Proposal to Conduct the Analysis of Field Services

ITHACA, NEW YORK

July 28, 2021

matrix # consulting group

The Matrix Consulting Group is pleased to submit our proposal to conduct the field analytics portion of the study for the Ithaca Police Department. We are comprised of highly experienced public safety professionals and management consultants that specialize in law enforcement, with a proven track record of analyzing patrol services and developing effective alternative response programs.

Our Experience

We have worked extensively to provide a wide range of services to police agencies around the country and in Canada, having conducted over 350 police studies in 42 states. Police management and staffing studies we have completed within the last 10 years include:

Arlington, TX	Kansas City, KS	Redding, CA
Asheville, NC	Kansas City, MO	Rancho Cordova, CA
Austin, TX	Kauai County, HI	Roseville, CA
Birmingham, AL	Lynnwood, WA	Sacramento, CA
Berkeley, CA	Mahwah, NJ	San Antonio, TX
Beverly Hills, CA	Miami Beach, FL	San Jose, CA
Chula Vista, CA	Nashville, TN	Spokane, WA
Coral Gables, FL	Omaha, NE	Spokane County, WA
DeKalb County, GA	**Ossining, NY**	Puyallup, WA
Hayward, CA	Portland, OR	Tacoma, WA *(x2)*
Hennepin County, MN	Raleigh, NC	Wichita, KS
Jacksonville, FL	Ramsey County, MN	Winnipeg, MB

Our team is highly experienced, having worked as public safety professionals and as consultants on hundreds of police studies, with each of the ones listed above:

- **Richard Brady**: As the President of the firm, and with 40 years of police analytical experience working with over 350 departments, I would manage the project and serve as an analyst.

- **John Scruggs**, a Manager, has over 26 years of law enforcement experience, serving as Captain in the Portland Police Bureau. He co-authored legislation on body worn cameras in Oregon.

- **Ian Brady**, a Vice President, specializes in law enforcement consulting and has developed the firm's deployment and statistical models.

- **Kelli Sheffer**, a Manager, has 30 years of law enforcement experience, serving as Commander in the Portland Police Bureau. She has served in all facets of law enforcement, both in civilian and sworn roles.

- **Ryan Peterson**, a Consultant, specializes in GIS capabilities and has over five years of experience in conducting geospatial analysis for local governments.

We have no subcontractors on our team. All of the project team members proposed for this project are employees of the firm.

The Matrix Consulting Group possesses the experience, team, and approach necessary for a successful project, as evidenced by the high rate of successful implementation from our studies.

We appreciate the opportunity to submit this proposal on this important project for the Ithaca Police Department. If you have any questions, please do not hesitate to contact me.

Richard P. Brady
President
Matrix Consulting Group

CITY OF ITHACA 00243

1   Approach and Methodology

The following task plan outlines our plan to conduct the study, including each interim deliverable leading to the final report.

Task 1 | Project Kickoff and Initial Interviews

In order to conduct the study of the Ithaca Police Department, the project team will first develop an initial understanding of the police department and its service environment, as well as seek input on existing service levels and potential issues from IPD managers and key stakeholders. This includes the following elements:

• Interviews with the command staff and project team staff to confirm the objectives of the study and gain an initial understanding of the department, its organization, issues, and service levels.

• Review of study documents and interim deliverables to gain a further understanding of the department, conducting follow-up as needed in addition.

• Interview contacts within the police department to start the data collection process in that area and identify other key contacts within the organization.

The project team will also begin to collect various documents, including organizational goals, vision, and objectives statements, as well as other organizational materials and budgetary documents.

TASK RESULT

Based on the results of the initial interviews and data collection, the project team will prepare a data collection list and work with the department on each of the items needed to conduct the study.

Task 2 | Analysis of Workload, Organization, and Staffing

The project team will use computer-aided dispatch data to develop a detailed and comprehensive assessment of patrol workload, response times, and utilization relative to staffing levels. This includes elements such as the following:

CITY OF ITHACA 00244

- Analysis of patrol workload, including at the following levels:

  – Calls for service by hour and weekday, month, area, priority level.

