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: 20

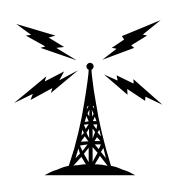
Budget:

 Employee Costs:
 \$1,114,809.20

 Operating Costs:
 \$ 960,921.83

 Capital Costs:
 \$ 453,837.59

Total Costs: \$2,529,568.60



INTRODUCTION

- Warren County Telecommunications department is located in the lower level of 500 Justice Drive.
- The department is administrated by a Director, Deputy 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 2008 Activity Report

The CAD Systems division is new to Telecommunications as of August 1st of 2008. Previously, the division fell under Warren County Emergency Services. The CAD Systems division was created in 2001 as a requirement of the Centralized Information Database project (C.I.D.B.).

Warren County Centralized Information Database Project (C.I.D.B.) History.

On January 13th, 2000 the Warren County Board of Commissioners, on behalf of Warren County Emergency Services entered into a contract with Omnicom, Inc. to provide technical consulting services for a review of the current and future needs related to its public safety computer aided dispatch system and future county wide data sharing requirements.

The comprehensive evaluation included a full assessment of the current computer aided dispatch system, its service, features, and related areas as compared to the current needs of the public safety agencies of Warren County. Areas to be evaluated included the following:

- Call processing times
- Ease of dispatcher access and use
- Internal and External customer value
- User ability to generate data and statistical reports
- Interaction and relation to CAD systems and Motorola's Centracom Elite console equipment
- Mobile Data Terminal Use / Interface
- Apparatus/Vehicle status notification and tracking
- System operational timers
- External system status monitoring (alphanumeric paging unit status)
- Applicability to specific fire, EMS, and police related service (System diversity)
- Reliability in call handling use and data accessibility
- Scheduled as well as special requests for report generation and the diversity and flexibility of related reports
- Field personnel safety monitoring
- System Security
- Remote site access and use (including data in to the system from noncommunication center users such as police and fire stations) as well as remote print-out features, etc.
- Interconnection and operability with a multi-jurisdictional central database
- Interconnection and operability with Ohio LEADS and NCIC
- Interconnection and operability with Warren County Geographical Information System

 Interconnection and operability with Sprint United Telephone Company's 911 System

Additions, deletions or changes in CAD databases in 2008:

3437	Agency Parameters
147	Beat
17,046	Common Places
41	Consoles
952	Cross Agency Security
5767	Fire Run Cards
5580	Fire/EMS Vehicles
1205	Foreign Units
4456	Incident Response
23,427	Incident Types
20,266	Intersections
12	Modifying Circumstances
24,059	Personnel & Personnel Security
2054	Plans
1199	Police vehicles
4096	Premise/Hazard Flags
3544	Ready Reference
616	Reoccurring Messages
28	Reports Security
25	Response Messages
6323	Resource Contacts
1998	Segments
39,492	Status Codes
1516	Streets
49	System Parameters
322	UDT Servers
30,055	Zetron

197,712 Total entries in CAD databases.

Emergin Paging System Usage Statistics:

508	Users
589	Devices
51	Carriers
44	Groups

In 2008, the CAD Systems division was involved in the following projects or events:

✓	Jan 3	Franklin Fire Switchover from County dispatch to their PD dispatch.
\checkmark	Jan 25 – Feb 1st	Participated in planning meetings and reconfigured CAD for the 3 rd
		police primary split test.
\checkmark	Feb 4 th	Assisted with MDC Class at Hamilton Twp FD.
\checkmark	March	Assisted with the 911 Upgrade
\checkmark	April 29th - May 1st	Installed the new Emergin paging gateway.
\checkmark	April 20 th – 26 th	Attended the annual Motorola User Conference which included 14
		trainings, meetings and networking events.
✓	May 21 st	Worked with the other divisions to host the annual Warren County
		Public Safety Symposium at the Kings Island Golf Center.
\checkmark	June 2 nd & 3 rd	Participated in interviews for the Training Specialist position.
\checkmark	June 08	Participated in the planning meetings for the river sweep event.
\checkmark	Aug 1 st	Reassigned to Telecom
\checkmark	Sept 14th (Week of)	Assisted in the recovery efforts after Hurricane Ike.
\checkmark	Sept 20 th	Participated in the annual Aces & Eights Event.
	Sept 15 th & 16 th	Assisted the vendor in installing the CAD Upgrade Staging Pathway.
✓	Sept 22 nd – Oct 10 th	Performed ATP testing to certify the CAD Upgrade on the staging pathway.
✓	Oct 21st - 23rd	Assisted the vendor with the CAD software upgrade and preformed
		additional testing to ensure its operation.
✓	Oct 27 – Nov 3 rd	Held interviews for the Training Specialist position.
\checkmark	Nov 12 th	Held the final round of interviews for the Training Specialist finalist.
\checkmark	Nov 13 th	Attended training on the statewide MARCS radio system at Franklin
		FD.
\checkmark	Nov 17 th & 18 th	Attended Planning for & Responding to a Terrorism/WMD Incident
		training at the WCSO.
\checkmark	Dec 18 th	Participated in the new generator training and walkthrough.
\checkmark	Dec 29 th	Start date for the new Training Specialist Amanda Bonahoom.
✓	Jan – July	Performed required L.E.A.D.S. Tests for all new or recertifying
		LEADS operators of non-terminal agencies.
✓	Attended and gave report	rts for the monthly Communications Advisory Board meetings.
./	Attended and gove renev	to for the monthly Law Communications Workgroup mostings

