BROWARD COUNTY, FLORIDA PUBLIC SAFETY ANSWERING POINTS (PSAPS) CONSOLIDATION FEASIBILITY ANALYSIS

OCTOBER 21ST, 2010

Provided to:

Broward City/County Management Association (BCCMA)



Presented by:
Communications Technology Division (CTD)

ABSTRACT: Evaluation on improved effectiveness and efficiencies provided from a more coordinated system of 911 dispatch operations.

The Broward City County Management Association (BCCMA) sought an evaluation on improved effectiveness and efficiencies from a more coordinated system of 911 dispatch operations. The County currently has 12 Public Safety Answering Points (PSAPs) that provide 911 services to all residents and visitors. The total annual operating cost of the existing system is approximately \$50 million. The analysis modeled a consolidated system that would operate three interconnected dispatch centers under the administrative control of a single entity.

The analysis shows significant improvements in effectiveness and efficiencies are possible. Savings of approximately 20% in staffing alone could save taxpayers an estimated \$7.7 million per year.

Properly configured and managed, a consolidated dispatch system for all law enforcement, fire, and EMS agencies could provide; 1) improved closest unit response independent agency affiliation for high-priority incidents, 2) improved safety for emergency responders, 3) minimize the need for 911 call transfers, and 4) more efficient and cost-effective implementation of new technologies.

Broward County governmental entities should undertake steps to develop a consolidated 911 system. Immediate efforts should be directed towards defining the governance and financing for such a system.

Table of Contents

1.0	EXE	CUTIVE SUMMARY	1-1
1.1	Pr	OJECT OVERVIEW	1-1
1.2	RE	PORT SCOPE	1-2
1.3	ST	AFFING ANALYSIS	1-2
1.4	TE	CHNICAL SYSTEMS CONSIDERATIONS	1-2
1.5	Рн	YSICAL FACILITIES	1-3
1.6	Bu	DGETARY CONSIDERATIONS	1-3
1.7	От	THER CONSIDERATIONS	1-4
1.8	A	OMINISTRATIVE STRUCTURE	1-5
1.9	Fin	NDINGS	1-5
1.10	0 NE	EXT STEPS	1-6
2.0	CUR	RENT ENVIRONMENT	2-1
2.1	Cu	URRENT BROWARD COUNTY PSAP STRUCTURE	2-1
2.2	9-1	I-1 Call Flow	2-1
2.3	Di	SPATCH OPERATIONS	2-2
2	2.3.1	PSAP Management	2-3
2	2.3.2	Dispatch Personnel	2-3
2	2.3.3	Communications Technology Systems	2-3
3.0	PRO	POSED CONSOLIDATION OPTION	3-1
3.1	Тн	REE CONSOLIDATED PSAPS	3-1
4.0	ANA	LYSES	4-1
4.1	ST	AFFING ANALYSIS	4-1
4	4.1.1	Baseline Staffing	4-5
4	1.1.2	Three PSAP Consolidated Alternative - Staffing Requirements	4-5
4.2	Рн	YSICAL FACILITIES	4-6
4	1.2.1	Baseline PSAP Facilities	4-6
4	1.2.2	Three PSAP Consolidated Alternative - Facilities	4-6
4.3	TE	CHNICAL SYSTEMS CONSIDERATIONS	4-7
4	1.3.1	Basline Technical Systems	4-7
4	1.3.2	Three PSAP Consolidated Alternative – Technical Systems	4-8
4.4	Bu	DGETARY CONSIDERATIONS	4-10

4.4.1 Current Configu	ration - Baseline	4-10
4.4.2 Three PSAP Con	solidated Alternative	4-11
.5 BENEFIT ANALYSIS		4-11
4.5.1 Baseline Configu	ıration Advantages	4-11
4.5.2 Baseline Configu	ıration Disadvantages	4-11
4.5.3 Three PSAP Con	solidated Alternative Advantages	4-12
4.5.4 Three PSAP Con	asolidated Alternative Disadvantages	4-12
ADMINISTRATIVE S	TRUCTURE CONSIDERATION	5-1
.1 Introduction		5-1
.2 GOVERNANCE AND SU	UPPORT STRUCTURE	5-1
APPENDICES		6-1
	FROM BROWARD COUNTY ADMINISTRATOR BERTHA HENRY	
.2 APPENDIX 2 - PSAP O	PERATIONS MACRO MAP	6-4
.3 APPENDIX 3 - STAFFIN	IG REQUIREMENTS – 3 PSAP CONSOLIDATED MODEL	6-4
.4 APPENDIX 4 - APCO F	RETAINS Model – PSAP Workload Allocations	6-5
.5 APPENDIX 5 - APCO F	RETAINS MODEL –PSAP AREAS	6-6
.6 APPENDIX 6 – STATE (OF FLORIDA COUNTIES COSTS PER 9-1-1 CALL	6-7
.7 APPENDIX 7 - CURREN	T PSAP O&M Expenditures	6-8
.8 APPENDIX 8 - CURREN	T PSAP OPERATIONAL AND PERSONNEL COST PER CALL STAT	ISTICS 6-9
.9 APPENDIX 9 - CURREN	T PSAP PERSONNEL COSTS PER CALL SCATTER DIAGRAM	6-10
.10 APPENDIX 10 - CURRE	ENT PSAP 9-1-1 CALLS ANSWERED PER EQUIPPED POSITION	6-11
.11 APPENDIX 11 - CURRE	ENT PSAP CALLS PER EQUIPPED POSITION SCATTER DIAGRAM.	6-12
.12 APPENDIX 12 – CURRE	ENT CALL ANSWERING PERFORMANCE FREQUENCY DISTRIBUTI	ON6-13
.13 APPENDIX 13 – FEASIE	BILITY ANALYSIS DATA GATHERING	6-14
	ent Meetings	
	July 9-26, 2010)	
	unications/Consolidation PSAP Meetings (July 9 - 13, 2010)	
9	unications/Consolidation PSAP Meetings (July 27, 2010)	
_	Meeting (August 31, 2010)	
	PSAP	
	SAP	
	PSAP (Secondary)	
6.13.9 Fort lauderdale	PSAP	6-18

6.13.10	Hollywood PSAP	6-18
6.13.11	Margate PSAP	6-19
6.13.12	Miramar PSAP (SECONDARY)	6-19
6.13.13	Pembroke Pines PSAP	6-20
6.13.14	Plantation	6-20
6.13.15	Pompano Beach PSAP (Operated by Broward Sheriff's Office)	6-20
6.13.16	Broward Sheriff's Office PSAP (Public Safety Building, PSB)	6-21
6.13.17	Sunrise PSAP	6-22
6.13.18	Broward County EOC PSAP (Backup PSAP)	6-22
6.13.19	Data Collection Surveys	6-22

1.0 EXECUTIVE SUMMARY

1.1 PROJECT OVERVIEW

In May 2010, Broward County Administrator Bertha Henry, through a letter to the Mayor and Board of County Commissioners, communicated that:

"Given the fact that the County can no longer afford to assume the costs of dispatch services for additional cities, the County has only two (2) choices:

Option 1 – Charge all entities which elect to be dispatched by BSO; or

Option 2 – Work to develop a more efficient dispatch system for emergency calls, which could include, but not be limited to, a consolidation of centers, pro rata assessments based on call volume, etc."

(See **Appendix 1** for the entire letter.)

The County Administrator also communicated this status to the Broward City/County Management Association (BCCMA), and encouraged the group to analyze the issue and develop a new operations model. In response, the city managers created a task force, the BCCMA Dispatch Committee, to further study this issue.

The BCCMA Dispatch Committee requested a high level presentation be provided to describe the current situation of dispatch operations in Broward County.

On June 24, 2010, BSO-Communication Technology Division presented the current landscape of the E9-1-1 System in Broward County to the BCCMA Dispatch Committee. This presentation included information about the current Broward County PSAP structure, operational and cost statistics, employee cost per call information, equipment utilization information, and current PSAP performance metrics. The current County PSAP structure, and the preliminary findings presented are summarized:

Today, Broward County (County) is served by twelve Public Safety Answering Points (PSAPs); ten (10) primary and two (2) secondary, in a model where one or more municipalities are served by each PSAP. The County also has one backup PSAP. The review of the PSAPs demonstrated that there is evidence to suggest that a consolidation of services into two to four consolidated county-wide PSAPs could potentially bring a number of benefits including:

- Operational cost savings as a result of greater economies of scale.
- > Improved E911 call handling.
- > Improved interoperability among participating agencies

However, the benefits must be weighed against the perceived loss of control for participating municipalities and agencies. To that end, it is important that participating municipalities and agencies cooperatively engage in the evaluation of consolidation and the subsequent coordination and preparation of unified operating procedures and policies.

Prior to committing to a recommendation towards advancing consolidation, the BCCMA Dispatch Committee requested CTD perform a Consolidation Feasibility analysis to assess potential benefits of consolidation, to uncover and better understand any possible pitfalls in the consolidation process, as well as to identify potential governance alternatives for optimized performance.

CTD has identified a structured approach that provides for the requested feasibility analysis and outlines the subsequent steps to be taken if the BCCMA decides to move forward with consolidation. The results of the analysis indicate that a number of benefits, including operational and financial, can be achieved through consolidation of PSAPs into two to four centers across the County.

This report describes the result of the Feasibility Analysis.

1.2 REPORT SCOPE

This report presents a high-level description of operational, organizational, and logistical E9-1-1 call handling and dispatch communications requirements for a consolidated model of PSAP operations. This report identifies potential benefits of such consolidation as well as potential drawbacks.

The findings of this report represent advantages of one possible alternative for consolidating communications operations within the County. The alternative proposes leveraging available space in suitable existing, or near-term planned PSAP facilities which are of sufficient size and structural strength to function as consolidated centers. Preliminary discussions with several Municipalities who have suitable existing or soon to be completed facilities have taken place. These Municipalities have agreed in concept to make space available to CTD to be used for the purposes of serving as emergency flee-to facilities in the current environment. These existing or near-term planned PSAP facilities are not of size and capacity to house the required number of fully equipped console positions in a single countywide consolidated PSAP, however they can be collectively used to accommodate the required number of positions to establish a three (3) PSAP consolidated model. By leveraging available space, this alternative avoids significant capital costs that would otherwise be required for land acquisition, design, facility re-tooling, large scale renovation, and/or construction.

1.3 STAFFING ANALYSIS

Public safety communications centers require a high Grade of Service (GOS) to serve the public's needs to answer E9-1-1 calls and dispatch response units. The number of call taker answering positions required to answer and handle 9-1-1 calls is determined by call volume, average call processing time, and the required grade of service. Grade Of Service is defined as the probability of a caller having to wait more than a certain length of time before a call taker answers the call. Florida statutes refer to the state E911 Plan, in which Technical Standard Part 1(D) requires that the probability of a caller having to wait more than 10 seconds be less than 10 percent. Conversely, 90 percent of all the callers will have their calls answered in 10 seconds or less during the average busy hour. For this report, each PSAP provided annual 911 and non-911 call data, and CTD, along with PSAP management assistance and participation, utilized the Association of Public-Safety Communications Officials (APCO) Project RETAINS to define the minimum staffing requirements that provide a 90 percent of calls answered within 10 seconds. APCO's Project RETAINS is a nationally recognized program and tool developed to assist public safety communication centers with staffing issues. The program tools are designed to assist communication center managers, human resource and budget personnel, and local elected officials in addressing the challenges associated with hiring and retaining qualified personnel for the critical positions required in a PSAP. Project RETAINS utilizes formulas and provides processes that estimate staffing needs by looking at factors such as the available hours employees can work, turnover rates, coverage hours, call volume, and call processing time.

