Proposal for Comprehensive Analysis of Public Safety Services Flint, Michigan



Submitted by: Center for Public Safety Management, LLC Exclusive Provider of Public Safety Technical Assistance for International City/County Management Association 475 K Street, NW – Suite 702 Washington, DC 20001 716-969-1360





Leaders at the Core of Better Communities

April 23, 2014

Mr. Darnell Earley Emergency Manager City of Flint 1101 S. Saginaw Street Flint, MI 48502

Dear Mr. Earley:

The Center for Public Safety Management, LLC, the exclusive providers of public safety technical services for ICMA, is pleased to submit this proposal for an analysis of emergency services for Flint, Michigan. The CPSM approach is unique and more comprehensive than ordinary accreditation or competitor studies. In general, our analysis involves the following major outcomes:

- Examine the department's organizational structure and culture;
- Perform gap analysis, comparing the "as is" state of the department to the best practices of industry standards;
- Recommend a management framework to ensure accountability, increased efficiency and improved performance;
- Conduct a data-driven forensic analysis to identify actual workload;
- Identify and recommend appropriate staffing and deployment levels for every discrete operational and support function in the department.
- Identify opportunities to implement consolidation of various public safety functions.

This proposal is specifically designed to provide the local government with a thorough and unbiased analysis of emergency services in your community. We have developed a unique approach by combining the experience of dozens of subject matter experts in the areas of emergency services. The team assigned to the project will have hundreds of years of practical experience managing emergency service agencies, a record of research, academic, teaching and training, and professional publications, and extensive consulting experience completing hundreds of projects nation-wide. The team assembled for you will be true "subject matter experts" not research assistants or interns.

ICMA has provided direct services to local governments worldwide for almost 100 years, which has helped to improve the quality of life for millions of residents in the United States and abroad. I, along with my colleagues at CPSM, greatly appreciate this opportunity and would be pleased to address any comments you may have. You may contact me at 716.969.1360 or via email at Imatarese@cpsm.us

Sincerely,

Leonard A. Matarese, ICMA-CM, IPMA-HR Director, Research and Project Development Center for Public Safety Management, LLC

The Association – The Company

International City/County Management Association (ICMA)

The International City/County Management Association (ICMA) is a 100 year old, non-profit professional association of local government administrators and managers, with approximately 9,000 members located in 32 countries.

Since its inception in 1914, ICMA has been dedicated to assisting local governments in providing services to its citizens in an efficient and effective manner. Our work spans all of the activities of local government – parks, libraries, recreation, public works, economic development, code enforcement, Brownfield's, public safety, etc.

ICMA advances the knowledge of local government best practices across a wide range of platforms including publications, research, training, and technical assistance. Our work includes both domestic and international activities in partnership with local, state and federal governments as well as private foundations. For example, we are involved in a major library research project funded by the Bill and Linda Gates Foundation and we are providing community policing training in Panama working with the U.S. State Department. We have personnel in Afghanistan assisting with building wastewater treatment plants and have teams in Central America providing training in disaster relief working with SOUTHCOM.

The ICMA Center for Public Safety Management (ICMA/CPSM) is one of four Centers within the Information and Assistance Division of ICMA providing support to local governments in the areas of police, fire, EMS, Emergency Management and Homeland Security. In addition to providing technical assistance in these areas we also represent local governments at the federal level and are involved in numerous projects with the Department of Justice and the Department of Homeland Security. In each of these Centers, ICMA has selected to partner with nationally recognized individuals or companies to provide services that ICMA has previously provided directly. Doing so will provide a higher level of services, greater flexibility and reduced costs in meeting member's needs as we will be expanding the services that ICMA can offer to local government is expanding. For example, The Center for Productivity Management (CPM) is now working exclusively with SAS, one of the world's leaders in data management and analysis. And the Center for Strategic Management (CSM) is now partnering with nationally recognized experts and academics in local government management and finance.

The ICMA Center for Public Safety Management will be maintaining the same team of individuals performing the same level of service that it has for the past seven years. The contracting entity will be "Center for Public Safety Management, LLC" (CPSM). This entity will be the exclusive provider of public safety technical assistance for ICMA and will continue to provide training and research for the Association's members and will represent ICMA in its dealings with the federal government and other public safety professional associations.

CPSM's local government technical assistance experience includes workload and deployment analysis, using our unique methodology and subject matter experts to examine department organizational structure and culture, identify workload and staffing needs as well as industry best practices. We have conducted over 200 such studies in 32 states and 120 communities ranging in size from 8,000 population Boone, IA to 800,000 population Indianapolis, IN.

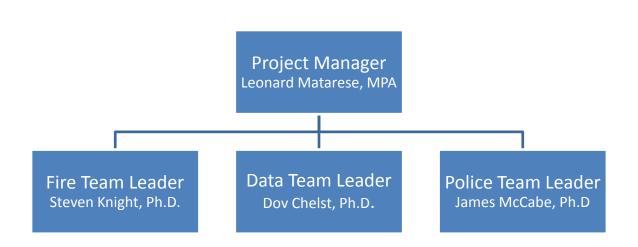
Thomas Wieczorek is the Director of the Center for Public Safety Management. Leonard Matarese serves as the Director of Research & Program Development. Dr. Dov Chelst is the Director of Quantitative Analysis.

Project Staffing



The proposal will look at the public safety services of Flint. For this project, the CPSM has assembled a premier team of experts from a variety of disciplines and from across the United States. The goal is to develop recommendations that will enable it to produce the outcomes necessary to provide critical emergency services consistent with the community's financial capabilities. The team will consist of a project team leader, two Operations Leaders and several senior public safety Subject Matter Experts selected from our team specifically to meet the needs of the community.

The management organizational chart for the project includes the following Key Team Members:



Project Manager

Director of Research and Project Development, Center for Public Safety Management, LLC,

Leonard Matarese, MPA, ICMA-CM, IPMA-CP

Background

Mr. Matarese is a specialist in public sector administration with particular expertise in public safety issues. He has conducted or managed over 200 public safety studies. He has 44 years' experience as a law enforcement officer, police chief, public safety director, city manager and major city Human Resources Commissioner. He was one of the original advisory board members and trainer for the first NIJ/ICMA Community Oriented Policing Project which has subsequently trained thousands of municipal practitioners on the techniques of the community policing philosophy over the past 18 years. He has managed several hundred studies of emergency services agencies with particular attention to matching staffing issues with calls for service workload.

Recognized as an innovator by his law enforcement colleagues he served as the Chairman of the SE Quadrant, Florida, Blue Lighting Strike Force, a 71agency, U.S. Customs Service anti-terrorist and narcotics task force and also as president of the Miami-Dade County Police Chief's Association – one of America's largest regional police associations. He represents ICMA on national projects involving the United States Department of Homeland Security, The Department of Justice, Office of Community Policing and the Department of Justice, Office Bureau of Justice Assistance. He has also served as a project reviewer for the National Institute of Justice and is the subject matter expert on several ICMA / USAID police projects in Central America. As a public safety director he has managed fire / EMS systems including ALS transport. He was an early proponent of public access and police response with AEDs.