  – Response and travel times by priority level and call classification.

  – Total spent handling calls by primary and backup units by hour and weekday, as well as area of geography.

  – Factors and assumptions for other workload factors (e.g., report writing).

- Patrol self-initiated activities and community engagement strategies, including:

  – Self-Initiated activities by hour and weekday.

  – Trends in types, frequency, and times when self-initiated activities are generated.

  – Relationship between uncommitted time and officer-generated activity.

- Analysis of patrol unit daily and hourly staffing by analyzing net availability factors, such as a leave, training, court attendance, administrative tasks (e.g., briefings, meal breaks, etc.), and turnover.

- Analysis of patrol proactivity using the results of the total workload and net availability calculations, in order to determine whether proactive capabilities exist both at an overall level and during key times throughout the day and week.

- Assessment of patrol staffing needs based on workloads and targets for proactivity.

The following page provides examples of the firm's approaches to analyzing crime, calls for service, and patrol proactivity:

(Fig. 1)   Analysis of patrol proactive (uncommitted) time

	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Overall
2am–6am	43%	56%	61%	61%	60%	57%	47%	54%
6am–10am	44%	34%	34%	33%	34%	34%	40%	40%
10am–2pm	22%	17%	20%	20%	20%	19%	21%	21%
2pm–6pm	32%	27%	29%	29%	28%	27%	31%	29%
6pm–10pm	24%	23%	22%	22%	24%	22%	22%	25%
10pm–2am	21%	34%	36%	37%	34%	30%	20%	30%
Overall	31%	32%	34%	34%	33%	32%	30%	32%

(Fig. 2)   Call frequency analysis to study alternative response, such as in mental health crisis events
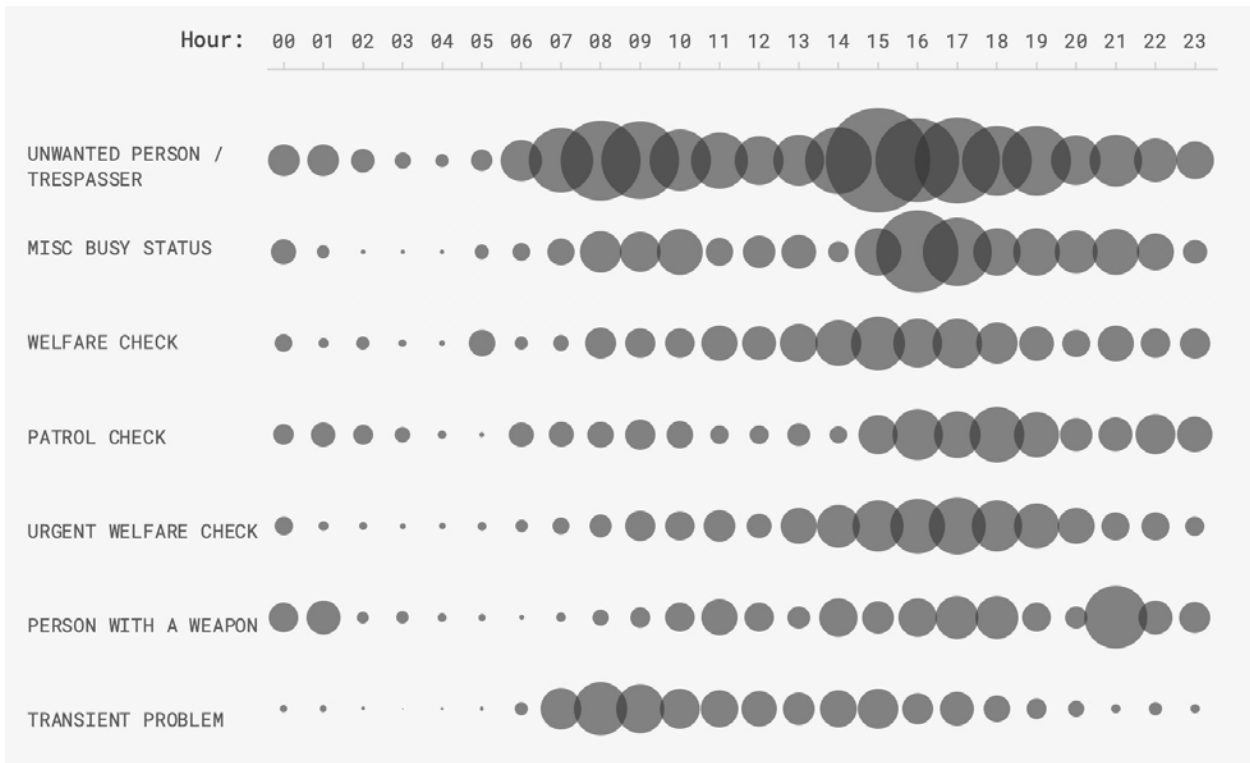
TASK RESULT