1.4 TECHNICAL SYSTEMS CONSIDERATIONS

A primary systems impact is the Computer Aided Dispatch (CAD) system. In a consolidated PSAP model, a single "multi-agency, multi-jurisdictional" CAD system is required to handle dispatch

functions and track resources for all user agencies. This CAD system must be capable of handling the unique dispatch requirements for Sheriff, Police, Fire, and EMS operations utilizing individual software modules specifically designed for each type of agency.

As a result of the Broward County 2002 Charter, the County implemented a county-wide CAD platform which is available to all Municipalities for their use. The majority of PSAPs in the County are taking advantage of the shared CAD platform. The CAD system is scalable and could be used in a consolidated configuration. Combining all the agency users, units, and jurisdictional response policies into this system would require some system reconfiguration.

In addition, the CAD system must have interfaces back into all of the users' existing Fire and Law Records Management Systems (RMS). These interfaces will be required to "download" completed CAD incident records into the individual jurisdictional records systems

1.5 PHYSICAL FACILITIES

To house and protect PSAP personnel and associated technology, appropriately hardened facilities are needed. The current Broward County PSAPs are not all appropriately hardened facilities. Three out of Broward County's four highest call volume PSAPs are Category 2 facilities. Under the alternative presented in this report, the three (3) county-wide consolidated PSAPs would be Category 5 facilities, and would collectively house the number of equipped console positions required to perform the work currently carried out in the twelve (12) production PSAPs throughout Broward County.

1.6 BUDGETARY CONSIDERATIONS

In FY08/09, the cost per 911 call for Broward County PSAPs was greater than that of the benchmark for large counties in the state. (See **Appendix 6** - State of Florida Counties Costs per 9-1-1 Call.) Collectively, annual O&M expenditures for the thirteen (13) Broward County PSAPs is over \$50 million. A review of Broward County PSAP O&M expenditures revealed the largest contributing category is Salaries and Benefits, making up approximately 85% of the total, which focused the feasibility analysis on Salary and Benefit costs. (See **Appendix 7** – Current PSAP O&M Expenditures.)

The existing Broward County PSAPs were interviewed to assess current staffing levels, which was used as a benchmark to compare against staffing requirements in a consolidated PSAP model. The focus was on front line staffing. Comparing the total staffing levels for the current environment with the requirements of a consolidated three PSAP model demonstrates that a 20% reduction of Full Time Equivalent employees (FTEs) in the consolidated model is a achievable. This represents an estimated annual savings of over \$7 million. (See Table 1-1 below.) The front line staffing budgetary considerations are discussed in further detail in Section 4.4.1.

Table 1-1 Comparing Current Staffing with 3 PSAP Consolidated Scenario

3 PSAP Consolidated Scenario Assumptions

Total Call Volume: 4,238,013 (911 and non-911 calls)

Average Processing Time: 2.5 min./call

3			
	Current Staffing	3 Consolidated PSAPs	Difference
Call Takers and Dispatchers	555	442	(113)

The requirement for a 3 PSAP Consolidated scenario requires fewer FTEs, representing a 20% reduction in FTE, at an estimated annual savings of \$7,779,118.

Adding to the estimated benefits to operating expenses, consolidation also leads to benefits for required future capital outlays for E-911 technology. The inevitable requirement to migrate to Next Generation E-911 technology will be less costly in the consolidated model as compared to the cost for the migration of the current 13 PSAPs.

1.7 OTHER CONSIDERATIONS

Independent of the information collected and analyzed for this report, there are a number of recommendations from other sources with respect to PSAP dispatching considerations. One example is a finding defined in an August 2009 report titled *Florida 911: The State of Emergency*, an independent analysis conducted by: Tartaglione & Associates, Consultants. In the Findings and Recommendations section of the report, one of the findings (Finding 3) was:

"Florida's 911 calls are answered in 258 call centers, all with their own standards for training, protocol and equipment. Florida recommends, but does not mandate, training for 911 call takers. As a result, centers do not necessarily employ industry best practices and standards, and Floridians receive uneven levels of service."

The primary recommendation related to this finding was mandated minimum standards for training. In 2010, Florida legislative action made Call Taker/Dispatcher training and certification a mandate. The secondary recommendation (Recommendation 3b) for this finding was:

"Explore call center consolidation to reduce the number of call centers, and thus reduce redundancies, reduce call transfers and increase consistency, in equipment and protocol."

Another benefit of consolidating PSAPs is the increased access to and eligibility for grant monies. Many current and anticipated funding opportunities are based on interoperability, data sharing and multi-agency center needs as opposed to single entity, stand-alone centers. The opportunities are aimed

at providing funding and support to consolidate and reduce single entity centers and interconnect services that allow for the interoperability necessary to support communications of all types at all levels. An example of this is revealed when reviewing the funding priorities defined in the 2010 Florida E911 State Grant Program. County requests for the purposes of consolidating E911 PSAPs ranks a Priority 3, and is only preceded in priority by systems requiring immediate replacement to maintain continued operations.

Another independent source in support of consolidation was a report entitled "Saving Lives, Increasing Value: Opportunities and Strategies for Consolidating New Jersey's 9-1-1 Emergency Services," produced under a contract from the State of New Jersey Office of Emergency Telecommunications Services to the John J. Heldrich Center for Workforce Development at Rutgers, The State University of New Jersey. The report states that consolidated call centers are likely to have more qualified, trained staff on duty and to provide more training opportunities for staff. The result is that there are "clear economies of scale in the cost of handling 9-1-1 calls."

These points all reflect a trend in dispatching toward consolidation of resources for efficiency and effectiveness of operations.

1.8 ADMINISTRATIVE STRUCTURE

The success of any PSAP consolidation begins with the development of an appropriate governance structure. The ability of all affected stakeholders to have input to the consolidation process and, where appropriate, into the operational and administrative oversight of the resulting organization is vital to the success.

In the proposed consolidated three (3) PSAP model, a single responsible administrative body should be installed to manage the operation. This administrative organization should direct, manage, and guide the three county-wide consolidated PSAPs as one functional group, and be augmented by operational and policy oversight from an administrative board and discipline-specific work groups that include representation from all affected stakeholders.

1.9 FINDINGS

Listed below are the findings that CTD feels the BCCMA should consider if they decide to further pursue the option of developing a more efficient dispatch system for emergency calls,

- A. 9-1-1 Dispatch operations for all Broward County Police, Fire, EMS, Sheriff agencies should be fully consolidated into three PSAPs. The following are arguments in support of a three PSAP consolidated configuration:
 - Improved Citizen/Officer Safety. An integrated consolidated dispatch configuration would better facilitate closest unit response to incidents that are independent of agency affiliation. This will minimize response times and increase the overall efficiency of all public safety agencies within the County.
 - **Minimized 9-1-1 Call Transfers.** All 9-1-1 calls would be answered by one of three common groups of call takers in our proposed consolidated operation, to be direct dispatched from the answering PSAP. This would eliminate most transfers that exist in the current configuration (and their associated potential life threatening delays).
 - **Cost Savings.** Consolidation could reduce the required quantity of telecommunicator personnel by up to 20 percent as compared to current staffing levels, thus, saving the taxpayers and estimated \$7,721,968/year in telecommunicator salaries and benefits. The

savings in staff do not include the savings that would be achieved by minimizing management staff (an assessment of current versus required management positions in a consolidated model was not conducted in this phase of the analysis). A reduction in required management positions will further reduce staffing costs. Other reductions may be realized in technical support personnel but are not quantified in this report.

Consolidating dispatch is also expected to reduce facilities costs (i.e., building maintenance, emergency power equipment, etc.) since an overall reduction in PSAP facilities would be achieved.

- Efficient, cost effective migration to new technologies. Consolidation also leads to benefits for required future capital outlays for E9-1-1 technology. The inevitable requirement to migrate to Next Generation 9-1-1 technology will be less costly in the consolidated model compared to the cost for the migration of the current 13 PSAPs.
- **B.** Install a Single Management Body for the Consolidated PSAP Model. The following are arguments in support of single-body management:
 - Policies, salaries, and benefits would be uniform for all call takers, dispatchers, and supervisors.
 - Single person/department responsible for center performance.
 - A single administrative and support services function serving countywide needs facilitates cost efficiencies by avoiding administrative and support redundancies.
- C. In a three PSAP consolidated configuration, PSAPs should be geographically dispersed. In the event of a PSAP system failure or evacuation, the other two PSAPs in the County can backup call taking/dispatch operations and could serve as flee-to centers.

1.10 NEXT STEPS

To advance the consolidated PSAP initiative, the BCCMA must decide whether there is sufficient data to demonstrate cost savings and operational efficiencies to move forward with the next step in the process. The success of the next phase, the Planning Phase, and the tasks incorporated within will have a direct impact on the success of this initiative.

- Planning Phase:
 - 1. Form Planning Task Team
 - 2. Site Selection
 - 3. Governance Model Formulation
 - 4. Determine Funding / Cost Allocation Formula
 - 5. Develop Organizational Structure
 - 6. Identify Human Resources Requirements
 - 7. Identify Performance Metrics
 - 8. Identify Municipality Participants / Non-participants
 - 9. Establish Implementation and Transition Objectives

2.0 CURRENT ENVIRONMENT

2.1 CURRENT BROWARD COUNTY PSAP STRUCTURE

Broward County currently handles 9-1-1 calls from 13 PSAPs located across the county. Figure 2-1 illustrates.

10 Primary PSAP's 2 Secondary PSAP's 1 Backup PSAP (Police & Fire Rescue) (Fire Rescue) (Police & Fire Rescue) **Secondary PSAPs Primary PSAPs Backup PSAP BSO Public Safety Bldg Coral Springs Broward EOC** Deerfield Beach Miramar Plantation Fort Lauderdale Hollywood Sunrise Pompano Beach Margate Pembroke Pines Coconut Creek

Figure 2-1 Current Broward County PSAP Structure

2.2 9-1-1 CALL FLOW

In the current structure, when a person calls 9-1-1 in Broward County, the call is routed to one of 10 Primary PSAPs, depending on where the caller is physically located when the call to 9-1-1 is made. Once the call is answered in the Primary PSAP, the caller may be handled and direct dispatched out of the answering PSAP, or may be transferred to a Secondary PSAP. Agencies receiving transfers of both voice and data are referred to as Secondary PSAPs. The data component that is transferred with the voice in 9-1-1 call transfers to Secondary PSAPs is the Automatic Location Information (ALI). This data provides information about the location of the caller, and is interfaced directly to the Computer Aided Dispatch (CAD) System to speed the response process. Figure 2-2 illustrates how calls flow through the Broward County PSAPs.

