CHITTENDEN COUNTY PUBLIC SAFETY AUTHORITY
Board of Directors Meeting

October 28, 2019, 8:00-10:00am
Colchester Town Hall, 781 Blakely Road
Outer Bay Conference Room

AGENDA

1. **Call to Order**
2. **Agenda Approval**
3. **Public Comment**
4. **Approval of Minutes from 10/15/19**
5. **Treasurer's Report on Payments / Monthly Financial Report: Board Acceptance**
6. **Update on Calls for Service: FY 19 and three year averages for consideration in workload and cost allocation**
7. **FY 21 Cost Estimates for Current Independent Dispatch Services**
8. **IXP Report, Section A Report revisions – Kevin Kearns**
9. **Timeline update/discussion**
10. **Board Communications and Other Matters**
11. **Next Meetings:**

Monday November 18nd 8:00-9:30AM Colchester Town Offices, Third Floor Outer Bay Room
Proposed: Monday December 2nd 8:00-9:30AM Colchester Town Offices, Third Floor Outer Bay Room
Monday December 16th 8:00-9:30AM Colchester Town Offices, Third Floor Outer Bay Room

12. **Executive Session: Labor Relations, and Vendor Contracts**
13. **Adjournment**

CHITTENDEN COUNTY PUBLIC SAFETY AUTHORITY
Board of Directors Meeting
October 15, 2019, 1:30 to 3:30
Colchester Town Hall, 781 Blakely Road
Outer Bay Conference Room

DRAFT MINUTES

Attendees:
Members: Aaron Frank (Chair – Colchester), Kevin Dorn (Vice Chair – South Burlington), Jessie Baker (Winooski), Rick McGuire (Treasurer – Williston), and Steve Locke (Secretary – Burlington).
Others present: Tom Hubbard (South Burlington), Julie Hulburd (Winooski), Stefanie Moore (South Burlington), Pam Simays (BPD), Judy Dunn (BPD), Caroline Earle (FOP), Christy Lorrain (BPD)

1. **Call to Order –** Frank called the meeting to order at 1:30.

2. **Agenda Approval –** Dorn moved to approve the agenda and Locke seconded. Motion carried.

3. **Public Comment -** None

4. **Approval of Minutes from 9/23/19 –** Locke moved to approve the minutes and Dorn seconded. All in favor. Motion carried.

5. **Board Communications and Other Matters –** None

6. **Next Meetings:**
   - Monday October 28th 8:00-9:30AM Colchester Town Offices, Third Floor Outer Bay Room
   - Monday November 18th 8:00-9:30AM Colchester Town Offices, Third Floor Outer Bay Room

7. **Executive Session: Labor**

   Dorn moved to find that premature general public knowledge of the CCPSA's labor relations would clearly place CCPSA at a substantial disadvantage, because the CCPSA risks disclosing its negotiation strategy if it discusses the proposed terms in public. Baker seconded. All in favor. Motion carried.

   Dorn moved that we enter into executive session to discuss confidential communications regarding labor relations under the provisions of Title1, Section 313(a)(1)(A), Executive Sessions, of the Vermont Statutes and to invite into Executive Session Hulburd, Hubbard, and Moore. Locke seconded. All in favor. Motion carried.

   Attorney Earle requested an update on Labor discussions at a future meeting.

   Board and invited attendees entered into Executive Session.

   Dorn moved to exit executive session and Locke seconded. All in favor. Motion carried.

8. **Adjournment**

   Dorn moved to adjourn at 2:55 and Locke seconded. All in favor. Motion carried.

CCPSA
CHITTENDEN COUNTY PUBLIC SAFETY AUTHORITY
POLICE FIRE RESCUE

CONTACT:
Aaron Frank, CCPSA Chair
afrank@colchestervt.gov | (802) 264-5509

MEMO

To: CCPSA Board

From: Aaron Frank, CCPSA Chair

Date: October 23, 2019

Re: Emergency Service Call Metrics for Chittenden County PSA Members: **FY 19**

Below are tables of Calls for Service for Police, Fire/Rescue by community and rescue service, and 911 calls by community for the time period FY 19 (7/1/2018-6/30/2019).

This information was intended to be used for call estimation in developing regional dispatch level of effort, costs, and later for cost allocation.

I have engaged the police and fire chiefs in developing these numbers and have backup by community. Please let me know if you would like to see the backup.

As you know, we defined calls for service in our CCPSA agreement. This is not as straightforward in police where officers self-initiate a significant portion of their calls. The definition we used is phone calls from people (requesting police/fire/rescue services be dispatched), plus self-initiated police calls (mostly traffic stops including tickets and warnings) plus delivery of warrants/service and non-law enforcement actions such as visits to schools.

Calls for service are about 2.5 times the numbers of 911 calls. This is due to self-initiated police calls for service and people calling dispatch centers directly instead of going through 911. Some citizens are aware of the added time that our current two stage 911/dispatch system takes and avoid it by calling old police numbers or non-emergency numbers.

FY 19 Calls for Service

Municipality	Population	Authorized Dispatch FTE	FY 19 CFS (Law)	FY 19 CFS (Fire/EMS)	FY 19 Total CFS
Burlington	42,239	12 + Mgr.	28,934	8,231	37,165
Colchester	17,287	8	13,658	3,086	16,744
Milton ***	10,610	0	10,217	1,196	11,413
South Burlington	19,141	6.5	13,402	3,799	17,201
Williston *	9,637	2 **	5,566	2,071	7,637
Winooski *	7,237	5	8,436	1,520	9,956
Total	**106,151**	**35**	**80,213**	**19,903**	**100,116**

* Does not include weekday Sheriff calls dispatched by Williston or night and Weekend Sheriff calls by Winooski

** Fire/Rescue Dispatch and Evening and Weekend Police Dispatch Provided by others

*** Dispatched by others

FY19 Other Data

SMC Rescue	
Burlington	16
Colchester	871
Essex	206
Hinesburg	209
Other	19
St. George	41
Shelburne	
South Burlington	36
Williston	23
Winooski	998
Total	**2,419**

Essex Rescue	
(Service to CCPSA Members)	
Estimate based on FY 16-18	
City	**# of Runs**
Burlington	6
Colchester	99
Milton	5
South Burlington	4
Williston	12
Winooski	6
Total	**132**

CC Sheriff			4,656

CCPSA
CHITTENDEN COUNTY PUBLIC SAFETY AUTHORITY
POLICE FIRE RESCUE

CONTACT:
Aaron Frank, CCPSA Chair
afrank@colchestervt.gov | (802) 264-5509

MEMO

To: CCPSA Board

From: Aaron Frank, CCPSA Chair

Date: October 23, 2019

Re: Emergency Service Call Metrics for Chittenden County PSA Members: **Three Year Summary**

Below are comparative tables of Calls for Service for Police and Fire/Rescue by community and rescue service for the fiscal years ending June 30, 2017, 2018 and 2019. This memo is a supplement to memos specific to each fiscal year which are attached. This information is intended to be used for call estimation in developing regional dispatch level of effort, costs, and later for cost allocation.

FY 17, 18 & 19 Calls for Service – CCPSA Only + Sheriff – Milton – Williston Police

This is the likely call volume to be dispatched

Municipality	FY 16 Calls for Service	FY 17 Calls for Service	FY 18 Calls for Service	FY 19 Calls for Service	Average Annual CFS	% Avg. Annual of Calls for Service
Burlington	44,550	42,020	38,564	37,159	40,573	45%
Colchester	16,373	15,367	17,289	16,744	16,443	18%
South Burlington	18,686	18,122	17,626	17,201	17,909	20%
Williston	1,916	1,993	2,071	1,993	1,993	2%
Winooski	10,302	9,615	9,319	9,956	9,798	11%
Chittenden Sheriff	3,900	3,756	3,386	4,656	3,925	4%
Total	**95,727**	**90,873**	**88,255**	**87,709**	**90,641**	**100%**

FY 17, 18 & 19 Calls for Service – CCPSA Only

without Chittenden Sheriff

(CCPSA agreed to dispatch for the Sheriff without charging so this is the basis for our allocations)

without Milton and without Williston Police *

*This is the basis for cost allocation **

Municipality	FY 17 Calls for Service	FY 18 Calls for Service	FY 19 Calls for Service	Average Annual CFS	% Avg. Annual of Calls for Service
Burlington	42,020	38,564	37,159	39,248	46%
Colchester	15,367	17,289	16,744	16,467	19%
South Burlington	18,117	17,626	17,201	17,648	21%
Williston	1,916	1,993	2,071	1,993	2%
Winooski	9,615	9,319	9,956	9,630	11%
Total	87,035	84,791	83,131	84,986	100%

*** CCPSA Has not agreed to let any member pay solely on the basis of one emergency service.**

CCPSA
CHITTENDEN COUNTY PUBLIC SAFETY AUTHORITY
POLICE FIRE RESCUE

CONTACT:
Aaron Frank, CCPSA Chair
afrank@colchestervt.gov | (802) 264-5509

MEMO

To: CCPSA Board

From: Aaron Frank, CCPSA Chair

Date: October 23, 2019

Re: FY 21 Cost Estimates for Chittenden County PSA Members Considering Service – Current Operations

As we move forward with an evaluation of CCPSA operations, it is important to understand the current costs of operating our independent dispatch services. On June 23, 2017 we documented the direct and indirect costs of current dispatch services in detail That memo is attached for reference.

For the purpose of this memo, I have not included Milton as Milton does not wish to receive services from CCPSA at this time. I have also only included the contracted fire/rescue costs for Williston as Williston does not wish to receive police dispatch services from CCPSA at this time.

There are two important costs to consider with regional dispatch, total costs and direct costs. The total costs are estimated at $3,369,453. Direct costs are estimated at $2,969,421. Thus indirect/overhead/supervision and management costs are estimated at $400,032.

The direct costs of employing the employees, including employer paid taxes and benefits, which will be avoided, but for any services/hours each community determines must be retained locally. The total costs include the direct costs plus the costs of supervision and management, central services (human resources, general management, finance/payroll, legal, information technology, and telecommunications).

Municipality	Population	FY 17-19 Avg. CFS	FY 21 Est. Dispatch Costs	FY 21 Direct Costs	Cost/Call
Burlington **	42,570	39,248	$ 1,456,242	$ 1,292,243	$ 32.93
Colchester ***	17,293	16,467	$ 593,946	$ 507,646	$ 30.83
South Burlington **	18,536	17,648	$ 740,937	$ 650,879	$ 36.88
Williston *, ***	9,054	1,993	$ 66,510	$ 66,510	$ 33.37
Winooski ***, ****	7,223	9,630	$ 511,818	$ 452,143	$ 46.95
Total	**94,676**	**84,986**	**3,369,453**	**2,969,421**	**$ 34.94**

* Fire/Rescue only; ** Based on detailed analysis of FY 16 costs escalated at 3% annually.; *** Based on draft FY 21 budgets. **** Winooski's costs include the costs of evening County Sheriff dispatching. Sheriff call volume not included.

MEMO From the Office of the Town Manager

To: Joint Survey Committee on Regional Dispatch

From: Aaron Frank, Colchester Deputy Town Manager

Date: June 23, 2017

Re: Current Dispatch Cost Compilation

In FY 2015-2016 (June 30, 2015-June 30, 2016) municipalities, public safety agencies within and outside of Chittenden County spent $3,709,746 on dispatch services provided by Chittenden County municipalities. This is $278,840 or 8% more than the DeltaWRX estimate.

The remainder of this memo addresses:

A. Calls and Costs in Chittenden County communities with more than 10,000 annual calls for services
B. Calls and Costs in Chittenden County communities with less than 10,000 annual calls for service
C. Calls and Costs in Franklin County that are dispatched from Chittenden County
D. Total calls and costs for all the above
E. Costs per call and calls per dispatcher by dispatch facility

We are still many, many months from determining future end state full consolidation costs. We do not yet have a scope of duties for our reginal dispatch entity, nor have we experimented with the number of staff necessary to operate an entity with such a scope of work. But we now have a solid benchmark to measure future operating states against.