The project team will provide an interim deliverable that examines patrol workload and staffing needs at a detailed and comprehensive level. The draft document will be reviewed with the project steering committee and used as a basis for understanding call diversion opportunities.

Task 3 | **Analysis of Call Diversion**

Over time, and particularly over the past decade, more and more has been asked of police officers. Police have been asked to function as social services in responding to issues of homelessness, intervene in situations involving persons experiencing mental health crisis, and serve numerous other roles beyond what was expected in the past.

At the same time, service level expectations have not diminished. Perhaps more than ever, police have been asked to respond to minor, non-emergency calls such as non-injury accidents, and calls that simply do not need to be not law enforcement matters.

Call diversion provides an opportunity to re-imagine and reconfigure these responsibilities, allowing departments to balance workload between police officers and other types of specialized resources.

The following charts provide a visual illustration of the framework for call handling before and after implementing call diversion for certain types of calls:

Before Implementing Call Diversion Approaches
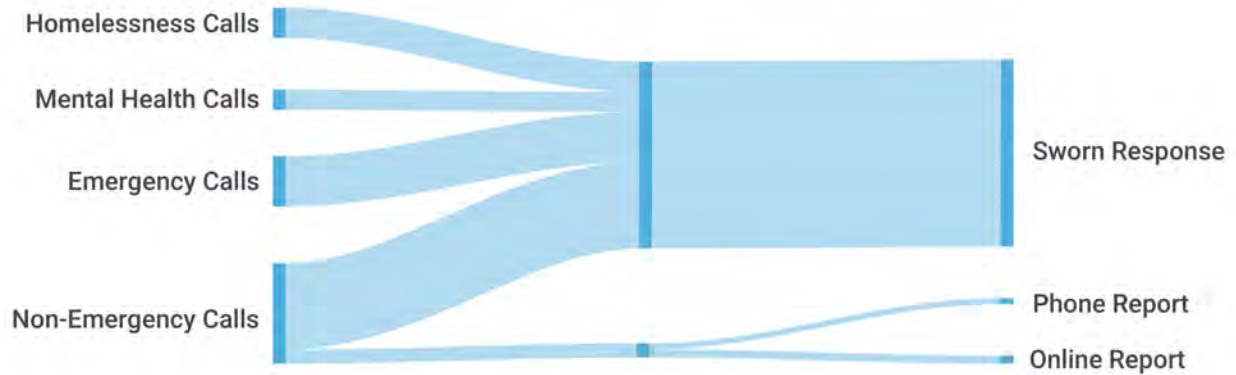
After Implementing Call Diversion Approaches
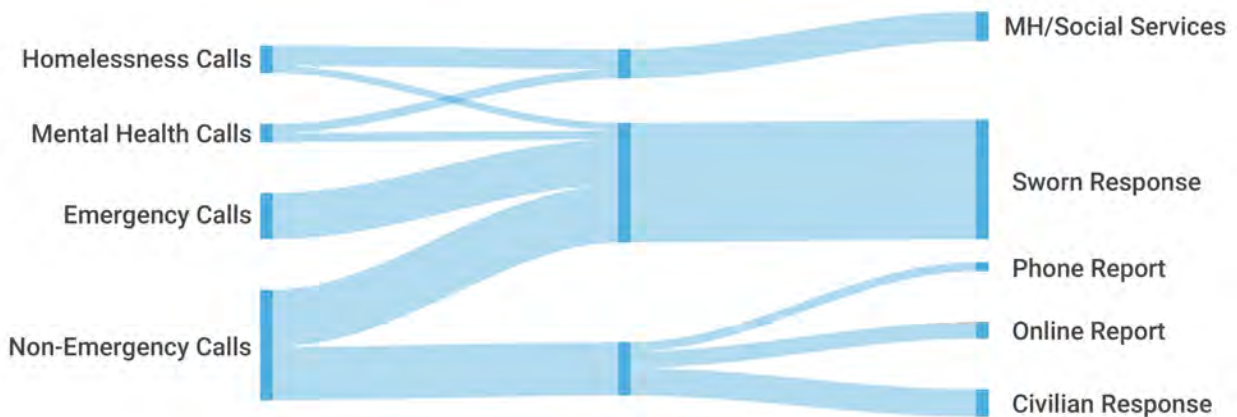
Alternative call diversion solutions the project team will examine include the following:

