

Minutes of a Meeting of

ENVIRONMENT, SAFETY & COMMUNITY SERVICES COMMITTEE

held April 27, 2015

6:30 p.m.

Present: Councilman Steve Lee, Chair  
Councilman Dwight Clark  
Councilwoman Karen Lieske

Also Present: Mayor Sutherland, Police Chief Spaetzel, Councilman Vincent,  
Service/Safety Director Thomas, Finance Director Mahoney, Operations  
Manager Landers, Ron Michalec, Police Chief, Retired (Pepper Pike, and  
Ohio State University)

Audience: Dick Majewski, Conda Boyd, Denny Wendell

Mr. Lee called this meeting of the Environment, Safety and Community Services Committee to order at 6:30 p.m. Mr. Lee thanked everyone for their attendance this evening.

**Proposal from Police Chief Spaetzel to Transition the Police Dispatch Function to Civilian Dispatch**

Mr. Lee introduced retired Police Chief Ron Michalec. Chief Michalec has over 35 years of experience in law enforcement and formerly served as Chief of Police of several communities including Pepper Pike, and Ohio State University. Chief Michalec is currently a professor at the University of Akron. Chief Michalec previously assisted Bay Village in connection with the selection process for a new police chief following the retirement of former Police Chief David Wright in 2013.

Mr. Lee advised that Chief Spaetzel has proposed that we transition from our current approach of utilizing sworn police officers as dispatchers to a structure where we hire civilian dispatchers to take over those dispatch functions. Bay Village is one of only three cities in Cuyahoga County that has not adopted the civilian dispatch model. Mr. Lee noted that Chief Spaetzel has done a great deal of work on this, and noted the memorandum Chief Spaetzel circulated late last year with many attachments, background information, and detailed analysis.

The anticipated total cost of the new approach is approximately \$236,000, comprised of the personnel cost of adding the equivalent of 4.4 FTE's in the dispatch function, and additional patrol costs that will be incurred due to additional officers on the road that are currently serving in the dispatch function. It is the Chief's proposal to utilize both full and part time employees to fill that 4.4 FTE's and the Chief has also identified savings of \$123,000 comprised of reductions in overtime, reductions in part time hours, and the flattening of the management structure in the

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Police Department, resulting in a net additional cost of \$113,500 per year once this is completely implemented.

There is concern among members of Council with adding this additional cost to the City's budget in perpetuity without first assuring that all potential operational efficiencies are identified and evaluated as part of the reorganization plan. As chair of this committee, Mr. Lee thought it prudent to obtain from an expert some input on the proposal. The committee meeting this evening will be for discussion on the study completed by Chief Ron Michalec and provide an opportunity to have committee members' questions answered regarding his analysis.

The objectives of the study are laid out on Page 1 of the report, entitled "City of Bay Village Police Department Management Study, April 3, 2015" (Exhibit A attached), and that is to research the best practices for the establishment of a radio communications center for the City of Bay Village Police Department, and analyze efficiencies and requirements for staffing of full time police patrol officers for the City of Bay Village Police Department. This would include analysis of patrol shift effectiveness; calls for service criterion and suggest best practices or process for improved efficiencies.

Mr. Lee stated that as he read through the report at first he was a little confused because there are sample calculations from other communities that are examples. Those are samples of how the calculations are to be run, and later in the report there are actual numbers for Bay Village applied to those different formulas. Pages 12, 13, and 14 of the report contain Chief Michalec's recommendations regarding the radio communications center, or civilian dispatch.

Chief Michalec stated that basically the study was two-fold. It speaks of the practicality and feasibility of a radio communications center which is civilian staffed handling telephones, radios, and monitoring the jail. Only three communities in Cuyahoga County still use sworn police officers for their dispatching which is a 19<sup>th</sup> century concept of the Police Sergeant or Lieutenant in the station handling walk-ins from the public or answering telephones at the turn of the century. Officers are misused, sitting in a radio communications center and not being able to go out on a call if they need to. If the officer is a Lieutenant or Sergeant it makes it even more difficult because they can't attend to the supervisory practices that are required of those particular ranks.

The three communities that still use sworn police officers are Fairview Park, Rocky River, and Bay Village. Chief Michalec outlined the three options he offers for consideration in his report:

- Leave the communications center as it is currently manned (not recommended);
- Finance the entire operation and personnel cost solely for the City of Bay Village;
- Market the communication center to surrounding agencies, one being Rocky River which is close to being agreeable to that proposal.

Chief Michalec stated that by operating a communications center with surrounding agencies, the costs could be deferred as a tri-community effort. At least two communities, Rocky River and Bay Village, are willing to engage with costs deferred accordingly. That makes good common

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sense and if it is here in Bay if there are walk-ins a citizen coming into the police department they will not come into an empty lobby. Chief Michalec related that in Monroe Falls, Ohio they received their dispatch through Tallmadge, Ohio. After the city hall closed, a citizen went over to an LPL Ring-Down Circuit, which basically is a phone, opened the door, picked up the phone which rang a dispatcher in Tallmadge and they called a police officer to come in and handle the citizen complaint. In Bay Village that is not acceptable; the City wants dispatchers to be able to service the public 24/7. Rocky River is not as concerned about that although they will probably have to staff their jail.

Chief Michalec recommended that the Bay Village Police Dispatch be civilianized, the officers put on the roads where they are performing a function that they are paid to do. This would result in a more effective and efficient dispatch center and it could be marketed to surrounding communities so Bay Village doesn't have to stand alone.

Mr. Lee asked Chief Michalec if there are other communities in Northeast Ohio, other than the three he mentioned in Cuyahoga County, who are still sworn police officer operated dispatch centers. Chief Michalec stated that he knows of none other than Bay Village, Fairview Park and Rocky River that have police officers answering calls and dispatching. He noted that if there is a major problem in the community the officer cannot get out on the road to assist. They have to stay on the phones and on the radios; they cannot get out in the field. He stated that speaking from the perspective of a chief, it would be more practical to have a civilian there and make sure that the command staff can respond to supervisory responsibilities.

Mr. Lee asked Chief Michalec if he would have any comments on the timeline Chief Spaetzel has proposed for transitioning, or for the mix of full time and part time dispatchers.

Chief Michalec stated that the timeline looks good to him. As far as the mixture, it is a good idea to get some part timers in. If you have to call somebody in to substitute for a full timer, you are not getting hit with time-and-one-half, or the benefit which is roughly 38 to 39%. The part timers were used at Ohio State University, and even at Pepper Pike. Part time were mixed with full time. Pepper Pike eventually consolidated with the City of Beachwood.

Mr. Lee asked what Pepper Pike did to address their jail needs or the station presence when Pepper Pike consolidated with the City of Beachwood. Chief Michalec stated that Pepper Pike would incarcerate at the Shaker Municipal Court. The Pepper Pike facility was an 8-hour facility, and received a finding from the Ohio State Department of Corrections to either modify their jail or close it down. They closed it down. Pepper Pike now would have to use the routine adopted by Monroe Falls to substitute for a police presence in the station to handle walk-ins, unless there is an officer in the station.