A. Chittenden Communities > 10,000 Annual Calls for Service

Municipality	Population	Authorized Dispatch FTE	FY 16 CFS (Law)	FY 16 CFS (Fire/EMS)	FY 16 Total CFS	FY 16 Total Dispatch Costs * **	FY 16 Direct Costs *	Cost/Call
Burlington	42,570	12 + Mgr.	37,083	7,467	44,550	$ 1,184,058	$ 1,050,712	$ 23.59
Colchester	17,293	7	13,295	3,078	16,373	$ 385,985	$ 338,545	$ 20.68
Essex	20,419	5	17,500	3,035	20,535	$ 575,300	$ 523,000	$ 25.47
Milton	10,610	0	8,988	1,067	10,055	$ 203,178	$ 203,178	$ 20.21
Shelburne (PSAP)	7,566	8.5	9,660	1,251	10,911	$ 401,591	$ 292,168.94	$ 26.78
South Burlington	18,536	6.5	15,383	3,304	18,687	$ 602,450	$ 529,225	$ 28.32
Williston **, ****	9,054	2 **	10,356	1,883	12,239	$ 228,861	$ 203,825	$ 16.65
Winooski ****	7,223	5	8,957	1,345	10,302	$ 483,225	$ 399,028	$ 38.73
Total	**133,271**	**47**	**121,222**	**22,430**	**143,652**	**4,064,648**	**3,539,682**	**$ 24.64**

* For towns that contract, cost is contracted cost paid. ** Does not include value of free evening and weekend police dispatching by the State Police. *** Total costs include 10% overhead on direct costs plus estimated costs of oversight and management of dispatch. Shelburne's costs are direct costs, minus contracted and PSAP revenes, minus costs of non dispatch functions of dispatch staff. **** Williston's costs include the costs of daytime County Sheriff dispatching. Winooski's costs include the costs of evening County Sheriff Dispatching. Sheriff call volume is not included.

Total costs include overhead, supervision and in some cases building expenses. Most of these costs will not disappear when regional dispatch is implemented. But there will be additional resources in some areas.

Direct costs are the costs for calls for service in that community that would transfer to a regional dispatch. However, there will be some costs in each community for functions that are not carried forward to regional dispatch.

B. Chittenden Communities < 10,000 Annual Calls for Service

Rural Town Call Volume-Chittenden County					
	Police CFS	Fire/EMS CFS	Total CFS	COST	Cost/Call
Richmond (VSP for PD; SD for Fire/EMS)	4,093	450	4,543		
Underhill/Jericho (VSP)		773	773		
Charlotte (SD)		567	567		
Hinesburg (SD) *	1,555	651	2,206		
Huntington (SD)		191	191		
Westford (St. A)		119	119		
Bolton (SD)		178	178		
St. George **		38	38		
Buels Gore		none			
CC Sheriff	3,900		3,900		
Total	**9,548**	**2,967**	**12,515**	**$ 86,434**	**$ 6.91**
VSP = Vermont State Police, provided for free; SD = Shelburne Dispatch					
* includes St. George for Fire; ** St. George Fire is included with Hinesburg Fire					

Westford (northern portion) is provided and paid through Saint Albans Dispatch. Westford's southern portion is provided at no cost through The Town of Essex.

Rural cost per call is artificially low due to 70% of the calls being dispatched for free by the Vermont State Police and by Williston and Winooski (for the Chittenden County Sheriff)

If all calls were paid for at $23 per call, costs would increase by approximately $202,000 for a total of $288,000.

C. Non - Chittenden Communities Contracted with Shelburne Dispatch

Rural Town Volume-out of County (Shelburne Dispatch)							
			Police CFS	Fire/EMS CFS	Total CFS	COST	Cost/Call
Addison Towns				2,535	2,535	$ 83,630	
Franklin/Grand Isle Towns							
Total			**-**	**2,535**	**2,535**	**$ 83,630**	**$ 32.99**

Shelburne Dispatch is currently contracting with Grand Isle County public safety agencies including: Alburg Fire, Alburg Rescue, Isle La Mott Fire, Isle La Motte First Response, Grand Isle Fire, Grand Isle Rescue, North Hero Fire, South Hero Fire and South Hero Rescue. However, their calls and costs are not included here as this service was not in place in FY 16 the year which this analysis covers.

D. Grand Total Calls and Costs

			Police CFS	Fire/EMS CFS	Total CFS	COST	Cost/Call
Grand Total			**$ 130,770**	**$ 27,932**	**$ 158,702**	**$ 3,709,746**	**$ 23.38**

The average costs per call include 7,866 (5%) calls for service for service that are handled for free by the state police in Richmond, Jericho, Underhill and Williston. While no one pays for the dispatch of calls for service provided for the County Sheriff by Williston and Winooski, the Sheriff's calls are dispatched by dispatchers included in the cost compilation. So while they are not being paid for directly, their costs are included in the $3.7M above. The Sheriff's department does provide equipment to Williston.

E. Dispatch Center Calls and Cost

(This is not community cost but rather cost/call handled by each dispatch center)

Municipality	Calls For Service per Dispatcher *	Cost/call taken
Burlington	3,713	$ 23.59
Colchester *	3,775	$ 20.50
Essex	4,107	$ 25.47
Shelburne PSAP *	2,641	$ 29.50
South Burlington	2,875	$ 28.32
Williston	5,531	$ 28.20
Winooski *	2,068	$ 38.59
Low	2,068	$ 20.50
High	5,531	$ 38.59
Avg	**3,530**	**$ 32.36**

* Includes contracted service and free service for Sheriff

Excludes calls taken by Vermont State Police and those contracted to others

This table should not be considered a reflection on dispatch staff at any location, but rather the outcome of operations they are charged with addressing, which is different at each location. Shelburne is a PSAP with a higher level of responsibility than the other facilities. In addition, Shelburne's call volumes and costs are also inflated by the costs being a PSAP prior to any revenues related thereto.

CCPSA

CHITTENDEN COUNTY PUBLIC SAFETY AUTHORITY

POLICE FIRE RESCUE

DRAFT REPORT SECTIONS

THRU 4TH BRIEFING

AND FOLLOWING SITE VISITS AND CHIEFS' REVIEW

October 25, 2019

IXP PUBLIC SAFETY SERVICES

Conducted by:

IXP Corporation

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submitted by: **IXP CORPORATION** 609.759.5100 *phone* 609.759.5099 *fax* *www.IXPCORP.com*

EXECUTIVE SUMMARY

[THIS SECTION WILL BE ADDED WHEN THE FINAL REPORT IS ASSEMBLED]

submitted by: **IXP CORPORATION** 609.759.5100 *phone* 609.759.5099 *fax* *www.IXPCORP.com*

SECTION 1 – INTRODUCTION

[THIS SECTION WILL BE ADDED WHEN THE FINAL REPORT IS ASSEMBLED]

This section will contain narrative that explains that after the data in this report was compiled, Williston decided to not have their Police call answering and dispatching performed by CCPSA's regional PSAP. But Williston Fire and Rescue will be dispatched by CCPSA. Therefore, while the document still reflects references to Williston Police since they were in the mix as this information was being developed, the staffing model and cost estimates (CAPEX and OPEX) have been based on only Williston Fire and Rescue being handled by the CCPSA Center.

SECTION 2 – OPERATIONAL OUTLINE PHASE ELEMENTS

1. TRANSITION PLAN FOR DISPATCH CENTERS

Develop a process to transition up to five separate dispatch centers into one consolidated regional dispatch center with limited disruption, including recommending any services that should remain with the local communities.

The orderly transition to live operations will be a key success factor for CCPSA's regional dispatch operation. Unless some compelling event requires this transition to take place for all five operations at the same time, IXP recommends that the transition be planned as two phases. In the first phase, the operations of Colchester, South Burlington, Williston and Winooski would be migrated to CCPSA operations. Then, in the second phase, Burlington would join CCPSA operations.

In preparation for the first phase, all of the personnel from the existing centers would need to undergo training on the new systems at CCPSA and the operational policies and procedures of CCPSA. This training would not need to encompass training on PSAP 9-1-1 CPE or call-taking processes since this functionality and responsibility won't be added until after CCPSA dispatch operations are up and operational. From IXP's experience with similar transitions in other agencies, we recommend the following characteristics for this training cycle:

- The process would commence with selecting at least one person from each of the five agencies to serve on a working group that would develop the training material for the new CCPSA operation. This approach starts the process of building stronger links between all the personnel that will be joining together in the new operation and leverages their local knowledge and experience with their home agency as the training material for CCPSA is developed.

- Typically, these are personnel already serving in a training capacity for their home agencies. As the CCPSA operation develops (facility, systems and operational policies/procedures) this training group would gather appropriate information for this training material. Time spent organizing this

information and reading the training program is absorbed by the home agencies to keep CCPSA costs low during this phase of transition.

- This group would also form the cadre of personnel needed to conduct the training. Typically, this training is scheduled to commence before the final fit-out of the new center is completed so that the early sessions focus on policies/procedures and the later sessions focus on the specific systems at the new center (after they are fully installed and tested). The training cycles are also timed so that as short a time period as possible elapses between the completion of training and the commencement of live operations. Typically, the training wraps up about 2-4 weeks before the planned start-up date.

- Training needs to be conducted in at least two parallel tracks so that the working schedules of all the current employees can be accommodated. Wherever possible, the personnel attending each track should be from all of the agencies to help build the team environment before they move together in the CCPSA center. As with the training personnel, it is typical for the overtime costs needed to send personnel to training to be borne by the home agencies.

- If new-hire employees are needed to meet the start-up staffing levels, it is advisable to do as much of their training with the existing employees as possible. When the local team can't meet all of the training needs for the new personnel, a combination of online or outside training can be used to supplement their training to get them ready to join the experienced team at the start of live CCPSA operations.

- Outside training support should also be engaged on specific system use skills for systems like CAD and radio consoles. This will allow those trainers to focus on the nuts-and-bolts on how to use the system and the CCPSA trainer cadres to focus on the operational side of how those systems have been configured for use in the new operation.

- It is recommended that Burlington's personnel be included in all of the training development and receiving training, even if they are sequenced for migration as a second phase. This will help build the team cohesion for CCPSA's operation and allow the Burlington personnel to better understand their backup role while Burlington is still operational before cutover to CCPSA operation. Depending on the time interval between phase one and phase two, a short refresher training cycle may be needed for the Burlington personnel before they move over to CCPSA operations.

The actual transition to live operations phase one should take place in as short a timeframe as possible, ideally in a single operational day. A common approach is outlined below:

- On the day of cutover, the staff for the first shift of CCPSA operations (at the staffing level to support the workload of the first four agencies) would report to the new facility and ready themselves for operation. Each of the existing facilities would also be staffed and operating as normal at the start of this day.

- In preparation for live operations, these personnel would confirm that radio communications are working to the field units they'll be taking on, and that they are ready with CAD to handle live operations.

- Then, one-by-one the telephone circuits from the existing centers will be swung over to the new center. Following a few test calls, the new center will know that inbound calls will be coming to them and the existing center will confirm that no new calls are arriving at their location.

- The new center would then take control of the radio channels and units on the air, and commence live operations for that agency. Personnel at the home center would remain in place for a period of time to make sure everything was stable and that the CCPSA center was handling all of their units and calls. They would then log off their systems and leave work, preparing themselves for whatever their next shift assignment is at the CCPSA center.

- The transition for phase two (Burlington) would follow a similar pattern whenever it was decided to make this second transition.

Many of the functions currently performed at the individual dispatch centers can continue to be done from the regional facility through combinations of technology and process changes. For example:

- Each of the centers have some degree of direct interaction with the public in the lobby of their police facility. This functionality is typically maintained when regionalized dispatch is implemented by establishing either ring-down phone lines or a video/audio 'kiosk' in the lobby of the police station that would no longer have a staffed window. Dispatchers at CCPSA could interact with people entering the lobby and provide needed information or dispatch appropriate resources if needed. They would not be able to support functions such as exchanging paperwork, taking payments or similar transitions requiring direct interaction with the public, so these processes would need to be restructured by each agency to meet their local needs and conditions.

- Similarly, each of the current centers has the ability to use a variety of video sources to monitor/observe security cameras around their facility. These feeds could be provided to the CCPSA operation so this functionality was available at the regional center when needed.

- The remote video capability could also be extended from the cameras that monitor things like sally ports, booking areas and holding areas as well so that CCPSA personnel could provide this extra layer of monitoring when officers were actively working in these areas. Controls for sally port and other secure doors in these areas should not be remoted to the CCPSA facility. This will require each agency to modify their procedures on how the staff these areas when they have a subject in for processing.

- Each of the current centers support a number of activities that place them in routine interaction and support of officers as they come into the station to process subjects or reports. This includes things like running criminal histories and pulling other records information from RMS systems. These support functions could still be provided by the regional center, but the interactions with officers would be through a combination of remote printing and telephone conversations rather than face-to-face interactions.

- Each of the current centers also provide a wide variety of administrative support functions for their agencies. These functions typically do not migrate well to a regional dispatch operation and each agency will need to undertake some process restructuring to meet their individual needs within their individual resources.

2. HANDLING TELEPHONE CALLS

Develop a process to handle phone calls from different CCPSA member communities based on input previously received from police chiefs regarding what processes must stay at local police departments, what processes should be handled by regional dispatch, and processes on which decisions must be made including: 9-1-1 calls; business lines; non-emergency calls for service.

9-1-1 CALLS

During the initial period of operation, 9-1-1 calls will be handled as they are today, with one of the PSAPs on the state network transferring those callers to designated 10-digit lines at the new CCPSA regional center that will be handled on the general telephone system at the center. As a secondary-PSAP in this type of operation, the CCPSA center will seldom need to transfer 9-1-1 calls to any other dispatch center since they will only be receiving 9-1-1 calls emerging from within their service area.