Mr. Matarese has presented before most major public administration organizations annual conferences on numerous occasions and was a keynote speaker at the 2011 annual PERF conference. He was a plenary speaker at the 2011 TAMSEC Homeland security conference in Linköping, Sweden and at the 2010 UN Habitat PPUD Conference in Barcelona, Spain.

He has a Master's degree in Public Administration and a Bachelor's degree in Political Science. He is a member of two national honor societies and has served as an adjunct faculty member for several universities. He holds the ICMA Credentialed Manager designation, as well as Certified Professional designation from the International Public Management Association- Human Resources. He also has extensive experience in labor management issues, particularly in police and fire departments and is currently editing an ICMA book on the selection of police and fire chiefs.

Data Assessment Team

CPSM Center for Public Safety Senior Team Members

Dov Chelst, Ph.D., Director of Quantitative Analysis

Background

Dr. Chelst is an expert in analyzing public safety department's workload and deployment. He manages the analysis of all public safety data for the Center. He is involved in all phases of The Center's studies from initial data collection, on-site review, large-scale dataset processing, statistical analysis, and designing data reports. To date, he has managed over 140 data analysis projects for city and county agencies ranging in population size from 8,000 to 800,000.

Dr. Chelst has a Ph.D. Mathematics from Rutgers University and a B.A. Magna Cum Laude in Mathematics and Physics from Yeshiva University. He has taught mathematics, physics and statistics, at the university level for 9 years. He has conducted research in complex analysis, mathematical physics, and wireless communication networks and has presented his academic research at local, national and international conferences, and participated in workshops across the country.

Senior Public Safety Subject Matter Expert

David Martin, Ph.D., Senior Researcher in the Center for Urban Studies, Wayne State University

Background

Dr. Martin specializes in public policy analysis and program evaluation. He has worked with several police departments to develop crime mapping and statistical analysis tools. In these projects he has developed automated crime analysis tools and real-time, dashboard-style performance indicator systems for police executive and command staff. Dr. Martin teaches statistics at Wayne State University. He is also the program evaluator for four Department of Justice Weed and Seed sites. He is an expert in the use of mapping technology to analyze calls for service workload and deployments.

Senior Public Safety Subject Matter Expert

Gang Wang, Ph.D., Fire & EMS Services Data Analyst

Background

Gang Wang received the dual bachelor degrees in industrial design and management science, and the M.S. in information system from Chongqing University in China and the Ph.D. degree in industrial engineering from Wayne State University. He has five years experience in enterprise information system and eight years experience in data analysis and applied mathematical modeling. He has rich experience in areas of automotive, travel and public safety with particular emphasis in fire / EMS analysis. He has published a book chapter and several journal articles.

Operations Assessment Team – Fire Unit

Director, Center for Public Safety Management, LLC

Thomas Wieczorek, Retired City Manager Ionia, MI; former Executive Director Center for Public Safety Excellence

Background

Thomas Wieczorek is an expert in fire and emergency medical services operations. He has served as a police officer, fire chief, director of public safety and city manager and is former Executive Director of the Center for Public Safety Excellence (formerly the Commission on Fire Accreditation International, Inc.). He has taught a number of programs at Grand Valley State University, the National Highway Traffic Safety Administration (NHTSA), and Grand Rapids Junior College. He has testified frequently for the Michigan Municipal League before the legislature and in several courts as an expert in the field of accident reconstruction and fire department management. He is the past-president of the Michigan Local Government Manager's Association; served as the vice-chairperson of the Commission on Fire Officer Designation; and serves as a representative of ICMA on the NFPA 1710 career committee.

He most recently worked with the National League of Cities and the Department of Homeland Security to create and deliver a program on emergency management for local officials titled, "Crisis Leadership for Local Government Officials." It has been presented in 43 states and has been assigned a course number by the DHS. He represents ICMA on the NFPA 1710 and 1730 Standards Committees and is a board member on the International Accreditation Service, a wholly owned subsidiary of the International Code Council.

He received the Mark E. Keane "Award for Excellence" in 2000 from the ICMA, the Association's highest award and was honored as City Manager of the Year (1999) and Person of the Year (2003) by the Rural Water Association of Michigan, and distinguished service by the Michigan Municipal League in 2005.

Senior Manager of Fire and EMS

Chief Steven G. Knight, Ph.D., MPA, BS, EFO, CFO, Retired Assistant Chief, St. Petersburg, FL Fire and Rescue Department.

Background

Dr. Steve Knight is a 20-year veteran of the fire and EMS service and recently retired a the assistant fire chief with the St. Petersburg, Florida Fire and Rescue Department. St. Petersburg Fire & Rescue protects the lives and property of over 260,000 residents and responds to over 40,000 emergency incidents annually from 12 stations. During his tenure with SPFR, Chief Knight has served as the chief of rescue. Knight also currently serves for the Center for Public Safety Excellence, Commission on Fire Accreditation International as a technical advisor and peer assessor.

Chief Knight received the outstanding research award by the National Fire Academy/ United States Fire Administration in 2007, as well as the A. Don Manno Award for Excellence in Research by the National Society for Executive Fire Officers also in 2007.

Knight holds a Ph.D. from the University of South Florida in curriculum and instruction and a minor in research and measurement, a master's degree in public administration from Troy University and a bachelor's in Fire & Safety Engineering from the University of Cincinnati. Chief Knight is also a graduate of the Executive Fire Officer Program through the U.S. Fire Administration, Federal Emergency Management Agency. Knight is an accredited Chief Fire Officer through the Center for Public Safety Excellence and holds numerous Florida state fire and EMS technical certifications. Knight also serves as an adjunct instructor at St. Petersburg College in the Fire Science and Public Safety Administration Program, is the former Program

Associate

Chief Mike Iacona, MPA, Fire Chief/Director Flagstaff Fire Department, Flagstaff Arizona; former Director and Fire Chief, Orange County, Florida Fire Rescue Department.

Background

Chief lacona has 38 years of fire service experience, with the last 17 years as Fire Chief. He currently serves as fire chief for the City of Flagstaff, Arizona and has held this position since 2002. Prior to this, he was the Director of Orange County Fire Rescue, Florida, which included oversight of the County's emergency management functions. In addition to duties associated with fire chief, he has served in various capacities, rising through the ranks from to fire fighter/paramedic to chief fire officer. Mike has led a fire training division, was the Chief of Operations, served as Emergency Manager in EOC Operations, was Chief Negotiator in multiple IAFF Contract deliberations. He has supervised the development of several fire master plans, was a volunteer fire fighter coordinator, led multiple fire code adoption processes, was in charge of personnel and payroll functions and implemented fire impact fees. He also has wildland fire experience, supervising a fuel management program, the adoption of a Wildland Interface Code, and the adoption of a Community Wildfire Protection Plan (CWPP).