Mr. Clark addressed Chief Michalec and asked him the challenges he saw in implementing civilian dispatch in other communities in which he has been involved in that transition, and how those challenges were overcome. Chief Michalec stated that he never had to develop his own civilian dispatch center. Either he inherited a location like Monroe Falls, Hudson, Pepper Pike, or Ohio State University where they already had in place a dispatch center. Since then, in talking

with associates from Summit County, Tallmadge decided to eliminate the dispatch and went with the Stow Police Department. That was not easy to do in the old days because there was not a 9-1-1 system. You were three digit bound; those three digits determined where the 9-1-1 calls would be routed prior to the enhanced system. The enhanced system made it so you could program numbers. No matter the exchange, you could still route calls. That was the only hurdle. When the enhanced system came in, you could actually capture those phone calls because you could program each and every member of the community. The Bay Village area code is 440, not 216. But, you could program that through an E-9-1-1 system into this radio dispatch center. Now, all of Bay Village, regardless of the area code, comes here. The radio system for Bay Village is in place as far as frequencies so that would not have to be captured from the FCC.

Mr. Clark stated that the City has approved the Sundance software for the Police Department. He asked if that is a learning curve for the dispatchers, or something that can be relatively fluid.

Chief Spaetzel stated that it depends on who you hire. Sundance is a new system, but all CAD RMS systems basically function the same way. The City of Rocky River also has Sundance, so the two cities will be sharing a CAD RMS system, a 9-1-1- system because Cuyahoga County basically has one primary answering point, and a radio frequency. Technologically, we are all set. Chief Spaetzel stated that hopefully by June 1, 2015, they will go live on Sundance.

Mr. Clark asked if the implementation of full time civilian dispatch incorporates another bargaining agreement, or would they fold into one of the other units. Chief Spaetzel stated that more than likely they would fold into the Ohio Patrolmen Benevolent Association (OPBA). As you look throughout this area and see full time dispatchers they are generally under the same bargaining unit as patrol officers.

#### Patrol Staffing Levels Analysis

Mr. Lee reviewed the section of the study in regard to patrol staffing levels. Page 16 of the study is a sample of calculating patrol force staffing needs. Mr. Lee stated that there are three different types of calculations in the study. The first is based on population, the second is based on total calls, and the third is a weighted call calculation.

Chief Michalec stated that the first one is strictly population in conjunction with calls for service. This is done if you cannot glean or garner information out of UCR, which is how the weighted sample is formed.

Mr. Lee stated that on Page 16 the sample city had a population of 23,212. The multi-step calculation comes to 9.84. Chief Michalec stated that this is strictly patrol calculations. IACP eliminates all command staff, administrative, and other functions like investigative and crime prevention. This is only uniformed police, on the street in squad cars. You want to determine how many uniformed patrol officers will be required for a population in relationship to calls for service. Mr. Lee asked if pages 16, 17, and 18 are based on population only. Chief Michalec agreed, noting that page 17 includes non-available police officer time including days off, holidays, bereavement, vacation, sick days, court time, training days, and personal days. Chief

Michalec advised that for the sample city the final factor is 1.84, multiplied by the 9.84 resulting in 18.13 or rounded to 19 patrol officers needed to respond to incidents in the sample city.

Mr. Lee asked Chief Michalec if he ran the calculation with Bay Village's population. Chief Michalec referred to Page 21 of the study, Bay Village PD Analysis, 2013 computer Aided Dispatch Calls for Service Methodology.

Mr. Lee stated that the calculation ran on Pages 16, 17, and 18 was not run on the analysis on Page 21. Although it refers to the Bay Village population of 15,474, it jumps right to the 10,180 calls for service. Chief Michalec stated that the other is if you do not have any data at all, you just go ahead and run the calculation. Chief Spaetzel actually punched in population and calls for service. The CAD showed 10,180. That's what he could get out of that system for 2013. He didn't do any other years on that. The .75 per officer is just an average of 45 minutes per call. When you look at that, he could have a call that is 20 to 50 hours, if it is very serious in nature. This particular formula doesn't allow for that. It is saying that these calls are all 45 minutes average per officer. If you can't calculate the exact number of time spent, you calculate an average of 45 minutes for 10,180 calls.

Mr. Lee asked if it would be possible to run through what the calculation would be if it was a population based model, without the 10,180. Mr. Lee thought that the three approaches for Bay Village would be included because the three approaches for the sample city were included.

Chief Spaetzel stated that he performed that calculation and came up with 12 police officers. Chief Michalec noted that Chief Spaetzel also provided non-available police officer time for the City of Bay Village which resulted in a factor of 1.72 instead of 1.84.

Mr. Lee stated that the 10,180 calls for service in 2013 included those categories that gave parking permission. On Page 21, Step 1, the description states that the calls are not to include situations where advice is given over the telephone, delivering messages, handling internal police department matters, etc. Does that mean that the parking permission category should not be included in the 10,180? There is also a departmental information category, which Chief Michalec describes as a "kitchen sink."

Chief Michalec stated that Chief Spaetzel would have to look at every single call to make a decision about categorizing. Chief Michalec advised Chief Spaetzel not to include any of those types of situations where it is a simple telephone call coming in for incidental information. Those should not be included as a service call.

Chief Spaetzel stated that the Computer Aided Dispatch Records Management System (CAD RMS) currently used is TAC. There are limitations to all CAD RMS systems. 2013 numbers were used because 2014 numbers could not be gleaned out due to issues that year. In using 2013, that was actually the lowest year of the previous five years, including just an overall count in 2014. Roughly 50% of the calls actually dove into the CAD. Informational calls and legal questions, do not. In addition to that, records requests, administrative calls, incident inquiries, inquiries about fraud, calls from other government agencies, calls directed to clerical staff, and

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detective administrators are not reflected in the numbers in these calculations. There will certainly be some calls that don't meet the criteria of calls for service, but to pull those out would be nearly impossible to do. There are patrol activities that are not necessarily included in there as well. There are patrol functions that don't get put into the CAD. Those would include things like vehicle checks, officers answering questions, releasing property, logging property, field inquiries from people coming into the station, going to court, surveillance, and follow-up by patrol. None of that gets put into the CAD. Traffic stops, unless it is a D.U.I. or accident do not get put into the system. Chief Michalec stated that these are still part of work, but not included in the statistics as a call for service.

Chief Spaetzel reviewed the police activity weighting factors for the application of IACP Police Patrol Force Staffing Formula for Bay Village in 2013. (Page 25) He stated that a factor of 1 is one police officer. He noted that the recent suicide at the lake would be found under accidents at a factor of 3, but the actual number of that suicide, not including detectives, was 29 ½ hours, or a weight of 40. Something that was given a weight of 3, is actually a weight of 40 in actual time.

Mr. Lee asked if the department ever relies on mutual aid in those types of events. Chief Spaetzel stated that they would rely on mutual aid only if needed. If everyone is on the scene and another call comes in they would probably call Westlake or Rocky River. Chief Michalec noted that they do not have to come. It is not failsafe. Mr. Lee asked if the Police Department uses mutual aid as frequently as the Fire Department and EMS Squads. Chief Spaetzel stated that they do not use mutual aid as frequently, and mostly the Fire/EMS mutual aid is start to finish. The Police mutual aid is where they show up until the local police get there and then they clear. It is a rare instance where someone comes in and spends a great deal of time.

Mr. Clark asked if we are asked to provide much mutual aid to other communities. Chief Spaetzel stated it is done, but the CAD RMS system does not pull out data like that. He estimated it is probably 50/50 as far as Bay requesting and Bay giving mutual aid. It is a very amicable well-run system. He noted that the departments all work together, all know each other, and are like one large department on the west side of Cleveland. If anyone needs help they help each other, no questions asked or no demand for reciprocity.

