Telecommunications Department

Paul Kindell, Director

Mission: Telecommunications is responsible for the design, installation, and maintenance of the Warren County 911 Center, communications systems, and data systems utilized by Public Safety agencies in Warren County. The department is also responsible for providing telephone service to government offices and their affiliates. Additionally, Telecommunications supports the Mobile Data Systems and CAD "Computer Aided Dispatch" systems housed in the Telecommunications Network Operations Center (NOC) and wide area data network along with auxiliary subsystems comprised of video, alarm, paging, telemetry, point-to-point microwave, buried cable, fiber optic networks, routers, switches and more.

Number of Full-Time Employees: 19

Budget:

Employee Costs: \$1,300,044.24
Operating Costs: \$1,430,400.39
Capital Costs: \$471,796.22

Total Costs: \$3,202,240,70



INTRODUCTION

- Warren County Telecommunications department is located in the lower level of 500 Justice Drive.
- The department is administrated by a Director, and staff members comprising 5 divisions, Administrative, Telephone, Radio, Data Systems, and CAD/RMS.

ADMINISTRATIVE DIVISION

 The Administrative division coordinates and prepares all communications, correspondence, purchase orders, transfers, payroll, and resolutions with the Commissioner's Office, OMB and the Auditor's Office.

 Admin tracks all expenditures, receipts, and billing to the departments and agencies for services provided.

CAD SYSTEMS DIVISION

Prepared by
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CAD/RMS Manager
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The CAD/RMS department came to the Telecommunications Division in August of 2008. The department provides user and configuration support to the following systems; Computer Aided Dispatch (CAD), Fire Records Management System (FRMS), Law Records Management (LRMS), Decision Support System (DSS), Mobile Data Computer (MDC), and Open Query (OQ). In addition, CAD/RMS also coordinates with vendors, trouble-shoots system problems, gathers information, and maintains user support groups. The department also handles all of the county mapping for the CAD system, and training of the public safety agencies.

CAD/RMS Manager – Responsible for the configuration and user support of the CAD and records management systems. Interfaces with vendors and passes along information to the public safety agencies. Provides monthly reports and attends monthly Law and Fire meetings.

GIS Mapping – Creates and updates county-wide maps for the CAD system. The map consists of graphical representations of streets, parcels, common locations, political subdivisions, jurisdictional boundaries (fire, police, EMS response areas), aerial photography, selected premise information, hydrant locations, and support information (electric, telephone, zip codes, topographical, rail, and water data). Also responsible for records requests such as a copy of the 9-1-1 call or printouts of a Call for Service form the CAD system.

Training Specialist – The trainer is responsible for documenting and creating training materials for the systems and applications supported by the Telecommunications Department. The trainer supports and provides training to Warren County Agencies.

2009 Statistics:

CAD – Total entries into the CAD database for 2009 – 60,040 (additions, deletions, or changes)

Records Requests – 412 - Records/Incidents, 75 - 911 Call Problem reports

Mapping Updates – 90 MSAG Updates, 311 Common Places, and 594 Zones for In County map changes/updates

2009 Highlights:

- Documentation/Training Provided documentation and training to many of the agencies in the county; Mason FD, Springboro PD, WCSO, WCSO Jail, Deerfield Twp FD, Clearcreek Twp PD, Salem-Morrow FD, Corrections officers, Harlan Twp FD, Juvenile officers, other county agencies (non public safety)
- System Upgrades FRMS, LRMS, GGM/MGU, Switched 9-1-1 to the new Datamaster platform
- CAD Changes Carlisle FD configuration changes, joint response changes with Mason FD and Deerfield Twp FD, configuration of Hamilton Twp. 2nd alarm assignments, response changes for Mason FD, and designed CAD DSS reports for WCSO
- Special Projects worked with the GIS department on the LBRS project, hosted a demo of our audio logging system for Cincinnati PD, added Aerial Photography to dispatch consoles, assisted in moving Springboro dispatch into their new building, County Wide PDF maps
- Meetings CCAO legislative meeting, VisionTek troubleshooting, Police Primary Split, participated in the VZW technology review, License Plate Recognition (LPR), Next-Gen 9-1-1, design meeting to add pictometry to the dispatch consoles, met with Montgomery and Warren County Fire officials to design mutual aid radio plan, monthly meetings with Fire and Law (C.A.R.T., Fire Chief, Police Chief, LCWG, FCWG, and Comm. Advisory Board)
- Miscellaneous created Radio training documentation, completed commissioner reports for the Telecommunication division, assisted with Boy Scout tour (Brian Hotel), monthly newsletter, monthly CAD and telephone reports

2010 Goals:

CAD and Tandem upgrade

Web based training materials

DATA SYSTEMS DIVISION

Prepared by
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This document reflects the 2009 activities of the Telecommunications Department - Data Systems Division. The information was derived from Key Performance Indicator reports, One on One report and calendar journaling.