Chief Iacona holds a Master's Degree in Public Administration and did his undergraduate work in Urban Planning at Florida Atlantic University, in Boca Raton, FL. He is a graduate of the National Fire Academy's Executive Fire Officer Program and attended The Program for Senior Executives in State and Local Government at the Harvard Kennedy School.

Senior Associate

Gerard J. Hoetmer, MPA, retired Executive Director of Public Entity Risk Institute, Fairfax, Virginia

Background

Gerry Hoetmer is an expert in fire services, emergency management, and risk management. He served as the founding executive director of the Public Entity Risk Institute, a nonprofit organization that provided training, technical assistance, and research on risk management issues for local government and other public and quasi-public organizations. During his tenure as executive director he was a member of the National Academy of Sciences Disaster Roundtable. Prior to his position as executive director at PERI, Mr. Hoetmer worked at ICMA for 19 years, most recently as the director of research and development. He has written extensively on local government emergency management, the fire service, code enforcement, and risk management issues.

Seminal works include the first report to Congress on fire master planning and the first edition of *Emergency Management: Principles and Practices for Local Government*. In addition to providing expert testimony before Congress and local arbitration boards on fire staffing and scheduling issues, Mr. Hoetmer represented ICMA on the NFPA 1500 Standard on Occupational Safety and Health; NFPA 1201, the Standard for Providing Emergency services to the Public; and the NFPA 1710, Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments. Mr. Hoetmer has developed and conducted training programs and seminars at FEMA's Emergency Management Institute and the National Fire Academy in Emmitsburg, Maryland.

He holds a Bachelors from the State University of New York, New Paltz and the Master of Public Administration degree from the University of Colorado at Denver

Senior Associate

Chief John (Jack) Brown (Ret.), BA, MS, EFO, Director, Arlington County Office of Emergency Management, Retired Assistant Chief Fairfax County Fire & Rescue Department

• Background

Jack Brown's 40 year public safety career includes 29 years with the Fairfax County, Virginia Fire & Rescue Department, where he retired as Assistant Fire Chief of Operations. He served in a number of operational and staff positions, including the Office of the Fire Marshal where he attained NFPA certification as a Fire Inspector II and Fire Investigator. As an investigator, he conducted post fire and post blast investigations, assisting in the prosecution of offences involving arson and illegal explosives. He served as a Planning Section Chief and Task Force Leader for the Fairfax County Urban Search and Rescue Task Force (VA TF-1). He deployed to Nairobi, Kenya as Plans Chief in response to the 1998 embassy bombing and as Task Force Leader on a deployment to Taiwan in response to an earthquake in 1999.

Upon his retirement from Fairfax County in 2000, he became the Assistant Chief for the Loudoun County Department of Fire, Rescue and Emergency Management, where he led a team of firefighters to the Pentagon on 9/11 and assisted the Arlington County Fire Department as the initial Planning Section Chief for the incident. Jack served as Planning Section Chief on a Northern Virginia multi-jurisdictional emergency management task force that reestablished the New Orleans Emergency Operations Center just after Hurricane Katrina. He retired from Loudoun County in 2006 to pursue a career in emergency management.

Brown retired from the Coast Guard Reserve as a Chief Warrant Officer 4, specializing in port safety and security, with 33 years of combined Army and Coast Guard Reserve service. After 9/11, he served on active duty for 47 months, including 15 months in the Middle East. He received the Bronze Star Medal for actions in Baghdad, Iraq while supporting combat operations during Operation Iraqi Freedom.

Brown holds a bachelor's degree in Fire Science Administration from the University of Maryland and a master's degree in Quality Systems Management from the National Graduate School, Falmouth, Massachusetts. He is a 1997 graduate of the National Fire Academy's Executive Fire Officer Program at the National Emergency Training Center, Emmitsburg, Maryland. He has been an adjunct professor at the Northern Virginia Community College and the University of the District of Columbia in the Fire Science curriculums. He is a graduate of the Executive Leadership Program in the Center for Homeland Defense and Security at the Naval Postgraduate School, Monterey, California.

Operations Assessment Team – Police Unit

Senior Associate

Bernard Melekian, DPPD,MA, BA, former Director of the U.S. Department of Justice, Office of Community Policing (COPs), retired Chief of the Pasadena, California Police Department, former Assistant Chief of the Santa Monica, California Police Department.

Background

Dr. Bernard Melekian has nearly forty years of experience in local law enforcement, including 13 years as the Chief of Police in Pasadena California. He served with the Santa Monica Police Department for 23 years and the Santa Barbara County Sheriff's Office for 1 year. While serving as the Chief of Police, he served six months as the acting Fire Chief and nine months as the acting City Manager. During his career he was awarded the Medal of Valor in 1978 and the Medal of Courage in 1980.

In 2009 Dr. Melekian was selected by Attorney General Eric Holder as the 4th Director of the Office of Community Oriented Policing Services (COPS), US Department of Justice. Dr. Melekian holds a Bachelor's Degree in American History and a Master's Degree in Public Administration, both from California State University, Northridge. In 2012 he was awarded a Doctorate in Policy, Planning and Development from the University of Southern California for his work on Law Enforcement discipline systems. He is graduate of the 150th session of the National Academy and Class 20 of the California Command College. He is currently attending the Harvard Executive Session.

Dr. Melekian served for 3 years in the United States Army and 25 years in the US Coast Guard reserve. His service with the Coast Guard included two active duty deployments including service in Jubail, Saudi Arabia during Operation Desert Storm in 1991.

Senior Associate

Inspector James E. McCabe, (Ret.) Ph.D., M. Phil., M.A., B.A., Assistant Professor of Criminal Justice, Sacred Heart University, Retired NYPD Inspector

Background

Dr. McCabe retired as an Inspector with the New York City Police Department after 20 years of service. As Inspector his assignments included Commanding Officer of the NYPD Office of Labor Relations and Commanding Officer of the Training Bureau. As a Deputy Inspector he was the Commanding Officer of the Police Academy with direct supervision of over 750 staff officers and 2,000 recruits. As Executive Officer, Police Commissioner's Office. His field experience includes, Commanding Officer, 110th Precinct, Executive Officer, 113th Precinct, assignment to the Operations Division/Office of Emergency Management and uniform patrol as on officer and Sergeant in Manhattan. He has published extensively and presented to numerous conference including Academy of Criminal Justice Sciences:

He holds a Ph.D. and M. Phil, in Criminal Justice, from CUNY Graduate Center, an M.A. in Criminal Justice, from John Jay College, an M.A. in Labor and Policy Studies, SUNY Empire State College, and B.A. in Psychology, CUNY Queens College, June, 1989. He is a graduate of the Executive Management Program,

Harvard University's John F. Kennedy School of Government, and the FBI National Academy.