Mrs. Lieske stated that looking at the largest number for reported incidents, it is animal complaints at 693, each call an average of 24 minutes with a weighted average of 1. Chief Spaetzel gave an example of a dog bite on the west side of the City where a dog ran out of the house, bit another dog and bit two people. It was far more than 24 minutes. Others may take 5 or 10 minutes.

Mr. Lee referred to the 693 animal calls mentioned by Mrs. Lieske. He stated that based on the formula, those calls are estimated to take 24 minutes. He asked if a factor of 1 indicates 45 minutes or less. Chief Michalec stated that anything 45 minutes or less is given a factor of 1. Mr. Lee asked if something takes 17 minutes, such as Barking Dogs, does that roll up to 45 minutes for purpose of this report. Chief Michalec responded affirmatively.

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Mr. Lee asked if the new Sundance System will show mutual aid. Chief Spaetzel stated that with all the systems you plug in dispatch call categories. We have revised our dispatch call categories. What you see on the Calls for Service Report provided to you (provided by Chief Spaetzel separately from this report) have been revised to include more categories. There have been 1046 false 9-1-1- calls. Under the new category, the 9-1-1- calls will be marked for what it is, e.g., if it is a domestic 9-1-1- call it will be marked as a domestic call, not a 9-1-1. They will be broken down more clearly as we go to the new system.

Mrs. Lieske asked if anything that would take under 45 minutes is counted as 45 minutes and a weight to a value of 1. We have the estimated time to handle per officer, which is the best estimates for Bay Village. Why would we use the 45 minute number instead of what the average would be for Bay Village? Chief Michalec stated this rolls back into the issue of the CAD system and what it allows you to do or not to do. With the current system he has in place he cannot provide that average. Mrs. Lieske asked if we were to average the actual time, what would we come up with as our average time. Chief Michalec stated that you would have to know the maximum amount of time spent on a call, and the minimum amount of time spent on a call, and how many times. Chief Spaetzel stated that the report is based on statistical average. There is no way to determine exactly, unless you go through every call and recreate how many officers responded, when did they get there, when did they clear and what did they do at the station for that call.

Mrs. Lieske reiterated that she is just questioning why we are rounding everything under 45 minutes up to 45 minutes. Chief Spaetzel stated that these estimates were provided by the IACP. From a Bay Village perspective, we probably spend more time on average per call than many other departments. You can't factor that in. Chief Michalec stated that the numbers are based on IACP research.

Mr. Clark stated that in the absence of getting good data from TAC, which has been our provider, we tried to use statistics that we have seen as live consequences to factor in this average number of calls. Chief Spaetzel responded affirmatively. He stated that even the Sundance system will not be able to provide exactly what you want. You are still dealing with statistical averages unless every single call is entered with the time for service. Chief Michalec noted that whatever is set for the year with Sundance cannot be changed until the following year. He noted that the Sundance system will be a better system than TAC. Chief Spaetzel cautioned that it will not be foolproof. It is not going to be so significantly better that you can say it is exactly what it is.

Mr. Clark noted what we are saying is that on average the higher profile cases up to the top of page of the report seem to be understated in terms of man-hours, but the smaller ones, such as the one Mrs. Lieske cites, are probably rounded up. Chief Spaetzel stated that some are and some aren't.

Mr. Lee stated that looking at Page 25 what he struggled with is that there are almost 12,000 items broken down, but two-thirds of the total are classified as "Other Incidents."

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Mr. Lee asked Chief Michalec to explain how the 10,180 which is the number used for the second calculation, converts to the 11,943 used for the third method of the calculation. Chief Michalec stated that all of the CAD calls were incorporated into that particular number, minus the Part I Crime Calls, and the Part II Crime Calls. The 10,180 mark are strictly phone calls coming in to dispatch. Chief Spaetzel stated there could be some overlaps but trying to pull those out is next to impossible. The Grand Total is the number 11,943. The number next to it, 12,900 is the weighted value of that number. Chief Spaetzel stated that he tried to be as accurate as he possibly could, knowing the limitations of the CAD system. A good portion of what is done is not even reflected in the document, to say nothing about the community service oriented things that they want to do on top of this. This is a minimum staffing report for patrol only based upon a weight of one officer handling all of these which is not realistic. Some would have a multiple of two, some would have a multiple of three, making that 12,900 weighted value significantly higher. Even taking out the night parking calls, it still gives a recommendation of 25 police officers.

Chief Michalec commented that of all the programming that was put on the table in the front end of the report, he would suggest the School Resource Officer SRO position as extremely important. That will take one police officer off the street immediately. The question then becomes, do you add one additional officer to make sure you at least have the adequate number of patrol officers. Of all the other programs that come and go, the SRO is nine months out of the year, which would cover the high school predominately but could go between the middle school and the high school. Chief Michalec recommended having an SRO because it is a safety issue and excellent community relations. Most crime in a community such as Bay Village is going to be juvenile related. You have eyes and ears inside the school, plus it is crime prevention programming at its best. At Pepper Pike, he did it with the Orange Schools and it was very successful.

Mr. Lee asked the Chief if the SRO would be a component of the community police programs he laid out with the 23 officers and the civilian dispatch. Chief Spaetzel responded affirmatively. He stated that once this would get up and running it would be to determine whether we can do the SRO with the current staffing.

Mr. Lee asked if SRO's are typically funded jointly by the City and the Schools. Chief Michalec stated that if you can get the school system to buy into and fund it that would be favorable.

Mr. Lee stated that from his perspective civilian dispatch is a very positive step to take. The hang-up is the cost of it and covering that expected \$113,000 additional cost. He asked if there are grants or other opportunities for funding that can be pursued to help cover this gap.

Chief Michalec stated that his Option Number 1 would be to at least get Rocky River on board very quickly and if it can be sold to Fairview Park, sell it to them. That will reduce the costs tremendously. If it can be marketed to Rocky River and defer some of that cost that would be the way to proceed.

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Mr. Clark asked what economies of scale might come out of working with the other communities. Chief Michalec stated that you do not want to make it so cost-prohibitive they would say no. Offer a package that you think is reasonable based on the call data.

Mr. Lee thanked Chief Michalec and Chief Spaetzel for their work with the committee this evening. The meeting adjourned at 7:38 p.m.

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Steve Lee, Chair

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Joan Kemper, Secretary

**CITY OF BAY VILLAGE  
POLICE DEPARTMENT**

**MANAGEMENT STUDY**

**April 3, 2015**

**Prepared By: Ron Michalec,  
Police Chief (ret.)**

**BAY VILLAGE POLICE DEPARTMENT  
MANAGEMENT STUDY FOR THE  
BAY VILLAGE CITY COUNCIL  
APRIL 3, 2015**

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**PURPOSE FOR THE STUDY**

The purpose of the management study of the City of Bay Village Police Department is to provide insight and guidance on matters relative to the staffing of full time police officers for patrol operations in the police department as well as best practices for the establishment of a radio communications center within the police department.

**GOALS & OBJECTIVES OF THE MANAGEMENT STUDY**

The goals and objectives of the management study are:

- Research current best practices for the establishment of a radio communications center for the City of Bay Village Police Department.
- Analyze efficiencies and requirements for staffing of full time police patrol officer for the City of Bay Village Police Department (to include analysis of patrol shift effectiveness; calls for service criterion and suggest best practices or process for improved efficiencies).