Once the State agrees to allow the center to become a regional PSAP, 9-1-1 telephone system equipment will be installed, and personnel will need to be trained to meet the statewide standards on 9-1-1 call receiving and processing. It is important to remember that once the CCPSA center becomes a PSAP in the State network, they will be handling calls from more than just their own communities. The state will assign the CCPSA PSAP what is known as a Catchment Area, which is the group of communities from which 9-1-1 calls would be routed to the CCPSA center. Presumably this Catchment Area will match the CCPSA member agencies, but the final configuration will need to be worked out with the State.

In addition to calls from the Catchment Area, the CCPSA PSAP will also receive 9-1-1 calls that would normally be routed to one of the other PSAPs but can't be routed there because all available Call Receivers are already engaged in processing a call. These calls will need to be screened and then transferred to the appropriate dispatch center for further processing.

NON-EMERGENCY CALLS FOR SERVICE

It is common for public safety agencies, particularly police departments, to have published 10-digit lines that the encourage the public to use when they have a need for services that they may not think are of an emergent nature. Unfortunately, the public's perception of what is and isn't an emergency (or what should or shouldn't result in a unit being dispatched) doesn't always align with the agencies' intended service levels. Therefore, it is important for the CCPSA regional dispatch center to still receive these calls so they can be screened to determine if a response is needed or refer the caller to another non-emergency resource.

It is also common for public safety dispatch centers to provide after-hours answering of 'emergency' lines for various public works functions. Reports of issues are captured and then relayed to the appropriate contact points for those public works agencies (which are typically multiple personnel assigned to some sort

of after-hours callout rotation). This function could also be integrated into the CCPSA regional dispatch operation so that the individual jurisdictions didn't need to redesign this process in their organizations.

BUSINESS LINES

The handling of routine 10-digit business lines is the area that typically causes the most debate when new regional dispatch centers are being planned. Typically, the existing centers become some form of main answering point for business-related calls for their agency, even if other direct 10-digit numbers are published for various internal functions of the organization (such as investigations, records, etc.). Ideally there would be solid statistics already in place with each of the existing centers to understand how many calls this actually entailed so that judgements could be made on whether this workload could be continued at the regional center.

Since this body of data does not exist, IXP recommends (and the Chiefs agree) that the individual police agencies implement automated phone answering and call routing systems (often referred to as Interactive Voice Response or IVR systems) to allow as many as possible of their non-emergency and non-dispatch calls to be handled at their police stations. These systems can be configured so the first option given the caller is to speak with a dispatcher, allowing them to quickly be routed into designated inbound call trunks at the regional PSAP so they can be handled along with other inbound emergency calls.

This approach will allow the public to access non-emergency services at their local police department without needing to staff a call answering position at the station, while still creating a simple and fast way for the caller to get to a live person at the PSAP if they feel their circumstances requires more urgent attention. Implementing this strategy before the transition process begins for bringing the center into the statewide 9-1-1 PSAP network will allow configuration and process adjustments to be worked out between the PSAP and the agencies before the addition of full 9-1-1 PSAP responsibilities.

COMMUNITY ENGAGEMENT AND EDUCATION

Throughout the process of establishing CCPSA regional dispatch operations and becoming the primary PSAP for your designated Catchment Area, it will be essential for CCPSA and each of the participating communities to engage in ongoing public education and outreach efforts. From IXP's experience, the creation of a new regionalized emergency communications center creates a perfect opportunity to re-focus the public's attention on the appropriate uses of 9-1-1, non-emergency and business telephone numbers, and help the public understand the best ways for them to access the services they need.

3. DEVELOPMENT OF POLICES, PROCEDURES AND PRACTICES

Consider current dispatch center policies, procedures and practices and develop/recommend public safety communications policies and procedures that are consistent with industry best practices and standards.

The development of the specific policies, procedures and practices for the regional communication center will likely be one of the most time consuming and challenging aspects of establishing the organization. While it is important that these documents be developed to reflect industry best practices and standards, it is even more important that they reflect the local service delivery and operational requirements of the communities and agencies being served.

The process of developing these documents should begin in advance of commencing the training processes outlined in Item #1 above. This will allow key policy and operational procedure decisions to be thoroughly debated and decided before the training material is developed and training commences. This will also allow the completed policy and procedure manual to become an integral resource during the training process.

IXP recommends creating a policy and procedure development workgroup and attempting to get representation on this group from each of the existing communications centers, along with a single representative from the law enforcement community, one from the fire service community and a final member from the emergency medical services community. This group of 8 individuals would take on the responsibility for reaching consensus on the Table of Contents for the policy/procedure documentation and gaining approval for this from the CCPSA governing process. It is also recommended that the Director for the CCPSA regional center be brought on board before the policy and procedure process begins so that this individual can lead and be engaged in the process from the outset.

With the Table of Contents in place, the process would then commence in drafting the individual sections to the document. Typically, this work is assigned across multiple individuals in the workgroup based on their area of expertise. Periodic joint workshops are held to make sure each subgroup is making progress according to the schedule established at the start of the process. As individual sections are completed, the workgroup would review and edit as needed so that consensus was reached, and the section would then be forwarded to the CCPSA governing process for final review and adoption.

From IXP's experience this type of incremental approval process is preferable to waiting until the entire document is complete and attempting to do the final review and adoption process in one large effort. It is also advisable to implement some form of online document management platform (such as PowerDMS) to manage the development, dissemination and management of this material.

An example table of contents is provided below. This structure comes from a regional communications center provides both multi-jurisdictional and multi-disciplinary dispatching services and has been in operation for over 40 years. Therefore, this table of contents has been refined over time to be one the best

all-inclusive examples that IXP has encountered in our work with agencies across the country. This agency is also accredited by the Commission on Accreditation for Law Enforcement Agencies (CALEA) and the Association of Public-Safety Communications Officials (APCO) so it represents a structure that meets current industry standards and best practices.

While every section of this example may not be pertinent to the final operational structures and strategies adopted by CCPSA, it provides a useful starting point to get the workgroup process underway.

ADMINISTRATION

Policy #100 Organizational Structure/Chain of Command/Authority
#101 Liability Protection Program
#102 FCC Rules and Regulations
#104 Industrial Accident/Illness Leave
#105 Jury Duty
#106 Leave of Absence Without Pay
#107 Maternity Disability Leave
#108 Military Leave
#109 Maintain Residence Telephone/Address
#111 Peaceful Performance of Duty
#112 Outside Employment
#114 Overtime/Compensatory Time
#115 Salary Administration
#116 Trade Procedures
#117 Sick, Bereavement, Administrative & Emergency Leave
#117A Family Medical Leave Act
#118 Suggestions
#119 Americans With Disabilities Act Policy
#120 Work Schedules
#121 Inquiry Processing Procedures
#122 Time Off Procedures (Vacation, Holiday & Comp)
#123 Administrative Reporting Program
#124 Calls For Service
#125 Reporting Improper Governmental Actions
#126 Fitness For Duty
#127 Risk Management
#128 Temporary Assignments Due to Injury/Illness

PERSONNEL

Policy #200 Personnel Policies & Practices
#204 Disciplinary System & Appeal Process
#205 Recruitment and Selection Practices
#207 Equal Opportunity Employment

#208 Administrative Employees Salary & Benefits
#209 Performance Evaluation System
#210 Personnel Files
#211 Classification Plan & Position Job Descriptions
#212 Trial Service Period
#214 Promotion
#215 Personnel Early Warning System
#216 Resignation/Dismissal/Termination of Employment
#218 Benefit Programs
#219 Supervisory Files
#220 Training
#221 Specialized & Rotating Assignments
#222 Educational Benefits
#223 Collective Bargaining
#224 Orientation
#225 Relief from Duty

MISCELLANEOUS ADMINISTRATION

Policy #300 Attendance, Notification, Tardiness & Time Sheets
#301 Rest & Meal Breaks
#302 Charitable Solicitations
#304 Forms & Disposal of Sensitive Materials
#305 Memo Book
#306 Recognizing & Rewarding Good Performance
#307 Personal Appearance
#308 Employee Conduct/Code of Ethics
#309 Safety
#310 Community Education, Social Media & News Releases
#311 Smoking Privileges
#312 Security, Visitors, Vendors & DHS Threat Levels
#313 Workplace Violence
#314 Facility Cleanliness
#315 Chaplaincy Program
#316 Employee Wellness
#317 Release of Public Records
#318 Written Directive System
#350 Planning & Research
#351 Organizational Mission, Purpose, Vision, Values & Goals
#352 Performance Measurement Program
#353 Quality Assurance Program

TELEPHONE PROCEDURES

Policy #400 Personal Telephone Calls
#402 Processing of 911 and 10 Digit Telephone Lines
#404 Telephone Liability
#405 TDD/TTY Accessibility
#406 9-1-1 Hang-up Calls & Open Lines
#411 Non-English Speaking Callers
#412 Downloading/Advised Incidents/In-Station Reports

MISCELLANEOUS

Policy #501 Electronic Messaging
#502 Miscellaneous Equipment in Communications Center
#503 Text Messaging and Retention
#505 Management Information System (MIS)
#510 Incident Processing, Canceling and Unit History
#515 Jurisdictional Boundaries
#520 Call Type Classification (Type Codes)
#523 Agency Involved Domestic Violence
#525 Bloodborne & Airborne Pathogen Hazards
#550 ACCESS/Data Inquiries & Returns
#551 Criminal History Use and Dissemination
#560 Communications Recordings
#570 CAD Safety Warnings
#580 Emergency Alert System (EAS)

POLICE PROCEDURES

Policy #610 Police Dispatch Technique
#611 Officer Availability/Sergeant Notifications
#617 Alarms (Police)
#619 Restricted/Closed Air/Marker Tones
#620 Mobile Data – Police Procedures
#622 Data/Overflow Dispatcher Procedure
#640 Police Electronic Emergency Alerts
#645 Officer Safety/Critical Incident Control
#650 Serious Injuries to Children
#651 Missing/Endangered Children or Adults
#655 Manual Police Dispatch Procedures
#660 Volunteers – Police Departments

FIRE PROCEDURES

Policy #710 Fire/EMS Dispatch Technique
#711 Fire/EMS Radio Conduct
#717 Firefighter Safety Procedures

#720 Fire/EMS MDT Dispatch Protocol
#726 Medic Dispatch Procedures
#728 Medical 911 Calls from Hospitals
#730 Ambulance Response
#735 Fire Department Move-Up/Cover Procedures
#737 Fire Department Mutual Aid Procedures
#740 Special Response Procedures
#741 Airlift Procedures
#743 Port of Seattle Mutual Aid
#744 Multiple Casualty Incident (MCI) Procedures
#745 High Call Volume Events
#746 Earthquake Response Procedures
#755 Manual Fire/EMS Dispatch Procedures
#760 Dam Procedures
#766 EOC Activations

TECHNICAL - MISCELLANEOUS

Policy #900 Information & Information Security
#901 Electronic Data Storage
#910 Alphanumeric Paging
#920 Personal Mobile Device

FINANCIAL - MISCELLANEOUS

Policy #1000 Property Control/Capitalization
#1001 Equipment Replacement
#1003 Cash Management
#1004 Travel and/or Expense Reimbursement
#1005 Credit Card Use
#1006 Budget
#1007 Purchasing and Contracting Policy
#1008 Donations

GENERAL ORDERS (these are holdovers from an original General Orders approach that could easily be integrated into the sections above, but left on the list in this order so they align with the complete set of documentation)

Order #5 Alcohol, Drugs & Intoxicants
#6 Unlawful Harassment/Sexual Harassment
#9 Posting of Materials
#11 Emergency Operations Plan

4. CAD AND RMS SYSTEMS

Review current CAD/RMS systems and make recommendations for future use.

Historically, computer aided dispatch (CAD) systems and records management systems (RMS) have often been implemented as paired solutions from a single vendor. This approach brings a variety of advantages if the vendor is able to build highly capable solutions for both functional areas. Unfortunately, this is not always the case, and it is not uncommon to find situations where a vendor's CAD offering is a great fit for an organization while the RMS functionality is lacking in some manner. Conversely, RMS solutions that provide great functionality from a law enforcement or fire service perspective often lack strong CAD capabilities.

This disparity of capabilities becomes even more pronounced when considering solutions for multi-jurisdictional and multi-disciplinary communications centers such as what is being planned for CCPSA. Therefore, it is increasingly common to find separate solutions being selected and implemented for CAD and RMS when multiple jurisdictions join together in regional dispatch initiatives. This is becoming even more common, and reasonable to execute, as the data interfacing strategies between CAD and RMS systems becomes easier to implement and manage.