Senior Associate

Chief James Gabbard, B.A (Ret.)., City of Vero Beach, Florida – Retired Chief of Police, Retired City Manager, Former Commander, West Palm Beach Police, Former President of Florida Police Chiefs Association.

Background

James M. Gabbard is the retired City Manager of Vero Beach, Florida, appointed in 2005. Prior to his appointment as City Manager he completed 37 years of law enforcement service in a series of increasingly responsible positions. Mr. Gabbard formerly served as the Police Chief of the Vero Beach Police Department. During his tenure as chief he served as interim city manager on several occasions. Prior to his service with Vero Beach he was a member of the West Palm Beach Police Department, serving in all divisions of the Department and in many assignments including Detective Lieutenant of Homicide. Upon his promotion to Captain he was placed in command of organized crime and organized drug crime investigations. He retired from West Palm Beach in 1986 to accept the chief's position in Vero Beach.

Mr. Gabbard has received numerous professional recognitions and was elected President of the Florida Police Chiefs Association, one of the largest organizations of senior police managers in the United States. He was cited for bravery by Governor Jeb Bush before a joint session of the Florida Legislature for his actions during several hurricanes which stuck Vero Beach. Upon his recent retirement from Vero Beach he was recognized by the Governor and Attorney General of Florida for his numerous contributions to law enforcement in the state.

Senior Associate

Professor Paul E. O'Connell, Ph.D., J.D., Chair of Criminal Justice Department, Iona College, New Rochelle, New York, former NYPD Training Officer.

• Background

Dr. O'Connell is a leading expert on the application of Compstat model Police Management principles to public administration organizations. He has been a full time member of the Criminal Justice faculty at Iona College in New Rochelle since 1994. He received his Ph.D. from CUNY where his doctoral thesis was the history and development of the Compstat model of Police Management. Dr. O'Connell began his professional career in criminal justice in 1981, serving the New York City Police Department first as a police officer, and then as a Police Academy instructor, in-service trainer and curriculum developer. After receiving an MPA in 1984 and J.D. in 1989, he worked as a trial attorney with the firm of Cummings & Lockwood in Stamford, CT. Presently, he is the chair of Iona College's Criminal Justice department, where he also conducts funded research, publishes scholarly papers and lectures widely on the topics of police performance measurement, integrity management and law enforcement training systems.

Dr. O'Connell has provided consulting services to a variety of government agencies, including assessment of existing policing policies and practices and development of proactive management strategies. Over the years, he has collaborated with the Center for Technology in Government (Albany, NY), Giuliani Partners (New York, NY) and the Center for Society, Law and Justice (University of New Orleans). Dr. O'Connell recently was awarded a Fulbright Grant working with the Turkish National Police.

Associate

Chief Demosthenes M. Long (Ret.) Ed.D. JD, MA, Former Assistant Chief of NYPD, Commanding Officer NYPD Police Academy, Former Deputy Commissioner / Undersheriff Westchester County Public Safety Department

Background

Chief Long has 30 years law enforcement experience, including 21 years with The New York City Police Department where he retired as Assistant Chief. His assignments included Commanding Officer, School Safety Division, where he managed 4,600 police officers and school safety agents and administered an operating budget of \$133 million. He served as Commanding Officer, Office of Deputy Commissioner Community Affairs where he was responsible for developing, implementing and assessing programs to strengthen police/community relations; Commanding Officer, Police Academy, responsible for 53,000 uniform and civilian members of the Department; Executive Officer, Office of the First Deputy Commissioner and Executive Officer, 47th Precinct and also assignment as Supervisor of Patrol for 17 Bronx Precincts, Transit Districts and Housing Police Service Areas.

After retiring from the NYPD he was appointed as First Deputy Commissioner / Undersheriff for the Westchester County Department of Public Safety. Responsibilities include the administrative planning, organization, coordination, execution and control of the fiscal, administrative, support and training functions of the 325 member police department.

He holds a Doctor of Education Degree in Executive Leadership from St. John Fisher College, a Juris Doctor Degree from New York Law School, and Master of Arts and Bachelor of Science degrees from John Jay College of Criminal Justice.



Milestone 1 - Full execution of the agreement

Agreement will identify Project Launch date.

Milestone 2 - Project Launch

We will conduct an interactive telephone conference with local government contacts. Our project leads will launch the project by clarifying and confirming expectations, detailing study parameters, and commencing information gathering.

Milestone 3a – Information Gathering and Data Extraction- 30 Days

Immediately following project launch, the operations leads will deliver an information request to the department. This is an extensive request which provides us with a detailed understanding of the department's operations. Our experience is that it typically takes an agency several weeks to accumulate and digitize the information. We will provide instructions concerning uploading materials to our website. When necessary, the lead will hold a telephone conference to discuss items contained in the request. The team lead will review this material prior to an on-site visit.

Milestone 3b - Data Extraction and Analysis - 14 Days

Also immediately following the project launch the Data Lead will submit a preliminary data request, which will evaluate the quality of the Computer Aided Dispatch (CAD) system data. This will be followed by a comprehensive request for data from the CAD system to conduct the response and workload analysis. This request requires a concerted effort and focused response from your department to ensure the timely production of required for analysis. Delays in this process will likely extend the entire project and impact the delivery of final report. The data team will extract one year's worth of Calls for Service (CFS) from the CAD system. Once the Data Team is confident the data are accurate, they will certify that they have all the data necessary to complete the analysis.

Milestone 3c - Data Certification - 14 days

Milestone 4a - Data Analysis and Delivery of Draft Data Report - 30 days

Within thirty days of data certification, the analysis will be completed and a draft, unedited data report will be delivered to each of the departments for their review and comment. After the data draft report is delivered, an on-site visit by the operations team will be scheduled.

Milestone 4b – Departmental Review of Draft Data Report – 14 days

The department will have 10 days to review and comment on the draft unedited data analysis. During this time, our Data team will be available to discuss the draft report. The Department must specify all concerns with the draft report at one time.

Milestone 4c - Final Data Report - 10 days

After receipt of the department's comments, the data report will be finalized within 10 days. Milestone 5 - Conduct On-Site Visit - 30 days

Subject matter experts will perform a site visit within 30 days of the delivery of the draft data report.

Milestone 6 – Draft Operations Report – 30 days

Within 30 days of the last on-site visit, the operations team will provide a draft operations report to each department. Again the departments will have 10 days to review and comment.

Milestone 7 - Final Report 15 days

Once the Department's comments and concerns are received by CPSM the combined final report will be delivered to the city within 15 days.