**POLICE DEPARTMENT BACKGROUND  
CITY OF BAY VILLAGE AND BAY VILLAGE POLICE  
DEPARTMENT**

The City of Bay Village, Ohio is located in Cuyahoga County, U.S. Route 6 traverses the city. Bay Village is approximately 7.1 square miles in area of which 4.6 square miles is land and 2.5 square miles is water. It has a residential population of approximately 15,474, which is predominately upper class. The city's demographics are 97% white, .5% African-American, .9% Asian, .1% Native American, and 1.5% Hispanic/Latino or other races. The City of Bay Village has a strong mayor/council form of government. The police chief reports directly to the mayor. The police sergeants report directly to their shift lieutenant. The police department's 2015 annual personnel budget is approximately 2.914 million dollars.

## **Bay Village Police Department Management Study**

The City of Bay Village is predominately residential but has a small retail plaza on Clague Road. The police department rates its relationship with the business community as 'good.'

The Bay Village City School District services the community with one high school (Bay High School), one middle school (Bay Middle School), two elementary schools (Westerly Elementary and Normandy Elementary), and one childcare learning center (Glenview Center for Childcare and Learning). The police department considers their relationship with the schools as 'excellent.'

The Cleveland Plain Dealer daily newspaper and The West Life weekly newspaper cover police events within the city. Other media outlets which cover the police department include Cleveland, Ohio's ABC affiliate WEWS television; NBC affiliate WKYC television; CBS affiliate WOIO television, and Fox Affiliate WJW television. The department's relationship with the media is considered 'very good.'

The City of Bay Village Police Department is serviced by the Rocky River Municipal Court and the Cuyahoga County Common Pleas and Juvenile Courts. The relationship with the courts is considered 'good.'

Crime and/or law enforcement concerns within the city are as follows:

- Crimes against property (identity theft, fraud, theft from autos)
- Crimes against persons (domestic violence)
- Juvenile crimes (drugs and underage consumption)

The police department has mutual aid contracts with all law enforcement jurisdictions in Cuyahoga County. It has a very good rapport with all of the law enforcement agencies within Cuyahoga County and surrounding counties. The police department participates in the WEB SWAT Team (Westshore Enforcement Bureau).

The City of Bay Village Police Department has an authorized strength of 23 full-time sworn personnel. It is comprised of a chief of police, two lieutenants, and four sergeants. The detective bureau is comprised of two detectives. There are five part-time sworn police officers, 25 auxiliary police officers, and 12 school crossing guards.

## **Bay Village Police Department Management Study**

The patrol bureau is comprised of two lieutenants, four sergeants and 12 officers. The department has one records clerk, one administrative assistant, and one part-time maintenance employee. The radio communications center is staffed by a lieutenant, sergeant and/or officer from the patrol division.

The department demographics are as follows: 17 male police officers (white); one male police officer (Hispanic); one female police officer (white); two full-time, non-sworn female personnel (white).

Programming within the department includes:

- The Detective Bureau
- Community Diversion Program for Juveniles, under the direction of the Cuyahoga County Juvenile Court
- Westshore Enforcement Bureau SWAT Team
- Community Care Monitor
- Bomb Squad
- Full-service jail which houses prisoners for the Rocky River Municipal Court

There are two separate bargaining unit contracts for the department: sergeants and lieutenants are represented by the Fraternal Order of Police Lodge No. 25 and the patrol officers are represented by the Ohio Patrolmen's Benevolent Association.

The department encourages and provides in-service training to its members. The department training budget is \$16,000 per year.

## **Bay Village Police Department Management Study**

### **THE DEPARTMENT'S POLICING PHILOSOPHY**

"The Bay Village Police Department is dedicated to providing the highest level of professional law enforcement services.

- Dignity
- Dedication
- Professionalism
- Integrity

Through a partnership with the community, we will strive to enhance the quality of life and ensure the safety and security of all persons."

### **DEPARTMENT CHALLENGES FUTURE GOALS & OBJECTIVES**

Chief Mark Spaetzel took his position as chief of police for the Bay Village Police Department on November 1, 2013. He immediately identified specific needs within the police department pertaining to community programming, outreach and interaction. Chief Spaetzel indicated that his goal to achieve a significant community policing agenda involves the incorporation of:

**Crime Prevention Officer** – The dedication of a Bay Village Police Officer to increase crime prevention awareness. This officer would also be involved in the establishment of 'Block Watch' programs in the neighborhoods.

**Safety Town** - During the summer months assigning sworn police personnel in conjunction with the Bay Village Schools personnel in providing safety programming to pre-school children.

**School Resource Officer** - Assigning, on a full time basis, a Bay Village Police Officer to the Bay High School and Bay Middle School as a 'peace keeper'; education resource in the classroom; and provide a positive role model for the youth of the community.

## **Bay Village Police Department Management Study**

**Safety/Service Day** – A one-day event that showcases city safety services within the city. This event would be used to promote police department operations while marketing department programs and/or services to the community.

**R.A.D. (Rape Aggression Defense Training)** – Self-defense and crime prevention training for women of all ages within the community.

**Community Police Academy** – A program offered to all Bay Village residents that informs them about police operations and procedures while fostering positive community relations.

**Bicycle Patrol** – During the spring, summer and fall months of the year assigning officers to patrol on bicycle. This program would be conducted within the business district, school grounds, parks and neighborhoods for detection and prevention of crime as well as community outreach.

**Drug Awareness Presentations** – With the current national epidemic with heroin abuse the police department would, in conjunction with its Westshore Enforcement Bureau partners, conduct various alcohol and drug programming presentations to various civic and school organizations.

**Community Events** – The department would participate in various community events such as Bay Days, Memorial Day Parade, Santa Ride, Boo Village, neighborhood block parties, and the securing of FOPA donations to needy families during the holiday season.

**Speaking Engagements** – Speaking engagements to various civic organizations pertaining to safety as well as marketing police department operations/programming, guest readers in the schools, and internet safety programming for children and parents of Bay Village.

**Police Department Tours** – Hosting citizen groups at the police department for tours and program promotion.

**Law Enforcement Career Guidance** – Involvement in higher education criminal justice studies internship programs. This program is designed to have students assist the police department with projects and/or programming while providing valuable job related experience to

## **Bay Village Police Department Management Study**

future criminal justice practitioners. Ultimately the internship could be used as a valuable recruiting tool for department vacancies.

### **DEPARTMENT STRUCTURE**

Once Chief Spaetzel took office his goal was to 'flatten' the organization. With the retirement of two lieutenants his goal was to collapse that position and create two administrative lieutenants (see Addendum C – Revised Organization Chart for details). One lieutenant (Administrative Lieutenant) would command the records and detective operations while the other lieutenant (Patrol Lieutenant) would command the patrol and communications operations.

Sergeants would be in charge of three platoons and/or shifts comprised of days (7:00 am to 3:00 pm), afternoons (3:00 pm to 11:00 pm), and nights (11:00 pm to 7:00 am).

#### **The lieutenant's job (mid-level management) tasks would include, but not be limited to:**

1. Assumes management responsibility for assigned services and activities of a division or service area of the Police Division; may oversee special projects or other assigned areas.
2. Manages and participates in the development and implementation of goals, objectives, policies, and priorities for assigned programs; recommends and administers policies and procedures.
3. Monitors and evaluates the efficiency and effectiveness of service delivery methods and procedures; recommends, within departmental policy, appropriate service and staffing levels.
4. Plans, directs, coordinates, and reviews the work plan for assigned staff; assigns work activities, projects, and programs; reviews and evaluates work products, methods, and procedures of assigned staff to ensure compliance with applicable federal, state, and local laws, codes, and regulations; ensure safe work practices, quality, and accuracy; meets with staff to identify and resolve problems.

