



Bi-State Regional Commission

Final Report
Dispatch Services And Record Keeping
Consolidation Study
MEDIC-EMS, City Of Davenport, City
Of Bettendorf & Scott County, Iowa

June 22, 2006



CONSOLIDATION STUDY

BI-STATE REGIONAL COMMISSION

Your Questions

- How Would A Consolidation Take Place And Provide Improved Service?
- How Should It Be Organized And Staffed?
- What Services Should It Perform?
- How Should Policies Be Made And Changed?
- How Should It Be Funded?
- With Consolidation, What Communications Changes Or Improvements Should Be Made In Order To Support The Operations Better Than Provided Today?

Develop A Consolidation Plan

- Survey & Review Current PSAP Operations
- Develop Operational Modes For A Consolidated Center
- Develop A Governing Structure For A Consolidated Center
- Identify Funding Options And Develop Operating Budget For A Consolidated Center
- Public And Stakeholder Study Involvement

Davenport Preliminary Findings

- Understaffed
- Obsolete Dispatch Equipment
- UHF Conventional Radio Systems
- Outdated CAD/RMS
- New PD Building – No Dispatch Area
- Railroad Tracks



Scott County Preliminary Findings

- RACOM Network/VHF
- Cody CAD/RMS
- Equipment ~ 5 Years Old
- Space Limited
- Railroad Tracks



Bettendorf Preliminary Findings

- RACOM Network
- Cody CAD/RMS
- Equipment is approximately 5 Years Old
- Railroad Tracks



MEDIC-EMS Preliminary Findings

- RACOM Network/UHF
- Zoll Data Systems CAD
- Secondary PSAP
- Limited Space
- Limited Backup





Warrants Preliminary Findings

- More Than 3100 Active Warrants
- IOWA Rules & Regulations
- Original Warrants Location
- Workload



Issues/Concerns

- Differing Levels Of Service
- Interoperability
 - Radio
 - CAD/RMS
- Finances
- Governance
- Location

PSAP Diversity

- The Issues
 - Call Volume
 - Davenport 108,856 Per Year 1.12 Per Person
 - Bettendorf 14,000 Per Year .42 Per Person
 - Scott County 11,400 Per Year .37 Per Person
 - NENA Study 34,310 Per Year .62 Per Person
 - Service Compromise
 - Accountability & Responsibility
 - Collateral Duties

911 Calls Per FTE

- Davenport 4948
- Bettendorf 1,389
- Scott County 877
- NENA Small PSAPS 635
- NENA Medium PSAPS 1,858
- NENA Large PSAPS 3,202
- NENA Study 1,811

Current Level Of Expenditure

Agency	Cost per 911 Call	Cost per Citizen
Davenport	\$14.07	\$15.70
Bettendorf	\$46.42	\$19.59
Scott County ¹	\$107.00	\$ 6.87
Scott County ²	\$107.00	\$ 35.28
MN PSAPS	\$30.00 (Approx.)	
NENA Study	\$31.50	\$11.59

FY 05-06 Expenditures

- Davenport \$ 1,504,802
- Bettendorf \$ 675,963
- Scott County \$ 929,506
- MED-COMM \$ 585,299

- Total \$ 3,695,588

- 82% Personnel Costs
- 0% Capital Equipment

Working Relationships

- Dispatchers/Officers
 - Personal Investment/Involvement
 - Informal Feedback/Complaint Resolution
 - Quick Information Transfer
 - Knowledge Of Capabilities



Customer Service – Best Practices

- Establish Benchmarks
 - 95% Of Calls Answered Within 15 Seconds
 - 95% Emergency Dispatching Completed Within 60 Seconds (NFPA 1221)
 - Standards For Non-emergency Calls
- Measure/Monitor Performance
- Adjust To Meet Benchmark





PSAP Infrastructure Standards

- Security
- Redundancy
- Diversity
- NFPA 1221





PSAP Administration Best Practices

- Written Policies And Procedures
 - Policy Development
 - Operational Standards
 - Decision-making Process
 - Command Protocols
 - Service Priorities
 - Dispute Resolution
- Audit & Review Process





Allowing For Operational Diversity

- Written Procedures Each Incident Type
- Training
- Use Technology
- Call Guides – Similar To EMD Guide Cards



Governance

- Issues
 - Davenport's Size
 - Past History
 - Nature Of Communities
 - Structure
 - Davenport – 2 Year Terms
 - Scott County – 4 Year Terms
 - Bettendorf – 4 Year Terms

Finance Alternatives

- 911 Surcharge
 - Scott County Only County In IA Without
 - \$1.00 Per Line Per Month/\$2.50 Per Line Per Month For 24 Months
 - Requires Referendum
 - 86,815 Access Lines = \$1,041,780 Per Year
 - The Number of Wireline Access Lines Decreasing (Nationwide)
 - 6% Of Households Wireless Only
 - 64% Of Population Has Wireless Phone
 - More than 224,000 Wireless 911 Calls Per Day