TOTAL ELAPSED TIME: 105 - 135 days

The CPSM Approach - Police



CPSM team developed a standardized approach to conducting analyses of police, fire and public safety departments by combining the experience sets of dozens of subject matter experts.

We begin projects with a request for data, documents and worksheets.

Next, we extract raw data on calls for service from an agency's computer aided dispatch system. The data are sorted and analyzed to identify performance indicators (i.e., response times, workload by time, multiple unit dispatching, etc.) for comparison to industry benchmarks. Performance indicators are valuable measures of agency efficiency and effectiveness. The findings are shown in tabular as well as graphic form and follow a standard format for presentation of the analyzed data. While the format will be similar from community to community, the data reported are unique to the specific agency.

CPSM also conducts an on-site operational review. Here the performance indicators serve as the basis for the operational reviews. Prior to any on-site arrival of an CPSM team, agencies are asked to compile a number of key operational documents (i.e., policies and procedures, assets lists, etc.). Most on-site reviews consist of interviews with management and supervisors, as well as rank and file officers; attendance at roll calls and ride-alongs with officers. We review case files with investigators and observe dispatch operations to assess compliance with the provided written documentation.

As a result of on- site visits and data assessments, our subject matter experts produce a SWOT analysis (strengths, weaknesses, opportunities and threats of the department). We have found that this standardized approach ensures that we measure and observe all of the critical components of agencies.

Additionally, this methodology can be integrated with ongoing support customized to the unique needs of your community. Strategic planning, risk assessment, and training services are also available to assist with the implementation of CPSM recommendations and developing new processes and programs that may arise as implementation evolves.

The following information describes the CPSM approach to studying, understanding, evaluating, and reporting on police departments around the country. Although no two police departments are the same, a standardized approach to department evaluation ensures a rigorous and methodological process that permits benchmarking, comparing, and assessing within the context of the best practices of American law enforcement. However, each locality has unique characteristics that present policing challenges. Integrating a standardized approach within the context of local variability permits an accurate assessment of the organization in its political environment, and further permits CPSM to offer recommendations that comport with the best practices in policing, yet tailor-made for the client community.

I. Benchmark the community

It is essential to understand the service levels, protection needs, community dynamics, and overall environment within which the police department operates. The CPSM study may involve interviews and surveys directed at stakeholders in the community. Elected officials, community groups (civic, business, religious, labor, etc.), community leaders, and employee labor representatives would be contacted to solicit their opinions about the department, the public safety needs of their constituency, and the perceived gaps in service levels currently provided. CPSM will work with the agency to identify community members that can provide this important

information.

Additionally, the department will be compared to organizations of similar size with respect to crime, demographics, and cost-efficiency.

II. Patrol Operations

Police agencies routinely speak about "recommended officers per 1,000 population" or a "National Standard" for staffing or comparisons to other municipalities. There are no such standards, nor are there "recommended numbers of "officer per thousand". The International Association of Chiefs of Police (IACP) states; "Ready-made, universally applicable patrol staffing standards do not exist. Ratios, such as officers-per-thousand population, are totally inappropriate as a basis for staffing decisions."

<u>Staffing decisions, particularly in patrol, must be made based upon actual workload and very</u> <u>few police agencies have the capability of conducting that analysis.</u> Once an analysis of the actual workload is made, then a determination can be made as to the amount of discretionary patrol time that should exist, consistent with the local government's ability to fund.

CPSM's team of doctoral level experts in Operations Research in Public Safety have created in *The CPSM Patrol Workload & Deployment Analysis System®* the ability to produce detailed information on workload even in those agencies without sophisticated management information systems. Using the raw data extracted from the police department's CAD system our team converts calls for service into police services workload and then effectively graphs workload reflecting seasonally, weekday / weekend and time of day variables. Using this information the police department can contrast actual workload with deployment and identify the amount of discretionary patrol time available (as well as time commitments to other police activities).

Police service workload differentiates from calls for service in that calls for service are a number reflecting the incidents recorded. Workload is a time measurement recording the actual amount of police time required to handle calls for service from inception to completion. Various types of police service calls require differing amounts of time (and thus affect staffing requirements). As such, call volume (number of calls) as a percentage of total number of calls could be significantly different than workload in a specific area as a percentage of total workload. The graph below demonstrates this difference in units.

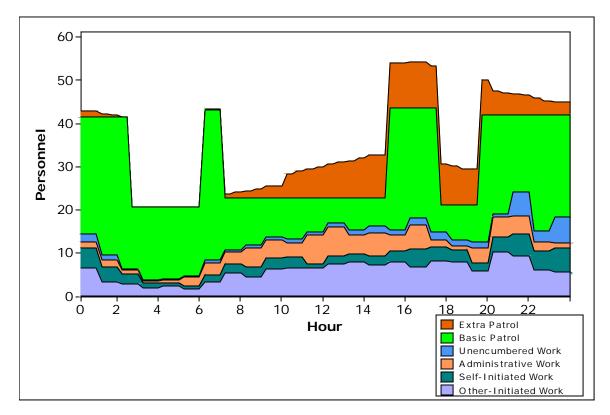
CPSM has found that the most effective way to manage operations, including policing, is to make decisions based upon the interpretation and analysis of data and information. To achieve this, a data analysis of police department workload, staffing and deployment will be conducted. By objectively looking at the availability of deployed hours and comparing those to the hours necessary to conduct operations, staffing expansion and/or reductions can be determined and projected. Additionally the time necessary to conduct proactive police activities (such as team-led enforcement, directed patrol, community policing and selected traffic enforcement) will be reviewed to provide the city with a meaningful methodology to determine appropriate costing allocation models.

Workload vs. deployment analysis sample

This is one of the ways we show the amount of available, non-committed patrol time compared to workload. As you can see we break out the various activities, convert them to time and then compare to available manpower. The deployment is based upon actual hours worked.

So in this example, at noon there are approximately 17 hours of work (including citizen initiated & officer initiated calls for services, including traffic) and administrative activities (meals, vehicle, reports, etc.). There are approximately 30 man hours of available resources meaning that at that hour, on average, of the 30 officers on duty 16 are busy on activities.

The area shown in green and brown is uncommitted time. This is the area where staffing decisions impact – it becomes a policy issue as to how much uncommitted time a city wants, and is willing to pay for.