- ✓ Attended and gave reports for the monthly Law Communications Workgroup meetings.
- ✓ Attended and gave reports for the monthly Fire Communications Workgroup meetings.
- ✓ Attended and gave reports for the monthly Police Chiefs Association meetings.
- ✓ Attended and gave reports for the monthly Fire Chiefs Association meetings.
- ✓ Attended and assisted with the monthly C.A.R.T. meetings.
- ✓ Ran monthly and yearly system usage reports in CAD DSS.

DATA SYSTEMS DIVISION 2008 Activity Report

Prepared and Maintained by
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Data Systems Manager
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This document reflects the 2008 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 2008. Stats for Joey Bishop are not included. Metric for DST are collecting in four categories.

- 1. Meetings Internal, External
- 2. Projects Projects as designated by the Division Manager.
- 3. 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, DPR Research, etc.

Team Time for each metric representing 10,400 team hours:

Meetings – 579.75 hours

Projects - 2,186.0 hours

Administration – 1,031.5 hours

Break-Fix, Sick, Vacation, FMLA - 6,602.75 hours

Ticket History for DST Support Activities

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.

Tech Re-Fresh in Dispatch	Open Query Upgrade
CAD Upgrade	FRMS Patch Set
Storage Server Replacement	Virtual Center Server Replacement

ASA Project Completed	Printer Server Project Completed	
Network Re-Design completed	Emergin Server	
Generator Project completed	LEADS Audit	
FBR – 4 Agencies	VZW Franklin/District 1 issues resolved	
WCWS Project completed	Runtime Maps Project completed	
Cameo, Marplot & Aloha apps on FD	Remote Access to WCT Desktops	
MDC's		
Remote Access to Site Terms	SOE 3.1 Finished and 25% MDC Tech	
	Refresh	
UDT / CAD DSS Upgrade	Blackberry Server Upgrade	

Supporting Activities

Symposium	CAD/RMS Division Acquisition
Hurricane IKE	Aces and Eights
Annual Hill climb	Countywide Data Backbone support
911 Upgrade	Radio Console Upgrades
Assist WCSO with Technical interviews	Court TV implementation and support

Distractions

Staff Changes – Pam Coffey, Joey Bishop	FRMS Report issues
VisionTEK Vendor Issues	Pre-Trial move
Building Transformer Change	FMLA Leaves

Notable Activities

Court and Records Team Meeting	Law Comm. Workgroup meeting
Fire Chief's Association meeting	Police Chief's Association meeting
Communications Board Meeting	Infragard
Court Clerks Seminar	Motorola Conference

Observation Statements

In 2008 Data Systems had an Applications Analyst (Joey Bishop) transfer to Emergency Services and his position was not filled. With the amount of effort required to support LRMS and FBR, Rhonda Bernard was temporarily assigned to that application set in 4th Quarter 2008 until further notice. These two events have left Data Systems short two positions.

The Teams call outs has remained steady and often voluntarily support radio in call out situations. I plan to implement an OCP procedure in 2009. OCP is On-Call Point.

The salaried positions posted 718 hours of overtime in 2008. The team's time away utilization is low. (Vacation / Sick and FMLA).

I have negotiated with Web Media Group to upgrade our existing Ticket System version 2.x to version 4 for the same annual cost in 2009.



RADIO SYSTEMS DIVISION 2008 Activity Report

Prepared and Maintained by
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This year our focus was to maintain or improve the Communications System infrastructure by concentrating on the tower sites sub-systems. The intent was 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 RSD addressed in 2008, by tower site location, followed by Tech Shop Stats:

EOC: Removed and replaced 10 GHz microwave backbone equipment. Removed 2.4 GHz microwave system.