It is also important to recognize that for law enforcement agencies there are significant operational and investigatory advantages to having RMS systems well populated with historical information. If the planning of a new regional dispatch organization were to simultaneously require migrating to a new regional RMS system, a large data conversion effort could potentially be needed to meet the operational expectations of the individual agencies. From IXP's experience, data-conversion and data-merging projects such as this are extremely difficult and expensive to execute, and often result in a new system that is perceived as less functional than the individual legacy systems the agencies migrated from.

With all of these factors in consideration, IXP recommends that if at all possible, the creation of a new regional dispatch operation not require any of the participating agencies to leave their existing RMS solutions. Good CAD systems for multi-jurisdictional and multi-disciplinary communications centers are fully capable of developing interfaces to each RMS system in use so that CAD data can be transferred to the appropriate RMS system(s) as needed. This allows the CAD system to be tailored for optimal functionality from a dispatch perspective while still preserving the functionality and historical data each agency has established with their existing RMS solution.

In addition to establishing the appropriate CAD-to-RMS interfaces as described above, it will also be important for the regional dispatch center to have access to the legacy RMS systems to support other operational needs. The Valcour RMS solution is currently utilized by the Burlington, South Burlington, Colchester and Winooski police departments and the Spillman RMS solution is used by Williston PD. Administrative workstations should be established at each dispatch console furniture position so that

regional dispatch personnel can be given whatever query access is needed into these systems to support the operational needs of the center and its user agencies.

Working from the assumption that legacy RMS solutions can remain in place, attention can then turn to considering whether the Tyler Technologies/New World CAD system currently in use at Burlington could be reconfigured and utilized as the regional CAD solution for the new CCPSA regional dispatch center. IXP has seen this product used successfully in many other multi-jurisdictional and multi-disciplinary communications centers. IXP also conducted an online demonstration session with the vendor to help confirm system functionality and configuration opportunities.

From everything we can see, CCPSA should be able to successfully reconfigure the Tyler/New World CAD system to meet your regional dispatch needs. Not only does this create an opportunity to leverage the existing information already built into the system, the City of Burlington advised that the potential for regional use was considered when the initial licensing of the system was put in place, so it also seems likely that only minor licensing adjustments would be needed based on the final number of workstations installed at the regional dispatch center and its backup facility.

5. STAFFING LEVELS AND SHIFT CONFIGURATIONS

Recommend appropriate staffing levels and shift configurations for consolidated dispatch center that considers the following factors and provide an explanation of the methodology used to determine results:

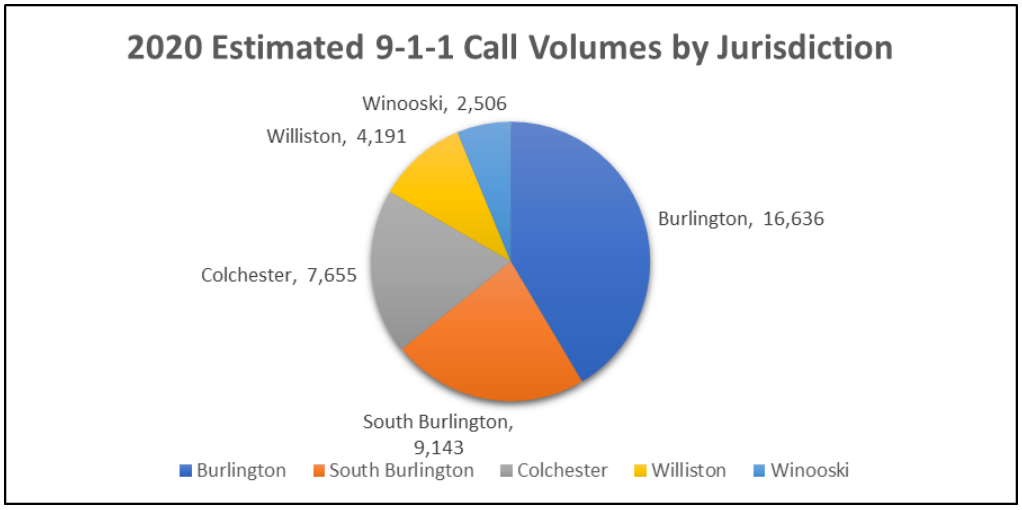
a. PSAP requirements
b. 9-1-1 call volume
c. Radio traffic
d. Non-emergency phone activity
e. Number of officers on per jurisdiction
f. Training, Management, and QA/QC

Emergency communications center staffing models need to take into consideration a number of variables as noted in the Statement of Work above. IXP examines staffing levels from both the call receiving and dispatching perspectives, and then blends this information into the overall recommended staffing model for the center.

The State 9-1-1 Program provided data for 2018 for the numbers of 9-1-1 calls within each of the CCPSA participating jurisdictions. The table and graph below show the breakdown of those calls for 2018, and the projected call volumes for 2020 (the year used as the target for the go-live). While dispatched calls for service levels have been fairly stable across the participating jurisdictions for the past two years, the 2020 9-1-1 call volume has been estimated at 5% above 2018 levels. From IXP's experience, publicity surrounding

the creation of a new regional dispatch model often results in an increased use of 9-1-1 services, so planning for some level of increase seem prudent.

Baseline 9-1-1 Call Volume Assumptions for Primary Catchment Area					
	2018			2020 Est	Statewide Stats
Burlington	15,844	41%		16,636	2017-to-2018 call volumes increased 2.7%. Using 5% as the local estimated increase from 2018 to 2020.
South Burlington	8,708	23%		9,143	
Colchester	7,290	19%		7,655	
Williston	3,991	10%		4,191	
Winooski	2,387	6%		2,506	
	38,220	100%		**40,131**	
				26,888	67% Wireless
				13,243	33% Wireline
				3,612	9% of Total Abandoned

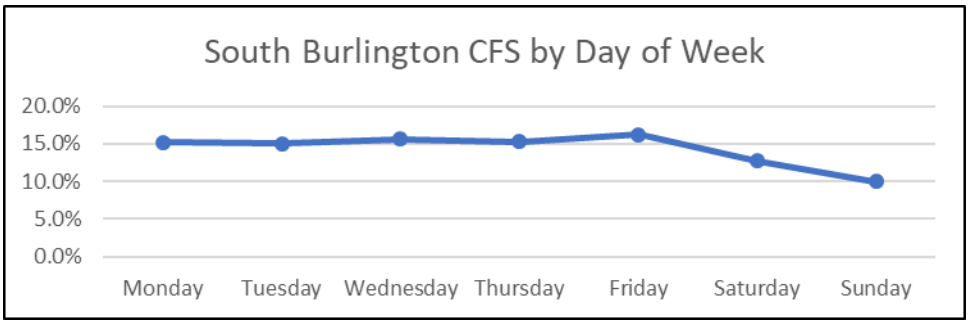


PSAPs in the statewide network are responsible for answering 9-1-1 calls from more than just the jurisdictions in their "catchment area". Calls originally routed to one of the other PSAPs will occasionally rollover to one of the other PSAPs for initial call screening and transfer to the proper dispatch center. State data indicates that this averages 7.2% of the number of calls in the PSAP's catchment area. Further, calls from out-of-state occasionally find their way into the Vermont 9-1-1 system and get handled at one of the PSAPs and transferred as needed. State data indicates that this averages 3% of the total calls in the PSAP's catchment area. Therefore, the expected volume of 9-1-1 calls that would be handled by the CCPSA PSAP/Dispatch center for the 2020 start-up year would be 44,205, as shown in the table below.

Total Estimated 9-1-1 Call Volumes	CCPSA 2020 Estimates	
Total 911 calls from PSAP Catchment Area (CA)	40,131	90.8%
Rollover calls answered by PSAP	2,888	6.5%
OOS (out of state) calls answered by PSAP	1,185	2.7%
Total Estimated 9-1-1 Call Volume	**44,205**	100.0%

In addition to inbound 9-1-1 calls, the center needs to be staffed to adequately handle inbound calls on 10-digit lines handled by the center. Since none of the existing centers have the statistical software packages on their phone systems to provide accurate call volumes and statistics, we need to estimate these volumes based on experiences with similarly-sized multi-jurisdictional centers. In these situations, we have seen 10-digit call volumes as low as 60% of the 9-1-1 call volume and as high as 2-times the 9-1-1 volume. For our initial start-up staffing model recommendation, we used a value of 1.5 times the 9-1-1 call volume, or a total of 110,512 inbound phone calls to be handled throughout the year.

IXP typically sees approximately 15-16% of inbound calls arriving each weekday, and lower volumes on weekends. This pattern was also demonstrated in dispatched calls for service (DCFS) data provided by South Burlington.

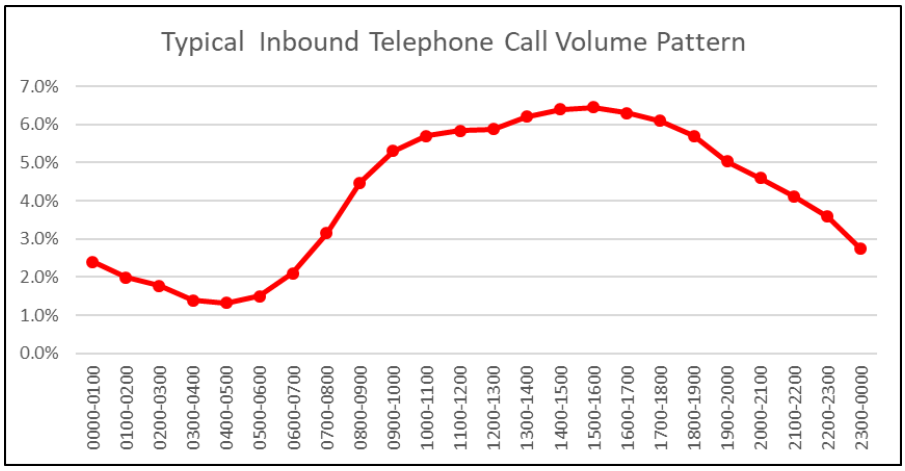


Therefore, the target weekday telephone call volume used for the staffing model was set at 329 inbound calls per day. This is slightly higher than a straight average of calls per day on a calendar basis of 303 calls per day, which is typical given the busier weekdays and slower weekends.

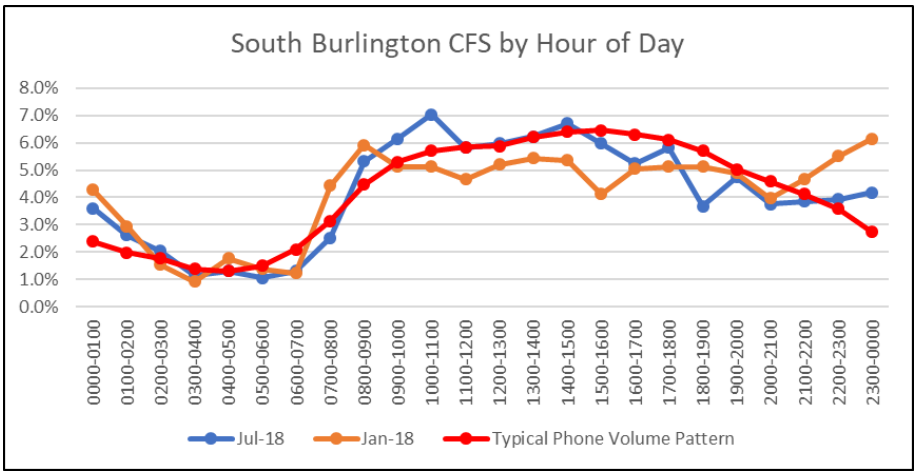
Estimated Daily Call Volumes Based on Monthly Percentages				
Month	% by Month	# per Month	Days in Month	Average Daily Volume
January	9.3%	10,257	31	331
February	7.9%	8,734	28	312
March	8.4%	9,292	31	300
April	8.4%	9,276	30	309
May	9.1%	10,049	31	324
June	9.0%	9,938	30	331
July	8.8%	9,739	31	314
August	8.6%	9,507	31	307
September	7.6%	8,376	30	279
October	7.6%	8,360	31	270
November	7.0%	7,754	30	258
December	8.4%	9,229	31	298
	100.0%	110,512	365	303
Estimated Weekday Call Volume (15.5% each Weekday)				**329**

Inbound 9-1-1 and 10-digit calls do not arrive on a constant basis throughout a normal 24-hour cycle. Instead, the middle portion of each day typically experiences higher call volumes while the deep nights

experience fewer calls. From data collected across multiple other projects in similar jurisdictions, IXP observes a typical pattern as shown in the graph below.



South Burlington provided hourly calls for service (CFS) data for 2018 to compare to this typical pattern. Data from two separate months (January and July) were compared to this pattern as shown in the graph below. While CFS data never perfectly matches call volume data (since not all CFS result from an inbound call from the public) there is often a correlation between the two, and that can be seen in this comparative data.