The CPSM study will result in the calculation of service demands placed on the department, workload levels, service times for calls for service, and response times. This information is developed by first extracting data from the departments CAD system. The extracted information is then processed and workload is calculated. This workload is then compared to deployment levels. The product of this analysis is the variance between service demands and available personnel, and appropriate recommendations made for staffing levels and an optimal deployment schedule to meet these service demands. This permits exploration of the following questions:

- What are the service demands made by the public as measured through the CAD system?
- What is the workload?
- Based on this workload is the alignment of Districts and Divisions appropriate?
- Based on the workload is the shift schedule aligned appropriately and what alternatives to the current shift plan are most efficient?
- How many police officers and supervisors are need to staff the patrol function in order to meet the workload demands placed on the agency?
- How long does it take to respond to calls for service (both response time and total time) and what ways are there to reduce these times?
- How many officers are assigned to each call and what are the ways to minimize these assignments?
- What categories of call, and in what frequency, does the agency handle and what

measures can be adopted to minimize unnecessary responses?

- How much time is spent on administrative duties?
- How much time is spent on directed patrol activities and specialized enforcement?

The study will determine the gaps in patrol coverage and recommendations for modifying temporal and spatial deployment. With the appropriate "best fit" of patrol coverage identified, a determination can be made about the exact number of officers required to meet service demands, and in what shift/district/division combinations to maximize resources.

In addition to the analysis of patrol operations from the CAD system and workload, the CPSM study will focus on the qualitative aspects of patrol. The study will observe officers on patrol through ride-alongs, interviews, and general observations. We will amass all available documents, plans, and data available to understand the patrol approach in the department. We will observe the special operations teams, the problem/nuisance unit, etc. to evaluate their role within the overall mission of the department and patrol operations. We will evaluate the performance of the units, identify improvement opportunities, and justify and recommend appropriate staffing levels

The CPSM study will also evaluate the implementation of technology on patrol, weapons available, and equipment used with opportunities for improvement.

CPSM advocates community policing as its operational philosophy. The CPSM study would evaluate the implementation of community policing, in quantifiable and anecdotal terms, and identify improvement opportunities where appropriate.

Similarly, the CPSM study would evaluate the relationship of patrol operations with the rest of the department. To what extent does this bureau work, coordinate, and communicate with the other operational and support functions of the department? How should it? What are the strategic, management, and planning functions of the department with regards to the patrol function and how does patrol operations respond to the mission of the organization? How are crime, traffic, disorder, and quality of life problems handled?

I. Investigations

The CPSM study will assess investigations – both reactive and proactive. The CPSM team will explore the following questions:

- Staffing Are there sufficient investigators available to handle the workload?
- Workload What is the workload; how many cases do investigators handle; is the specialization appropriate?
- Case management Is there an effective case management system in place?
- Effectiveness & Efficiency How much time does it take to investigate cases? Are victims kept informed? Are cases cleared and offenders held accountable? How much overtime is spent?
- Intelligence How is intelligence gathered and disseminated (inside and outside the department)? Does the investigations function make use of intelligence?
- Civilianization opportunities What are the potential areas for civilianization?
- Technological opportunities Is technology being leveraged to improve investigations?
- Crime scene Are crime scenes being processed efficiently, and are appropriate follow-up investigations being conducted?
- Proactive Investigations the same approach and inquires found in sections above are applied to each specialized investigative unit in the department.
 - Narcotics

- Violent Offenders
- Warrants and Fugitives
- Bombings and Arson
- Fraud/Cyber crimes
- All other specialized investigations units

CPSM will essentially evaluate each investigative unit operating in the agency. This evaluation will make an assessment of the performance of the unit, how the unit operates within the overall mission of the department, compare operations to best practices in law enforcement, identify improvement opportunities, and identify appropriate staffing levels.

III. Administration and Support

Once again, CPSM will evaluate every administrative and support unit in the police department. This evaluation will involve:

- Staffing;
- Workload;
- Civilianization possibilities;
- Cost saving opportunities;
- Out-sourcing opportunities;
- Best practice comparisons and opportunities for improvement.

The CPSM team has subject matter experts in police management and administration and will explore administration and support activities in the area of professional standards (Internal investigations, hiring and recruitment, disciplinary system, promotional system), training (both academy and in-service), records management, evaluating the critical, frequent, and high liability policies, facility, fleet, equipment, information technology, property management system, laboratory, planning and research, sick-time management, overtime, communications and dispatch, etc.

In general, we look at every unit identified as a discrete operational/support entity for the following:

- Describe the functions of the unit;
- Evaluate the performance of the unit. In most cases this is a quantitative; evaluation, but in units not appropriate for quantification, a qualitative evaluation is provided;
- Identification of improvement opportunities
- An evaluation and justification, and recommendation for appropriate staffing levels.

IV. Organizational Culture

During the operational evaluation described above, organizational "themes" emerge. What does the department "think" about providing police service to the community and how does this thinking align with the stated mission and department policies? How does the department interact with the community and internally with its own members? In general, what is the culture of the organization?

The culture of a police organization is a reflection of its members and the community it serves. Through focus groups, interviews, and observations, the CPSM team will evaluate operational readiness and need. In addition, every member of the department will be given the opportunity to participate in an anonymous survey. This survey is designed to understand the culture of the department, assess internal and external communications, and determine what it "thinks" about various elements of organizational life. This part of the CPSM study is critical to the overall success of the project as it provides a better understanding of the police department and how the workload, staffing, and community dynamics shape the mission, goals, operations, and needs of the organization.

V. Organizational Structure and Administration

Based on the above, we are able to analyze current management structure and practice and make recommendations to improve organizational administration. The product of this analysis is a proposed staffing mode. The product of this analysis also generally ends up with a leaner, flatter, and more efficient organizational design.

VI. Performance Management

The overarching philosophy of the CPSM approach is to evaluate the police department in terms of performance management. Identifying workload, staffing, and best practices is just the beginning. It is also important to assess the organization's ability to carry out its mission. Essentially, does the police department know its goals, and how does it know they are being met. It is very difficult for an organization to succeed at any given level of staffing unless it has a clear picture of success. How does the department "think" about its mission, how does it identify and measure what's important to the community, how does it communicate internally and externally, how does it hold managers accountable, and how does it know the job is getting done? The CPSM team will evaluate the department and make recommendations to assist with improving capacity in this area, if necessary. In addition, CPSM can offer performance management training and mentoring services to support organizational success.

The ICMA Approach: Fire/EMS



Operations Review

Using information analyzed by the data team, an operational assessment by CPSM technical experts will be conducted to evaluate the deployment of emergency resources.

The CPSM team will evaluate equipment, maintenance, records, policies, procedures, mapping, implemented technology and innovations, facilities, training, and staff to create recommendations for future service delivery.

The team <u>may</u> meet with elected and appointed officials as well as identified community leaders to determine the outcome they are seeking from deployment of resources.