Worked with Embarq to provide a reliable terrestrial T1 back-up for Dispatch Consoles to the radio system central site controller. Initiated the EOC tower replacement project with an expected completion in the Spring of 2009.

Zoar: Rebuilt tower FAA lighting system.

Added OSHA require climb safety cable
Resolved Controller Failsoft event on AC power loss
Installed new AC back-up generator
Installed -48V DC Low voltage disconnect
Remove and replaced 10 GHz Microwave backbone equipment
Replaced "Economy-Air" ducting
Replaced Site Control PC

Hatfield: Removed and replaced 10 GHz microwave backbone equipment Serviced & Repaired AC back-up generator Installed T1 microwave link to Black Hawk Replaced site control PC

Manchester: Removed and replaced 10 GHz microwave backbone equipment.

Installed new AC back-up generator.

Installed Peco -48Vdc power plant, 'new' battery stack and Low Voltage disconnect.

Effected repair to receiver preamp and multi-coupler, site controller,

sync clock, and Fire Paging Base transmission line. Replaced "Economy-Air" ducting.

Snider: Removed and replaced 10 GHz microwave backbone equipment Replaced defective tower top amplifier and receiver multi-coupler.

Goose Creek: Installed grounding system and ice bridge

Completed AC commercial power, back-up generator and site security fence installation.

Loaded equipment racks, ordered all remaining equipment to complete Licensed all systems, expected completion & commissioning 1st quarter 2009.

Black Hawk: Removed unused antennas, installed T1 microwave to Hatfield to allow removal of old 2.4GHz system

Other projects:

Participated and supported the Telecom Symposium

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

Established status/maintenance network for all sites microwave backbone

Cleared sites of surplus equipment

Tech Shop:

Handled normal work hour database maintenance and walk-in traffic: Repaired 77 radios, supported system user changes by programming 331 units. Resolved 214 Repair and Accessory invoices.

Performed 15 Removal & Installations

Upgraded 32 Control Stations on site

Performed system wide inventory in support of Rebanding activities Installed 14 Canopy links to support Springboro PD, Clearcreek Twp., and the Water Department Granden Road Water Plant, water tanks in Landen, Zoar, Deerfield, Snider Road, Otterbein, Corwin & Harveysburg.

Maintained readiness of Hot Box Radios, supplied additional communications equipment for Aces & Eights event, Hill Climb, Lebanon FD special event, Waynesville festival and the Prosecutors River Sweep.

Department Man hours for 2008:

Work Time logged 5,810 hours, including 132 hours OT Vacation Time logged 289.5 hours Sick Time 129 hours FMLA 176 hours

2009 Activities:

Complete and commission Goose Creek site
Complete and commission new EOC tower
Complete Re-Banding effort
Complete microwave backbone 'loop' with the installation of the
Manchester-Snider shot.
Install new back-up generators at 3 tower sites.



TELEPHONE SYSTEMS DIVISION 2008 Activity Report

Prepared and Maintained by
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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 2008:

2008 Projects:

- **9-1-1 Service –** Training on configuration of new telephone system for dispatch center and call statistics program. Installation of cabling required for new phone system.
- **2-1-1 Service –** Configuration of non-emergency 2-1-1 calling system for Warren County Information & Referral Agency.
- **EOC (Emergency Operations Center) –** Installation and programming of new phone system.
- **Verizon Wireless In-Building Repeaters** Setup, Configuration and Implementation of cellular repeaters in 500 Justice Drive, Administration, Drug Task Force and WCSO buildings for better reception of cellular service.
- **Cellular Billing** Implemented a new calling plan with Verizon Wireless to gain more features on the Federal Account while reducing costs by approximately \$60,000 per year.
- **416 S. East Street** Continuation of building construction involved moving and setting up temporary office service for Human Service, Health Department, and Children Services.
- **MRDD/Deerfield Rd** Installed new telephony switch in building for configuration of call center and communications to building. Installed telephone and data wiring for occupation of building by agency.

MRDD/Banta Center – Installation and Moves associated with moving of offices.

Hamilton-Deerfield Sewer Plant – Installation of telephone cabling in new facilities.

Warren County Garage – Continuation of installation of telephone/data wiring due to building construction.

Inmate Calling System – Upgrade and maintenance of web-based system. Setup and configuration of individual user accounts for retrieval of inmate call records.

Community Services – Programming of new telephony switch for building.

Public Safety Symposium – Planning, supporting and participating in symposium.

Juvenile Court COOP – Design supporting documentation and calling system for emergency deployment.