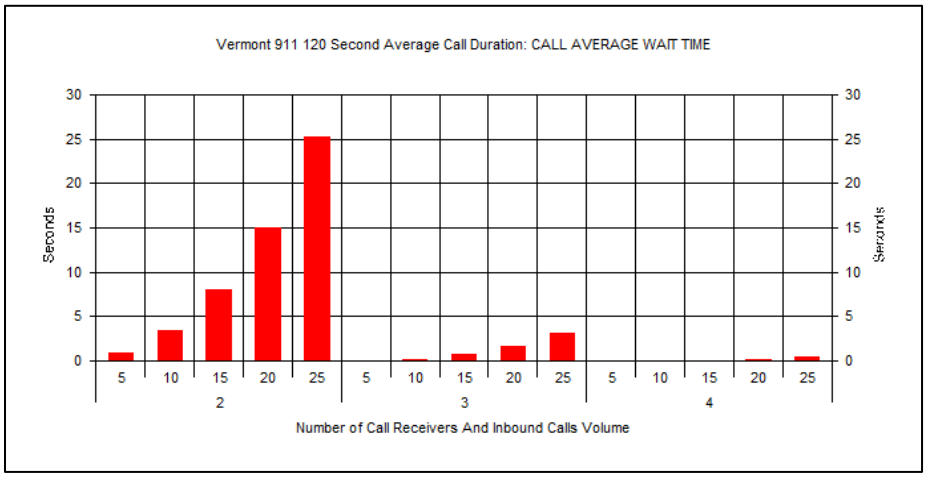
Utilizing this hourly call volume distribution against the projected 110,512 inbound calls and the weekday average of 329 calls per day, the following hourly breakdown results. The busier hours of the day from 10:00 am to 7:00 pm will experience approximately 20 calls per hour while the quieter deep nights will experience less than 10 calls per hour.

Hour of Day	Projected Hourly Inbound Call Volumes	
0000-0100	2.4%	8
0100-0200	2.0%	7
0200-0300	1.8%	6
0300-0400	1.4%	5
0400-0500	1.3%	4
0500-0600	1.5%	5
0600-0700	2.1%	7
0700-0800	3.1%	10
0800-0900	4.5%	15
0900-1000	5.3%	17
1000-1100	5.7%	19
1100-1200	5.8%	19
1200-1300	5.9%	19
1300-1400	6.2%	20
1400-1500	6.4%	21
1500-1600	6.5%	21
1600-1700	6.3%	21
1700-1800	6.1%	20
1800-1900	5.7%	19
1900-2000	5.0%	17
2000-2100	4.6%	15
2100-2200	4.1%	14
2200-2300	3.6%	12
2300-0000	2.7%	9
	100.0%	**329**

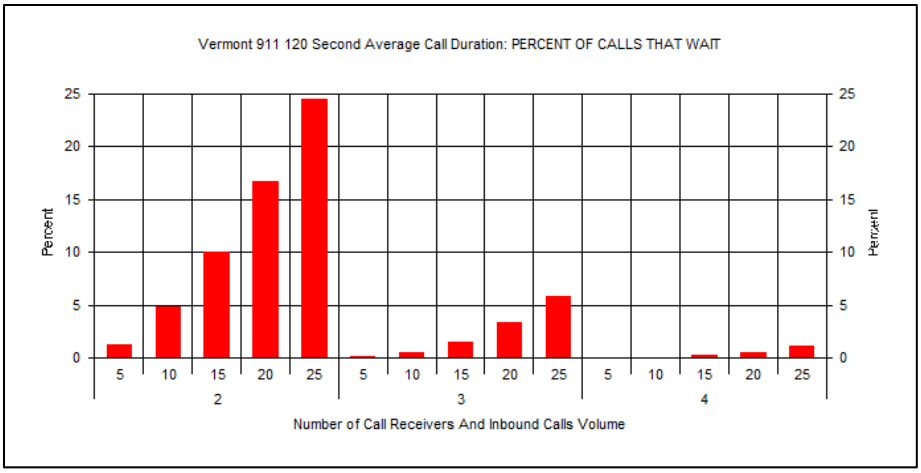
Answering 9-1-1 and emergency calls for services requires that sufficient call receivers be both on-duty and logged into the telephone system so that inbound calls can be answered quickly. The statewide average for call answering time is 5 seconds, and the standards of the National Emergency Number Association (NENA) establish that 90% of inbound calls should be answered within 10 seconds during the busy hour of each day.

To understand the staffing levels needed to meet these call answering objectives, IXP has developed a tool that utilizes industry standard Erlang queuing calculations to predict the call answering performance across a range of call volumes and a range of available personnel to handle those calls. Call answering performance is influenced by a variety of factors including the number of calls in a given hour, the random dispersion of calls across the hour, and the duration of each call. The statewide average 9-1-1 call duration for 2018 was 1 minute 59 seconds (119 seconds), which was down from 2 minutes 5 seconds in 2017. IXP has used 120 seconds for our projection for CCPSA's regional operation.

In the graph below, we can see the Average Wait Time for a range of inbound calls from 5 per hour to a high of 25 per hour, and that call volume handled by either 2, 3 or 4 personnel available to handle those calls. While two personnel could handle up to 15 calls per hour and remain under the 10-second average wait time, as soon as call volumes reach the projected mid-day levels for CCPSA, a third person would need to be added. Further, with this 3rd person in the mix, surges in call volumes could be handled and remain under the 10-second goal.



In addition to looking at things from an average wait time perspective, it is also important to examine the percentage of calls that would experience a wait time. In the graph below, we see that the 15 calls per hour point is also the threshold were up to 10% of callers would experience a wait time if only 2 personnel were handling inbound calls. The busier hours of the day would definitely require a 3rd person in the mix to sustain call answering performance.



The final step in developing a staffing model for a multi-jurisdictional and multi-disciplinary center such as CCPSA is to consider the staffing levels needed to handle dispatching functions. Dispatch staffing strategies are not as mathematically precise as telephone call answering. Instead, a variety of factors such as the nature of the discipline being dispatched, the number of agencies being handled, the number of officers on the air generating radio traffic and workload, the number of concurrent incidents and factors of this nature need to be taken into consideration. Taking all of these factors into consideration, and recognizing the successful operations IXP has encountered in similar settings and the insights gathered by CCPSA representatives during site visits to other centers, the following staffing model is recommended.

- 1 Dispatch position staffed 24 hours per day for Burlington PD (typically about 10 officers on the air).
- 1 Dispatch position staffed 24 hours per day for Colchester and Winooski PDs (typically 5-6 officers for Colchester and 3 for Winooski).
- 1 Dispatch position staffed 24 hours per day for South Burlington PD, Burlington PD, and to assist the other positions as needed (typically 4-5 officers on the air).
- 1 Dispatch position staffed 24 hours per day for primary Fire/EMS dispatching.
- 2 Call Receiver positions staffed 24 hours per day. These positions can also assist in Police and Fire/EMS Dispatching when not handling telephone workload.
- 1 Dispatcher/Call Receiver position 7 days per week, for the busiest 16 hours per day.
- 1 Shift Manager on duty the majority of the time (described further below).

This model accomplishes several objectives for CCPSA's agencies. First, designated Call Receiver positions will be able to handle inbound telephone call volumes without those calls needing to be handled by Dispatch personnel except under unusual circumstances when call volumes surge. This will allow the Dispatch personnel to remain focused on working their radio and related dispatch duties with the agencies they are working. Further, by utilizing flexible scheduling during the busiest hours of the week for additional Dispatch and Call Receiver personnel, the Center will be able to allow personnel to take needed breaks during their work-day without decreasing the effectiveness of the Center. This model also creates a dedicated Fire/EMS dispatch position that can stay focused on Fire/EMS dispatching duties without needing to be part of the staffing levels needed to handle routine telephone call workload.

Determining the total body count needed to fill this staffing model will depend on the number of factors that influence the net available working hours (NAWH) for each employee. While a typical work year is 2080 hours, there are a number of factors such as working schedule rotations, holidays, vacation leave, sick leave, and scheduled training that take personnel away from work. Based on how these factors are handled within the existing operations, and the recognition that establishing these factors for the new organization will need to be a part of the start-up and employee on-boarding process, IXP recommends that a NAWH value of 1,700 hours per year per position be utilized for planning and budgeting purposes. Applying this against the recommended staffing model results in the need to employ a total of 38.4 personnel to staff the CCPSA regional operation, as shown in the table below.

Estimated Staffing Levels	Positions to Cover	Hours to Cover	NAWH per EE	Calculated EE Count
Shift Managers	1	NA	NA	4
Telecommunicators/CTO (24X7)	1	8,760	1,700	5.2
Telecommunicators (24X7)	5	43,800	1,700	25.8
Telecommunicators (busiest 16 hrs X 7)	1	5,840	1,700	3.4
			Total Estimated Staffing	**38.4**

As mentioned earlier, IXP recommends that Shift Managers be on duty the majority of the time, but not all the time. A total Shift Manager count of 4 personnel, working 12-hour shifts with some planned overlaps, has been found in many centers to be an effective mechanism to provide coverage across the busiest days

and hours. When Shift Managers are not on duty, we recommend that dispatch personnel who are additionally trained as Communications Training Officers, and strategically placed in the scheduling pattern, serve as supervisors.

Shift Managers in this model cover a variety of operational and administrative responsibilities. In addition to the call receiving and dispatching relief functions described above, they would also be assigned a group of employees to monitor for performance and to conduct quality assurance reviews. They also would be responsible for scheduling, and a variety of administrative duties running the training program, coordinating the QA/QC processes, and participating in hew-hire testing and training.

6. TRANSITION OF EXISTING WORKFORCE

Recommend best strategy to transition current workforce into new consolidated center, understanding the need to retain current dispatchers in local dispatch until their communities are dispatched by regional, (considering training and possible joint employment by local and regional dispatch for a period of time) and within the constraints of applicable labor laws and in consultation with CCPSA's labor attorney.

As described in item #1 above (Transition Plan for Dispatch Centers), the transition process from current operations to the regional model will require careful coordination of training and preparation to assure a smooth transition. The same is true for transitioning the staff from the employment of their current jurisdictions to employment with CCPSA.

CCPSA's Board of Directors has already taken one of the most important steps in this process, assuring current employees that they will be given an offer of employment with the regional organization. From IXP's experience, the fear of losing employment when a regional consolidation takes place creates significant stress within the current workforce and often leads to personnel leaving before the regional organization is operational as they seek confidence in having stable employment.

As discussed in item #1, IXP recommends that all of the policy & procedure development and the training on regional operational practices be conducted while personnel are still employed with their home agency. This will allow each agency to carefully manage the scheduling and engagement in these activities (along with the overtime costs being incurred) while still maintaining staffing levels needed to sustain current operations.

Four of the five jurisdictions currently planning for a transition to regional dispatch operations have collective bargaining agreements with their dispatch personnel. CCPSA should anticipate that one or more of the labor organizations currently representing personnel in these agencies, and perhaps other labor organizations, will have an interest in representing the CCPSA regional dispatch personnel. Assuming the

transition processes outlined in item #1 are followed, employment for CCPSA would commence on the day of cutover to live operation. No decisions regarding any labor organizations will be made prior to that time.

7. CALL TAKING STRATEGY FOR COMBINED PSAP/DISPATCH

Recommend best call-taking strategy (one stage with combined PSAP/dispatch positions or two-stage with separate PSAP and dispatch positions) for a combined PSAP/Dispatch Center given expected call volume.

As discussed in item #5 above, IXP recommends preforming 9-1-1 call receiving and emergency dispatching functions within a single operational model across all the functional positions in the center. During the busier periods of the normal 24-hour day, one or more positions may be designated as primarily focused on only call receiving workload, but during quieter periods of the day positions responsible for dispatching functions would also handle inbound 9-1-1 and 10-digit calls. This model provides the most efficient utilization of all personnel on duty at any given time, and avoids the problem of having an isolated group of call receivers unable to handle all the inbound calls (resulting in 9-1-1 rollovers to other PSAPs).

8. RECOMMENDATIONS ON EXISTING TECHNOLOGIES

Provide recommendations on the most efficient way to incorporate the use of existing technology, including the following:

a. 9-1-1 customer premises equipment
b. CAD
c. Recording equipment
d. Radio equipment
e. Networking
f. Workstation equipment
g. Fire alarm monitoring system

One of the most significant challenges in establishing a new regional emergency communications center in an entirely new facility is that the facility and all of the technology systems have to be fully installed, tested and trained on prior to the cut-over to live operations. Attempting to go live with a limited set of technology and/or functionality puts the new operation at risk of not being to perform critical functions until systems are de-installed at their current center, re-installed at the regional center, and then tested to make sure they are ready for live operations. Further, legacy systems may lack the features and functions needed for a regional dispatch environment. And finally, it is not uncommon for legacy systems to be at or near the end of their normal life cycle and not ideally suited for re-use at the new facility.