Metrics

10,400 based on 40 hour work period for a team of 5 were funded in 2009. Metrics for DST (Data Systems Team) are collecting in four categories.

- 1. Meetings Internal, External
- 2. Projects Projects as designated by the Division Manager.
- Administration Phone calls not related to tickets, Voice Mail processing, Journaling, Staff Management, Payroll, OMB related.
- 4. Break Fix Was working and is broken. This includes call outs, Dispatch Problem Reports, Research, etc.

Team Time for each metric representing 10,400 team hours: Meetings – 500.5 hours Projects – 2,047.5 hours Administration – 1,147.25 hours

Ticket History for DST Support Activities. Dispatch Problem Reports are not counted in these totals.

2009 – 2019 tickets processed 2008 – 1843 tickets processed 2007 – 2106 tickets processed 2006 – 1776 tickets processed 2005 – 1144 tickets processed 2004 – 1034 tickets processed

Mile Stone Achievements

The activities represent major planning, acquisition, and implementation or troubleshooting efforts.

Mobile Data Computers:

Fire Mobile CAD flexible unit numbers created and deployed

Field Based Reporting Completed with diagrams

Wants & Warrants added to Law Records Management queries

VisionTEK Client Upgrade

Image Server Upgrade

Started License Plate Reader project with Cincinnati

IPASS Server Upgrade

Mobile Data Computers deploy to Community Corrections for the first time

PrePlan4Me - Updates for Fire Agencies

Tech Refresh – Waynesville Police

Tech Refresh - Franklin Police

Jaws of Life Software evaluation

Mobile Data Computers deployed to Adult Probation for the first time

Radix Account Cleanup

Crash Recovery System - on Mobile Data Computers

Automatic Vehicle Location System for Clearcreek PD evaluated

Network Upgrades:

Telecom Client Network Support

Emergency Services Client Network Support

Public Safety Network-Printer server installation

Web Proxy - Replacement of 5 proxy devices with one

RSA - Replacement of expired tokens

RTRA Project completed

Added 2nd tape backup unit and one off line spare unit

F.B.I. Security Audit

Dearth Water Tank - New UPS and power monitoring capability

Storage Server Logical reorganization

Storage Server permission review and documentation

Asset Disposal of Zetron Paging Terminal

Printer installation issue - Major project to fix printer issues PD and FD

Mason MDC's configured to access Mason City Citrix Gateway

Switch replacement Goose Creek Tower Site

Switch replacement Lytle - not storm related.

Switch replacement Snider Site

Switch replacement Hatfield Tower Site

Switch replacement EOC CAN 0

Switch Audit – Manchester Tower Site

Storm Damage repairs at Lytle Tower Site

Citrix Gateway:

PS4 to XenApp Migration

Xen Server Migration started

Server Upgrades:

2 Additional VMWare ESX Servers
Add two Domain Controllers with 2003 SP R2
Upgrade existing DC's to 2003 SP2 R2
Fire Records Management System Upgrades
SMS server upgraded
New Central Resources web server
Cyberhouse Tech refresh
Terrastation for GGM
Server0 Crash recovery - no data loss

Dispatch Upgrades:

Audiolog technical refresh started Added image drive and process Added backlit keyboards Office Desktop Access Install of CAD Client 1.6.8.58.2, AWW 3.4.0.2

Other:

Assisted Springboro Police Agency Move CAD terminal to new City Building Telephone Systems Call Redirector Server Replacement Project Asset Disposal of E.O.C. and W.C.D.E.S. Computers 4 Staff desktop computers replaced Carlisle Fire Department returns Mobile Data Computer and leaves the program Drug Task Force leaves the Mobile Data Computer Program



RADIO SYSTEMS DIVISION

Prepared and Maintained by Gary Hardwick Radio Systems Manager 513.695.2860 Gary.Hardwick@wcoh.net

This year our focus is to continue regular maintenance and improvements to the Communications System infrastructure by concentrating on the tower sites sub-systems. The intent is to further 'harden' each tower site by evaluating the sites communications systems function, the power system capability and the inter-site microwave backbone, then make repairs or system changes as necessary.

Following is a list of the major items that RST (Radio Systems Team) addressed in 2009, by tower site location, followed by Tech Shop Stats:

Emergency Operations Center:

Erected new tower. Outfitting continues.

