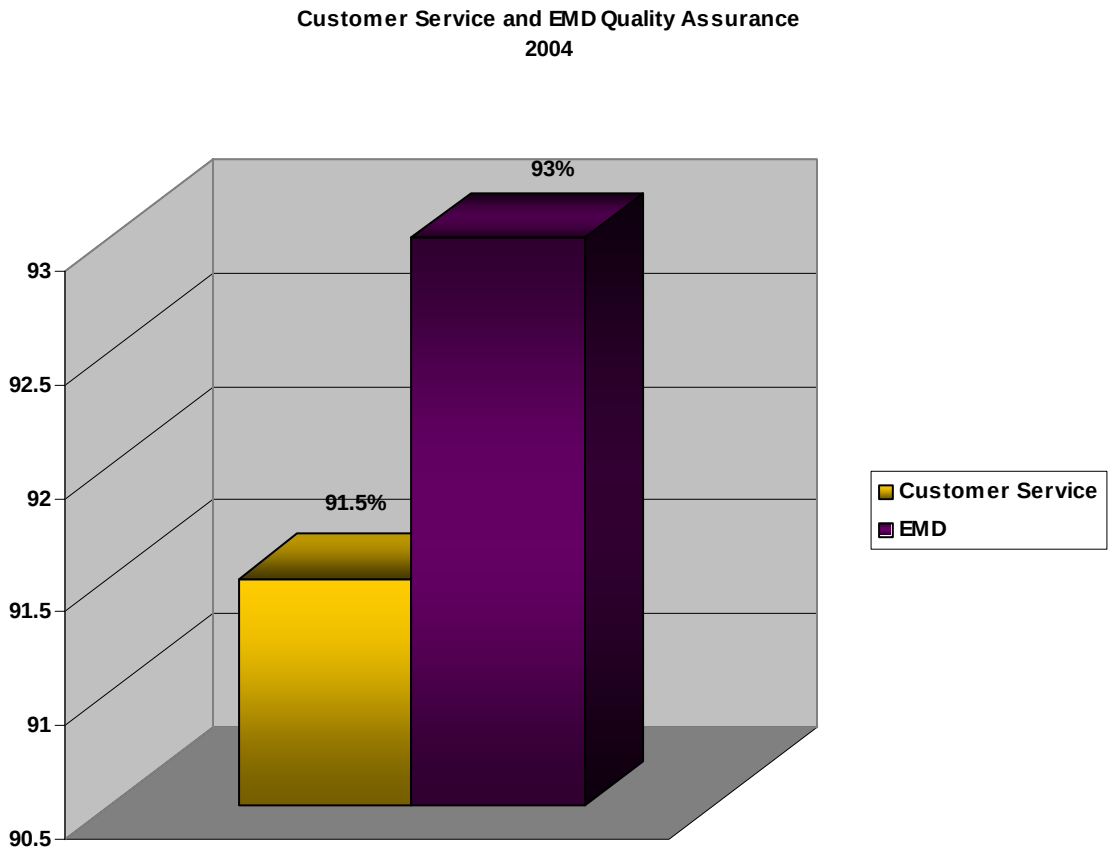


The performance measures are expected to reflect the resulting improvements of the Restructuring Plan by the end of January 2005.

QUALITY ASSURANCE AND IMPROVEMENT

The Quality Assurance and Improvement (QAI) part of the Quality Unit follows the same guidelines. The purpose of the QAI is to evaluate each Telecommunicator's compliance on procedural changes, call taking (interrogation of the caller), dispatch procedures (relaying appropriate information to the public safety or assisting agencies), and to provide feedback to the Telecommunicator's on calls taken in the Center. The QAI is broken down into two separate categories, Customer Service (which includes law enforcement, fire and assisting agencies) and Emergency Medical Dispatch (EMD) calls.

The goal of the Catawba County E-911 Emergency Communications Center is to reach and maintain 90% compliance for Customer Service and EMD calls.