Finance Alternatives Continued

- General Fund Of Participating Agencies
 - Contribution Based On Formula
 - Population
 - Calls For Service
 - Property Value
 - Pressures On General Funds
 - Property Tax
 - State Imposed Limitations
 - Competition



Emergency Management Fund

- Chapter 29C
- Emergency Management Commission
- Local Emergency Management Fund
 - “A Countywide Special Levy Approved By The Board Of Supervisors”



Interoperability

- 3 Different Frequency Bands
- 2 Different Technologies
 - Davenport UHF Conventional
 - Bettendorf, Scott County & MEDIC 800 MHZ Trunked
 - Outlying Fire VHF Conventional
- 4 Separate CAD Systems
 - 3 Different Vendors

Regulatory Issues

- FCC Narrowbanding (<512 MHz)
 - Davenport, Scott County Fire, MEDIC
 - Current Channels 25 KHz; New 12.5 KHz
 - Stop Manufacturing Jan 1, 2011
 - Migration Deadline Jan 1, 2013
- 800 MHz Rebanding
 - Scott County, Bettendorf, & MEDIC
 - Interference From Nextel



	Davenport		Bettendorf		Scott County		MED-COM		Total Staff	
	On-Duty	Total	On-Duty	Total	On-Duty	Total	On-Duty	Total	On-Duty	Total
Manager										
Operations Manager				1		1		1		3
Training Manager										
Tech Support Coordinator		0.5				0.5		0.5		1.5
Admin Assistant										
Sub-Total		0.5		1		0.5		1.5		3.5
Shift Supervisors					1	3			1	3
Telecommunicators	2-3	22	2-3	8	2	9	2-3	8	8-11	47
Front Desk	1-2								1-2	
Part-Time (Counted as .5 FTE)				1		1		6		8
Sub-Total (FTE)	3-5	22	2-3	8.5	3	9.5	2-3	11	10-13	54
Total	3-5	22.5	2-3	9.5	3	14	2-3	12.5	9-12	58.5



Consolidation Models

- Independent Entity
- Absorption
- Contracted Services
- Co-location
- Shared Services

Consolidation Scenarios

- Davenport Only
- Davenport & Scott County
- Davenport, Scott County & Bettendorf
- Davenport, Scott County & MEDIC
- All Four

Technological Assumptions

- Interoperability
- Computer Aided Dispatch
- Records Management
- 9-1-1 System
- New Construction At \$300 PSF