IXP offers the following observations and recommendations on the various technology systems needed for the regional dispatch center.

a. 9-1-1 Customer Premises Equipment (CPE) – While not specifically identified in CCPSA's Statement of work, we need to consider 9-1-1 CPE in the context of an overall telephone system environment for the new regional center. Since the State 9-1-1 Program will not undertake the process of providing and installing 9-1-1 CPE until the center has successfully commenced regional dispatch operations, the new center will need to install a basic telephone system to allow the routine processing of inbound and outbound telephone calls as is currently accomplished at each of the existing centers. This will need to be a new system that is fully installed, tested and trained on prior to commencing live operations.

   In the process of laying out each of the dispatch console positions and the technology equipment room, space would be reserved for 9-1-1 system to be installed by the State at the point in time they are ready to begin the transition to the center serving as a PSAP in their network. Since 9-1-1 calls would then be handled on the 9-1-1 CPE rather than being transferred to the center of 10-digit lines as it is today, the general telephone system could be reconfigured to reduce the number of lines to meet the routine 10-digit needs of the regional center.

   A new phone system would likely not be needed for whatever facility is identified as the backup facility. Rather, the existing phone system at that center would be reconfigured to accommodate backup operations and 9-1-1 calls would be routed to the backup facility over 10-digit lines from one of the other PSAPs in the State network as it is today.

b. CAD System – As discussed in Item #4 above, the Tyler Technologies/New World CAD system could be re-configured and re-used as the CAD system for the regional dispatch center. The best practice for re-use of system like this is to provision new servers and workstations at the new facility and get the re-configured system fully installed, tested and trained on at the new center. This is preferable to trying to operate as remote workstations so that the new center can be fully self-contained from functionality, maintenance and security perspectives. If the City of Burlington is not a part of the start-up cutover of the regional center, their workstations could be converted to operate remotely off the regional system at the new center until such time as they make the transition to the regional center.

c. Recording Equipment – The logging and recording system for the regional center should be a new system that is fully installed, integrated, tested and trained on prior to commencing live operations. IXP also recommends that regional dispatch centers also operate a low-cost backup recording system to minimally capture telephone line and radio channel traffic that is essential to the operational record of the center. For this backup system, one of the recording systems from one of the existing centers could be moved to the regional center after that agency cuts over to regional dispatch.

d. Radio Equipment – The new regional center will need to have a new radio console system fully installed, integrated, tested and trained on prior to commencing live operations. These systems require a significant number of radio control stations and leased phone lines to be interfaced and tested to allow normal operations to be conducted. This often takes several months to complete and limits the ability to relocate any back-end system equipment from any of the existing centers.

As part of acquiring and implementing the new radio console system, a new fire station alerting and personnel notification system will also need to be installed so it can be fully installed, tested and trained on prior to commencing live operations.

If the new system at the regional center matches systems currently in use at one or more of the existing centers, the initial number of furniture positions equipped with radio console workstations could be kept to the minimum needed for start-up operations. Workstation positions could then be moved and reused from existing centers based on compatibility. Three different radio console systems are currently in use at the existing centers: Motorola MCC5500, Motorola MIP5000 and Avtec Scout (now a Motorola company).

e. Networking – A new stand-alone local domain and network will be needed for the regional center. This will allow all of the systems at the facility to be properly configured, installed, and tested prior to commencing live operations. Operating on a stand-alone network also allows the regional center to protect itself within its own firewalls and security systems. It will also allow the center to carefully configure, control and monitor any interfaces to external systems and networks.

f. Workstation Equipment – As discussed above, there may be some opportunity for reuse of CAD or radio console workstations after the regional center commences live operations and equipment can be moved from centers that are closing down. 9-1-1 workstations would all be new as part of the State installing the 9-1-1 CPE. IXP recommends that each working position in the center also be equipped with what we refer to as an 'administrative' workstation. This is used for interactions with both internal and external systems such as email, RMS systems, external databases, etc. Keeping these ancillary functions off the 9-1-1, CAD and Radio workstations is part of the security architecture that helps protect mission-critical comm center systems. Some re-use opportunities may present themselves here depending on the sequence of centers migrating to regional operations and the age/capability of the legacy equipment.

g. Fire Alarm Monitoring System – The City of Burlington is the only dispatch center currently providing direct monitoring of fire alarm systems. All of the other jurisdictions receive notifications of activated fire alarms from commercial central station alarm companies via 10-digit telephone calls. It is recommended that when the new regional dispatch center's telephone system is configured that a specific 10-digit number be established for these alarm monitoring company calls to make it easier for the center's staff to manage call answering responsibilities and work flow.

Assuming that the City of Burlington will want to continue to provide direct fire alarm monitoring service to their community and continue the annual revenue stream derived from their alarm monitoring agreements, it will be necessary to replicate the Sigcom TRX50 system functionality at the regional dispatch center. This will need to be done in advance of Burlington joining the regional dispatch operation so the system can be fully installed and tested before cutting over to live operations. The system currently in place at Burlington's dispatch center could then remain in place if Burlington's center is selected as the backup center, or moved to whichever facility is selected as the backup center.

h. Other Systems – While not specifically mentioned in the Statement of Work the new regional center will also need several ancillary technologies installed as part of readying for live operations. A master time synchronization system is needed to tie all the dispatch-related systems to a common time reference. This is critical for future incident reconstruction or similar quality assurance activities. A variety of video monitors and workstations to control them will also be needed to allow access to video feeds from facility security systems at the regional center, regional traffic and weather feeds, and as needed video feeds from the facilities of the agencies being served.

9. EVALUATION OF DESIGNATED SPACE

Evaluate the designated space and provide recommendations for configuration based on the operational and staffing requirements, including:

a. Comfort
b. Security
c. Utilities
d. Technology
e. Environment needs
f. Console position, configuration and planned assigned use
g. Adjacency access such as lockers, break room, storage, and access to restrooms

IXP was asked to evaluate leasable office space on the second floor of the building that houses South Burlington Police Department at 19 Gregory Drive. This space has a total of approximately 3,450 square feet of space that could be remodeled to house the regional communications center operations in several different configurations.

The space is encumbered by several design constraints due to the layout of the building and the location of existing tenant spaces. The geometry of the space is unusual, with a large triangular space separated from the main space by a combination of a wall that cannot be removed (but it can have doorways framed into it). There is also an existing technology equipment room that is currently used by another tenant. Early conversations with this tenant indicated a willingness to share the space with the communications center by consolidating as much of their equipment as possible to one end of the room. Figure 1 below provides an overview of the space available.

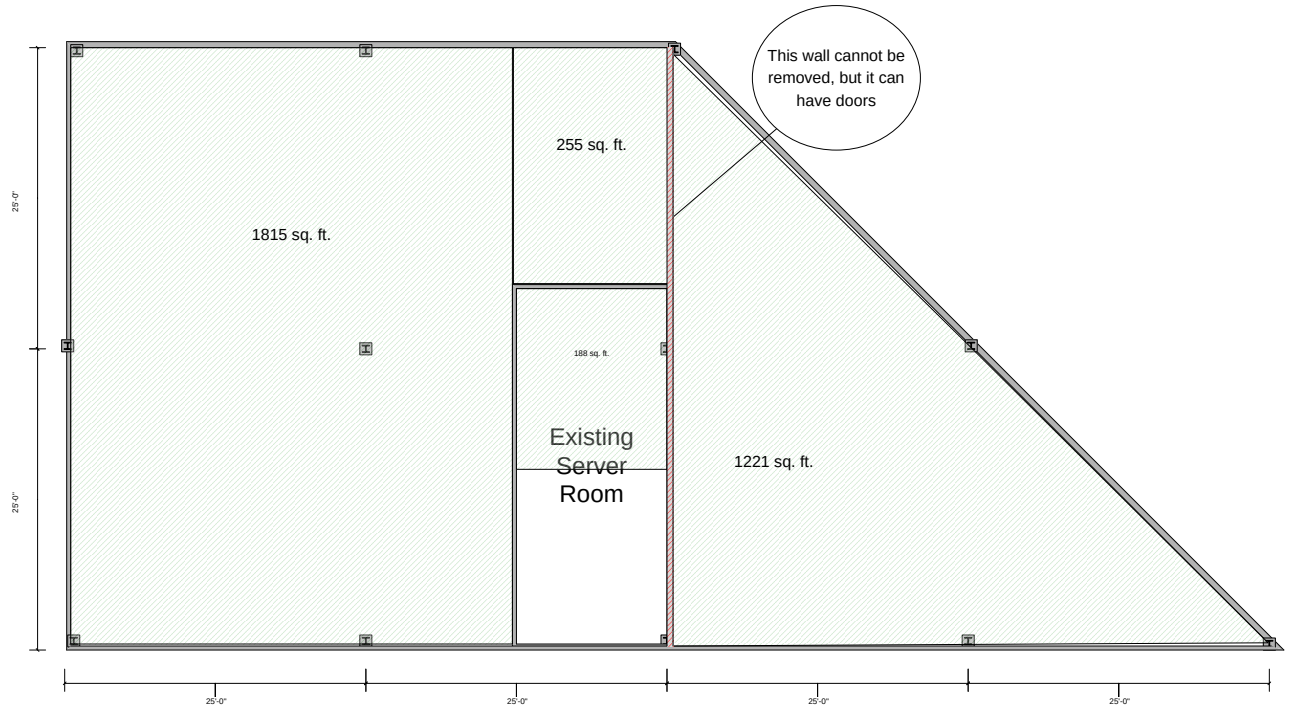


Figure 1 - General overview of the available space

The best industry guideline to use for evaluating a facility for an emergency communications center is the Standard for the Installation, Maintenance and Use of Emergency Services Communications Systems published by the National Fire Protection Association (NFPA #1221). Chapter 4 of this standard provides specific standards and recommendations for Communications Centers.

In addition to providing best practice guidance on specific building systems and technical characteristics, the Standard also stresses the importance of having the communications center capable of sustaining operations within their own security boundaries. Therefore, features such as kitchen/break areas, restrooms, rest areas and locker space need to be incorporated within the security footprint of the center. In addition to these features, IXP also recommends that communications centers include sufficient storage space to allow storage of both emergency supplies, operational support materials, and files.

Finally, if possible, centers should include some form of meeting/training space to allow at least small meetings or training sessions to take place within the security perimeter of the center. Since South Burlington Police also occupies this building and has expressed that meeting and training space needs could be accommodated in spaces under their control, the need for meeting space in the communications center may be less important in this instance.

Coupling these considerations with the items CCPSA identified in the Statement of Work, IXP developed a variety of alternative floor plans that CCPSA could consider. Each layout alternative has a number of tradeoffs when compared to other alternatives, and these are outlined below for each viable layout we considered. Each possible layout is described in the pages that follow.

ALTERNATIVE 1A – Prior to learning that the wall along Line C of the building layout could not be removed, we had looked at a layout we called Alternative 1 that concentrated all of the operational spaces to the left of that wall and all of the administrative and support spaces to the triangular portion to the right of that wall. Upon learning that the wall could not be removed and that only framed openings of approximately 5' could be considered, we modified this strategy into Alternative 1A, which is shown below in Figure 2.

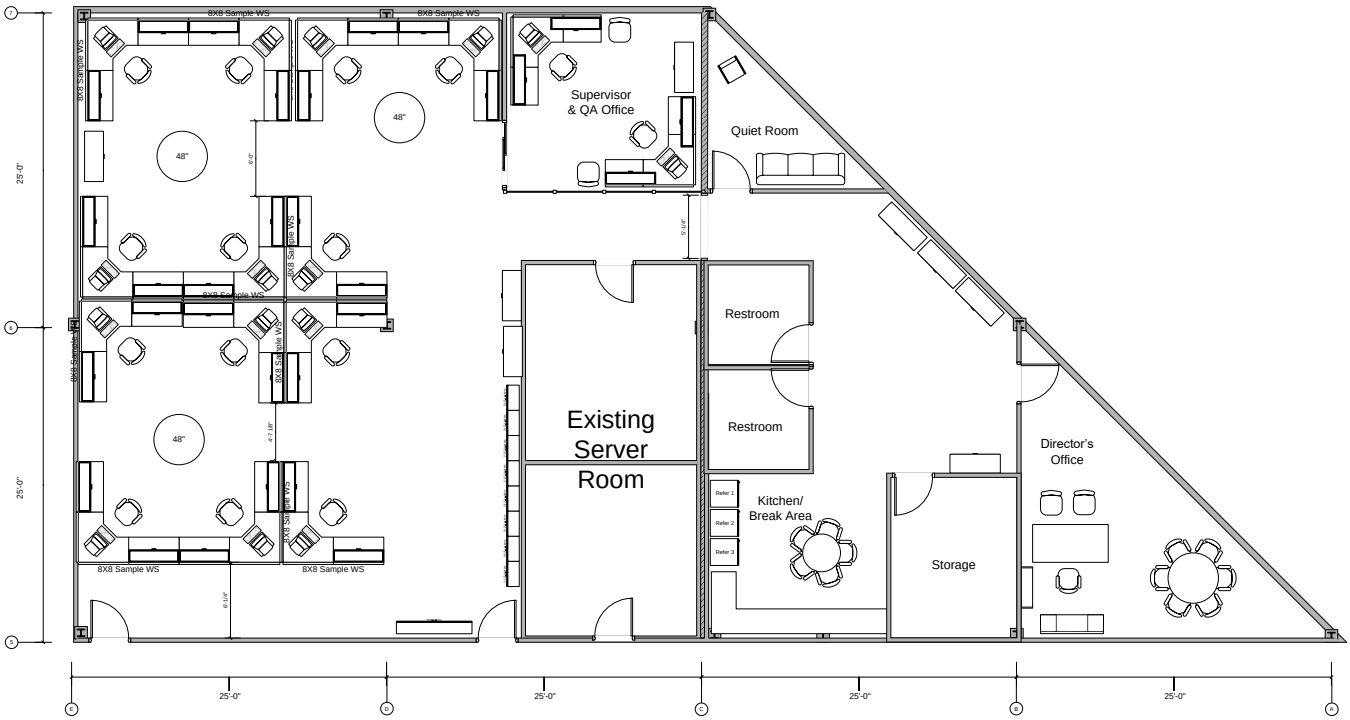


Figure 2 - Alternative 1A

In this configuration, the Center could fit 13 console furniture positions capable of being equipped for PSAP, dispatch or combined PSAP/Dispatch functionality. All critical personnel support functions also fit within the layout including restrooms, a quiet room, a kitchen/break area and a storage room.