## **Bay Village Police Department Management Study**

- 5. Coordinates the selection, orientation, training, and evaluation programs for department personnel; provides or coordinates staff training; provides positive motivation for employee performance; identifies and resolves staff deficiencies; recommends discipline procedures.**
- 6. Oversees and participates in the development and administration of the Division's annual budget; participates in the forecast of funds needed for staffing, equipment, materials, and supplies; monitors and approves expenditures; implements adjustments within their division.**
- 7. Supervises, reviews and participates in the preparation of reports and other written material and the maintenance of departmental records; inspects departmental equipment and ensures that deficiencies are corrected.**
- 8. Responds to some of the most difficult inquiries and requests for information; assists in hearing and adjustment of citizen complaints; conducts and oversees sensitive and complex internal and external investigations.**
- 9. Responds to major incidents reported to the Police Division and ensures that all personnel are following emergency management protocol; assumes command of incidents as needed for the situation.**
- 10. Serves as the liaison for the assigned functions with other divisions, departments, and outside agencies; participates with community relations including public, media, and the press; serves as staff on a variety of boards, commissions, and committees.**
- 11. Represents the department with other law enforcement services and allied agencies, other city departments, civic groups, and the public; plans and facilitates the conduct of special community events requiring law enforcement participation; establishes and maintains a customer service orientation within assigned areas.**

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12. Provides responsible staff assistance to higher ranks; conducts a variety of organizational studies, investigations, and operational studies; recommends modifications to programs, policies, and procedures as appropriate; may assist in the development and preparation of new and revised City ordinances pertaining to the law enforcement services and activities; prepares and presents staff reports and other necessary correspondence.
13. Manages and oversees assigned special projects.
14. Attends and participates in professional group meetings; maintains awareness of new trends and developments in the field of law enforcement and crime prevention; incorporates new developments as appropriate.
15. As assigned, assumes command of the department in the absence of the department head.

### **The sergeant's job (first line supervision) tasks would include, but not be limited to:**

1. Plan, prioritize, assign, supervise, and review the work of sworn law enforcement staff involved in traffic and field patrol, investigations, crime prevention, community relations, and related services and activities; supervise non-sworn staff in dispatch, records, and property and evidence room as assigned.
2. Serve as first level supervisor/Watch Commander for an assigned shift; prepare and administer briefings; assign patrol beats; supervise and direct sworn and non-sworn staff and activities on assigned shift; conduct personnel, equipment, and building inspections.
3. Prepare, process, and maintain a variety of written reports and records pertaining to assigned activities including daily activity reports; complete payroll for assigned personnel.
4. Review incident reports, required forms, summons, records, and related documents prepared by subordinates to ensure accuracy and timely completion, correct or instruct officers to make corrections.

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5. Coordinate police activities with other units in the department, and/or other city departments or divisions; coordinate functions of the unit with other law enforcement agencies.
6. Conduct a continuing review of assigned activities to identify problems and develop recommendations for improving services.
7. Recommend and assist in the implementation of goals and objectives; establish schedules and methods for providing effective law enforcement services, implement approved policies and procedures.
8. Interpret, convey, and ensure implementation of agency policies, procedures, and methods; ensure that personnel have clear guidelines of authority and responsibility.
9. Participate in the training and evaluating of assigned personnel; assist with training and orientation of new employees; provide training, guidance, and counseling to assigned personnel; complete employee performance evaluations.
10. Respond to major crimes, accident scenes, and emergencies; assume initial command; establish field command posts and implement the Incident Command System; may act as incident commander until such time as a higher-ranking officer assumes command.
11. Assume responsibility for assigned collateral functions including special programs, projects, or department-wide functions or activities; supervise specialized teams and services.
14. Conduct investigation of citizen complaints as necessary.
15. Participate in shift activities as necessary including enforcing local and state laws, issue citations and make arrests.
16. Speak before groups and represent the department and city at meetings and conferences.

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17. Supervise and participate in the preparation of reports for various cases including cases going to trial; prepare supplemental reports as required; appear in court to present evidence and testimony as required.

18. When assigned to investigations, supervise and personally conduct complete and detailed investigations of a general and specialized nature; review all patrol generated reports and evaluate, prioritize, and assign them to detectives for follow-up investigations; manage day-to-day activities and coordinate investigations including those involving several officers, units and divisions; oversee and participate in undercover and surveillance operations; review all investigation reports and make recommendations and suggestions to officers; supervise and assist officers in follow-up investigations including the gathering of evidence, questioning of witnesses, and apprehension of suspects.

19. When assigned to traffic, supervise and participate in traffic control activities and accident investigations; review and correct all departmental traffic collision reports and towed vehicle reports; review and make decisions on request for early release of towed vehicles; respond to call-outs on major injury or death accident investigations; respond to questions from citizens concerning traffic related issues.

Chief Speatzel indicated that due to the commitment in staffing the radio communications center and jail facility, both the lieutenants and sergeants are unable to perform their duties/assignments. The chief indicated that since his promotion to chief of police he has been unable to fully engage his management staff in the duties and/or tasks associated with their positions.

Since each management position (sergeants and lieutenants) is unable to fully engage in their administrative responsibilities, Chief Speatzel has been engaged in the performance of their duties. Currently the chief is acting as an *\*Administrative Police Chief*. In this capacity he is concentrating almost exclusively on internal department matters. This

## **Bay Village Police Department Management Study**

classic organizational style only allows him to internally plan, direct, staff, control and organize. Should he not be able to properly delegate internal responsibilities to his management staff, he may fail to interpret problems that may be occurring within the department and community.

Ideally, lieutenants and sergeants should be relieved of their responsibilities in the radio/communication center. This would allow Chief Speatzel the opportunity to delegate internal administrative assignments to them while he engages in his role as a *\*Statesman Police Chief*. In the role of a Statesman Police Chief he would be sensitive to the internal and external affairs of the department while working with community leaders. The chief's internal responsibilities would include managing the department through effective planning; directing; staffing; controlling and organizing. He would delegate tasks and assignments, skillfully running the department while working with community/political leaders to proactively solve problems and/or develop innovative law enforcement programming.

*\*Policing Today - Frank Schmalleger & John L. Worrall*

## **Bay Village Police Department Management Study**

### **STAFFING REQUIREMENTS/RECOMMENDATIONS RADIO COMMUNICATIONS CENTER**

Cuyahoga County currently has three law enforcement agencies that have sworn police personnel staff the radio communication center on a full time basis. These communities are:

- City of Bay Village Police Department
- City of Rocky River Police Department
- City of Fairview Park Police Department

All three of these agencies are neighbors. Their boundaries are contiguous to each other, they share the same municipal court (Rocky River Municipal Court), and they are mutual aid partners. Each of these agencies loses one officer of the shift/watch for the purposes of staffing the radio communication center as well as monitoring prisoners in the jail.

Bay Village, Ohio is not the first community to question the effectiveness and/or efficiency of having sworn officers staff the radio communications center. The December 15, 2010 Los Angeles Daily News editorial page reported that 'the already short on cops of the street, LAPD had sworn officers stuck doing paperwork, answering phones and handling other administrative duties that could be done more cheaply by civilian workers'. The editorial went on to say that the administration of the LAPD was quoted as saying 'we do not need hundreds of police officers, at a cost of \$30,000 a year more than a properly trained civilian, performing administrative functions that do not require carrying a firearm'.