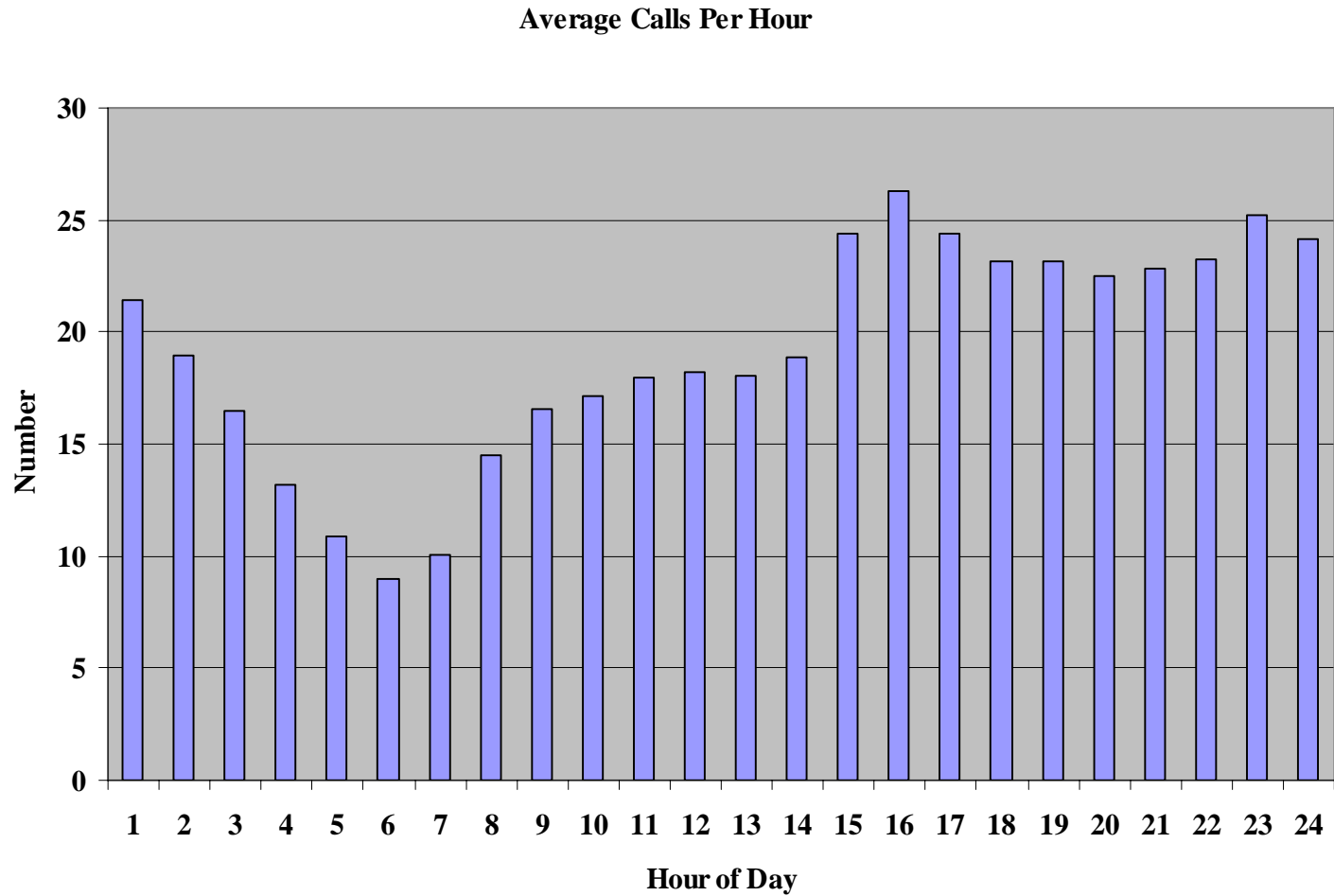
9-1-1 Operations

- Police
 - High Call Volume
 - Small Number of Units To Large Number Of Incidents
 - Field Unit Initiated Calls
- Fire
 - Lower Call Volume
 - More EMS Than Fire Related
 - Incidents More Complex
- EMS
 - Fewer Calls Than Police
 - Multiple Agency Response
- Pre-arrival Instructions
 - Transfers

Staffing

- Workload Analysis
 - Task Analysis
 - Activity Data From Participating Agencies
 - Distribution
 - Busy Day 40% Busier Than Average
 - 47% Between 3 PM And 11 PM
 - 29% Between 7 AM And 3 PM
 - 25% Between 11 Pm And 7AM
 - 10% Busiest Hour Of Busiest Shift
 - 8% Busiest Hour Of Second Busiest Shift
 - 6% Busiest Hour Of Least Busy Shift

Workload Distribution





Combined Activity

	Daily Avg.	Busy Day	Avg. Busy Hour
Total 911 Calls Received	394	552	61
Administrative/Non-Emergency Calls	863	1208	121
Total Incoming Calls	1315	1841	184
Police Calls Dispatched	530	741	74
Police Officer Initiated	304	426	43
Fire Events Dispatched	45	62	6
Emergency Medical Incidents	33	47	5
Medical Pre-Arrival Instructions Given	29	41	4
911 Calls Dispatched (MEDIC)	34	47	5
Transfers Dispatched (MEDIC)	26	36	4
Total Dispatches (MEDIC)	59	83	8
Total Transports (MEDIC)	44	62	6
Illini Ambulance Dispatches	14	19	2
MED_FORCE Dispatches	4	5	0
MEDIC Courier Calls	5	7	1
Total Iowa/NCIC Transactions	936	1311	131





Quality Of Service

- 95% Of Calls Answered With 15 Seconds
- 99% Of Calls Answered Within 40 Seconds
- 95% Of Emergency Dispatching Completed With In 60 Seconds



Recommended Staffing

- On-duty Staff Required
- Universal Positions
- Activity Driven/Coverage
- Full Consolidation
 - Days $5 + 2 = 7$
 - Afternoons $7 + 2 = 9$
 - Nights $4 + 2 = 6$

Davenport/Scott County Staffing

- Days $3 + 2 = 5$
- Afternoons $6 + 2 = 8$
- Nights $3 + 2 = 5$

Governmental PSAPs

- Days $4 + 2 = 6$
- Afternoons $7 + 2 = 9$
- Nights $3 + 2 = 5$



Davenport, Scott County & MEDIC-EMS

- Days $4 + 2 = 6$
- Afternoons $6 + 2 = 8$
- Nights $3 + 2 = 5$





Consolidated Center Requirements Design

- “Survivable”
- Self-contained Operation (7 Days)
- Location – Away From Threats
- Guidance
 - NFPA 1221 2002 Edition
 - FEMA 426
 - FEMA 361





ECC Center Size

	#	Overflow	Future	Total
Davenport Only	3	1	1	5
Davenport/Scott County	8	2	2	12
Governmental	9	2	2	13
Davenport/Scott/MED IC	8	2	2	12
Full	9	2	2	12