ALTERNATIVE 1B – In this variation of Alternative 1, a small meeting/training space is introduced into the operational side of the layout. This takes the total console furniture count down to 10 positions. If this configuration were chosen for initial operations, the meeting/training space could be framed with demountable walls so that if further operational space expansion were needed in the future the room could be disassembled and the full configuration of Alternative 1A could be achieved. Alternative 1B is shown below in Figure 3.

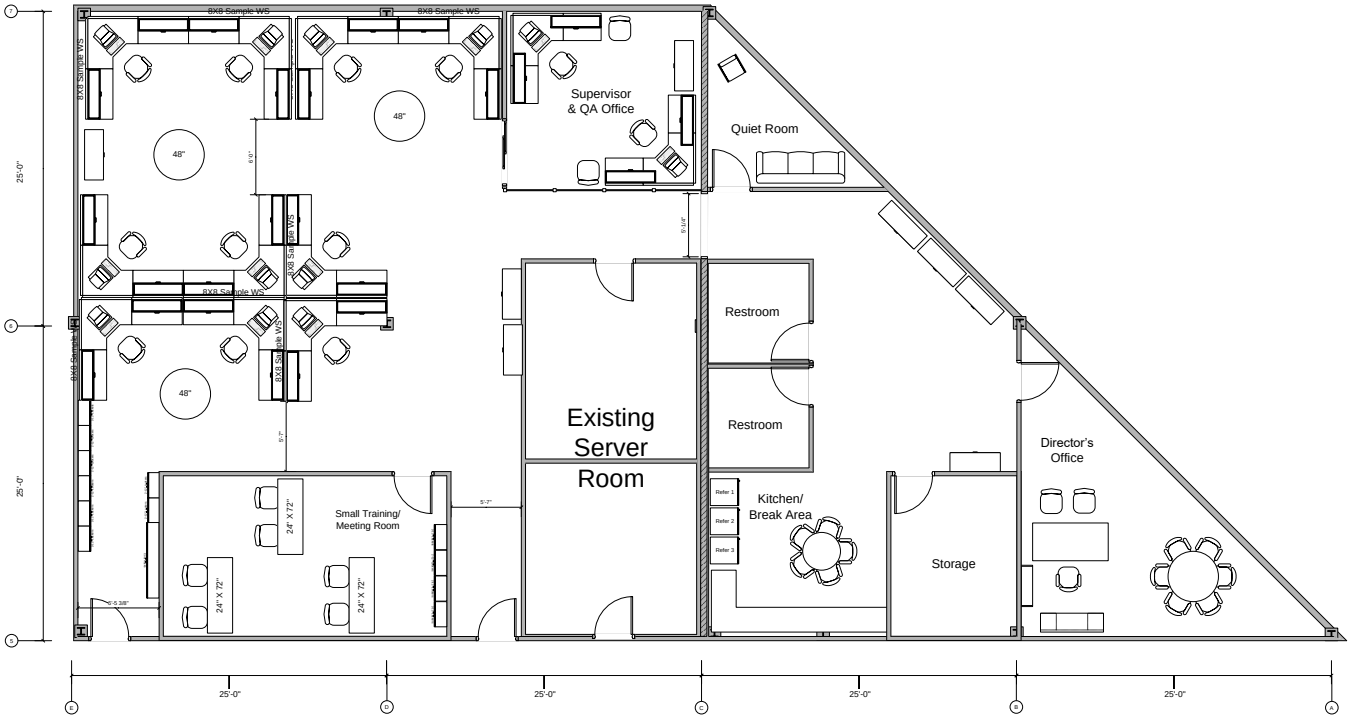


Figure 3 - Alternative 1B

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ALTERNATIVE 2 – In this layout (Figure 4 below), consideration was given to possible layouts that moved the employee support areas (kitchen/break, restrooms, etc.) to the left side of the space so they are co-located with the operational area. This configuration takes the maximum position count down to 7 but accommodates a larger meeting/training space. This layout also keeps the kitchen/break area roughly the same size as in the Alternative 1 scenarios, which results in the lack of any designated storage space (so storage cabinets and/or shelving would have to be deployed on the 'administrative' side of the space).

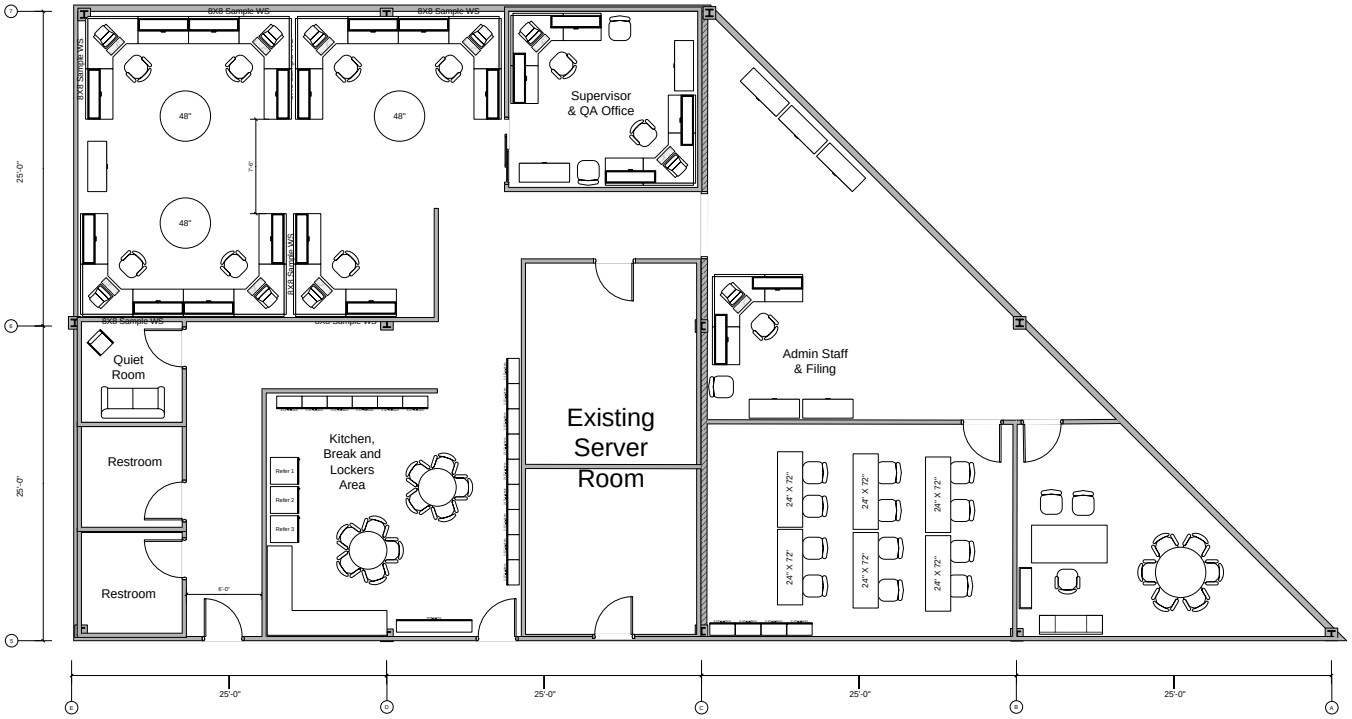

Figure 4 - Alternative 2

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ALTERNATIVE 2A – In this layout (Figure 5 below), the size of the kitchen/break area is reduced to allow a 'hall-closet' type of configuration for some storage space.

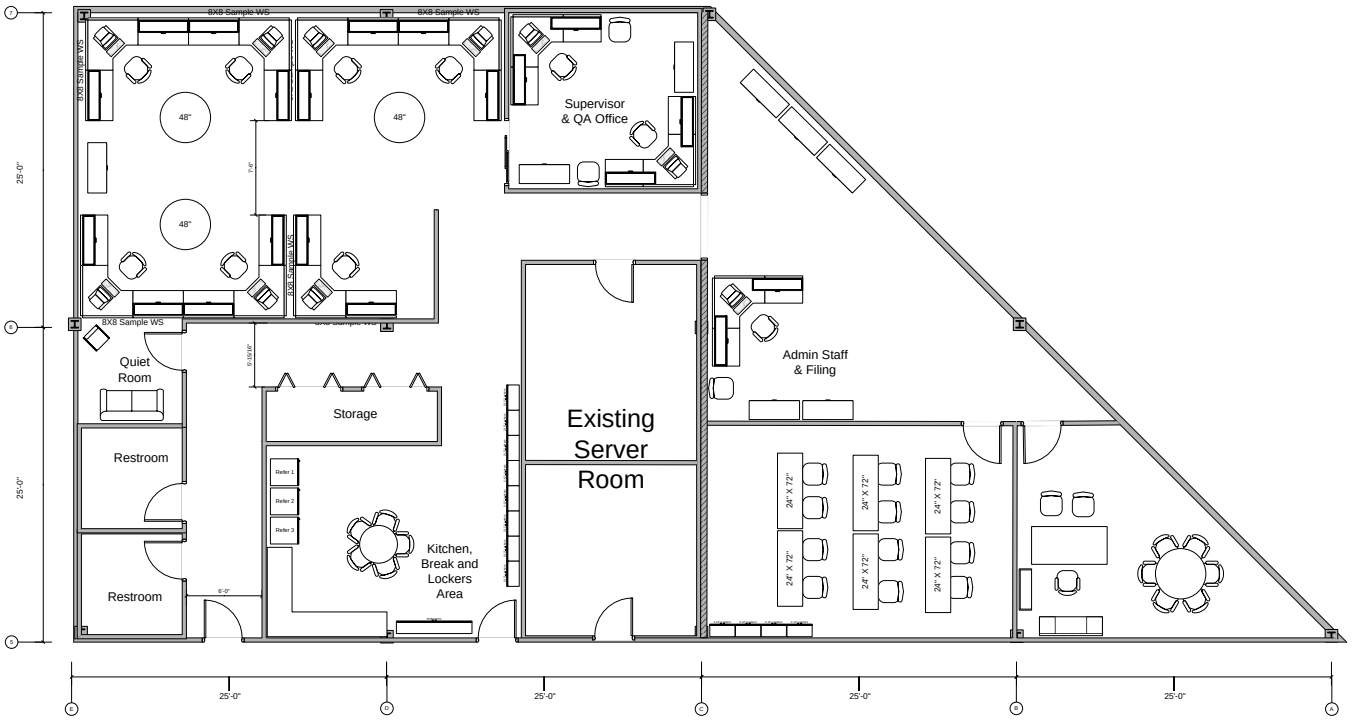

Figure 5 - Alternative 2A

ALTERNATIVE 3 – In this configuration (shown in Figure 6 below) the quiet room is moved to the other side of the dividing wall and this allows be restroom sizes to be increased slightly.