Observations and recommendations will be developed around key performance and analysis areas in the completion of the report and include:

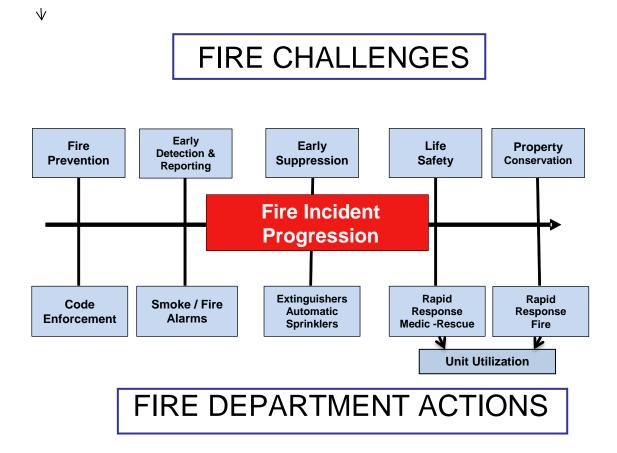
- Comprehensive Data Analysis
 - o Incident Type Workload
 - o Response Time
 - o Unit Workload
 - o Analysis of Busiest Hour
- Governance and Administration
 - o Organizational Structure
 - o Organizational Leadership
 - o Staffing and Deployment
 - o External Relationships
- Organizational Behavior/Management/Processes
- o Time Allocation of Staff
- o Organizational Communication
- o Strategic Planning
- o Performance Measurement
- Financial Resources (Operating and Capital Resources)
- Programs (To include fire suppression, EMS, fire prevention, public education, fire investigation, technical rescue, hazardous materials, emergency management, , and other service delivery programs)
- Risk Management/All hazards approach to community protection
- ISO/Accreditation Benefit Analysis

Using GIS technology we will review the current locations of deployed equipment and stations with recommendations developed for the future. Key to making these determinations will be response time for dispatched units and call density.

The CPSM data team has created a methodology for determining resource utilization that quantifies the maximum and minimum deployment of personnel and equipment. It is unlike any other approach currently used by consultants and is indicative of the desire by CPSM to deliver the right resources at the right time.

Fire Suppression Services

Fire departments staff their stations and train their personnel to respond to a wide array of fire and vehicular accident emergencies. In addition, many departments use the long intervals between calls for service for a variety of fire prevention, training and station activities. Research in the United Kingdom as well as by FEMA has shown that the most cost-effective approach to fire deployment is the elimination of calls. If a call is received, eliminating hazards decreases the risk faced by first responders and may result in a more positive outcome. These preventive strategies should include building effective code enforcement and fire prevention activities as well as strong public education programs promoting smoke detectors fire extinguisher use and placement in homes and businesses. The effort may also include early fire suppression through the use of automatic sprinkler systems and other fire protection systems. All of these prevention and response challenges are illustrated below.



The resulting data study CPSM completes will gather and analyze data on the efficiency and effectiveness of the current deployment on the fire runs. Resource utilization will be quantified for concentration, location, and unit utilization.

The study will also analyze fire call data to provide a comprehensive review of how fire services are delivered to the community including a detailed analysis of workloads and response times. The analysis of the workloads should begin with an in-depth study of the types of calls handled and their severity. The goal of this data gathering would be to explicate the fundamental nature of the fire challenge faced by the Fire Department.

The study will pay special attention to fires reported in residences or buildings. Some examples of questions to be answered as a part of the study include: What was the average response time of the first arriving fire suppression unit capable of deploying extinguishing agent? How long did the engine companies work at the scene?

For each call type, we will determine the time spent on-scene and the manpower personnel who worked the scene. This data will be aggregated to determine an overall average total time spent on fire calls per 24-hour period and by shift for each engine company. It will document any dramatic variations by time of day and day of week as well as seasonal variations. It will also require the review the department's non-emergency productive hours that fire personnel carry out between emergency calls. The study will also analyze data to determine the proportion of calls and the associated workload that arise within the community's borders compared to mutual aid calls.

Response time is an important statistic in emergency service systems. We will determine:

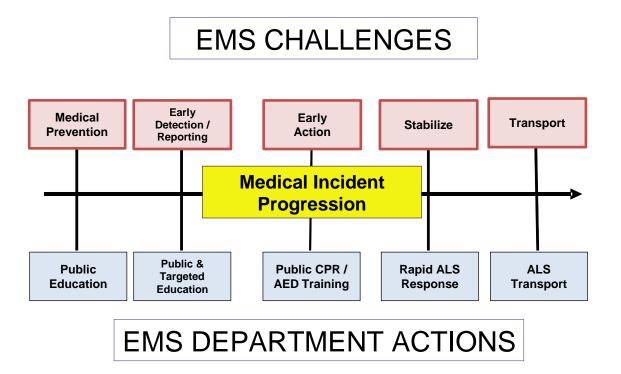
- Average response time of first arriving fire suppression unit capable of deploying extinguishing agent.
- Distribution of response times for different call categories
- Response time for the second arriving engine company, where possible

We will also identify and review calls that experienced unusually long response times.



Emergency Medical Services

Fire Departments provide emergency medical services in addition to fire suppression duties. In this project we will analyze EMS call data to provide a comprehensive review of emergency medical services including a detailed analysis of workloads and response times. The analysis of the workloads will begin with an in-depth study of the types of calls handled and their severity. The goal is to explicate the fundamental nature of the emergency medical challenge faced by the community's Fire Department. We will pay special attention to the most critical emergencies such as heart attack and serious vehicular accidents.



For each call type, we will determine the time spent on-scene and the manpower personnel who worked the scene. These data will be aggregated to determine an overall average total time spent on fire calls per 24-hour period for each ambulance company and the unit hour utilization (UHU). We will also determine how much EMS calls contribute to the workload of fire engine companies since they also respond to most calls. We will document any dramatic variations by time of day and day of week as well as seasonal variations.

Response time is an important statistic in emergency service systems. We will determine not only average response time but also the distribution of response times for different call categories. We will also identify and review calls that experienced unusually long response times.

Center for Public Safety Management, LLC – Flint, MI

Analysis of the Busiest Hours of the Year

Fire departments often speak of the "worst case scenario" or "resource exhaustion" when developing staffing and deployment plans. In reality, on agency can never staff for the worst case scenario, because whatever situation can be envisioned, there can always be a more serious event that can be planned.

What is needed to make staffing and apparatus decisions is a clear understanding of what levels of demand can reasonably be expected over specific periods of time in a specific jurisdiction. For example, what are the busiest calls for service times over a one year period and what levels of staffing and apparatus were needed to handle this workload?

To answer this question requires a detailed analysis of calls for service, broken down minute by minute, identifying which units were busy and how many units remained available to respond to a new call for service. More sophisticated analysis can take into consideration available mutual aid resources.

There is significant variability in the number of calls from hour to hour. One special concern relates to the fire resources available for the highest workload hours. We tabulate the data for each of 8760 hours in the year. We identify how often the fire department will respond to more than a specified number of calls in an hour. In studying call totals, it is important to remember that an EMS run typically lasts, on average, a different amount of time than a fire category call.