Zoar Tower:

Re-configured building AC wiring to Code, and incorporated backup generator controls, rebuilt tower lighting system, inspected, plumbed and guy wires tensioned to code, and installed proper ice bridge between the tower and building.

Hatfield Tower:

Installed microwave link to Goose Creek

Manchester Tower:

Removed and replaced failing HVAC system

Snider Tower:

Rebuilt and updated Tower Lighting system

Goose Creek Tower:

Completed equipment installation, continuing dialogue with Motorola to commission site and place in service.

Black Hawk Tower:

Stripped equipment from building in preparation for demolition.

Lytle Tower:

Prepared for new HVAC and building wiring upgrade.

Other projects:

Installed new 800 MHz conventional repeater and relocated control base station in the Jail facility.

Removed aging Fairgrounds Tower

Provided on-scene communications, radio support & service for the Hill Climb event

Tech Shop:

Handled normal work hour database maintenance and walk-in traffic: Repaired 72 radios

Supported system user changes, including the Police Primary split, and preparation for Re-Banding by programming of flashing 1200 units.

Resolved 226 Repair and Accessory invoices.

Performed 8 Removal & Installations

Continued system wide inventory reconciliation in preparation for

Nextel Rebanding project

Maintained readiness of Hot Box Radios.

Supplied additional communications equipment for Hill Climb, Lebanon FD special event, Waynesville festival and SO River Sweep.

Department Man-hours for 2009:

Work Time logged 5,490.5 hours, plus 114 hours OT Vacation Time logged 402 hours Sick Time 119.5 hours

2010 Planned Activities:

Complete and Commission Goose Creek site

Complete Antenna and Transmission line installation, new EOC tower Complete UASI funded Flash Upgrades and Law Enforcement Primary split programming.

Complete Microwave backbone 'loop' with the installation of the Manchester-Snider link.

Initiate Re-Banding effort replacement and reprogramming Demolish old building and Install new communications shelter at Blackhawk tower site

Expand Microwave system by adding EOC to Zoar, Lytle to Hatfield and Blackhawk to Hatfield links.

Install new back-up generators at Zoar, Hatfield and Manchester tower sites

Correct lightning protection and grounding issues at Manchester and Lytle tower sites



TELEPHONE SYSTEMS DIVISION

Prepared and Maintained by
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Telephone Systems Supervisor
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The Telephone Division of Telecommunications processes the majority of its work orders as an On-Call basis serving over 100 County, State,

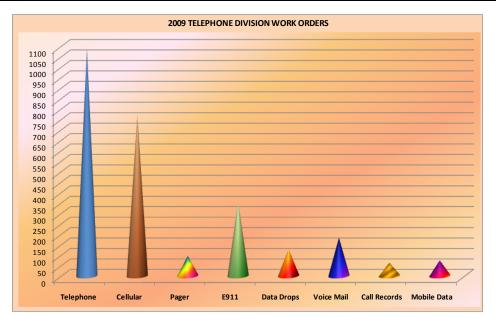
Federal and Private Agencies. The Telephone Division wires all telephone and data drops in all County buildings as well as manages all moves, changes and installing of temporary service to those displaced by construction. The division also provides all cellular and alpha paging services to county offices as well as assists Fire and Police Agencies of Warren County in obtaining contracts and maintenance of existing units.

The following is a list of some of the major projects the Telephone Division configured, installed and maintained in 2009:

2009 Accomplishments:

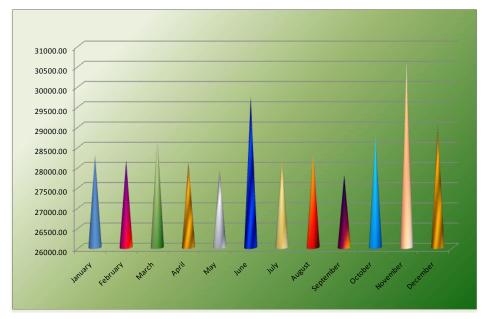
 Work orders - installation, operation, configuration, maintenance and repair of all county owned telephone/communications equipment and circuitry

Telephone	1087
Cellular	769
Pager	96
E911	352
Data Drops	127
Voice Mail	183
Call Records	63
Mobile Data	74
Total	2751



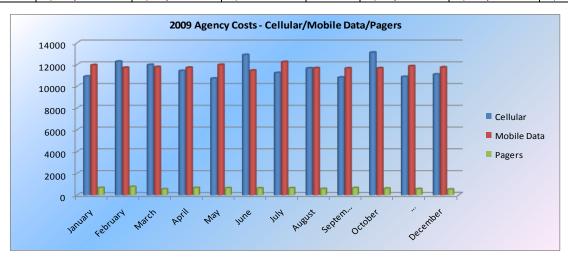
 Telephone Service - Voice Mail, Fax Lines, Automated Attendant, Automatic Call Distribution, and Interactive Informational Recordings to solve our customer's needs. These services are noncommissioner funded and are billed to the agencies.