NEW-HIRE TRAINING PROGRAM

The New-Hire Training program revolves around the basic concept that, by providing information, understanding and accessing necessary resources and practical experience to each new-hire, the Training Division is providing an opportunity to succeed. We are entrusted with the responsibility of developing, through effective training, the Telecommunicators of the future. We embrace the training philosophy that every trainee should be given the maximum opportunity to succeed by creating a positive environment in which learning is maximized.

The investment of time, energy and resources available are indicative of our commitment to assist the trainee in learning the demanding and complex responsibilities of their job as a Telecommunicator. By fulfilling our training commitment and retaining only those trainees who meet the performance standards, we also fulfill our obligation to the citizens and agencies of Catawba County.

During this fiscal year, nine Telecommunicators have been trained in the New-Hire Training Program for a total of 80 hours of classroom instruction before being sent to the Center for their individual on-the-job training (The Communications Officer Training Program).

Our success rate was uncharacteristically high with 100% of the trainees successfully completing the program and achieving either full-time or part-time status.

COMMUNICATIONS OFFICER TRAINING PROGRAM (CTO)

The purpose of the CTO Program is to provide newly-hired Telecommunicators with on-the-job training, guided practice and evaluations. The CTO's also provide recommendations to the Training Officer regarding policies and procedures; training and personnel issues as they pertain to training; and issues of organizational concerns as they relate to training.

The Catawba County E-911 Emergency Communications Center now has eight CTO's including Supervisors. Each of the CTO's has no less than 18 months of public safety Telecommunicator experience and was recommended by his/her supervisor. Each of the CTO's follow a standard procedure or outline for the on-the-job training of the newly-hired Telecommunicator that was developed by the Training Officer according to the needs of the Center.

CONTINUING EDUCATION PROGRAM

Continuing Education efforts stem from the Training Division's belief that people are the most valuable resource available. Therefore, we place an emphasis on employee career development and maintenance of a work environment that inspires employee excellence and success. Providing employees with the best training available, while recognizing their needs and accomplishments, assures the continued success of the individual and organization as a whole.

Continuing Education Classes (In-Service) are mandatory (March 2004) for all Telecommunicators and occur on a bi-monthly schedule that ensures that all Telecommunicators have the opportunity to attend one of the classes. Each class consists of three hours and is broken into two separate categories: 1) Emergency Medical Dispatch (EMD) education, and 2) Communications Center related education. Telecommunicators are also required to ride with the Catawba County Emergency Medical Service for four hours during the calendar year so they may understand and appreciate the vital link we are to the Paramedics.

Although the Training Officer has only been officially recognized since June 2003, Continuing Education has been occurring since 2002 by utilizing the talents and the teaching knowledge of one of the Center's Telecommunicators.

Continuing Education Classes

Year	Number of Classes	Number of Attendance	Number of Contact hours
2002	12	32	36
2003	12	32	36
2004	12	37	36
Sub Total:	**36**	**101**	**108**

Other Specialized Training (EMD)

Year	Number of Classes	Number of Attendance	Number of Contact hours
2002	1	2	24
2003	2	11	24
2004	1	7	24
Sub Total:	**4**	**20**	**72**
Grand Total:	**40**	**121**	**180**

PUBLIC EDUCATION AND OUTREACH

Public Education is a facet of the Training Division. In 2004, four presentations were conducted at the Catawba County Commissioners' meetings. There have been 10 tours of the Center by various community and civic groups. Presentations were made to schools and scout groups, as well as other agencies.

In October of this year, the Catawba County E-911 Emergency Communications Center was well represented at the "Training Day" event held by the Bandys High School Criminal Justice class. The Mobile Command Post was used by the students to "dispatch" public safety agencies for the event. The students took on the roles of the various public safety agencies involved in the scenario.

Training Day-October 22, 2004

Bandys High School

In November 2004, a complete overhaul of our website was begun and should be completed by February 2005. On the new and improved website, citizens will be able to access more information about the Catawba County E-911 Emergency Communications Center, along with links to forms (property checks, etc.), printable brochures for teenagers and a 911 activity book for children.