In an August 2, 2013 article in the Hudson Valley Insider Newspaper titled "Port Jervis To Hire Civilian Dispatcher to Free Up On Duty Police Officers" the City of Port Jervis, New York hired a team of part time civilian police communications clerk-dispatchers to allow for more officers on the city streets. Like Bay Village Police Department, Port Jervis Police Department had six patrol sergeants who were charged with supervising a squad of police officers staffing the central communication desk 24 hours a day, seven days a week.

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In the August 22, 2009 The News Herald, The Voice of Downriver Newspaper entitled "Taylor: City Mulls Hiring Civilian Dispatchers; More Officers Would Then Be on the Road," the City of Taylor, Michigan was, as a result of concerned citizens that there were not enough officers on the street, considered putting more officers on the road by taking them off dispatch duty. Currently, police officers and public service officers (who are civilian employees) were handling dispatch duties. In the article, city council was considering hiring civilian employees as full time dispatchers to 'put more officers on the street'.

### **RECOMMENDATIONS**

The current radio communications/jail operations within the Bay Village Police Department is inefficient and an ineffective use of valuable sworn law enforcement resources. Patrol officers should be engaged in sworn duties in the field. Similarly, administrative personnel are not being used to their fullest potential and are not engaged in their administrative duties. Their inability to respond to calls for service, as a result of their responsibilities in the radio communications center/jail facility and/or emergencies in the field, curb their effectiveness and impede their responsibility as first-line supervisors of providing guidance, mentoring, coaching, evaluating and training their personnel in the field.

It is recommended that the following options be considered:

1. In conjunction with Rocky River and Fairview Park Police Departments establish a tri-community communications center. If this option is considered there would be a need to consolidate the jail operations of all three communities. Putting the radio communications in a central location does not solve the need to monitor prisoners while they are housed in the jail facilities.
2. Establish a radio communications center within the Bay Village Police Department, staffed by civilian personnel, that provides service to all three law enforcement agencies (Rocky River Police Department, Fairview Park Police Department and Bay Village Police Department).

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- 3. Establish a radio communication center in the Bay Village Police Department staffed by civilian personnel that provides service only to the Bay Village Police Department.**

In the near term I would recommend that the City of Bay Village adopt recommendation 3. Option 3 immediately eliminates police officers and/or administrative personnel from staffing the radio communication center. This allows sworn police personnel to engage in their primary law enforcement functions.

Once the radio communications center is operational, I would recommend moving to Option 2. In order to increase effectiveness and defer costs of Option 3, a two or three joint jurisdictional model would be optimal.

Should the city decide to adopt Option 3 there will be additional personnel costs with the hiring of civilian radio communications personnel. In discussing this with the chief of police and the mayor, there is a mechanism within the city budget that would allow the hiring of additional civilian personnel at a reasonable cost. As it currently stands, the citizens of Bay Village are currently paying for a police officer and/or police supervisor to staff the radio communications center.

## Bay Village Police Department Management Study

### PATROL STAFFING LEVELS ANALYSIS

The City of Bay Village City Council is amenable to the establishment of a radio communication center staffed by civilian personnel. Part of the charge of this study was to analyze the request by Chief Spaetzel for the hiring of the 23rd full time police officer. It is city council's position that, with the civilian staffing of the radio communication center thus freeing up officers for field duty, there would be no need to hire an additional full time police officer.

In order to effectively analyze patrol staffing needs I used the International Association of Chiefs of Police (IACP) model. The method for determining patrol force manpower needs is based on the actual or estimated complaint or incident experience in the community. The Pennsylvania Department of Community and Economic Development has found the IACP method to be the most reliable in determining manpower needs. The following method determines the level of required patrol officer positions and does not include administrators, supervisors, or specialists. It provides the basis from which a community can estimate minimum staffing needs.

## **Calculating Patrol Force Staffing Needs *Sample***

### **The Calculation Formula**

**Step 1.** Determine the number of complaints or incidents received and responded to in a year by the police agency. Complaints and incidents include all forms of police activity when an officer responded and/or took an official action. It does not include situations where advice was given over the telephone, delivering messages, handling internal police department matters, etc. If the actual complaint or incident count is not available, an estimate may be used. Sound estimates may be made based upon the assumption that, on the average in any community, 550 complaints or incidents will occur for every 1,000 residents, or .55 per resident. "Your Municipality" has a population of 23,212.

$$23,212 \times .55 = 12,766.6 \text{ or } 12,767 \text{ calls for service}$$

**Step 2.** Multiply the total complaints or incidents by 0.75 (45 minutes). It is generally accepted that 45 minutes is the average time necessary to handle a complaint or incident.

$$12,767 \times .75 = 9,575.25$$

**Step 3.** Multiply by three to add a buffer factor and time for preventative patrol. General experience has shown that about one-third of an officer's time should be spent handling requests for services. Other requirements for servicing police vehicles, personal relief, eating and supervision must be considered. Time for preventative patrol must also be taken into consideration. Multiplying by three makes up the unknowns.

$$9,575.25 \times 3 = 28,725.75$$

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**Step 4.** Divide the product by 2,920 - the number of hours necessary to staff one basic one-officer patrol unit for one year (8 hours X 365 days = 2,920).

$$28,725.75/2,920 = 9.84$$

According to the application of the IACP formula it takes **9.84** patrol elements to handle the estimated 12,767 incidents.

If police officers worked every day of the year without any time off then the respective number of patrol elements would be all that was needed to handle the estimated incidents. Since police officers cannot be expected to work every day, the amount of time an officer is actually on duty must be determined to establish precisely how many officers are required to staff the patrol elements. A review of the benefits department personnel receive indicates that the average police officer in the department has the following amount of time off duty:

**(NON-AVAILABLE POLICE OFFICER TIME)**

Regular Days off (104 days)	832	hours
Holidays (12 days)	96	hours
Bereavement: (4 days)	32	hours
Vacation: (15 days average)	120	hours
Sick Days (estimated average 20 days)	160	hours
Court Time (conservative estimate at 5 days)	40	hours
Training Days (mandatory training 5 days)	40	hours
Personal Days (2 days)	16	hours
<b>TOTAL AVERAGE TIME OFF</b>	<b>1,336</b>	
<b>hours</b>		
<b>TOTAL TIME AVAILABLE FOR DUTY</b>	<b>1,584</b>	
<b>hours</b>		

Of the 2,920 hours needed to staff one patrol element, a police officer is not available 1,336 hours or is available 1,584 hours. To determine how many officers are necessary to staff one patrol element divide the 2,920 hours needed for one year by the number of hours available ( $2,920/1,584 = 1.84$ ). This means that 1.84 officers are required to fill each patrol element. By multiplying the availability

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factor (1.84) by the number of patrol elements you have the number of patrol officers needed:

$$1.84 \times 9.84 = 18.13 \text{ or } 19$$

The calculations indicate that 19 patrol officers are needed to respond to the number of incidents in the Village. These calculations indicate the number of patrol officers needed. They do not include the chief or any other sworn personnel assigned to duties other than patrol.

As stated in the IACP formula above, it takes approximately 45 minutes to deal with an average call. The Governor's Center for Local Government Services has developed a Police Activity Weighting Scale that applies to this 45 minute limit. Each type of call or incident is given a "Weight Value" based upon the time it actually took to complete it in a study done by DCED (Pennsylvania Department of Community and Economic Development). A "Weight of 1 is given to any type of call that takes 45 minutes or any part thereof. So if an average robbery call takes 2 hours and 26 minutes, it will have a weight value of 4.