Mental Health

Increasingly, as other social services have experienced cuts over the past few decades around the country, the police have been tasked with responding to situations involving persons experiencing mental health crisis, the causes and effective responses to which are varied. As a result, extensive training is needed to respond effectively and minimize risk. The project team will evaluate the feasibility of implementing alternative approaches, such as establishing an external unit/agency to divert many of these calls from law enforcement, and to play a central role in de-escalation in calls where law enforcement is still required.

Homelessness

The project team will examine alternative means for handling many non-emergency calls involving homelessness-related issues, such as individuals camped out on the sidewalk,

panhandling, loitering, and other issues. Alternatives include specialized non-sworn units, outside city department/work group, and community-based organizations.

Non-emergency Call Response

Departments across the country have developed approaches to handle minor, non-emergency calls for service that do not require a badge and a gun, by instead sending a civilian call responder respond in place of a sworn officer. The project team will examine opportunities to implement these approaches, the scope of calls that could be handled by civilian call responders, and use analytics to determine workload, staffing needs, and deployment

Expansion of Online and Telephone Reporting

IPD already operates robust services for reporting many types of police reports without requiring an officer to respond. To expand these programs and maximize their effectiveness, these programs should be evaluated in regards to the following:

- Are there opportunities to expand to the scope of each program, including the types of calls that each service can handle?

- Are these services advertised effectively? What percentage of each type of eligible report is handled using these services:

- Can both services be streamlined into a more unified approach that directs users as needed to the right service?

- Are the services user friendly?

- Can individuals expect the same or equivalent level of service in response to their report, as opposed to an in-person response by a sworn officer?

Task 4 | Analysis of Deployment Strategies

A critical issue for many large departments is the significant imbalance among precincts in call for service workloads versus the number of patrol officers that are assigned to each shift, and to each district covered by the department. In the busiest areas, officers often have the *least* time available, calls are more likely to queue – increasing response times – and community engagement becomes impossible. As a result, it is critical to examine these issues to identify and address any inequities in patrol service level, as these have critical effects on community support and trust.

The project team will conduct an analysis of time used by patrol units to respond to calls for service, including:

- Response and travel times by priority level and call classification.

- Total spent handling calls by primary and backup units.

- Factors and assumptions for other workload factors, such as report writing time.

- Determination of patrol unit daily and hourly staffing by analyzing net availability factors, such as a leave, training, court attendance, administrative tasks (e.g., briefings, meal breaks, etc.), and turnover.

- Analysis of patrol proactivity using the results of the total workload and net availability calculations, in order to determine whether proactive capabilities exist both at an overall level and during key times throughout the day and week.

This analysis will be used to evaluate resource allocation – both in terms of whether patrol officers are assigned to precincts in proportion to workload, as well as how they are scheduled, in order to address deficiencies in service level by area and by time of day.