V. OPERATIONS DIVISION

The Operations Division is responsible for providing emergency and routine public safety radio, telephone, 911, and computer-aided dispatch services to our user agencies. The Division is divided into three shifts (Dispatch Unit) responsible for the 24-hour, seven day a week service. Personnel assigned to the Operations Division include the Administrator, three Telecommunicator Supervisors, three Senior Telecommunicators, 15 full-time Telecommunicators, 16 part-time Telecommunicators, the Administrative Assistant and the Training Officer.

DISPATCH UNIT

The Dispatch Unit is comprised of three shifts. The first shift works 7:00 a.m. to 3:00 p.m.; the second shift works from 3:00 p.m. to 11:00 p.m.; and the third shift works from 11:00 p.m. to 7:00 a.m. All Telecommunicators work a four-days-on and two-days-off schedule.

Telecommunicators routinely handle hundreds of calls for service everyday. Their dedication, professionalism, and experience provide them with the background to render aid and comfort callers from our community. During this past year, Telecommunicators prioritized, coordinated, and dispatched 104,711 calls for assistance, including (but not limited to):

8,449 Alarms
2,437 Assist Motorists
1,337 Breathing Difficulties
4,110 Call by Phone (Assisting Agencies)
1,123 Chest Pain
3,389 Domestic Arguments
1,862 Larcenies
2,810 911 Hang Ups
2,049 Suspicious Vehicles
2,699 Traffic Accidents

While each and every call for service is important, there are some specific incidents that stand out with the Dispatch Unit. A few incidents that demonstrate teamwork, dedication, and professionalism are as follows:

November 18, 2004

At 18:06 hours, Telecommunicator Mitch Campbell took a 911 call from a 39-year-old female that was having a severe asthma attack. Mitch, with 11 years of experience, knew immediately the seriousness of the situation as the female could only speak words and not complete sentences. Mitch immediately dispatched the EMS, first responders and law enforcement to the address. Mitch stayed on the phone offering re-assurance to the caller that, indeed, help was on the way and giving her hope. The caller, being overcome with the lack of oxygen, dropped the phone. Mitch continued to stay on the line trying to get the caller to make some kind of acknowledgment that she was still conscious.
The EMS arrived, and Mitch was able to tell them that they were at the right apartment because he could hear them knocking on the door. The EMS entered the residence and

found the female unconscious, lying on the sofa with the phone on the floor beside her, and began to render aid.

Telecommunicator Campbell did an outstanding job with this call. Unfortunately, the female later died at Catawba Valley Medical Center.

During this call, the other Telecommunicators knew the situation of Mitch's call and answered all the radio and telephone calls, allowing Mitch to dedicate himself to the situation at hand.

November 25, 2004

At 05:25 hours, Telecommunicator Randal Manning took a 911 call from a 79-year-old female complaining of an allergic reaction to medication. Randy could tell that the caller was in an acute situation and was very fearful. With the assistance of a fellow Telecommunicator that actually dispatched the EMS and first responders, Randy was able to stay on the phone using calming techniques and re-assurance. The first responders and EMS arrived and transported the caller to the hospital.

On December 11, 2004, the Catawba County E-911 Emergency Communications Center received a thank you letter from the caller "…And a special Thank You to the Man who answered MY call, who helped me to stay calm and told [me] where the ambulance was and how close it was getting to my home…"

December 4, 2004

At 17:01 hours, Telecommunicator Cindy Lester took a 911 call from a residence on Highway 16 South that would forever change the Catawba County E-911 Emergency Communications Center.

While Telecommunicators routinely deal with serious medical emergencies every day, it was personalized and far from routine when this call was received.

A female was calling to report a 45 year-old-male unconscious and not breathing, and then gave Cindy his name—Darius Deal—a fellow Telecommunicator and friend!

Cindy, in her professionalism, immediately dispatched the call to EMS, first responders and law enforcement…hoping someone could get there as fast as possible. Fortunately, an EMS unit was less than two miles away when the call was dispatched and arrived very quickly, along with first responders and law enforcement.