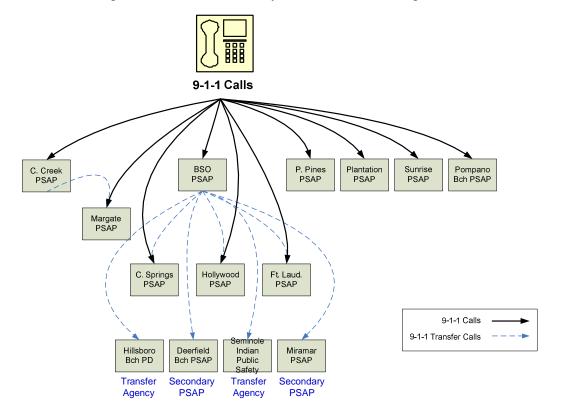


Figure 2-2 Broward County 9-1-1 Call Flow Diagram

Transfer calls contain added potential for a failure in the processing and handling of a 9-1-1 call as they introduce the possibility of the call being dropped in the process of transferring the call from one PSAP to another PSAP. Also, the response time of the call transfer method is greater than the direct dispatch method because the caller must talk to an additional person. For this reason, it is recommended that call transfers are minimized in the design of a 9-1-1 system. Direct dispatch is the preferred method of handling 9-1-1 calls in order that response time can be minimized to the greatest extent possible.

2.3 DISPATCH OPERATIONS

Dispatch services to the various public safety agencies throughout the County are provided by twelve (12) PSAPS. Each PSAP typically provides dispatch services to its own Police Department (PD), Fire Department (FD), and/or Emergency Medical Services (EMS) agencies. Other public safety agencies contract dispatch services from the Sheriff's Office, or one of the other PSAPs. Table 2-3 is a listing of PSAPs and the agencies they provide dispatch services to.

Pompano Coral Deerfield Coconut **PSB** Ft. Laud Hollywood P. Pines **Plantation Sunrise** Margate Miramar **Beach Springs** Creek **Beach PSAP PSAP** PD/ PD/ FD/EMS: FD/EMS: FD/EMS: FD/EMS: FD/EMS: FD/EMS: FD/EMS: FD/EMS: FD/EMS: Ft. Laud. Pompano Bch Pemb Pines Margate Cooper City Hollywood C. Springs Plantation Sunrise Wilton Mnr Davie Hallandale LBTS Laud. Lakes Lauderhill Lighthouse Pt N Laudrdale Oakland Park Pemb Park Port Everglds Sea Rch Lks SW Ranches Tamarac West Park Weston Unicorporated PD: Dania Beach C. Creek Deerfield Bch Lazy Lake Miramar Parkland FD/EMS: FD/FMS. FD/EMS: FD/EMS: FD/FMS FD/FMS. Lazy Lake Dania Bch Parkland C. Creek Deerfield Bch Miramar Hillsboro Bch Seminol

Table 2-3 PSAPs and Dispatched Agencies

2.3.1 PSAP MANAGEMENT

Every PSAP in the County is managed by a Police or Fire agency. In some cases sworn personnel (Lieutenant or Sergeant) supervise the call taker/dispatch operation, while other PSAPs' management are non-sworn personnel.

2.3.2 DISPATCH PERSONNEL

Telecommunicators are typically cross-trained to answer calls and dispatch units. Some PSAP telecommunicators are unionized, some are not. All (sworn) PSAP supervisory personnel (Lieutenants and Sergeants) are union workers too.

2.3.3 COMMUNICATIONS TECHNOLOGY SYSTEMS

All of the PSAPs utilize Positron 9-1-1 call answering equipment. Eight of the twelve production PSAPs, and the backup PSAP have been upgraded to the newest generation of Positron's call taking equipment, Power-911 on the VIPER platform (Voice over Internet Protocol for Emergency Response). Plans are in place to upgrade the remaining PSAPs, which currently operate on legacy Positron 9-1-1 call answering equipment.

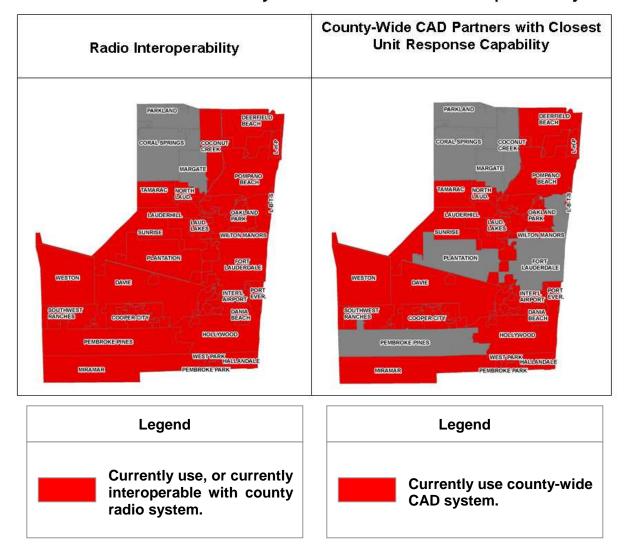
The majority of PSAPs within the County utilize the County-wide Computer Aided Dispatch software to manage/track field resources. (See Table 4-5 Current CAD Systems) The majority of PSAPs also utilize a GIS Mapping system to visually locate incidents.

Most agencies in the county either currently use county radio system, or are configured to be interoperable with the county radio system.

Figure 2-4 Broward County Radio Interoperability and CAD Partners

Technological Capability

Current Broward County Radio and CAD Interoperability



3.0 PROPOSED CONSOLIDATION OPTION

This study considers the following option for Broward County PSAPs:

3.1 THREE CONSOLIDATED PSAPS

The consolidated alternative consists of three common facilities for public safety agencies to accept and dispatch calls. Each PSAP would employ both call takers and dispatchers to answer and dispatch for all of the incoming 9-1-1 calls for the PSAP's geographical area of responsibility. Figure 3-1 illustrates call flow in a three PSAP Consolidated model.

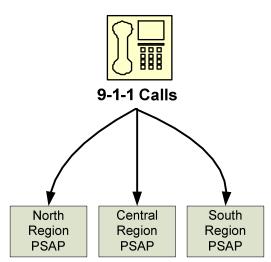


Figure 3-1 Three Regional PSAPs

4.0 ANALYSES

4.1 STAFFING ANALYSIS

In the eyes of the citizen, the efficiency of public safety agencies is often measured by their timely response and the rapid conclusion the agency brings to reported incidents. Response to incoming calls in the emergency communications center and how they are processed often determines the timeliness of the response to calls for assistance, and sometimes whether or not the outcome is successful. Delays in the processing of emergency calls for service can often lead to criticism, especially in those incidents that have a propensity for being high public profile incidents.

In order to develop an understanding of the requirements for the PSAP alternatives presented in this report, CTD submitted data collection surveys to each of the existing PSAP within the County. PSAPs were asked to provide data that identifies their current level of annual E9-1-1 and non 9-1-1 call volumes, Calls For Service (CAD incident) data, staffing levels, the annual available hours per employee, and salary and benefits information. Where data was requested but not made available to CTD, estimates were inserted (and referenced). CTD then projected the annual E9-1-1 calls and Calls For Service for the consolidated alternative described in this report.

Table 4-1 illustrates the average number of hours an individual telecommunicator is available for duty and indicates that it requires approximately 5.8 people to staff each full-time position in a communications center on a 24/7 basis.

Net Available Work Hours per FTE

Hours

(52 x 5 x 8) 2,080 Beginning FTE Annual Hours: 40 Hours per week, for 52 weeks

Average Allowance for: Vacation, Holidays, Bonus Days, Sick

(573) Time, Personal Day, Training, Breaks, Lunch, and Personal Time.

1,507 Subtotal Net Available Work Hours per FTE

FTES Required per One Required Position

(24 x 7 x 52) 8,736 Total Annual Hours to cover one required position

1,507 Net Available Work Hours per FTE

Table 4-1 Telecommunicator Net Available Work Hours

Each required PSAP position requires 8,736 hours of personnel coverage (52 weeks x 7 days x 24 hours). Based on the average annual personnel availability in Table 4-1 above, each PSAP position requires almost six full time equivalent (FTE) staff (8,736 hours ÷ 1,507 hours available per year = 5.80 required FTE per PSAP position).

5.80 FTEs Required per One Required Position

 $(8,736 \div 1,507)$

Table 4-2 illustrates the total number of E9-1-1 calls and dispatched incidents by PSAP.

Table 4-2 Sample Call Data for Each PSAP

	2008/09 9-1-1 Calls	2008/09 Estimated* Non 9-1-1	2008/09 Police Dispatches	2008/09 Fire/EMS Dispatches
PSAP		Calls		
BSO PSB	669,628	1,047,158	698,911	89,906
Ft. Lauderdale	223,511	279,958	151,586	41,648
Hollywood	137,178	270,979	202,627	24,979
Pompano Bch	113,952	238,235	113,222	23,213
Pemb. Pines	93,441	119,971	115,196	22,048
Coral Springs	66,450	177,190	176,095	19,483
Plantation	57,094	125,331	67,590	9,121
Sunrise	53,323	152,442	70,898	10,247
Margate	34,053	43,340	57,388	14,139
Coco. Creek	29,460	71,590	18,444	2,085
Deerfield Bch	11,282	19,304 ¹	n/a	
Miramar	7,596	17,895	n/a	10,935
EOC	n/a	n/a	n/a	n/a
Total	1,496,968	2,563,373	1,671,957	267,804

Figure 4-1 Dispatch Type Distribution

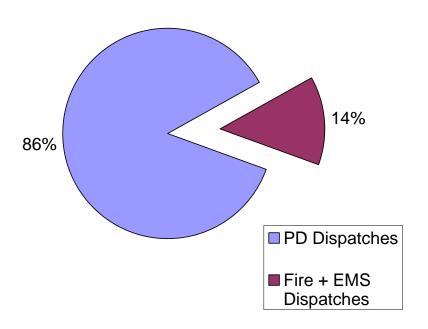
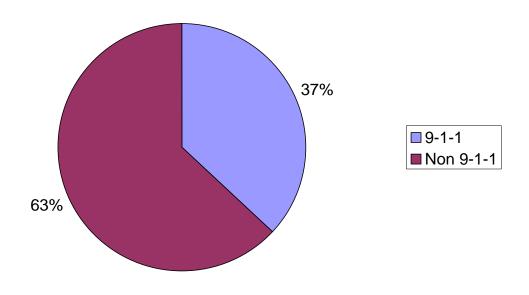


Figure 4-2 Call Type Distribution



For the purposes of this Feasibility Analysis, the assumption is that the call and incident quantities above include all calls/incidents that call takers and dispatchers handle.