Data analytics will be used to develop alternative resource allocation and scheduling configurations, in order to balance service levels across the city at all times of the day. This can ensure that officers are less likely to go call, resulting in more time to engage with the community in the areas where it is most needed.

This analytical task will result in recommendations to improve resource allocation and scheduling in order to achieve more equitable service levels, including detailed staffing assignment and scheduling plans.

TASK RESULT

The project team will conduct an evaluation of the geographic deployment structure, including analysis of inequalities in call workloads by individual area of responsibility, and redesign/recommend improvements to the structure.

Additionally, the project team will complete an analysis of shift schedule effectiveness, as well as opportunities to optimize the current configuration or implement alternatives.

2 Project Team Qualifications

The following page provides resumes for each project team member, beginning with the project manager and president of the firm:

RICHARD BRADY

PRESIDENT, MATRIX CONSULTING GROUP

Richard Brady founded Matrix Consulting Group in 2002 and leads our public safety practice, which includes law enforcement and justice studies. He has served as the project manager or lead analyst on hundreds of public safety studies in his 40 year career.

His subject matter expertise includes police staffing and deployment, management effectiveness, and governance and transparency. Prior to his founding of these two firms, he served for over 20 years as a practice leader in two other firms, including Maximus.

Experience Highlights

Columbus, OH: Richard served as the project manager for this recently completed project that identified the need for new positions, but more importantly, identified a number of areas which would improve the quality of service and integrity, including:

- Steps to improve upon building trust in the community.

- Changes to use of force policies and biased policing, as well as training for de-escalation and procedural justice.

- Increase the use of civilians in the field and in administration.

A number of recommendations were made in the study in these areas in order to bridge the disconnect between the department's goals and policies, as well as how these are reinforced by management. *Contact information for the client is included in the references section.*

Austin, TX: Project manager on the study, which was designed to assist the APD recreate its approach to community policing to involve everyone, not just those with specialty assignments. While the study supported the addition of staff, the study also found that there were significant opportunities to support community policing in leadership, policies, recruitment, training, supervision, and use of data.

Los Angeles, CA: Project manager on a comprehensive study of LAPD field services, community policing programs, and patrol resource allocation strategies. The study recommended improved methods in order to better equalize service levels and prioritized a community-centered approach to field services.

Role on This Engagement:

Richard will serve as a project executive and advisor.

He will be involved in all project stages, including on-site interviews and review meetings. He will lead product design and quality control.

Relevant Clients:

CA	Los Angeles
NV	Las Vegas
CA	San Jose
CA	Sacramento
CA	San Francisco
TX	Austin
TX	Fort Worth
MO	Kansas City
OH	Columbus
NY	Ossining
NY	Albany
NY	Newburgh
NC	Raleigh
NC	Asheville
AZ	Phoenix
WA	Tacoma
OR	Portland
MB	Winnipeg
FL	Miami Beach
KS	Wichita
AL	Birmingham

Years of Consulting Experience: 40

Education:

BA, California State University, East Bay

PhD, Oxford University, U.K.

Notable Accomplishments:

Ohio Commission on Juvenile Justice

Massachusetts Governor's Committee on Local Government

Professional Association:

Association of Local Government Auditors

International City-County Management Association

IAN BRADY

VICE PRESIDENT, MATRIX CONSULTING GROUP

Ian Brady is a Vice President with Matrix Consulting Group in our Police Services Practice. He leads our data analytics unit, and has over 10 years of consulting experience. Specializing in public safety, he works on all of our police, fire, corrections, and emergency communications studies.

Mr. Brady is the lead developer on all of our statistical modeling and data analytics efforts, and has created standalone models in support of our studies' analytical efforts, including for:

- New agency formation feasibility, financial and service delivery modeling.
- Growth forecasting using GIS-based projections for population, service needs, and staffing requirements.
- Comprehensive workload and staffing analytics.
- Interactive scheduling configuration, forecasting effects on service levels and overtime usage.