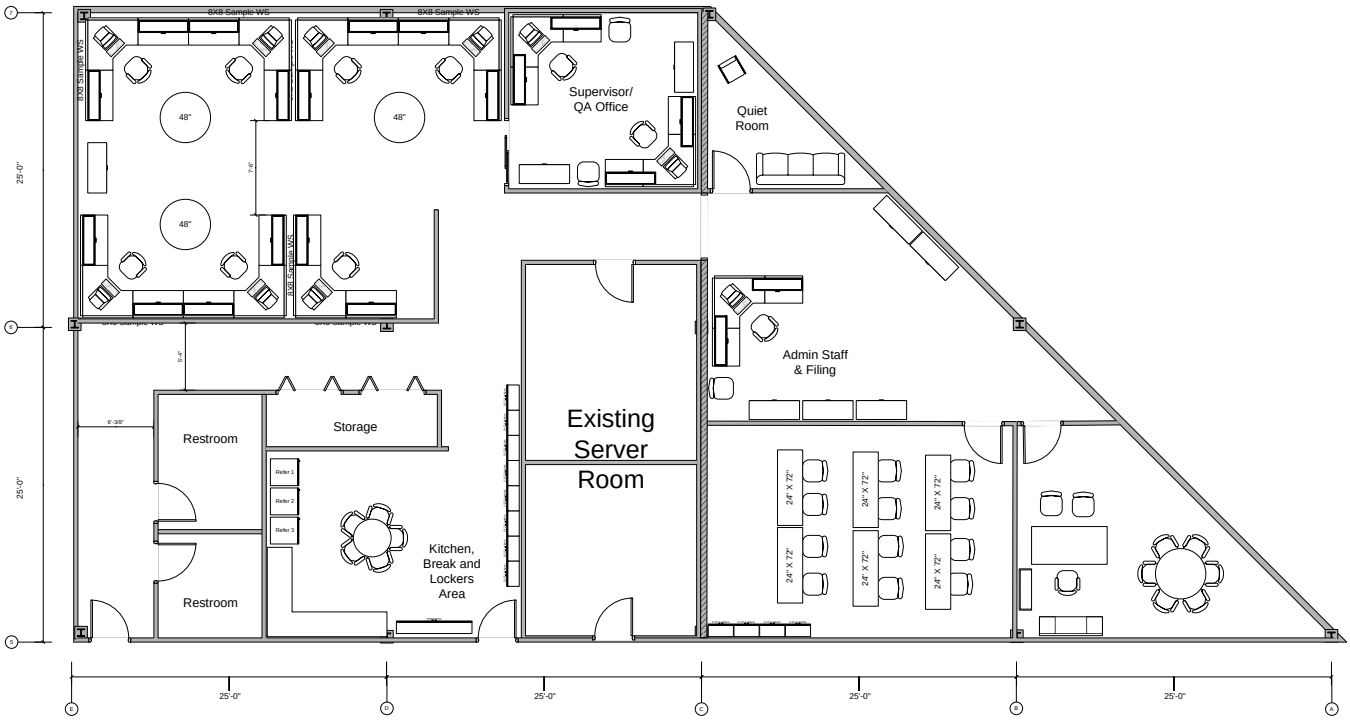

Figure 6 - Alternative 3

SUMMARY OF ALTERNATIVE LAYOUTS

Each of the layouts considered have advantages and disadvantages. Either flavor of Alternative 2 or Alternative 3 allow the center to more easily accommodate its meeting and training needs within its own footprint. But this comes at a cost of reducing the operational floor space so that configurations of greater than 7 furniture positions would be difficult to accommodate. It also limits the storage space available for the center.

Conversely, Alternative 1A maximizes the operational space with the potential for up to 13 positions if needed in the future. This configuration also allows for adequate storage space for the center's emergency and operational supplies. Alternative 1B creates the same long-term expansion potential as 1A, but also creates a small meeting/training space to use until expansion beyond 10 positions is needed. It also retains the storage space.

Regardless of the configuration ultimately chosen, it seems clear to IXP that a space configuration can be found that would allow this facility to be utilized for CCPSA's operation.

OTHER FACILITY CONSIDERATIONS

Backup Power – At the time the building was remodeled to accommodate the needs of the South Burlington Police Department, an emergency generator was added to support their backup power needs. The capacity and current loads on this generator will need to be evaluated to determine if it can adequately

provide backup power for the CCPSA regional dispatch center as well. If it is not capable of supporting the expected loads, consideration could be given to up-sizing the generator to meet the additional loads, or adding a separate generator to support CCPSA's needs.

Technology Equipment Room – The existing server room is currently occupied by another tenant in the building, but that tenant has expressed a willingness to reconfigure their equipment so that CCPSA could have use of approximately one half of the total space in the room. Since some of this existing equipment and electrical panels are wall-mounted, it will likely not be possible to find a configuration that would isolate the other tenant to just one half of the room, so a shared access and security agreement will need to be put in place. Combining such a process along with CCPSA systems being installed in locking equipment cabinets should provide sufficient security for CCPSA systems.

At the time the tenant improvement design and engineering work is done, the total power loads and heat loads for this room will need to be calculated to determine if additional electrical or HVAC capacity will need to be added. It is quite common to install small, stand-alone HVAC systems for rooms of this nature to augment the cooling capacity of the building's main system and to maintain desired operational temperatures in the technology equipment space.

It will also be advisable to explore the potential of installing a stand-alone FM-200 fire suppression system to protect this room. Given the room already exists and does not appear to have been designed with the tight seals required for an FM-200 system to be effective, it may end up being too expensive to retrofit the space to allow an FM-200 system to be utilized. If that turns out to be the case, a combination of smoke and heat detectors should be installed in the room and this system be monitored directly in the comm center. With 7X24 staff that can be properly trained in how to deal with over-temperature or smoke/fire conditions, the room would be adequately monitored and protected.

10. RECOMMENDATIONS ON RADIO SYSTEMS

Using information provided by a single representative of CCPSA, including a list of all member community public safety radio channels, their current use, frequency licenses, and approximate coverage per channel, provide recommendations on radio system(s), head end, microwave, back-haul, frequencies, licensing, the reuse or repurposing of existing (in place) equipment and frequencies, considering end of useful life of current equipment, replacement and upgrades. (This should not be an ultimate radio system for CCPSA but rather one that will be sufficiently robust, efficient, and effective until such time as CCPSA determines if it wishes to develop, or own, or operate a radio system covering all of its member communities. CCPSA does not plan on even such an endeavor until CCPSA has been operating with all its member communities.) Please note however, that CCPSA prefers copper back haul vs. internet back haul for resiliency purposes.

Regional dispatch consolidations are easiest to execute if the agencies being consolidated are already operating on a unifying radio system infrastructure. Unfortunately, very few dispatch consolidation initiatives have the opportunity to work with agencies operating on a shared radio infrastructure, so integrating existing systems into the new regional dispatch operation is a routine challenge in these types of initiatives.

As is often the case, the existing radio systems within the CCPSA member jurisdictions have evolved over a long period of time, with systems at various stages of technological advancement and equipment at varying places in their useful lifecycle. Some communities have been able to sustain investments in their systems and find them performing well for their needs, while others recognize that equipment repairs or replacements are an imminent need. Recognizing that CCPSA wishes to defer a decision on whether to develop and operate a regionalized radio infrastructure until after dispatch operations are fully operational, planning for the new center will need to anticipate integrating all of the existing systems into the operational concepts at the new regional center.

IXP does not recommend attempting an interim reconfiguration of existing systems to try and create an approximation of a regional system environment. Rather, we recommend integrating the systems into the regional center on an as-is basis, and keeping the responsibility for the performance and maintenance of each system with the jurisdictions that currently own/operate them. This will allow each community to make their own decisions on how to prioritize any investments in their current systems/equipment until a formal project is launched to plan and implement a regional radio infrastructure. This will also create an easily understood demarcation of responsibility between the regional dispatch operational responsibilities of CCPSA and the radio system infrastructure and equipment responsibilities of the individual communities.

Deferring a large-scale infrastructure reconfiguration, or a full regional design and implementation effort, also allows each community to transition to CCPSA regional dispatch services on timelines that work for them, without requiring them to also have to undergo radio system changes.

Current generation radio console systems are able to support a wide variety of interfaces to existing and future radio system infrastructures. The most common approach is to lease wireline circuits from local telecommunications providers to tie remote transmitters and/or receivers back to the radio console system. While wireline interfaces are often desired, they are becoming increasingly expensive to acquire and sustain since most telecommunications carriers are moving away from their legacy copper-line communications networks. Many of these carriers are systematically increasing their pricing for these circuits in hopes of pushing radio system interfaces to alternative links such as microwave or IP backhaul.

Wherever possible, wireline links should be established from the existing radio infrastructures to the new regional dispatch center. These would be implemented in tandem to the links already in place to the existing dispatch centers. After that jurisdiction cuts over to regional dispatch services, their existing lines could be removed as they decommission their center. This decommissioning would not be done at the center selected as the backup location. Rather, additional links would also be provisioned to this facility or control station radios added to reach these systems over the air rather than over a wireline link. Multi-channel control station radios will also need to be integrated into the radio console system at the regional dispatch center to provide a backup method of accessing systems if wireline lines go down.

11. RECOMMEND OPTIONS FOR BACKUP CENTER

Provide recommendations for an emergency backup dispatch center to ensure continuity of operations, based on an understanding of centers previously operated by CCPSA member communities, understanding that the PSAP function need not be backed up.

While a number of factors influence the selection of a backup location, the most important is having the backup location far enough removed from the main location so that it is unlikely to be affected by the same disabling situation. Therefore, the South Burlington dispatch center would not be a candidate since it is located in the same building under consideration for CCPSA's operation.

The next important consideration is that adequate space is available both for the operational positions needed and for the back-end servers and equipment to support those positions. The Williston and Winooski centers are both 2-position operations currently and would not be reasonable to expand. This leaves the Colchester and Burlington centers for consideration as potential backup locations. Colchester is currently configured with 3 positions and it would likely be possible to fit in a 4th position. Burlington is currently configured with 4 positions and it would likely be possible to fit in a 5th or even 6th position if needed. This makes it much more likely to meet the backup needs for CCPSA as the agency continues to grow over time.

The Burlington location also brings several other advantages if it is selected. As the center that already houses the Tyler/New World CAD system, coordinating the migration of this system to CCPSA operations while concurrently serving Burlington's needs until cutover would be much easier to coordinate. Further, the fire alarm monitoring system needed to support Burlington's alarm monitoring service is already in

place, making it immediately ready to serve as a CCPSA backup. And, as discussed in Item #1 above, if the transition sequence has Burlington joining the CCPSA operation last, the Burlington center will be in live operation all the way through the start-up of CCPSA's center, allowing it to be configured and ready to serve as the backup concurrent with the start-up of CCPSA's center.

As noted in the discussion on radio systems, regardless of which location is selected it will be necessary to set up the backup center with additional wireline interfaces and control station radios so that the backup center can access the most important radio channels for the agencies being served.

12. REVIEW ALARM ORDINANCES

Review alarm ordinances in the six-member communities, to be provided as a single package to selected contractor by CCPSA, and provide recommendations including:

a. Any proposed changes to individual municipal alarm ordinances, and
b. Whether to repeal individual municipal alarm ordinance and replacement with a common regional alarm ordinance (a power which CCPSA has).

IXP has reviewed the alarm ordinances for each of the participating jurisdictions and does not see any issues with allowing them to continue as they are for the initial start-up of the CCPSA regional operation. Multi-jurisdictional and multi-disciplinary communications centers typically deal with customer agencies with different approaches on how they administer alarms in their jurisdiction, and these approaches are often influenced by their local conditions such as the nature of the alarm systems in their jurisdiction and the numbers of officers they have available to handle them.

The role of the communications center is to provide the tracking and reporting mechanisms each jurisdiction needs to administer their alarm licensing and fee structures, and this can be accomplished with statistics extracted from the CAD system and provided to the agencies on a routine basis. After a period of operation where consistent statistics across all agencies have been gathered by the regional communications center, further consideration could be given to establishing a regional alarm strategy.

As discussed earlier in item #8, the new center will need to be equipped with the TRX50 central station alarm system to receive fire alarms from the City of Burlington. All the other participating jurisdictions have their fire alarms going to commercial central station alarm companies. IXP sees no reason to force Burlington to change their current approach, and the integration of the TRX50 into regional communications center operations should be a straight-forward matter.

One important point of agreement will be needed to allow alarms and alarm data to be handled at the regional center as described above. Each jurisdiction needs to retain the responsibility for maintaining all of the subscriber, keyholder and contact data for the alarms in their jurisdiction and providing this up-to-date

information on a routine basis to the reginal communications center. Further, Burlington Fire should be tasked with keeping this data current in the TRX50 system.

SECTION 3 – COST ESTIMATES PHASE ELEMENTS

1. OPERATIONAL COST ESTIMATES

[THIS SECTION WILL BE ADDED WHEN THE FINAL REPORT IS ASSEMBLED]

2. CAPITAL COST ESTIMATES

[THIS SECTION WILL BE ADDED WHEN THE FINAL REPORT IS ASSEMBLED]

SECTION 4 – SUMMARY AND CLOSING

[THIS SECTION WILL BE ADDED WHEN THE FINAL REPORT IS ASSEMBLED]