To determine staffing requirements for each of the proposed consolidated PSAPs, the workload that is currently carried out in the existing 12 production PSAPs was divided up based on groups of municipality boundaries that approximate equal workload in a 3 PSAP consolidated model. In the current PSAP structure, there are calls originating from municipalities and unincorporated areas spanning across the Broward County map that are answered and dispatched out of the BSO Public Safety Building PSAP. To allocate these calls into one of the 3 PSAPs in the model, we have to determine the amount of calls that originate from each the geographical areas of responsibility for each of 3 PSAPs in the model. The reporting capability to get the data in this granular level of detail is not available. However, the number of Police, Fire, and EMS dispatches, known as Calls For Service (CFS), are available at this level of detail. Therefore, Calls For Service (CFS) were used as the basis for extrapolating the allocation percentages of call volume associated with each PSAP in the model. Call volume was allocated based on the percent allocation of Police, Fire, and EMS dispatches for each of the proposed PSAP's geographical boundary.

Public safety communications centers require a high Grade of Service (GOS) to serve the public's needs to answer E9-1-1 calls and dispatch response units. The number of call taker answering positions required to answer and handle 9-1-1 calls is determined by call volume, average call processing time, and the required grade of service. The grade of service is the probability of a caller having to wait more than a certain length of time before a call taker answers the call. Florida statutes refer to the state E911 Plan, in which Technical Standard Part 1(D) requires that the probability of a caller having to wait more than 10 seconds be less than 10 percent. Conversely, 90 percent of all the callers will have their calls answered in 10 seconds or less during the average busy hour.

CTD, along with PSAP management assistance and participation, utilized the Association of Public-Safety Communications Officials (APCO) Project RETAINS to define the minimum staffing requirements that provide a 90 percent of calls answered within 10 seconds.

4.1.1 BASELINE STAFFING

The existing PSAPs in the County are staffed as delineated in Table 4-3 below.

Table 4-3 Baseline PSAP Front Line Staffing¹

PSAP	Telecommunicator Staffing
BSO PSB	228
Ft. Lauderdale	70
Hollywood	47
Pompano Beach	41
Pembroke Pines	25
Coral Springs	29
Plantation	33
Sunrise	30
Margate	23
Coconut Creek	14
Deerfield Bch	8.25
Miramar	7
Total	555

4.1.2 THREE PSAP CONSOLIDATED ALTERNATIVE - STAFFING REQUIREMENTS

Based on the call volume allocated to each of the PSAPs in the consolidated model, the call processing time, and staff available hours data provided by the PSAPs, the APCO Project RETAINS tool yielded the following front line staffing requirements for the three PSAP Consolidated model. See Table 4-4 below.

Table 4-4 Required Front Line Staffing for a Three PSAP Consolidated Model

Required Staff	South	Central	North	Total
Call Takers	61	55	45	161
Dispatchers	100	94	87	281
Total	161	149	132	442

¹ Note: All Baseline PSAP Front Line Staffing values refer to current PSAP staffing levels reported in the data collected from the PSAP management.

Analysis Assumptions:

- Used the Association of Public-Safety Communications Officials (APCO) Project RETAINS to determine the staffing requirements.
- Number of Calls (911 + non-911): 4,238,013 (includes an allowance for outbound calls).
- Call Processing Time: 2.5 min./call (includes after call work time).
- Average Net Available Work Hours: 1,507 (This is the current average of existing PSAPs.)
- Each required position will require 5.80 Full Time Equivalent (FTE) headcount for 24x7 coverage (52 weeks/yr x 7 days/week x 24 hrs/day ÷ 1,507 hours available/year = 5.80 FTEs required per one 24x7 required position).

4.2 PHYSICAL FACILITIES

4.2.1 BASELINE PSAP FACILITIES

To house and protect PSAP personnel and associated technology, appropriately hardened facilities are needed. The current facilities that house the Broward County PSAPs are not all appropriately hardened facilities. Three out of Broward County's four highest call volume PSAPs are Category 2 facilities.

4.2.2 THREE PSAP CONSOLIDATED ALTERNATIVE - FACILITIES

Under the alternative presented in this report, it is assumed three (3) consolidated PSAPs will be Category 5 facilities, and collectively will house the number of fully equipped console positions required to perform the work currently carried out in the twelve (12) production PSAPs throughout Broward County.

There is space in suitable existing, or near-term planned Category 5 PSAP facilities which are of sufficient size and structural strength to function as consolidated centers. Preliminary discussions with several Municipalities who have suitable existing or soon to be completed facilities have taken place. These Municipalities have agreed in concept to make space available to CTD to be used for the purposes of serving as emergency flee-to facilities in the current environment. These existing or near-term planned PSAP facilities are not of size and capacity to house the required number of fully equipped console positions in a single countywide consolidated PSAP, however they can be collectively used to accommodate the required number of positions to establish a three (3) PSAP consolidated model. By leveraging available space, this alternative avoids significant capital costs that would otherwise be required for land acquisition, design, facility re-tooling, large scale renovation, and/or construction.

4.2.2.1 FACILITY SUMMARY

In the next phase, the Planning Phase, spatial and equipment requirements have to be compiled, based on current and future operational and head-count projections, into a facility plan that would review current or near-term available facilities and compare them against the requirements to confirm:

- A. Sufficient square footage to support the functional and head-count requirements of the PSAPs.
- B. Sufficient parking lot to support the functional and head-count requirements of the PSAPs.

The Dispatch and Operations Center area in the facility plan should have at least a six-inch raised floor system, allowing for flexibility regarding the use of communications, computing equipment, and cabling to the CAD hardware equipment room.

4.3 TECHNICAL SYSTEMS CONSIDERATIONS

4.3.1 BASLINE TECHNICAL SYSTEMS

Currently, the following CAD systems are in use at the County PSAPs:

Table 4-5 Current CAD Systems

PSAP	Current CAD	# of Workstations	Date Implemented
DGO DGD	Matanala Drintrala	62	System 1994
BSO PSB	Motorola Printrak	63	Cur. Version 2007
			System 1998
Ft. Lauderdale	Intergraph	17	H/W Version 2009
			S/W Version 2009
Hallywand	Motorola Printrak	26	System 1994
Hollywood	Motorola Printrak	20	Cur. Version 2007
Dommono Doh	Motorola Printrak	16	System 1994
Pompano Bch	Motorola Printrak	10	Cur. Version 2007
			System 1994
Pembroke Pines	VisionAir	20	H/W Version
			S/W Version
			System 1994
Coral Springs	HTE	11	H/W Version
			S/W Version
			2007
Plantation	Intergraph	10	H/W Version
			S/W Version
Sunrise	Matauala Dointuala	8	System 1994
Sunrise	Motorola Printrak	New PSAP = 19	Cur. Version 2007
			1996
Margate	HTE	5	H/W Version 2005
			S/W Version 2010
Coco. Creek	OSSI Sungard	7	2001

			H/W Version
			S/W Version
Deerfield Bch	Motorola Printrak	2	System 1994
Deerneid Ben	Motorola Printrak	2	Cur. Version 2007
) / ·	Matauala Duintuala	4	System 1994
Miramar	Motorola Printrak	4	Cur. Version 2007
EOC	-	n/a	n/a

4.3.2 THREE PSAP CONSOLIDATED ALTERNATIVE – TECHNICAL SYSTEMS

In a three PSAP consolidated configuration, public safety response resources would be dispatched by one of the three PSAPs. Call takers would answer telephone/9-1-1 calls, enter incident information into a common CAD system and transfer the CAD incident to the appropriate dispatcher (based on incident jurisdiction). If the County chooses to consolidate dispatch operations, one CAD system should be chosen for all operations.

In a new consolidated PSAP configuration, a single "multi-agency, multi-jurisdictional" CAD system is required to handle dispatch functions and track resources for all user agencies. This CAD system must be capable of handling the unique dispatch requirements for Sheriff, Police, Fire, and EMS operations utilizing individual software modules specifically designed for each type of agency.

As a result of the Broward County 2002 Charter, the County implemented a county-wide CAD platform which is available to all Municipalities for their use. The majority of PSAPs in the County are taking advantage of the shared CAD platform. The CAD system is scalable and could be used in a consolidated configuration. Combining all the agency users, units, and jurisdictional response policies into this system would require some system reconfiguration.

In addition, the CAD system must have interfaces back into all of the users' existing Fire and Law Records Management Systems (RMS). These interfaces will be required to "download" completed CAD incident records into the individual jurisdictional records systems.

Other interfaces to consider for the new consolidated CAD System would include:

- A. Message Switch Enable access FCIC/NCIC
- B. Mobile Computer Enable messaging between CAD terminals and Mobile Data Communications units
- C. E9-1-1 Delivery of 9-1-1 ANI/ALI Data to CAD
- D. TDD Interface Interface for hearing impaired callers
- E. ProQA Interface Integration of caller aid with CAD
- F. Mapping Interface Interface with Broward County Street centerline geofile
- G. AVL Interface ability to track police and fire units via GPS technology. Typically used in fire vehicles to facilitate closest unit response.
- H. Master Clock (NetClock) Timing input from a Master Clock system

- I. Emergency Radio Button Translation of Radio Unit I.D. to user name and display on CAD screen
- J. Alphanumeric Paging Ability to create page messages on CAD screen and transmit to Alphanumeric Pagers (private or commercial carrier)
- K. Fire Station Alerting Interface to encoders allowing Fire Station Alerting from CAD Terminal
- L. Other applicable CAD feeds (e.g. false alarm billing (CryWolf) and EMS billing (TripTix))

TECHNICAL SYSTEMS SUMMARY

Consistency of the 9-1-1 call taking system already exists, because all of the existing PSAPs are currently using Positron call taking equipment, and all are planned to be upgraded to the newest generation of call taking equipment.

Consolidation would require modifications to the county-wide CAD system to combine all the agency users, units, and jurisdictional response policies into this system. This would require some system reconfiguration.

4.4 BUDGETARY CONSIDERATIONS

4.4.1 CURRENT CONFIGURATION - BASELINE

For developing a baseline, the current front line staffing levels were provided by PSAP management for each of the PSAPs. A summary of the total PSAP front line staffing is shown in Table 4-6.

Table 4-6 Current PSAP Front Line Staffing

	Call Takers and Dispatchers
Current Staffing	555

Fiscal year 2008/2009 costs were obtained from PSAP management for each of the PSAPs. The staffing costs for each of the PSAPs is shown in Table 4-7. These costs includes the salary & wages as well as benefits.

Table 4-7 PSAP Baseline Staffing Costs

PSAP	Total Salary and Benefits
BSO, Pompano, and Ft. Laud.	\$25,693,843.39
Hollywood	\$4,545,026.00
Pemb. Pines	\$1,296,385.86
Coral Springs	\$2,070,366.00
Plantation	\$2,329,596.82
Sunrise	\$2,664,418.02
Margate	\$1,384,728.00
Coco. Creek	\$1,017,727.66
Deerfield Bch	\$603,209.65
Miramar	\$753,024.00
Total	\$42,358,325.40

Based on the information provided, the total staffing cost to support the current configuration is \$42,358,325.

Based on information provided by the PSAPs, the salary and benefits expenses for front line staffing range in various pay categories starting from entry level to seasoned communications operators. The range of costs for Salaries plus Benefits that was reported was between \$48,900 on the low end, up to high of \$109,500. (Note: These figures include the total cost for both Salaries and Benefits.) For the analysis presented in this report, the average Salary plus Benefit cost per employee of \$68,336 was used. This number is in line with the average Salary plus Benefit cost of a more seasoned communications employee in the Sheriff's Office, which is the PSAP that employs the greatest number of communications employees.