Example of "Busiest Hour Analysis"

What follows is an example of an CPSM study of a fire department with 17 units staffed all the time. For the vast majority of these high volume hours, the total workload of all units combined is equivalent to 3 or fewer units busy the entire hour. For the ten highest volume hours, 0.1% of the hours, the total workload exceeded 3 hours. All of these high volume hours occurred between 10 a.m. and 9 p.m.

The hour with the most work was between 1000 and 1100 on September 12, 2009. The 21 calls involved 34 runs. The combined workload was 417 minutes. This is equivalent to 7 firefighting units being busy the entire hour. However, in the City there are 17 units staffed all of the time. During the worst portion of the hour, there were always at least 5 units still available to respond immediately. Only 5 of the 17 units were busy more than 30 minutes during this hour.

The hour with the most calls was between 1400 and 1500 on October 13, 2009. The 23 calls involved 28 runs. The combined workload was 379 minutes. This is equivalent to between 6 and 7 firefighting units being busy the entire hour. However, in the city there are 17 units staffed all of the time. During the worst portion of the hour, there were always at least 7 units still available to respond immediately. <u>Only 3 of the 17 units were busy more than 30 minutes during this hour.</u>

Table 1. Frequency Distribution of the Number of Calls

Number of Calls in an Hour	Frequency
0-5	6397
6-10	2263
11-15	98
16 or more	2

Observations:

- A total of 6,397 hours (73%) in a year have received 0-5 calls.
- A total of 2,263 hours (25.8%) in a year have received 6-10 calls.
- A total of 100 hours (1.2%) in a year have received 11 or more calls.

Table 2. Top Ten Hours with the Most Calls Received

НОІ	JRS	Number of Calls	Number of Runs	Total Busy Minutes		
13-Oct-2009	1400	23	28	379		
12-Sep-2009	1000	21	34	417		
20-Jun-2009	2000	15	16	252		
02-Feb-2009	1900	15	16	213		
10-Jul-2009	1000	14	15	226		
15-Feb-2009	1900	14	20	317		
29-Jul-2009	1700	14	18	274		
23-Feb-2009	1100	14	15	180		
17-Mar-2009	1500	14	17	193		
01-Mar-2009	1800	13	14	185		

Station	1	2		3	}	Z	1	5	6	7	1	9	10	11	12	13	14	Numt Un	
Unit	E1	E2	T2	E3	T3	E4	T4	E5	E6	E7	T7	E9	E10	E11	E12	E13	E14	Busy	Free
0-5																	3.3	1	16
5-10		1.9		0.7													5	3	14
10-15	3.1	5		5								3.7		0.6	4.8		5	7	10
15-20	5	4.3		5	0.5							5		5	4.4		4	8	9
20-25	4.4	1.1		4.4	5							3.8		5	5			7	10
25-30				5	5							5		5	5			5	12
30-35				4.6	5							5		5	2.7			5	12
35-40				5	5	3.1						5		5	1.3			6	11
40-45				5	5	5				1.2		0.7	0.7	4.9	5	1.6		9	8
45-50				5	5	5	1.8			5	1.8		1.9	1.6	5	4.9	1.7	11	6
50-55				0.9	5	5	4.5		3.3	5	5	2.5	0.8	2.5	5	5		12	5
55-60					5	5	5		0.8	3.1	5	4.1	5	5	5	5		11	6
Total	12.5	12.3	0.0	40.6	40.5	23.1	11.3	0.0	4.1	14.3	11.8	34.8	8.4	39.6	43.2	16.5	19.0		

Table 3. Deployed Minutes by Unit for the Hour between 10 a.m. and 11 a.m. on 12-Sep-2009

Note: The numbers in the cells are the busy minutes within the 5 minute block. The cell values greater than 2.5 are coded as red. Observations:

- Between 10 a.m. and 11 a.m. on September 12, 2009, the fire department responded to 21 calls and dispatched 34 units to these calls.
- In the city there are 17 units staffed all of the time. During the worst portion of this hour, there were always at least 5 units still available to respond immediately. Only 5 of the 17 units were busy more than 30 minutes during this hour.

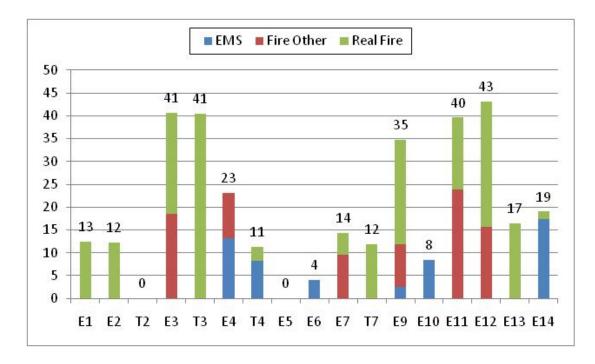


Figure 1. Workload by Unit and Call Type for the Hour between 10 a.m. and 11 a.m. on 12-Sep-2009

Observations:

- Engine companies E3, E11 and E12 were busy more than 40 minutes during this hour.
- Truck T3 was busy more than 40 minutes during this hour.
- Eleven units were busy less than 20 minutes. Two units responded to no calls.

Proposed Fees



The quotation of fees and compensation shall remain firm for a period of 90 days from this proposal submission.

CPSM will conduct the analysis of the police, fire, and EMS departments for \$89,000 exclusive of travel. The project would be billed in three installments: 40% within 14 days of signing the contract; 40\$ with delivery of the police, fire and EMS draft data analysis; 20% with delivery of the final reports. Following delivery of the draft reports, the city will have 30 days to provide comments as to accuracy and a final report will be delivered within 30 days of the comment period.

A travel budget of \$5,000 is proposed.

NOTE: If the chief administrative officer of the jurisdiction is a member of CPSM the fee, exclusive of travel, will be reduced by 10%.

Deliverables

Draft reports for police, fire/EMS will be provided for department review in electronic format.

In order to be ecologically friendly, CPSM will deliver the final report in computer readable material either by email or CD or both. The final reports will incorporate the operational as well as data analysis. Should the municipality desire additional copies of the report, CPSM will produce and deliver whatever number of copies the client request and will invoice the client at cost.

Should the City desire additional support or in-person presentation of findings, CPSM will assign staff for such meetings at a cost of \$2,000 per day/per meeting along with reimbursement of travel expenses.

Conclusion



Part of ICMA's mission is to assist local governments in achieving excellence through information and assistance. Following this mission, *Center for Public Safety Management, LLC* acts as a trusted advisor, assisting local governments in an objective manner. In particular, ICMA's experience in dealing with public safety issues combined with its background in performance measurement, achievement of efficiencies, and genuine community engagement, makes ICMA a unique and beneficial partner in dealing with issues such as those being presented in this proposal. We look forward to working with you further.