Warren County Employee Benefits Day – Setup and participation of Verizon Wireless service.

Board of Elections – Issuance of temporary cellular phones for elections.

Metropolitan Housing – Installation and maintenance of new phone system in building.

Humane Association/Animal Shelter – Installation and maintenance of new phone system in building.

Emergency Preparation – Design, and maintenance of Warren County Essential Personnel Directory to be used in emergencies.

Ike Wind Storm – Participated in disaster planning and aided county and outside agencies in achieving power and communications failures related to the storm.

Court TV – Installation of wiring of T1's and support of service.

Child Support Enforcement Agency – Moving of complete agency to alternate telephony switch to make room for other features.

Committees:

Public Safety Symposium
Juvenile Court COOP (Continuation of Operation Planning Board)
Warren County 2-1-1 Advisory Board
Common Pleas Court COOP (Continuation of Operation Planning Board)

TELEPHONE WORK ORDERS	AMT
Trouble	526
Installs	194
Dispatch Work	93
Moves/Changes	712
Data Drops	272
911 Work	116
County Ext / Inmate Call Search	26
Cable - Locate/Repair/Move	49

Work orders completed for the installation, operation, configuration, maintenance and repair of all county owned telephone/communications equipment and circuitry.

Construction of the East Street building this year occupied a big portion of the telephony

division's time and energy.

Installation of a new telephony switch at the

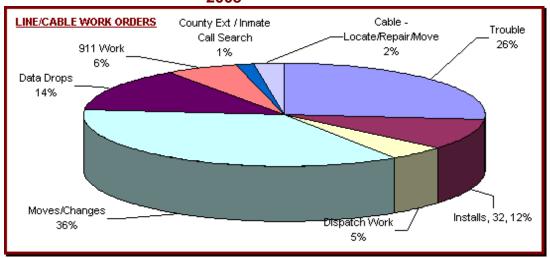
Deerfield Center was also very time consuming.

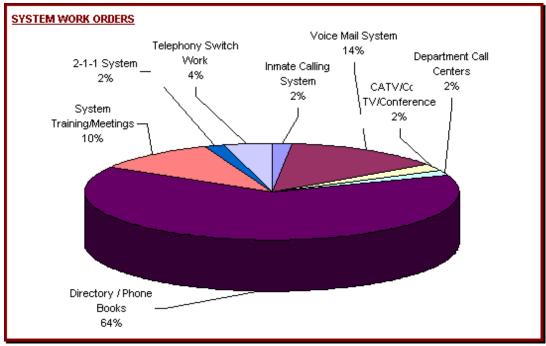
SYSTEM WORK ORDERS	AMT
Inmate Calling System	23
Voice Mail System	183
CATV/Court TV/Conference	32
Department Call Centers	25
Directory / Phone Books	861
System Training/Meetings	140
2-1-1 System	23
Telephony Switch Work	56

The Telephony Division aided the United Way in implementing a 2-1-1 information system for the public. This was very beneficial during the Wind Storm caused by IKE in reducing non-emergency calls to 9-1-1 center.

Telecommunications Telephony Division offer several different types of call management systems to county agencies. Training is provided for all systems.

2008





Cellular Work Orders	AMT
Meetings/Training	26
New Cellular Issues	108
Cell Replace/Upgrade/Cancel	202
Cellular Programming Issues	129
System Work Orders	91
MyBiz Cell User Accnt Work	123
Cellular Billing Issues	746
Cellular/Data Accessories	214

The Telephony Division created user accounts on a web based program called MyBiz for all county cell phone users to enable them to determine personal usage.

Mobile Data Work Orders	AMT
New Mobile Data Units	53
Replaced M.D. Units	19
Upgraded M.D. Units	52
MDC Billing Issues	256
Mobile Data System Work	161

The Telephony Division implemented a new data plan with Verizon Wireless to reduce monthly service costs of units.

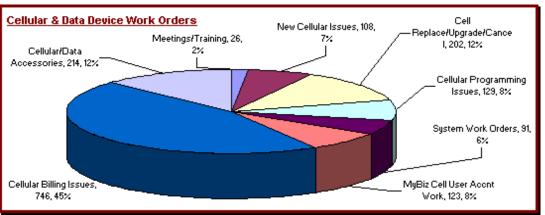
Pager Work Orders	AMT
New Issue	11
Replacement	36
Cancellation	66
Pager Billing Issues	137
Programming	18

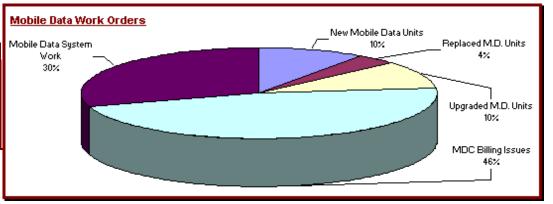
The Telephony orders, issues and maintains all alpha paging devices for

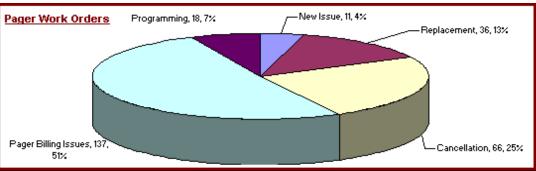
the county as well as assists several Police and Fire Agencies with their accounts.