4.4.2 THREE PSAP CONSOLIDATED ALTERNATIVE

STAFFING

Table 4-8 below presents the estimated front line staffing requirements for a three PSAP Consolidated Model.

Table 4-8 Three PSAP Consolidated Staffing Summary

	Call Takers	Dispatchers	Total
Headcount	161	281	442

Table 4-9 below presents the staffing impact comparison of the baseline configuration and the consolidated model.

Table 4-9 Annual Staffing Cost – Baseline vs. Three PSAP Consolidated Alternative

Configuration	Number of Call Takers and Dispatchers			
Baseline	555			
Three PSAP Consolidated Alternative	442			
Difference	-113			
Average Salary plus Benefit Expense	\$68,336			
Estimated Savings	\$7,721,968			

As estimated in the Consolidation Feasibility analysis, the total telecommunicator personnel are decreased by 20 percent (113 FTEs) in the three PSAP Consolidated model, as compared to the baseline configuration. The resulting decrease in telecommunicator front line staff payroll would be approximately \$7,721,968 annually.

4.5 BENEFIT ANALYSIS

4.5.1 BASELINE CONFIGURATION ADVANTAGES

- A. PSAPs are geographically dispersed. In the event of a PSAP system failure or evacuation, other PSAPs in the County can backup call taking/dispatch operations.
- B. PSAP police departments are staffed 24/7; providing continuous agency access to the public.

4.5.2 BASELINE CONFIGURATION DISADVANTAGES

A. The randomness of call arrival results in inevitable peaked call arrival at some times. With smaller, independent groups of staff, which is inherent in the current PSAP configuration, it is difficult to handle peaked call arrivals. With smaller, independent groups of staff, it is also difficult to schedule time for training, or to handle workload during other times of reduced staff availability (e.g. because of vacation or sick time, etc.).

B. When 9-1-1 calls require to be transferred to another PSAP it results in a greater potential for a failure in the processing and handling of a 9-1-1 call because it introduces the possibility of the call being dropped in the process of transferring the call from one PSAP to another PSAP. Also, the response time of the calls transferred are greater than the direct dispatch method because the caller must talk to an additional person.

4.5.3 THREE PSAP CONSOLIDATED ALTERNATIVE ADVANTAGES

- A. Staffing efficiencies are realized by sharing the entire County's call taking and dispatch functions by three larger groups of telecommunicators.
- B. Improved public safety dispatch services provided to the citizens of Broward County. Telecommunicators would be similarly trained to provide consistent service to the public and public safety response unit personnel.
- C. Improved multi-agency response coordination.
- D. PSAPs are geographically dispersed. In the event of a PSAP system failure or evacuation, other PSAP in the County can backup call taking/dispatch operations.

4.5.4 THREE PSAP CONSOLIDATED ALTERNATIVE DISADVANTAGES

- A. Systems and facilities would have to be modified and/or re-designed to support the change to a consolidated PSAP model.
- B. Some agencies may be opposed to consolidation.
- C. Acceptable telecommunicator salaries and benefits would have to be negotiated/implemented.
- D. Common dispatch policies and protocols would have to be developed and implemented.
- E. A sufficient management and governance model would have to be developed and implemented.

5.0 ADMINISTRATIVE STRUCTURE CONSIDERATION

5.1 Introduction

Governance refers to establishing a shared vision and a collaborative decision-making process supporting interoperability efforts to improve communication, coordination, and cooperation across jurisdictions². The success of any PSAP consolidation begins with the development of an appropriate governance structure. The ability of all affected stakeholders to have input to the consolidation process and, where appropriate, into the operational and administrative oversight of the resulting organization is vital to the success.

The following sections are a presented for the BCCMA's consideration as a basis for governance formation.

5.2 GOVERNANCE AND SUPPORT STRUCTURE

The consolidation of emergency communications should be a collaborative effort between public safety response agencies and municipalities. A business model approach of service provider and customer agencies will result in equal and optimal service to all user agencies.

In a consolidated PSAP operation with resources distributed throughout several physical facilities, a single responsible administrative body should be installed to manage the operation. It is important to recognize that the responsible administrative body must utilize PSAP resources to address the needs of all user agencies equitably. The governance structure must be designed in support of this notion. Clearly established authorities and responsibilities of all parties are necessary to avoid and/or address political and user agency control issues. Deployment of the governance structure should establish a consolidated PSAP management organization that is a full partner with other public safety agencies, rather than a subordinate of the agencies.

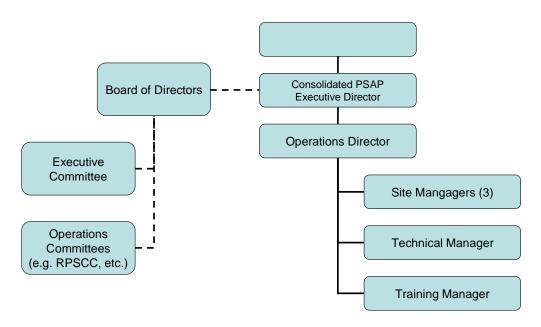
The consolidated PSAP model will also require a backbone structure to support services, such as payroll and other human resource support needs. The support structure also provides services such as budget/finance, legal, risk management and procurement.

This administrative organization should direct, manage, and guide the consolidated PSAPs as one functional group, and be augmented by operational and policy oversight from an administrative board and discipline-specific work groups that include representation from all affected stakeholders. Table 5-1 below illustrates one possible organizational design and governance structure.

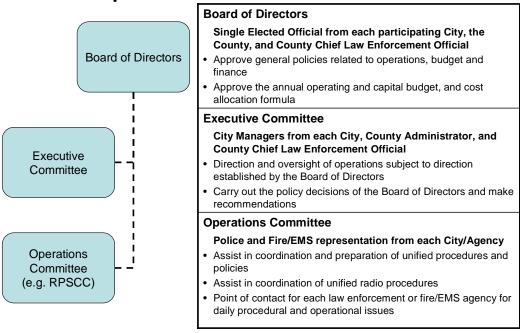
² U.S. Department of Homeland Security; March 2007.

Table 5-1 Sample Organization and Governance Structures

Sample Organization Structure



Sample Governance Structure



6.0 APPENDICES

6.1 APPENDIX 1 - LETTER FROM BROWARD COUNTY ADMINISTRATOR BERTHA HENRY



BERTHA W. HENRY, County Administrator

115 S. Andrews Avenue, Room 409 • Fort Lauderdale, Florida 33301 • 954-357-7362 • FAX 954-357-7360

DATE: May 20, 2010

TO: Mayor and Board of County Commissioners

FROM: Bertha Henry, County Administrator

SUBJECT: Funding Public Safety E911 Dispatch Operations

<u>Background</u>

In the late 1970's, four (4) Cooperative Dispatch Centers (CDCs) were established in order to implement the 911 emergency system in the County. The County funded all four (4) CDCs which were operated by BSO, Fort Lauderdale, Hollywood and Pompano Beach. Each CDC dispatched for a number of other cities. The County phased out the funding for the CDCs operated by the three (3) cities and continued funding only for the CDC operated by BSO (BSO dispatch center). BSO continued to dispatch for a number of cities. Over the years, several additional cities were added to the BSO dispatch center and a number of cities dropped out of the CDCs to establish their own public safety answering point (PSAP).

In 1995, the County entered into interlocal agreements (ILAs) with Fort Lauderdale and Pompano Beach. Each ILA addressed a number of disparate issues such as the expansion of North Broward detention facilities, funding for the homeless shelter and a number of other issues. Each ILA, limited by specific time frames, also included a provision for the County to fund dispatch services. The intent at the time was to work towards a common public safety communications system.

In 2002, the County Charter was amended and gave the County the responsibility to fund public safety communications infrastructure (not staff). This met the objective of a common public safety

communications system and closest unit response (common CAD system); and the County did not pursue centralizing dispatch services.

The ILA between Fort Lauderdale and the County expired in 2000; however, BSO continued to provide police dispatch services under an ILA between BSO and the City with County funding. The cost to provide dispatch services to the City is approximately \$5.7 million per year. The Pompano Beach ILA expires on September 30, 2010, and staff has notified the City that payments (\$2.5 million per year) for dispatch services will cease at that time. This has become an issue between the City of Pompano Beach and BSO in relation to their proposed agreement for law enforcement services.

Currently, there are ten (10) primary PSAP's and two (2) secondary PSAP's and one (1) backup PSAP in the County. BSO dispatches police calls for twenty-three (23) cities. Fourteen (14) of these cities are contract cities. BSO does not dispatch police calls for the following cities: Coral Springs, Margate, Coconut Creek, Sunrise, Hollywood, Pembroke Pines, Plantation and Hillsboro Beach. Currently BSO dispatches fire rescue calls for seventeen (17) cities. Seven (7) of the cities are BSO contract cities. BSO does not dispatch fire rescue calls for the following cities: Coral Springs, Margate, Coconut Creek, Sunrise, Hollywood, Pembroke Pines, Plantation, Hillsboro Beach, Dania Beach, Deerfield Beach, Fort Lauderdale, Lazy Lakes, Wilton Manors and Miramar. State Statutes do not address who has the responsibility to pay for dispatching services. What is clear is that police, fire and emergency dispatch are tied to the delivery of those services. While it can be argued that the current system is not "fair" since some cities pay for their own dispatching, the County's actions are permissible as long as it is prepared to provide the service to all cities that ask. Given the County's budget situation, this is not an option.

Current Situation

As mentioned above, the County's ILA with the City of Pompano Beach will expire at the end of this fiscal year and payments for dispatch services will cease. While the City has been aware for several years that the ILA will expire and the County will no longer fund dispatch services, the recent turnovers in city managers delayed the City's attention to the matter. The City has asked the County and BSO to continue to provide the City with dispatch service at no cost. In addition, the City of Hollywood has informed BSO that it wants the County to pay for the City's dispatch operations and other cities may soon follow. The County cannot afford to assume these additional costs.

Given the fact that the County can no longer afford to assume the costs of dispatch services for additional cities, the County has only two (2) choices:

Option 1 - Charge all entities which elect to be dispatched by BSO; or

Option 2 - Work to develop a more efficient dispatch system for emergency calls, which could include, but not be limited to, a consolidation of centers, pro rata assessments based on call volume, etc.

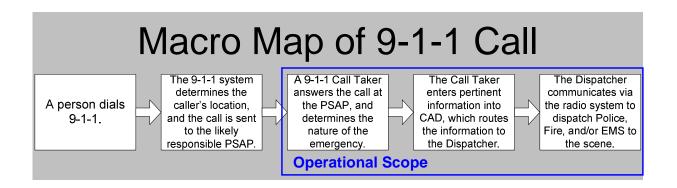
I raised this issue at a recent meeting of the Broward City/County Manager Association (BCCMA) and encouraged the group to study the issue and develop a new operations model. Staff expects the BCCMA to place the item on their next agenda and establish a working group. BSO staff has evaluated the issue and concluded that a more cost effective fee based model is feasible – subject to a "buy in" from municipalities.