Experience Highlights

Los Angeles, CA: **LAPD Basic Car Area Boundary Study**

- Led a comprehensive staffing study of LAPD field services.
- Recreated the patrol geographic deployment structure from the granular level, resulting in 202 new patrol areas, up from the 168 that existed previously.
- Analyzed patrol resource allocation strategies, recommending improved methods in order to better equalize service levels.

San Francisco, CA: **Police Department Staffing Analysis**

- Lead analyst on a comprehensive staffing study of the department.
- The project was designed to create defensible methodologies for determining the staffing needs of all 600+ assignments in the department based on service needs and other factors. These methodologies were then used to recommend appropriate staffing levels in every position.
- Developed and designed an interactive analytical tool for SFPD to use in the future to recreate the analysis in its entirety.

Role on This Engagement:

Ian will serve as the lead analyst in field services, as well as more generally over data analytics. He will be involved in all project stages, including on-site interview and review meetings, and will be involved in the development of each deliverable.

Relevant Clients:

AZ	Peoria
AL	Birmingham
CA	Berkeley
CA	Los Angeles
CA	Roseville
CA	Sacramento
CA	San Francisco
CA	San Jose
CO	Adams County
FL	Miami Beach
FL	Orange County
GA	DeKalb County
HI	Kauai County
IL	Lansing
IL	Rockford
KS	Wichita
MB	Winnipeg
MD	Harford County
MD	Howard County
MN	Hennepin County
MO	Columbia
MO	Kansas City
OK	Midwest City
NC	Raleigh
NJ	Mahwah
NM	Rio Rancho
NY	Newburgh
NY	Ossining
OH	Columbus
OR	Portland
PA	Carlisle
TX	Austin
TX	Fort Worth
TX	Travis County
VA	Suffolk
WA	Tacoma
WI	Oshkosh

Years of Experience: 10

Education:

BS in Politics, Willamette University.

JOHN SCRUGGS

MANAGER, MATRIX CONSULTING GROUP

John Scruggs is a former Captain with the Portland Police Bureau, with 26 years of experience in law enforcement. He is now a manager and analyst on our law enforcement, public safety, and criminal justice engagements. His relevant experience include:

- Completed over 50 studies for law enforcement, public safety, and criminal justice clients.
- Analysis focuses on operational and staffing review, workload analysis, net annual work hour determination, and alternative scheduling analysis.
- Expertise also includes the evaluation of administrative, dispatch, investigations, patrol, records, and property and evidence functions.

Experience Highlights

Kansas City, MO: This study evaluated the staffing needs of the Police Department. Key findings included:

- Opportunity for greater fiscal savings by transitioning 30 positions from sworn to civilian staff, primarily in administrative areas (e.g. finance, records, fleet maintenance, security, IT, and HR).
- Identified the need for additional positions related to open record requests, reviewing BWC footage, and packaging of officer videos for judicial proceedings.
- Provided insight into alternative organizational structures and span of control in administrative functions.
- Conducting workload analysis to determine staffing needs for non-patrol and investigative units.

Kawartha Lakes, Ontario: John served as the lead analyst of the on this engagement which reviewed the current staffing and developed staffing projections for a facilities study. Key recommendations included:

- Identified two patrol positions needed in the next 4 years and six positions over the next 20 years to better meet adopted proactive policing thresholds.
- Identified a shortage of detectives assigned to investigate crimes committed at the Central East Correctional Center.
- Reviewed space projections to meet desired operational approaches and service levels.

Role on This Engagement:

John will serve as a lead analyst on police training, best practices, policies, organizational issues, and operations.