January	\$ 28,274.92	July	\$28,277.45
February	\$ 28,161.77	August	\$28,366.37
March	\$ 28,740.02	September	\$27,786.95
April	\$ 28,124.68	October	\$28,792.75
May	\$ 27,951.74	November	\$30,588.06
June	\$ 29,731.08	December	\$29,037.04
Total	\$343,832.83		



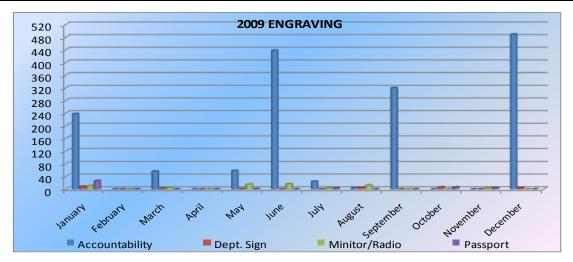
Cellular/Mobile Data/Pagers

Month	Cellular	Mobile Data	Pa	ger	Month	Cellular	Mobile Data	Pager
Jan	\$ 10,900.83	\$11,948.50	\$	662.68	July	\$11,227.65	\$ 12,237.05	\$638.70
Feb	\$ 12,270.01	\$11,711.06	\$	754.46	Aug	\$11,650.38	\$ 11,674.76	\$572.39
March	\$ 11,967.74	\$11,770.32	\$	541.49	Sep	\$10,808.36	\$ 11,653.61	\$655.71
April	\$ 11,425.06	\$11,714.03	\$	659.95	Oct	\$13,101.64	\$ 11,664.13	\$610.43
May	\$ 10,714.00	\$11,972.67	\$	639.95	Nov	\$10,874.70	\$ 11,855.54	\$565.43
June	\$ 12,886.65	\$11,445.95	\$	627.54	Dec	\$11,091.10	\$ 11,744.95	\$518.78



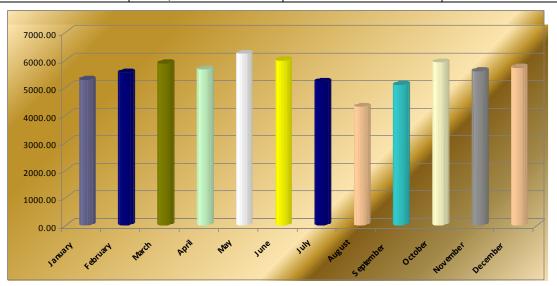
Engraving

Month	Accntblty	Signs	Radios	Passport	Month	Accntblty	Signs	Radios	Passport
Jan	238	8	10	26	July	24	0	3	3
Feb	0	0	0	0	Aug	4	5	12	0
March	56	2	5	0	Sep	320	0	0	0
April	0	0	0	0	Oct	0	6	0	6
May	58	1	15	1	Nov	0	0	3	4
June	438	0	16	0	Dec	489	4	0	0



 IC Solutions Inmate Services – Warren County receives commission revenue based on the total amount of calls completed by inmates at the County Jail. We have significantly increased our call volume and revenue without impacting the family and friends of our inmates by switching to IC Solutions in 2004.

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January	\$ 6,280.47	July	\$7,053.51
February	\$ 7,276.10	August	\$6,412.10
March	\$ 7,002.37	September	\$6,661.06
April	\$ 6,489.32	October	\$7,395.89
May	\$ 7,450.90	November	\$6,228.83
June	\$ 7,627.97	December	\$5,561.63
Total	\$81,440.15		



2010 Goals:

Phone System – Purchase replacement parts for the telephony switching systems that will aid in prolonging the life of the current phone system. Telephony is evaluating potential systems to replace the existing phone systems.

Voice Mail System – Implement a new Voice Mail system that has been purchased.

Telephone Service Billing – Implement a Unified Billing System to better suit the County Agency needs.

Community Services – Replace the existing telephony switch at the 741 Center building to provide redundancy and better call management.

Mental Health Center - Install a telephony switch in the Mental Health buildings on Cook Road for future expansion of their agency's needs.

VOIP – Install and evaluate the performance of VOIP phones at several tower sites.

Armco Park – Assess a communication/data solution to better suit the Warren County Park Boards needs.

Board of DD – Assess a communications/data solution to better suit the current Board of DD building location as well as future locations.