If efforts fail to develop a regional dispatch system, the County would fund BSO to cover the cost of dispatching for the unincorporated areas and regional services.

Please let me know if you would like a more detailed briefing on this issue.

cc: Pamela Madison, Interim Deputy County Administrator
Pete Corwin, Assistant to the County Administrator
Kayla Olsen, Director, Office of Management and Budget
Evan Lukic, County Auditor
Jeffrey Newton, County Attorney
Director John Curry, Broward Sheriff's Office

6.2 APPENDIX 2 - PSAP OPERATIONS MACRO MAP



6.3 APPENDIX 3 - STAFFING REQUIREMENTS - 3 PSAP CONSOLIDATED MODEL

APCO RETAINS Staffing Requirements

_									
	APCO RETAINS Model - Call Taker Staffing Requirements								
	South	Central	North	Total					
(a)	1,603,383	1,438,010	1,196,622	4,238,015	911 Calls + non 911 Calls				
(b)	183.0	164.2	136.6	483.8	Average 911 + non 911 Calls Per Hour (a) / (24 x 365)				
(c)	150 150 150 150		150	Call Processing Time (Seconds) (2.5 min. per call)					
(d)	27,455	24,623	20,490	72,569	Avgerage Call Workload per Hour (in seconds) (b) x (c)				
(e)	457.6	410.4	341.5	1,209	Avgerage Call Workload per Hour (in minutess) (d) / 60				
(f)	7.63	6.84	5.69		Average Base Required Staffing (BIS) per Hour (e) / 60				
(g)	9.53	8.55	7.11	25.2	Avg Base Required Staffing (BIS) per Hour w/80% Occupancy Rate (f) / (0.8)				
(h)	5.80	5.80	5.80		FTE Adj. for 24 x 7, Vaca, Trng, Sick, Lunch, etc [(52x7x24) / (n)]				
(i)	55.3	55.3 49.6 41.3 146.1		146.1	FTE 911 + non 911 Staff Required (g) x (h)				
(j)	5.5	4.9	4.1	14.5	Attrition Allowance (i) x [(m)/2]				
(k)	61	55	45	161	Total FTE 911 + non 911 Staff Required (with Attrition allowance) (i) + (j)				
(m)	19.89% Turn Over Rate								
(n)	1.507	Net Availa	ble Work H	lours					

	APCO RETAINS Model - Dispatcher Staffing Requirements							
	South	Central	North	Total				
(a)	5	5	4	14	Fire/EMS Dispatcher Positions			
(b)	8 7 7 22		22	Police Dispatcher Positions				
(c)	2.67	2.67	2.67	8	Teletype Positions			
(d)	15.67	14.67	13.67	44	Total Number of Dispatcher Positions Required (a) + (b) + (c)			
(e)	5.80	5.80	5.80	5.80	FTE Adj. for 24 x 7, Vaca, Trng, Sick, Lunch, etc [(52x7x24) / (n)]			
(f)	90.8	90.8 85.0 79.2 255.1		255.1	FTE Dispatchers Required (d) x (e)			
(g)	9.0	8.5	7.9	25.4	Attrition Allowance (f) x [(i)/2]			
(h)	99.9	93.5	87.1	281	Total FTE Dispatchers Required (with Attrition allowance) (f) + (g)			
(i)	(i) 19.89% Turn Over Rate							
(j)	(j) 1,507 Net Available Work Hours							

6.4 APPENDIX 4 - APCO RETAINS MODEL – PSAP WORKLOAD ALLOCATIONS

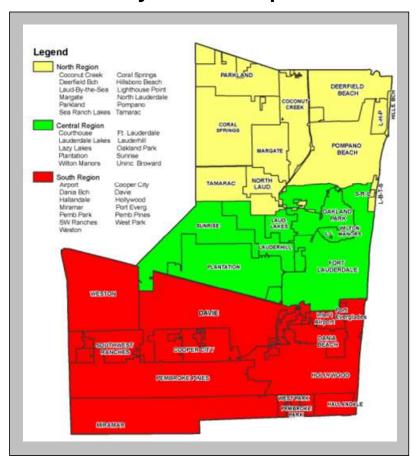
APCO RETAINS Model Broward County Assumptions - Workload

	2008/09 Calls For Service			vice	Extrapolated Total				
	_				PSAP 911			911 + non 911	
Region	Area		Fire CFS	Total CFS	Calls	911 Calls	Calls	Calls	
North	* Parkland	8,493	40.400	8,493	00.450	477.400	20,808	20,808	
	Coral Springs	176,095	19,483	195,578		177,190		243,640	
	Coconut Creek	18,444	2,085	20,529		71,590		101,050	
	Margate	57,388	14,139	71,527	34,053	43,340		77,393	
	* Deerfield Bch	64,896	14,381	79,277			158,995	158,995	
	Hillsboro Beach			0				(
	* Lighthouse Point	8,632	1,229	9,861			24,159	24,159	
	Pompano	113,222	23,213	136,435	113,952	238,235		352,187	
	* Sea Ranch Lakes	218		218			532	532	
	* Lauderdale By the Sea	5,118	1,206	6,324			15,494	15,494	
	* Tamarac	41,630	10,844	52,474			128,561	128,561	
=	* North Lauderdale	25,956	4,167	30,123			73,801	73,801	
North To		520,092	90,747	610,839	,	530,355	422,350	1,196,620	
Central	Plantation	67,590	9,121	76,711		125,331		182,425	
	Sunrise	70,898	10,247	81,145		141,216		194,528	
	Ft. Lauderdale	143,871	41,648	185,519	223,511	279,958		503,469	
	Wilton Manors	7,715	2,346	10,061				(
	* Lazy Lake	100		100			245	245	
	* Lauderdale Lakes	34,959	5,499	40,458			99,122	99,122	
	* Lauderhill	66,722	12,323	79,045			193,660	193,660	
	* Oakland Park	46,020	7,677	53,697			131,558	131,558	
	* Unincorporated Broward		3,602	38,571			94,499	94,499	
	* Courthouse	15,716		15,716			38,504	38,504	
Central T		488,560	92,463	581,023	333,917	546,505	557,588	1,438,010	
South	* Miramar	75,897	10,935	86,832			212,738	212,738	
	* West Park	14,942	2,260	17,202			42,145	42,145	
	* Pembroke Park	7,797	1,523	9,320			22,834	22,834	
	* Hallandale	54,642	7,608	62,250			152,513	152,513	
	Hollywood	202,627	24,979	227,606		270,979		408,157	
	Pembroke Pines	115,196	22,048	137,244		119,971		213,412	
	* SW Ranches	5,927	835	6,762			16,567	16,567	
	* Cooper City	14,988	2,478	17,466			42,792	42,792	
	* Weston	24,631	4,555	29,186			71,506	71,506	
	* Davie	73,003	22,522	95,525			234,036	234,036	
	* Sea Port	17,620	1,175	18,795			46,048	46,048	
	* Dania	30,082	5,834	35,916			87,994	87,994	
	* Airport	18,942	2,544	21,486			52,641	52,641	
South To	otal	656,294	109,296	765,590	230,619	390,950	981,814	1,603,383	
Grand To	otal	1,664,946	292,506	1,957,452	808,451	1,467,810	1,961,752	4,238,013	

* - Currently Dispatched by BSO PSB.

6.5 APPENDIX 5 - APCO RETAINS MODEL -PSAP AREAS

APCO RETAINS Model Broward County Assumptions - Workload



6.6 APPENDIX 6 – STATE OF FLORIDA COUNTIES COSTS PER 9-1-1 CALL

Broward County PSAPs FY 2008/09

- In FY08/09, the cost per 911 call for Broward County PSAPs was greater than that of the benchmark for large counties in the state.
- E911 Fee revenue funded only 43% of the 911 costs in the county, compared to an average funding level of 67% for large counties in the state.



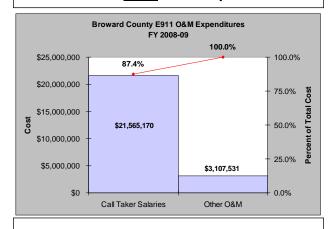
Cost Per Call (Total E911 Expenditures)

(*Source: State of Florida E911 Board 2009 Annual Report)

6.7 APPENDIX 7 - CURRENT PSAP O&M EXPENDITURES

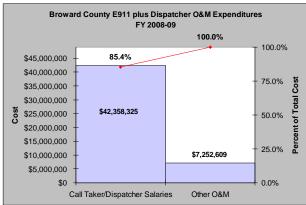
Broward County PSAPs FY 2008/09

FY 2008/09 9-1-1 O&M Expenditures



In FY08/09, 911 Call Taker Salaries made up 87% of the Broward County E911 O&M Expenditures.

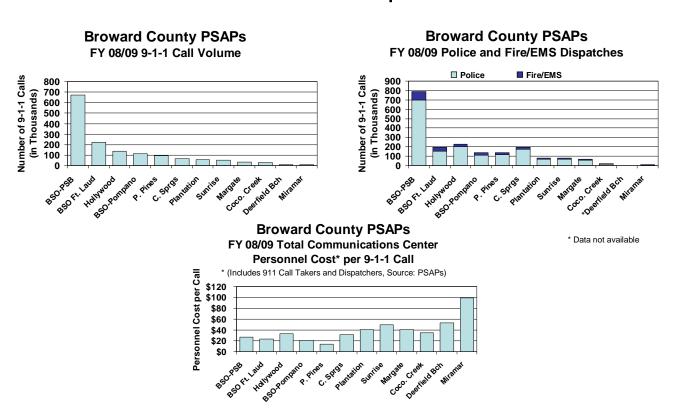
9-1-1 plus Dispatcher O&M Expenditures



In FY08/09, 911 Call Taker/Dispatcher Salaries made up 85% of the Broward County 911 plus Dispatchers O&M Expenditures.

6.8 APPENDIX 8 - CURRENT PSAP OPERATIONAL AND PERSONNEL COST PER CALL STATISTICS

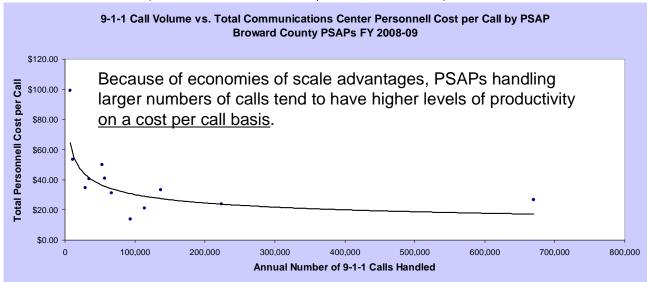
E911 Call Volume, Dispatches, and Total Personnel Cost per 9-1-1 Call



6.9 APPENDIX 9 - CURRENT PSAP PERSONNEL COSTS PER CALL SCATTER DIAGRAM

PSAP Total Communications Center Personnel Cost* per 9-1-1 Call

*(Includes 911 Call Takers and Dispatchers, Source: PSAPs)

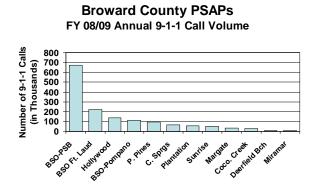


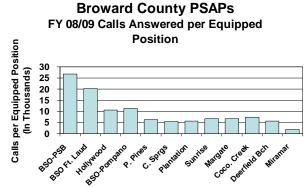
Higher Call Volume

→ Lower Cost Per Call

6.10 APPENDIX 10 - CURRENT PSAP 9-1-1 CALLS ANSWERED PER EQUIPPED POSITION

Calls Answered per Equipped Position Varies by PSAP





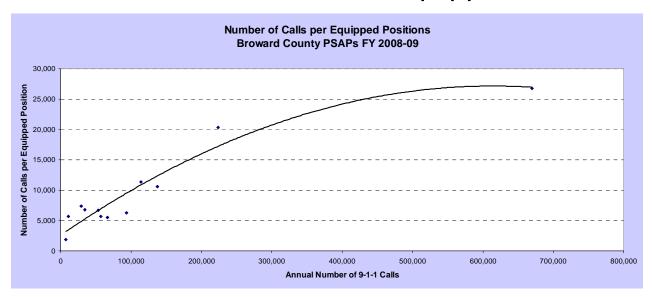
The production we get out of each piece of equipment is much greater in larger PSAPs.