**See the following page for the weighting chart and applicable figures.**

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## Police Activity Weighting Factors For The Application of IACP Police Patrol Force Staffing Formula Your Municipality - 2004

Activity	Estimated Time To Handle	Weight Value	Reported Incidents	Computed Value
<b>Part I Crimes</b>				
Criminal Homicide	4 hours 57 minutes	7	0	0
Forcible Rape	3 hours 10 minutes	5	2	10
Robbery	2 hours 26 minutes	4	3	12
Aggravated Assault	2 hours 9 minutes	3	3	9
Burglary	1 hours 44 minutes	3	76	228
Larceny/Theft	57 minutes	2	348	696
Motor Vehicle Theft	55 minutes	2	26	52
Arson	2 hours 50 minutes	4	6	24
<b>Total Part I Crimes</b>			<b>464</b>	<b>1031</b>
<b>Part II Crimes</b>				
Other Assaults	1 hour 12 minutes	2	73	146
Forgery	1 hour 5 minutes	2	3	6
Fraud	1 hour 6 minutes	2	2	4
Embezzlement	1 hour 41 minutes	3	0	0
Receiving Stolen Property	1 hour 28 minutes	2	2	4
Vandalism	30 minutes	1	277	277
Weapons Offenses	1 hour 19 minutes	2	16	32
Prostitution/Vice	1 hour 9 minutes	2	0	0
Sex Offenses (except 2 & 16)	1 hour 33 minutes	3	3	9
Narcotics/Drugs	1 hour 50 minutes	3	12	36
Gambling	1 hour 4 minutes	2	0	0
Offenses Against Family/Children	1 hour 40 minutes	3	0	0
Driving Under The Influence	2 hours 20 minutes	4	93	372
Liquor Law Violations	52 minutes	2	0	0
Drunkennes	60 minutes	2	12	24
Disorderly Conduct	45 minutes	1	9	9
Vagrancy	45 minutes	1	0	0
All Other Offenses	39 minutes	1	0	0
<b>Total Part II Crimes</b>			<b>502</b>	<b>919</b>
<b>Other Activity</b>				
Accidents (reportable)	2 hours 10 minutes	3	245	735
Accidents (non-reportable)	45 minutes	1	83	83
Parking Complaints	16 minutes	1	134	134
Driving Complaints	20 minutes	1	0	0
Family Disputes	36 minutes	1	277	277
Fights	41 minutes	1	36	36
Noise Complaints	23 minutes	1	194	194
Barking Dogs	17 minutes	1	784	784
Prowlers	29 minutes	1	2	2
Mischief	28 minutes	1	550	550
Animal Complaints (except 34)	24 minutes	1	784	784
Assisting Other Agencies	32 minutes	1	0	0
Open Doors	32 minutes	1	44	44
Suspicious Circumstances	26 minutes	1	0	0
Suspicious Persons	25 minutes	1	176	176
Alarm Response	25 minutes	1	920	920
Dangerous/Hazardous Conditions	1 hour 2 minutes	2	301	602
Other Incidents	45 minutes	1	7271	7271
<b>Total Other Activity</b>			<b>11801</b>	<b>12592</b>
<b>Grand Totals</b>			<b>12767</b>	<b>14542</b>

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By returning to Step 2 of the original IACP formula for calculating patrol force staffing needs and using the new computed value of 14,542 as shown on the previous page, the following figures are derived.

**Step 2.** Multiply the total complaints or incidents by 0.75 (45 minutes). It is generally accepted that 45 minutes is the average time necessary to handle a complaint or incident.

$$14,542 \times .75 = 10,906.50$$

**Step 3.** Multiply by three to add a buffer factor and time for preventive patrol. General experience has shown that about one-third of an officer's time should be spent handling requests for services. Other requirements for servicing police vehicles, personal relief, eating and supervision must be considered. Time for preventative patrol must also be taken into consideration. Multiplying by three makes up the unknowns.

$$10,906.50 \times 3 = 32,719.50$$

**Step 4.** Divide the product by 2,920 - the number of hours necessary to staff one basic one-officer patrol unit for one year (8 hours X 365 days = 2,920).

$$32,719.50 / 2,920 = 11.21$$

With the new application of the weighting formula it now takes 11.21 patrol elements to handle the 12,767 incidents as reported for "Your Municipality."

Again taking the 1.84 availability figure calculated previously that is required to fill each patrol element and by multiplying that availability factor (1.84) by the number of patrol elements (11.21) you now have a new number of the number of patrol officers needed.

**Step 7.**  $1.84 \times 11.21 = 20.63$  or **21**

## **Calculating Patrol Force Staffing Needs**

### **Bay Village PD Analysis 2013 Computer Aided Dispatch Calls for Service Methodology**

**Step 1.** Determine the number of complaints or incidents received and responded to in a year by the police agency. Complaints and incidents include all forms of police activity when an officer responded and/or took an official action. It does not include situations where advice was given over the telephone, delivering messages, handling internal police department matters, etc. If the actual complaint or incident count is not available, an estimate may be used. Sound estimates may be made based upon the assumption that, on the average in any community, 550 complaints or incidents will occur for every 1,000 residents, or .55 per resident. The City of Bay Village has a population of 15,474.

**10,180** calls for service per CAD records (does not include police officers coming on (logging) and/or off duty

**Step 2.** Multiply the total complaints or incidents by 0.75 (45 minutes). It is generally accepted that 45 minutes is the average time necessary to handle a complaint or incident.

$$10,180 \times .75 = 7,635$$

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**Step 3.** Multiply by three to add a buffer factor and time for preventative patrol. General experience has shown that about one-third of an officer's time should be spent handling requests for services. Other requirements for servicing police vehicles, personal relief, eating and supervision must be considered. Time for preventative patrol must also be taken into consideration. Multiplying by three makes up the unknowns.

$$7,635 \times 3 = 22,905$$

**Step 4.** Divide the product by 2,920 - the number of hours necessary to staff one basic one-officer patrol unit for one year (8 hours X 365 days = 2,920).

$$22,905 / 2,920 = 7.84$$

According to the application of the IACP formula it takes **7.84** patrol elements to handle the estimated 10,180 incidents.

If police officers worked every day of the year without any time off then the respective number of patrol elements would be all that was needed to handle the estimated incidents. Since police officers cannot be expected to work every day, the amount of time an officer is actually on duty must be determined to establish precisely how many officers are required to staff the patrol elements. A review of the benefits department personnel receive indicates that the average police officer in the Bay Village Police Department has the following amount of time off duty:

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**(NON-AVAILABLE POLICE OFFICER TIME)**

Regular Days off (104 days)	832	hours
Holidays (11 days)	88	hours
Bereavement: (2 days)	16	hours
Vacation: (17.5 days average)	140	hours
Sick Days (estimated average 4 days)	32	hours
Court Time (conservative estimated at 3 days)	24	hours
Training Days (mandatory training 10 days)	80	hours
Personal Days (1.5 days)	12	hours
<b>TOTAL AVERAGE TIME OFF</b>	<b>1,224</b>	
<b>hours</b>		
<b>TOTAL TIME AVAILABLE FOR DUTY</b>	<b>1,696</b>	
<b>hours</b>		

Of the 2,920 hours needed to staff one patrol element, a police officer is not available 1,224 hours or is available 1,696 hours. To determine how many officers are necessary to staff one patrol element divide the 2,920 hours needed for one year by the number of hours available ( $2,920/1,696 = 1.72$ ). This means that 1.72 officers are required to fill each patrol element. By multiplying the availability factor (1.72) by the number of patrol elements you have the number of patrol officers needed.

$$1.72 \times 7.84 = 13.48 \text{ or } 14$$

The calculations indicate that 14 patrol officers are needed to respond to the number of incidents within the City of Bay Village. These calculations indicate the number of patrol officers needed and do not include the chief or any other sworn personnel assigned to duties other than patrol.