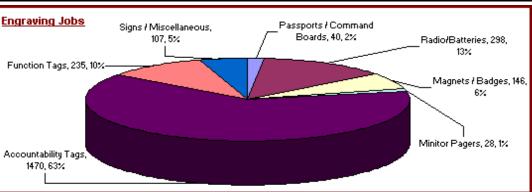
ENGRAVING	AMT
Passports / Command Boards	40
Radio/Batteries	298
Magnets / Badges	146
Minitor Pagers	28
Accountability Tags	1470
Function Tags	235
Signs / Miscellaneous	107

The Division consumes a lot of time Engraving various signage for County, Police and Fire Agencies.







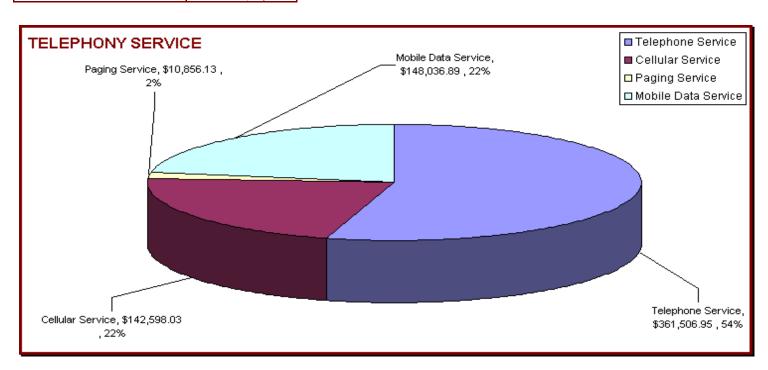


The Telecommunications Telephony division provides voice, voice mail, data fax, ISDN, HDSL and Internet services to all county agencies. We are responsible for the design, installation, operation and maintenance of all communications systems for County Agencies as well as various State, Federal, and private agencies located within the City of Lebanon limits. We also provide training on any of these systems to all county agencies.

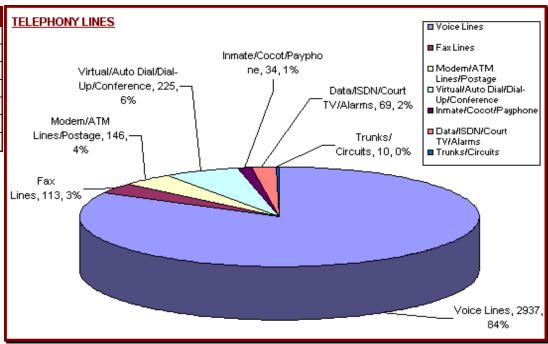
We also provide a very advanced Inmate calling system that has been crucial to court cases for the Warren County Prosecutor's Office, Drug Task Force and the Sheriff's Office.

The Telephony Division has also aided the United Way and Information and Referral Agencies in implementing a 24 hour 2-1-1 calling for both the Warren and Clinton County areas. This will provide the public a fast and efficient way of receiving non-emergency assistance in our counties. A valid need for this service was greatly demonstrated during the IKE windstorm by providing information to the public and relieving 9-1-1 dispatch of non-emergency calls. Configuration of this system by the Telephone Division was set up in a way where the service can be routed to various locations both during an emergency and during normal working hours.

Telephony Services	AMT
Telephone Service	\$361,506.95
Cellular Service	\$142,598.03
Paging Service	\$10,856.13
Mobile Data Service	\$148,036.89



Telephony Lines	AMT
Voice Lines	2937
Fax Lines	113
Modem/ATM Lines/Postage	146
Virtual/Auto Dial/Dial-Up/Conference	225
Inmate/Cocot/Payphone	34
Data/ISDN/Court TV/Alarms	69
Trunks/Circuits	10



Wireless Lines	AMT
Cellular Phones	186
Data Devices (Blackberry/Treo)	89
Data AirCards	36
MDT AirCards	262
Pagers	184