9-1-1 Calls Answered per year	Calls per Equipped Position
>200,000	> 20,000
<100,000	5,700 Average

Higher Call Volume Higher Calls Answered per Equipped Position

6.11 APPENDIX 11 - CURRENT PSAP CALLS PER EQUIPPED POSITION SCATTER DIAGRAM

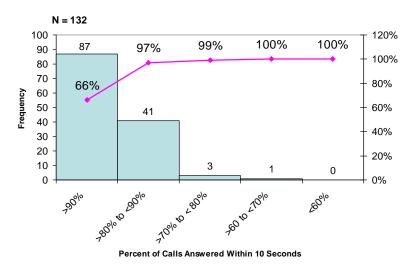
PSAP Calls Answered Per Equipped Position



Higher Call Volume Maximize Call Handling Equipment

6.12 APPENDIX 12 – CURRENT CALL ANSWERING PERFORMANCE FREQUENCY DISTRIBUTION

Broward County PSAP Call Answering Performance FY08/09 Monthly Percent of Calls Answered within 10 sec. (per PSAP) Frequency Distribution



- 66% of the monthly indicator values for FY08/09 were on target.
- Note: Per S. 365.171,F.S. 90% of the calls shall be answered within 10 seconds of call arrival at the PSAP.

(Note: Deerfield Beach PSAP does not have reporting capability)

6.13 APPENDIX 13 – FEASIBILITY ANALYSIS DATA GATHERING

6.13.1 PSAP MANAGEMENT MEETINGS

CTD began the Consolidation Feasibility analysis in July of 2010 through orientation meetings with existing PSAP management. In these meetings, existing PSAP management was briefed on the current situation and was petitioned to participate in feasibility analysis data gathering by providing operational and budgetary information related to their respective PSAPs. Existing PSAP management was encouraged to also provide input regarding any concerns that they would like to be considered. Subsequent information was gathered via telephone and email. This section will summarize the data collected during that phase of the project.

6.13.2 GENERAL NOTES (JULY 9-26, 2010)

The following notes were taken during project related PSAP manager meetings:

- A. Highest ranking law enforcement official in the County is the Broward County Sheriff.
- B. PSAPs configured to automatically transfer calls to non-emergency lines if 9-1-1 phones lines are busy.
- C. PSAPs do not all use the same CAD and Radio systems.
- D. PSAPs currently have different procedures for Teletype operations.
- E. Some PSAPs currently handle public and internal transcript requests.
- F. Some PSAPs currently handle call outs.
- G. PSAPs were unsure how consistency across PSAPs would be ensured.
- H. Other considerations:
- I. Frequency and radio coverage for dispatching.
- J. PSAP Performance Metrics, maintain/improve level of service.

6.13.3 REGIONAL COMMUNICATIONS/CONSOLIDATION PSAP MEETINGS (JULY 9 - 13, 2010)

Between July 9 and July 13, 2010, CTD met with PSAP management representation from all of the existing PSAPs. The following was presented and noted:

- A. In May 2010, The County Administrator of Broward County, Bertha Henry, through a letter to the Mayor and Board of County Commissioners, communicated that: "Given the fact that the County can no longer afford to assume the costs of dispatch services for additional cities, the County has only two (2) choices:
 - Option 1 Charge all entities which elect to be dispatched by BSO; or
 - Option 2 Work to develop a more efficient dispatch system for emergency calls, which could include, but not be limited to, a consolidation of centers, pro rata assessments based on call volume, etc."

The County Administrator also communicated this status to the Broward City/County Management Association (BCCMA), and encouraged the group to analyze the issue and develop a new operations model. In response, the city managers created a task force, the

BCCMA Dispatch Committee, to work among cities, the County, and BSO. The BCCMA Dispatch Committee requested a high level presentation be provided to describe the current situation of dispatch operations in Broward County. CTD presented to the BCCMA Dispatch Committee. The presentation included information about the current Broward County PSAP structure, operational and cost statistics, employee cost per call information, equipment utilization information, and current PSAP performance metrics. the BCCMA Dispatch Committee requested CTD to perform a Phase I Consolidation Feasibility analysis to assess potential benefits of consolidation, to uncover and better understand any possible pitfalls in the consolidation process.

B. Data gathering forms were reviewed and PSAPs were requested to provide completed forms. PSAPs were requested to include input regarding any concerns with their completed documents.

6.13.4 REGIONAL COMMUNICATIONS/CONSOLIDATION PSAP MEETINGS (JULY 27, 2010)

On July 27, 2010, CTD met in the Broward County EOC with representatives from various PSAPs. The following was presented and noted:

- A. Data Collection Deliverables:
 - 1. PSAPs provided completed forms containing requested operational, staffing, and budgetary information.
 - i. Note: All PSAPs were petitioned to participate, however not all PSAPs provided information.
- B. Staffing Analysis Methodology:
 - 1. Call taker staffing requirements will be determined based on current workload assumptions. This means that emergency AND admin (non 9-1-1) calls will be assumed to be included as workload that would be carried out in the consolidated model used in the Feasibility Analysis.
 - 2. Discussed APCO's Project RETAINS being used as the basis for determining staffing requirements.
 - 3. A review of APCO's Project RETAINS was presented.
- C. Assume we maintain current (radio) communications infrastructure (not evaluating relocation of sites or control stations and associated coverage impacts).
- D. An approach for equitably allocating call volumes and calls for service between PSAPs will be developed.

6.13.5 PSAP MANAGERS MEETING (AUGUST 31, 2010)

On August 31, 2010, CTD met in the Broward County EOC with representatives from various PSAPs. The following was presented, and comments/questions noted:

- A. Project Objective: Provide Broward County with excellent 9-1-1 and emergency dispatch service in an efficient manner, both operationally and economically.
- B. There are significant benefits for both staffing and equipment maintenance, that can be attained through consolidation.

- C. In FY08/09, 911 Call Taker/Dispatcher Salaries made up 85% of the total Broward County 911 plus Dispatchers O&M Expenditures.
- D. A comparison between current combined front line staffing, and the required front line staffing in a 3 PSAP consolidated model was presented, which demonstrated staffing benefits resulting from economies of scale in the consolidated model.
- E. The workload assumptions that were included in the calculations to determine front line staffing requirements were presented.
 - 1. Maintain or improve current level of service (at minimum 90% of calls answered within 10 seconds)
 - 2. Number of Calls (911 + non-911): 4,238,013
 - Average Call Processing Time: 2.5 min./call
 (Note: Average for 911 AND non-911 calls; call processing includes after call work time.)
 - 4. Average Annual Net Available Work Hours per FTE: 1,507
- F. For the purpose of the Feasibility Analysis, the workload that is currently carried out in the existing 12 production PSAPs was divided up based on groups of municipality boundaries that approximate equal workload in a 3 PSAP consolidated model. In the current PSAP structure, there are calls originating from municipalities and unincorporated areas spanning across the Broward County map that are answered and dispatched out of the BSO Public Safety Building PSAP. To allocate these calls into one of the 3 PSAPs in the model, we would have to determine the amount of calls that originate from each the geographical areas of responsibility for each of 3 PSAPs in the model. The reporting capability to get the data in this granular level of detail is not available. However, the number of Police, Fire, and EMS dispatches, known as Calls For Service (CFS), are available at this level of detail. Therefore, Calls For Service (CFS) were used as the basis for determining allocation percentages for call volume. Call volume was allocated based on the percent allocation of Police, Fire, and EMS dispatches for each geographical boundary.

G. Q/A topics:

- 1. How and will teletype be affected at PSAPs?
- 2. Why (3) regional centers and how will the locations be decided?
- 3. Is cost savings great enough for consolidation?
- 4. Forced participation?
- 5. How will future funding to consolidated PSAPs and individual PSAPs (those that chose to be on their own) be distributed?
- 6. All systems (radio, CAD ...) are not the same at existing PSAPs. Has this been discussed at City Managers meeting?
- 7. What would be the implementation schedule?

6.13.6 COCONUT CREEK PSAP

- A. Site Management: Stacy Friedman, Carolyn Reed, Sgt. Robert J. Wehmeyer.
- B. The city of Coconut Creek encompasses approximately 12 square miles. According to the U.S Census estimates of 1 July 2006, the city had a population of 62,769.
- C. The Coconut Creek PSAP dispatches for the following agencies:
 - 1. City of Coconut Creek: Police only
- D. 2008/2009: Police Dispatches 18,444, Fire/EMS Dispatches 2,085
- E. 2008/2009: 9-1-1 Calls 29,460, Approx. Non 9-1-1 Calls 71,590,
- F. Staff is non union.
- G. After hours, public works calls are forwarded to the PSAP.
- H. Uses OSSI Sungard CAD since 2001; 7 dispatch terminals for CAD

6.13.7 CORAL SPRINGS PSAP

- A. Site Management: Joann Brown, Training/Technical Coordinator: Tom Ciampi.
- B. The city of Coral Springs encompasses approximately 23.9 square miles and is located approximately 20 miles northwest of Ft. Lauderdale. According to the U.S. Census Bureau estimates of 2007, the city had a population of 126,875.
- C. The Coral Springs PSAP dispatches for the following agencies:
 - 1. City of Coral Springs: Police and Fire/EMS
 - 2. City of Parkland: Fire/EMS only
- D. 2008/2009: Police Dispatches 176,095, Fire/EMS Dispatches 19,483
- E. 2008/2009: 9-1-1 Calls 66,450, Approx. Non 9-1-1 Calls 177,190,
- F. Call Takers only answer calls, dispatchers do both call taking and dispatching
- G. Staff is non union.
- H. Do not handle local government calls.
- I. Uses Sungard HTE/OSSI CAD (AS400 system) since 1994; 11 dispatch terminals for CAD