The EMS and first responders worked feverishly to revive Darius. Unfortunately, Darius did not survive, and was later pronounced dead at Catawba Valley Medical Center.

On December 7, 2004, a cold and rainy day, the entire full-time staff attended Darius' funeral as Honorary Pall Bearers and gave Darius a last farewell.

December 29, 2004

At 17:52 hours, Telecommunicator Mitch Campbell took a 911 call from a very panicky and overwhelmed elderly woman stating that she had just found her husband, and she thought he was dead. Part-time Telecommunicator Troy Scott had also picked up on the same telephone line, and once he heard the situation immediately dispatched the call to EMS and first responders. The call was dispatched in less than forty-two seconds.

An EMS supervisor that happened to be near the call, responded as well. Upon his arrival, the elderly male was, in fact, clinically dead. By using a defibrillator he was able to re-start the man's heart.

Later that same evening, the EMS supervisor came by the Catawba County E-911 Emergency Communications Center and commented on the job well done by the Telecommunicators.

VI. TELECOMMUNICATOR OF THE YEAR

History

Each year, the second full week of April is dedicated to the men and women who serve as public safety Telecommunicators. It was first conceived by Patricia Anderson of the Contra Costa County (Calif.) Sheriff's Office in 1981 and was observed only at that agency for three years. Members of the Virginia and North Carolina chapters of the Association of Public-Safety Communications Officials (APCO) became involved in the mid-1980s.

By the early 1990s, the national APCO organization convinced Congress of the need for a formal proclamation. Rep. Edward J. Markey (D-Mass.) introduced what became H.J. Res. 284 to create "National Public Safety Telecommunicator Week." According to Congressional procedure, it was introduced twice more in 1993 and 1994, and then became permanent, without the need for yearly introduction.

The official name of the week when originally introduced to Congress in 1991 was "National Public Safety Telecommunicators Week." In the intervening years, it has somehow become known by several other names, including "National Public-Safety Telecommunications Week" and "International Public Safety Telecommunicator's Week."

Catawba County E-911 Emergency Communications Center

Each year we have celebrated National Public Safety Telecommunicator Week by providing a meal for the Telecommunicators and, on occasion, presented them small gifts such as pins, tie tacks, etc. In 2004, we implemented the Telecommunicator of the Year Award that will be part of the celebration each year. Each Telecommunicator nominates a person from their shift. The person with the highest number of votes is then put on a ballot and then everyone votes for one individual.

Telecommunicator of the Year for 2004 is Chad Parker. Chad had been with the Catawba County E-911 Emergency Communications Center for over 12 years.

Chad was born and raised in Catawba County and a member of the Maiden Fire Department. Chad worked on third shift and achieved shift supervisor, before stepping down from those responsibilities so that he could go back to school and receive his B.A. in Education.

Chad's mentor on third shift was fellow Telecommunicator Morris Petree. Morris had the unusually ability to know every street in the county by memory—Morris didn't need a map!
That same ability rubbed off on Chad. Chad is a "human map", as his co-workers call him. Chad remembers streets, addresses, and gives directions without looking at a map.

Congratulations Chad!

VII. EVALUATION OF OUR MID-YEAR GOALS 2004

1. When a HOT call is received by E 9-1-1, the emergency is life-threatening, and the need for prompt medical care is imperative. To ensure citizens receive prompt medical care, the Communications Center will dispatch the appropriate agency within one (1) minute from the time the call is received in 90% of HOT call situations. This procedure will be implemented by September 30, 2004. Reports will be provided on a quarterly basis showing progress of this outcome.

   *As of November 1, 2004, a restructuring plan for Emergency Medical Dispatch (EMD) was implemented. At that time, Echo calls were at 26% within one minute. As of December 31, 2004, Echo calls were being answered at 60% within one minute – **a 34% increase**. The Medical Director agreed on this restructure. This restructuring plan will be reevaluated by the EMD Committee during the February 9, 2005 Committee meeting*

2. Between the hours of 10:00 a.m. and 8:00 p.m., Monday through Friday, it is shown to be the peak hours for the number of E 9-1-1 calls received with the heaviest peak times being from 2:00 p.m. to 6:00 p.m. During 70% of these heavier peak hours, there will be additional personnel (either part-time or full-time with shifted hours) working to decrease the time in which a phone line is answered and to decrease the amount of time to respond to our internal customers on the radio. This will be implemented by December 31, 2004. Call transactions will be monitored to evaluate efficiency and effectiveness of this new procedure. Reports will be provided on a quarterly basis showing the status of this outcome and to help establish benchmarks for future efficiency planning.