CTA Recommendations

- How Would A Consolidation Take Place And Provide Improved Service?
 - Create Shared Communications Center Including All 4 PSAPs
- How Should It Be Organized And Staffed?
 - Consolidate 3 Governmental PSAPs And Initially Co-locate Med-com
 - Create 5 Administrative Staff (Director, Operations Manager, Training Coordinator, Technical Services Coordinator, Administrative Assistant)
 - Appoint 5 Shift Supervisors
 - Train 38 Telecommunicators

Recommendations Continued

- What Services Should It Perform?
 - Public Access, Dispatch Services, Data Systems Access, Interagency Coordination
 - Warrants
- How Should Policies Be Made And Changed?
 - User Advisory Committee Input
 - CALEA Communications Center Accreditation Model

How Should It Be Funded?

- Local Emergency Management Fund
- 911 Surcharge Option
 - \$2.50 Per Month For 24 Months
 - \$2,604,450 Per Year
 - \$1.00 Per Month After Start-up
 - \$1,041,780 Per Year
- Capital Improvements
 - City Of Davenport Bonds
 - Paid Back Through Operating Budget

CTA Recommendations Continued

- With Consolidation, What Communications Changes Or Improvements Should Be Made In Order To Support The Operations Better Than Provided Today?
 - Radio Study
 - 3 Frequency Bands
 - 2 Different Technologies
 - Narrowband Mandate
 - Rebanding
 - Interoperability

Additional Services

- Warrants
 - 3 Warrant Clerks
 - Joint Warrant Squad
 - Existing Officers
- Emergency Operating Center
 - Co-locate With ECC

Governance

- Board Of Directors
 - Mayor And 1 Alderman, City Of Davenport
 - Mayor, City Of Bettendorf
 - Chair, Scott County Board Of Supervisors
 - MEDIC-EMS Board Member (Non-public)
 - Citizen Appointee
 - Davenport and Bettendorf City Administrators; County Administrator; and Medic Administrator as Ex-officio Members

Board of Directors Functions

- Entering Into Contracts
- Acquiring, Holding, Or Disposing Of Property
- Approval Of Dispatch Annual Budget And Expenditures
- By-laws Adoption And Revision



User Advisory Committee

- Davenport Police Chief
- Davenport Fire Chief
- Bettendorf Police Chief
- Bettendorf Fire Chief
- Scott County Sheriff
- MEDIC-EMS Representative
- Outlying Police Representative
- Volunteer Fire Department Representative





User Advisory Committee Functions

- Guidance & Input To Board Of Directors
 - Operational Issues
- Guidance To ECC Director
 - Operational Issues
- Policy & Procedure Development Assistance
- Assistance In Personnel Selection



Staffing

- Currently 58.5 Persons Between 4 Centers
- Consolidated Center Requires 48
- Governing Bodies Committed All Would Be Offered Employment At New Center
 - In Writing
- Attrition

Administration

- Use One System
 - Personnel
 - Finance
 - Facility Maintenance
- Position Classification
 - Job Task Analysis
 - New Job Description
 - New Pay Plan

Budget

- Current Expenditures \$ 3,653,222
 - No Capital Outlays
- Operating Budget
 - Personnel Services \$ 3,145,612
 - Operating Expenses \$ 347,898
 - Debt Service \$ 360,000
- Total \$ 3,853,510

Initial Capital Outlay

- CAD/RMS \$ 1,027,475
- 911 CPE \$ 397,213
- Radio Consoles \$ 554,200
- Workstations \$ 109,310
- ECC \$ 2,340,000
- Total \$ 4,428,198



Financial Review

- 20 Year Project Life
- Consolidated Costs \$ 125,250,000
- Non- Consolidated \$ 132,200,000

(With Capital Outlay)





Action Plan

- Commitment To Consolidate By 7/1/06
- Draft Intergovernmental Agreement By 10/01/06
- Recruit & Hire ECC Director By 1/1/07
- Facility Development Start 7/1/06
- LMR Needs Assessment 12/31/06
- Prepare 911 CPE, CAD, Radio Console & Furniture Specs By 4/01/07





Action Plan Continued

- Purchase 911 CPE, CAD, Radio Console & Furniture Specs By 8/01/07
- Include Capital Costs In Davenport 2007 Bond Package
- Complete Construction Of New ECC
 - 1st Quarter 2008
- Cutover To New Center
 - 2nd Quarter 2008
- Develop 911 Surcharge Ballot Proposal
 - 3rd Quarter 2008



Conclusion

- Consolidation Makes Sense
 - Improved Service
 - Improved Coordination
 - Improved Cooperation
 - More Effective Use Of Staff
 - Financial Savings
- Need To Move Quickly
 - Davenport Police Station



COMMUNICATIONS, INC.



Questions & Answers

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