6.13.8 DEERFIELD BEACH PSAP (SECONDARY)

- A. Site Management: Mona Boyd.
- B. The City of Deerfield Beach is a dynamic coastal community encompassing approximately 14.9 square miles and is located on the northeast border of Broward County. According to the U.S. Census Bureau estimates of 2006, the city had a population of 76,478.
- C. The Deerfield Beach PSAP dispatches for the following agencies:
 - 1. City of Deerfield Beach: Fire/EMS only
 - 2. City of Hillsboro Beach: Fire/EMS only
- D. 2008/2009: Police Dispatches N/A, Fire/EMS Dispatches 14,381

- E. 2008/2009: 9-1-1 Calls (transferred to PSAP) Approx. 11,282, Approx. Non 9-1-1 Calls 19,304, Source (for 9-1-1 Calls): ATT Count of ALI Database Queries
- F. Dispatchers answer 911 calls, and also dispatch calls
- G. Staff is union.
- H. When local government calls are received, the callers are given the correct local government contact number to call. Local government calls are not forwarded to the PSAP.
- I. Did not use CAD at time of interview, has since transitioned to County-wide CAD since September, 2010; 2 dispatch terminals for CAD

6.13.9 FORT LAUDERDALE PSAP

- A. Site Management: Carol Ward, Mark Blanco, Kim Rubio.
- B. The City of Fort Lauderdale is the largest of Broward County's municipalities, encompassing more than 33 square miles. According to 2007 U.S. Census Bureau estimates, the city had a population of 183,606.
- C. The Fort Lauderdale PSAP dispatches for the following agencies:
 - 1. City of Fort Lauderdale: Police and Fire/EMS
 - 2. City of Wilton Manors: Police and Fire/EMS
 - 3. City of Lazy Lake: Fire/EMS only
- D. 2008/2009: Police Dispatches 151,586, Fire/EMS Dispatches 43,994
- E. 2008/2009: 9-1-1 Calls 223,511, Approx. Non 9-1-1 Calls 279,958
- F. Staff is union.
- G. Local government calls for Wilton Manors are handled in the PSAP.
- H. Uses Intergraph CAD for Fire/EMS since 1998; 17 dispatch terminals for CAD
- I. Use County-wide CAD for Police
- J. All support staff is provided from BSO PSB. Exception is 1 Comm Op assigned to tape/evidence.
- K. Staffing levels provided do not include Dispatchers for Fort Lauderdale Fire dispatching

6.13.10HOLLYWOOD PSAP

- A. Site Management: Major Vincent Affanoto, Lt. Karen Zorsky.
- B. The City of Hollywood is located in southeastern Broward County, and includes about 5–6 miles of Atlantic Ocean beach. The city encompasses 30.8 square miles. As of July 1, 2008, the population estimated by the U.S. Census Bureau is 141,740.
- C. The Hollywood PSAP dispatches for the following agencies:
 - 1. City of Hollywood: Police and Fire/EMS
 - 2. City of Dania Beach: Fire/EMS only
 - 3. Seminole Indian Reservation: Fire only

- D. 2008/2009: Police Dispatches 202,627, Fire/EMS Dispatches 24,979
- E. 2008/2009: 9-1-1 Calls 137,178, Approx. Non 9-1-1 Calls 270,979
- F. Staff have the option of joining the union. Some staff are represented, others are not.
- G. When local government calls are received, the callers are given the correct local government contact number to call. (e.g. Water Dept., call out personnel contact info provided to callers.)
- H. Uses County-wide CAD; 26 dispatch terminals for CAD

6.13.11MARGATE PSAP

- A. Site Management: Lynn Burnside.
- B. The city of Maragate encompasses approximately 9.2 square miles and is located roughly 15 miles north west of Fort Lauderdale. According to the U.S. Census Bureau's 2006 estimates, the city had a population of 56,002.
- C. The Margate PSAP dispatches for the following agencies:
 - 1. City of Margate: Police and Fire/EMS
 - 2. City of Coconut Creek: Fire/EMS only
- D. 2008/2009: Police Dispatches 57,388, Fire/EMS Dispatches 14,139
- E. 2008/2009: 9-1-1 Calls 34,053, Approx. Non 9-1-1 Calls 43,340,
- F. Dispatchers answer 911 calls, and also dispatch calls
- G. From 6:30 AM to 10:30 PM, 1 dedicated Call Taker on Duty (only answers calls, does not dispatch).
- H. Staff is union, Supervisor and Commander are non-bargaining.
- I. Does not dispatch for local government.
- J. Uses HTE CAD since July 1996; 5 dispatch terminals for CAD

6.13.12MIRAMAR PSAP (SECONDARY)

- A. Site Management: Chief Ron Deshong, Chief Keith Tomey
- B. Situated in southwestern Broward County, Miramar is 14 miles in length from east to west and 2.5 miles in width, encompassing 31.0 square miles. As of 2007, the population estimated by the U.S. Census Bureau is 108,240.
- C. The Miramar PSAP dispatches for the following agencies:
 - 1. City of Miramar: Fire/EMS only
- D. 2008/2009: Police Dispatches N/A, Fire/EMS Dispatches 10,935
- E. 2008/2009: 9-1-1 Calls (transferred to PSAP) 7,596, Approx. Non 9-1-1 Calls 17,895
- F. Currently schedule coverage of one call taker, one dispatcher, and one supervisor/duty officer 24x7.
- G. Staff is union (GAME).
- H. PSAP handles Program 602-HELP. Dispatch if necessary.

I. Uses County-wide CAD; 4 dispatch terminals for CAD.

6.13.13PEMBROKE PINES PSAP

- A. Site Management: Thomas Gallagher.
- B. The City of Pembroke Pines is the second most populous city in Broward County. The city encompasses 34.4 square miles. According to 2006 U.S. Census Bureau estimates, the city has a population of 150,064.
- C. The Pembroke Pines PSAP dispatches for the following agencies:
 - 1. City of Pembroke Pines: Police and Fire/EMS
- D. 2008/2009: Police Dispatches 115,196, Fire/EMS Dispatches 22,048
- E. 2008/2009: 9-1-1 Calls 93,441, Approx. Non 9-1-1 Calls 119,971
- F. The PSAP uses resourceful staff scheduling methods, with much of the staff working longer hours per day but only four day work weeks.
- G. The PSAP operates with the highest reported average total annual hours available per FTE (1,700).
- H. Staff is non-bargaining, management is non-bargaining.
- I. Does not dispatch for local government.
- J. Uses VisionAir CAD; 20 dispatch terminals for CAD

6.13.14PLANTATION

- A. Site Management: David J Tomlinson.
- B. The City of Plantation is situated directly west of Fort Lauderdale. The city encompasses 22.8 square miles. As of July 2006 the population estimated by the U.S. Census Bureau is 86,138.
- C. The Plantation PSAP dispatches for the following agencies:
 - 1. City of Plantation: Police and Fire/EMS
- D. 2008/2009: Police Dispatches 67,590, Fire/EMS Dispatches 9,121
- E. 2008/2009: 9-1-1 Calls 57,094, Approx. Non 9-1-1 Calls 125,331
- F. Staff is not union.
- G. Receive local government calls after hours. Water Dept. has on-call personnel. Dispatch police if necessary.
- H. Uses Intergraph CAD; 10 dispatch terminals for CAD

6.13.15POMPANO BEACH PSAP (OPERATED BY BROWARD SHERIFF'S OFFICE)

- A. Site Management: Tara Thomas.
- B. The city of Pompano Beach is located along the coast of the Atlantic Ocean just to the north of Fort Lauderdale. The city encompasses 25.8 square miles. As of 2007, the U.S. Census Bureau estimated that the city's population was 102,745.
- C. The Pompano Beach PSAP dispatches for the following agencies:

- 1. City of Pompano Beach: Police and Fire/EMS
- D. 2008/2009: Police Dispatches 113,222, Fire/EMS Dispatches 23,213
- E. 2008/2009: 9-1-1 Calls 113,952, Approx. Non 9-1-1 Calls 238,235
- F. Staff is union,
- G. Do not dispatch for local government.
- H. Uses County-wide CAD; 16 dispatch terminals for CAD
- I. All support staff is provided from BSO PSB.

6.13.16BROWARD SHERIFF'S OFFICE PSAP (PUBLIC SAFETY BUILDING, PSB)

- A. Site Management: Lt. Cynthia Adamsky, Kim Rubio.
- B. The Broward Sheriff's Office answers 9-1-1 calls and dispatches Police, Fire, and EMS services for all unincorporated areas of Broward County, 23 Law Enforcement municipalities, 15 Fire Rescue municipalities and numerous special patrol areas including the Ft. Lauderdale-Hollywood International Airport, Port Everglades, BSO Department of Detention, Court Services and other areas.
- C. The BSO PSB PSAP dispatches for the following agencies:
 - 1. Police and Fire/EMS for:
 - i. Davie
 - ii. Hallandale
 - iii. Lauderdale by the Sea
 - iv. Lauderdale Lakes
 - v. Lauderhill
 - vi. Lighthouse Point
 - vii. North Lauderdale
 - viii. Oakland Park
 - ix. Pembroke Park
 - x. Port Everglades
 - xi. Sea Ranch Lakes
 - xii. Southwest Ranches
 - xiii. Tamarac
 - xiv. West Park
 - xv. Weston
 - xvi. Unincorporated
 - 2. Police Only for:
 - i. Dania Beach

- ii. Deerfield Beach
- iii. Lazy lake
- iv. Miramar
- v. Parkland
- D. 2008/2009: Police Dispatches 698,911, Fire/EMS Dispatches 89,906
- E. 2008/2009: 9-1-1 Calls 669,628, Approx. Non 9-1-1 Calls 1,047,158
- F. Staff is union.
- G. Handle calls for access to Broward County EOC after hours.
- H. When local government calls are received, callers are transferred to an auto attendant.
- I. Uses County-wide CAD; 63 dispatch terminals for CAD

6.13.17SUNRISE PSAP

- A. Site Management: Lt. Anthony Rosa, Billy Sprayberry.
- B. The City of Sunrise is located in western Broward County. The city encompasses 18.4 square miles. As of 2004, the population recorded by the U.S. Census Bureau is 90,227.
- C. The Sunrise PSAP dispatches for the following agencies:
 - 1. City of Sunrise: Police and Fire/EMS
- D. 2008/2009: Police Dispatches 70,898, Fire/EMS Dispatches 10,247
- E. 2008/2009: 9-1-1 Calls 53,312, Approx. Non 9-1-1 Calls 141,216
- F. 911 personnel have the option of joining the Fraternal Order of Police Association (FOPA), Lodge 80. Some staff are represented, others are not.
- G. Local Government calls are transferred to the 911/Dispatch Center after normal working hours.
- H. Uses County-wide CAD; currently 8 dispatch terminals for CAD, new Public Safety Complex will have 19

6.13.18BROWARD COUNTY EOC PSAP (BACKUP PSAP)

- A. Site Management: n/a.
- B. The Broward County EOC houses the Broward County 9-1-1 Backup.
- C. There are 21 new 9-1-1 call taking positions (Power 9-1-1) and 21 legacy call taking positions in the Broward County EOC.
- D. There are no CAD dispatch terminals in the Broward County EOC.

6.13.19DATA COLLECTION SURVEYS

CTD developed data collection surveys for each PSAP to complete. The information gathered from these surveys, meetings, and telephone conversations were used in the analysis and preparation of this report.