   The statistics continue to show the peak hours are from 10:00 a.m. until 10:00 p.m. However, due to sickness and a death in the 911 Center, this outcome is still on going.

3. To educate citizens about the Emergency Medical Dispatch (EMD) program and in understanding of what happens when placing a 9-1-1 call, several educational programs will be implemented:

   - During the four Commissioners' meetings that will be located at various locations around the County, there will be pamphlets and a slide show presentation set up to provide education to citizens on the EMD program and what happens when you call 9-1-1. Completed by December 31, 2004.

     To meet this outcome, we developed a "Commitment and Pride in Serving the Citizens of Catawba County" brochure; a PowerPoint presentation that educates the citizens on how to use 911 and what they can expect when they call; a display board showing pictures of the activities of the 911 Center, mutual aid for Chowan County, and Telecommunicator of the Year; and we

attended all four Commissioners' Meetings held throughout the county.

- Information will be provided to the County's Public Information Officer on the EMD program for placement on the Government Channel. This will need to run at various times for a minimum of 6 months. Completed by December 31, 2004.

  Catawba County's PIO received a video tape-recording that was made to be displayed on the Government Channel. This presentation has been and is currently running to educate our citizens about the use of 911 and the services we provide.

- Explore other opportunities to provide education to the citizens about E 9-1-1, such as participating in EMS week, Public Safety Education week, etc.

  We have visited numerous public safety agencies (fire departments and police departments). These agencies have taken and distributed the "Commitment and Pride in Serving the Citizens of Catawba County" brochures for education in their districts. Catawba County schools are visited, and a 911 operator educates elementary-aged students on 911.

4. The Communications Center provides services both to the citizens of Catawba County as our External Customers and the public safety agencies of Catawba County as our Internal Customers. To measure the quality of service provided, a customer service survey for our Internal Customers was implemented during the 2003-2004 fiscal year. The current customer services satisfaction rate is 90.8%.

   - To provide a measurement of the quality of service to the External Customers, there will be a web-based survey available for citizens to complete after utilizing our services. There will be random phone call surveys conducted on a monthly basis to an average of 5 callers to reach those individuals who may not have access to the web-based survey. This will be completed by October 31, 2004. The results of this survey will be used to improve the survey, to evaluate for training needs, and compile data for benchmarking purposes. A final survey with benchmarks will be in place by December 31, 2004.

     The external customers' web-based survey was completed November 1, 2004. Five letters were mailed to citizens the first week of December, and we have received all five back. All were very positive about our services.

- To improve the quality of services provided to our Internal Customers, the measurement percentage will be increased to 94%. This will be completed during the 2004-2005 fiscal year.

  This is an on-going objective. Thus far, we have achieved a 91.5% customer service rating, according to statistics.

5. The RF coverage within Catawba County was reviewed during 2003. A sub-committee was established, and upon their recommendations, the construction and build-out of two sites were approved:

   - Construct and build-out sites that were recommended by the sub-committee to increase the RF coverage for Catawba County Public Safety agencies. This should be completed by September 31, 2004.

     Site build-out is not complete. Contract agreements are in progress with the City of Hickory, City of Conover, and Catawba Rescue. 95% of all equipment has been ordered.

   - Document costs for further expansion of 4 TX (transmit) sites and 7 RX (receiver sites) for the VHF RF system, and make appropriate recommendations as to the cost and a phased in approach by November 15, 2004 for budgeting purposes.

     Implementation of the Voter system includes 4 TX sites and 7 RX sites. This implementation is estimated to be completed by April 2005.