Using this formula the City of Bay Village Police Department needs 23 full time police personnel to adequately staff the department.

## **Bay Village PD Analysis 2013 Weighted Formula Methodology**

### **Calculating Patrol Force Staffing Needs**

**Step 1.** Determine the number of complaints or incidents received and responded to in a year by the Bay Village Police Department. Complaints and incidents include all forms of police activity when an officer responded and/or took an official action.

**Step 2.** Multiply the total number of complaints or incidents by 0.75 (45 minutes). It is generally accepted that 45 minutes is the average time necessary to handle a complaint or incident.

**Step 3.** Multiply by three to add a buffer factor and time for preventative patrol. General experience has shown that about one-third of an officer's time should be spent handling requests for services. Other requirements for servicing police vehicles, personal relief, eating and supervision must be considered. Time for preventative patrol must also be taken into consideration. Multiplying by three makes up for the unknowns.

**Step 4.** Divide the product by 2,920 – the number of hours necessary to staff one basic one-officer patrol unit for one year (8 hours X 365 days = 2,920).

As stated in the IACP formula above, it takes approximately 45 minutes to deal with an average call. The Governor's Center for Local Government Services has developed a Police Activity Weighting Scale that applies to this 45 minute limit. Each type of call or incident is given a "Weight Value" based upon the time it actually took to complete it in a study done by DCED (Pennsylvania Department of Community and Economic Development). A "Weight" of 1 is given to any type of call that takes 45 minutes and/or any part thereof. So if an average robbery call takes 2 hours and 26 minutes, it will have a weight value of 4.

**See the following page for the weighting chart and applicable figures**

# Bay Village Police Department Management Study

## Police Activity Weighting Factors for the Application of IACP Police Patrol Force Staffing Formula Your Municipality - 2013

Activity	Estimated Time To Handle	Weight Value	Reported Incidents	Computed Value
<b>Part I Crimes</b>				
Criminal Homicide	4 hours 57 minutes	7	0	0
Forcible Rape	3 hours 10 minutes	5	3	15
Robbery	2 hours 26 minutes	4	1	4
Aggravated Assault	2 hours 9 minutes	3	0	0
Burglary	1 hours 44 minutes	3	26	78
Larceny/Theft	57 minutes	2	62	124
Motor Vehicle Theft	55 minutes	2	4	8
Arson	2 hours 50 minutes	4	3	12
<b>Total Part I Crimes</b>			<b>99</b>	<b>241</b>
<b>Part II Crimes</b>				
Other Assaults	1 hour 12 minutes	2	4	8
Forgery	1 hour 5 minutes	2	1	2
Fraud	1 hour 6 minutes	2	39	78
Embezzlement	1 hour 41 minutes	3	0	0
Receiving Stolen Property	1 hour 28 minutes	2	6	12
Vandalism	30 minutes	1	6	6
Weapons Offenses	1 hour 19 minutes	2	2	4
Prostitution/Vice	1 hour 9 minutes	2	0	0
Sex Offenses (except 2 & 16)	1 hour 33 minutes	3	9	27
Narcotics/Drugs	1 hour 50 minutes	3	51	153
Gambling	1 hour 4 minutes	2	0	0
Offenses Against Family/Children	1 hour 40 minutes	3	23	69
Driving Under The Influence	2 hours 20 minutes	4	92	368
Liquor Law Violations	52 minutes	2	26	52
Drunkenness	60 minutes	2	8	16
Disorderly Conduct	45 minutes	1	3	3
Vagrancy	45 minutes	1	1	1
All Other Offenses	39 minutes	1	21	21
<b>Total Part II Crimes</b>			<b>292</b>	<b>820</b>
<b>Other Activity</b>				
Accidents (reportable)	2 hours 10 minutes	3	79	237
Accidents (non-reportable)	45 minutes	1	119	119
Parking Complaints	16 minutes	1	388	388
Driving Complaints	20 minutes	1	667	667
Family Disputes	36 minutes	1	0	0
Fights	41 minutes	1	0	0
Noise Complaints	23 minutes	1	243	243
Barking Dogs	17 minutes	1	0	0
Prowlers	29 minutes	1	0	0
Mischief	28 minutes	1	67	67
Animal Complaints (except 34)	24 minutes	1	693	693
Assisting Other Agencies	32 minutes	1	208	208
Open Doors	32 minutes	1	25	25
Suspicious Circumstances	26 minutes	1	0	0
Suspicious Persons	25 minutes	1	666	666
Alarm Response	25 minutes	1	366	366
Dangerous/Hazardous Conditions	1 hour 2 minutes	2	139	278
Other Incidents	45 minutes	1	7892	7892
<b>Total Other Activity</b>			<b>11552</b>	<b>11859</b>
<b>Grand Totals</b>			<b>11943</b>	<b>12900</b>

## **Bay Village Police Department Management Study**

By returning to Step 2 of the original IACP formula for calculating patrol force staffing need and using the new computed value of 12,900 as shown on the previous page, the following figures are derived:

**Step 2.** Multiply the total complaints or incidents by 0.75 (45 minutes). It is generally accepted that 45 minutes is the average time necessary to handle a complaint or incident.

$$12,900 \times .75 = 9,675$$

**Step 3.** Multiply by three to add a buffer factor and time for preventative patrol. General experience has shown that about one-third of an officer's time should be spent handling requests for services. Other requirements for servicing police vehicles, personal relief, eating and supervision must be considered. Time for preventative patrol must also be taken into consideration. Multiplying by three makes up the unknowns.

$$9,675 \times 3 = 29,025$$

**Step 4.** Divide the product by 2,920 - the number of hours necessary to staff one basic one-officer patrol unit for one year (8 hours X 365 days = 2,920).

$$29,025 / 2,920 = 9.94$$

With the new application of the weighting formula it now takes 9.94 patrol elements to handle the 12,900 incidents as reported for the City of Bay Village Police Department.

Again taking the 1.72 availability figure calculated previously that is required to fill each patrol element and by multiplying that availability factor (1.72) by the number of patrol elements (11.21) you now have a new number of the number of patrol officers needed.

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**Step 5.**                       $1.72 \times 9.94 = 17.096$  or **18**

The calculations indicate that **18** patrol officers are needed to respond to the number of incidents within the City of Bay Village. These calculations indicate the number of patrol officers needed and do not include the chief or any other sworn personnel assigned to duties other than patrol.

Using this formula the City of Bay Village Police Department needs **27** full time police personnel to adequately staff the department.

**Bay Village Police Department  
Management Study**

**FINAL RESULTS & PATROL FORCE STAFFING  
RECOMMENDATIONS**

As a result of both IACP patrol force calculations, city council could authorize the hiring of an additional 1 to 4 full time police officers. These calculations should be considered apart from the establishment of a civilian radio communications center.

**CONCLUSION**

I appreciate the assistance the City of Bay Village Police Department, City Council and the Office of Mayor provided in the development of this management study. The City of Bay Village Police Department is a progressive and innovative law enforcement agency. It is my opinion that under the leadership of Chief Mark Speatzel the department will continue to be one of Cuyahoga County's premier law enforcement agencies.

Ron Michalec  
Consultant

**ADDENDUM**

**Addendum C- Revised Organizational Chart**