Relevant Clients:

AL	Gulf Shores
AZ	Buckeye
CA	Los Angeles
CA	San Jose
CA	Santa Clara
FL	St. Cloud
KS	Kansas City
KS	Wichita
MA	Yarmouth
MN	Hennepin County
MO	Kansas City
NC	Raleigh
NC	Waxhaw
NY	Ossining
OR	Tigard
PA	Lower Saucon
PA	Narberth
PA	Upper Macungie
TX	Denton
TX	Fort Worth
TX	Glenn Heights
TX	Sunnyvale
WA	Monroe
WA	Tacoma
WI	Dodge County

Years of Experience: 32

Education: Master of Public Administration and B.S. in Political Science from Portland State University

KELLI SHEFFER

MANAGER, MATRIX CONSULTING GROUP

Kelli Sheffer is a 30-year law enforcement veteran with 16 years of command leadership experience with the Portland Police Bureau. She has extensive specialized experience in precinct operations, investigations, major events/protests, houselessness/mental health and neighborhood livability issues, background investigation and personnel recruitment, use of force review, policy development, among many other areas.

Experience Highlights

Kelli most recently worked for the City of Portland, Oregon as the Central Precinct Commander responsible for the oversight of all police response and operations in the downtown core and neighborhoods in the south and west of the city.

- Lead for the Critical Incident Management Command Program-Training for Incident Command.
- Oversight of the Service Coordination Team, a multi-disciplinary service response to houselessness, mental health, and addiction.
- Commander, North Precinct
- Commander, East Precincts
- Commander, Traffic Division.
- Public Information Officer
- Hostage Negotiation Team Lead
- Detective Sergeant
- 20-year Defensive Tactics Instructor

Camp Rosenbaum Board member (2010 – Present)

Camp counselor and staff positions from 1994 to 2018. CRB is a summer camp started 48 years ago by the late Brigadier Gen. Fred M. Rosenbaum utilizing partnerships between police, Air/Army Guard and Housing authority to support and mentor underprivileged youth.

DOJ, ICITAP (2010)

Partnering to build curriculum and instruct Bangladesh National Police in modern policing and Community Policing philosophies – 2010.

Associations:

Member of OACP Oregon Association of Chiefs of Police

Member of IACP International Association of Chiefs of Police

Western States Hostage Negotiators Association (previous)

Bureau Positions:

2016-2018
- Central & East Precinct Commander

2013-2016
- Traffic Division Commander

2012-2013
- North Precinct Commander/Captain

2010-2012 Lieutenant
- Adjunct to Operations Branch Chief
- Public Information Officer

2007-2010 Lieutenant
- East Precinct
- Lieutenant/Hostage Negotiation Team Lead
- Personnel Division

2003-2007 Sergeant
- Precincts
- HNT
- Detectives

2000-2003 Detective
- Robbery
- Child Abuse Team

1990-2000 Officer
- Precincts
- Background Invest. /Recruitment

Training/Education:
- Texas A&M All Hazard
- Unified Command
- NTOA Command
- HNT/CNT
- Critical Incident Stress
- Crisis Intervention
- Major Event Management

RYAN PETERSON

CONSULTANT, MATRIX CONSULTING GROUP

Ryan Peterson is a Consultant with the Matrix Consulting Group, specializing in GIS and data analytics.

He has over 5 years of experience conducting geospatial analysis for public safety agencies.

Experience Highlights

Los Angeles, CA: LAPD Basic Car Area Boundary Study

- Assisted in the recreation the patrol geographic deployment structure from the granular level, resulting in 202 new patrol areas, up from the 168 that existed previously.

- Analyzed patrol resource allocation strategies, recommending improved methods in order to better equalize service levels.

San Francisco, CA: Police Department Staffing Analysis

- Analyst on a comprehensive staffing study of the department.

- The project was designed to create defensible methodologies for determining the staffing needs of all 600+ assignments in the department based on service needs and other factors. These methodologies were then used to recommend appropriate staffing levels in every position.

- Developed and designed an interactive analytical tool for SFPD to use in the future to recreate the analysis in its entirety.

Relevant Experience:

CA	Los Angeles
CA	San Francisco
FL	Miami Beach
FL	Orange County
HI	Kauai County
IL	Rockford
MD	Harford County
MO	Kansas City
NC	Raleigh
NY	Ossining
OH	Columbus
TX	Fort Worth
TX	Travis County
WA	Tacoma
WI	Oshkosh

Years of Experience: 6

Education:

BS in Geography, University of Oregon

CITY OF ITHACA 00255