

Rochester Police Department Reorganization Evaluation Metrics

EVALUATING THE REORGANIZATION

RPD REORGANIZATION CORE TEAM

Reorganization Evaluation Metrics

RPD Core Team, December 20, 2014

The Rochester Police Department (RPD) will reorganize patrol functions from the current 2-Division structure to a 5-Section model on March 30, 2015. The approved 5-Section design is a staffing model based on a weighted non-discretionary patrol workload analysis. Resource allocation in the approved 5-Section model was designed to account for existing constraints and practical considerations, including but not limited to the workload analysis, current staffing, 911 dispatch protocols, and available technology resources.

The goals of the reorganization are maintain and exceed current levels of service, increase community policing initiatives, connect officers to smaller, neighborhood-based patrol beats, decentralize police services to neighborhoods, utilize an analytical model that allows flexibility for continual evaluation and adjustment, and maintain long-term financial sustainability.

RPD provides a variety of public services to the community. The nature of these services varies widely, including responding to calls for police service, educating citizens about crime prevention, responding to automobile accidents, and investigating crimes and apprehending offenders. The multi-dimensional nature of police work requires multiple, perhaps even competing priorities. The reorganization will affect all aspects of public service in varying degrees. RPD recognizes that traditional police output measures alone are not diverse enough to thoroughly evaluate this reorganization. A wide-ranging set of metrics are necessary to effectively evaluate the impact the reorganization has on all types of police service.

A comprehensive evaluation of the reorganization plan will require analysis of the workload model, community engagement, service metrics, and fiscal responsibility. A combination of official crime statistics and qualitative data from community members and RPD personnel will be utilized in the analysis. Each metric is identified and defined below. None of the criteria identified in this document stands alone as an overall measure of performance; rather they will be utilized collectively to identify potential positive or negative impacts of the new 5-Section model, and identify possible adjustments.

The estimated delivery date of the full evaluation is September 30th, 2016. This will allow for a three-month adjustment period, one full year of data collection, and two months to conduct the analysis. This large-scale organizational change requires significant adjustment in acclimation to new geographic section and beat boundaries, adaptation to change in command structure, and adjustments to policy and procedure implementation. Three months will allow personnel to get familiarized with the new structure, and the Department to fine-tune the plan to ensure the quality of data used for evaluation criteria. Using one full year of data for the evaluation will allow for a complete comparison set to be analyzed against a similar timeframe prior to the reorganization.

RPD delivered these Reorganization Evaluation Metrics to the Reorganization Steering Committee on November 3, 2014. The Committee reviewed the document and recommended some changes and additions, which RPD adopted. The Committee has now unanimously approved these Reorganization Evaluation Metrics

1 CONSTRAINTS

The potential constraints on the proposed methodology and data analyzed in the evaluation are outlined below. Any limitations identified here are presented to inform the reader on common nuances associated with using law enforcement data for evaluations, and the specific guidelines within which this evaluation will be conducted.

1.1 COST

RPD has allocated no additional operating funds for the evaluation of the project. Existing staff will perform the review; no additional personnel will be added to aid in the data collection, processing, interpretation, or production of evaluation components. No new technology (hardware, applications, and modifications) will be purchased or created solely for the purpose of evaluation.

1.2 DATA SOURCES

RPD generates substantial organizational data, not all of which is connected to the evaluation. Some data elements, for instance, are collected for administrative purposes, some for resource allocation, and some for other accountability structures.

Most of the data identified for this evaluation are secondary sources. They are data that has been collected previously, on an ongoing basis, for reasons other than evaluation. Evaluation metrics are limited by the data fields collected and the methods in which they are collected.

1.3 ASSESSMENT OF CRIME

Crime rates often have as much to do with how local police departments process the information they receive as they do with the “true” level of crime. They are as much a product of the police departments that produced them as they are of the community or situation in which the alleged offense took place. (McCleary, Nienstedt, & Erven, 1982)

Police departments can potentially influence crime rates through departmental policies and procedures dealing with resource allocation, enforcement, community engagement standards, technology adoption and implementation, and data collection methods.

Measuring police performance solely by crime statistics simply ignores consequential values... [such as] justice, integrity, fear reduction, citizen satisfaction, protection, and help for those who cannot protect or help themselves, and many others. (Kelling, 1996) It is important to recognize a substantial proportion of police work is unrelated to crime.

1.4 CRIME REPORTING PRACTICES OF THE CITIZENRY

Certain service metrics could potentially indicate an uptick in crime. These may indicate an improved relationship with the community, as citizens respond positively to closer relationships and expectations of service continuity. The attitudes of a jurisdiction’s citizenry toward crime and the crime reporting practices of its residents are known to have an effect

on the number of crimes coming to the attention of law enforcement. Careful consideration will be given to avoid making spurious implications of causality.

1.5 CONCLUSIONS

The evaluation team will not interpret or publish generalizations of the RPD reorganization project based solely on a single metric, or on any single metric group outcome. Police performance is multidimensional; the number and nature of those dimensions is a matter for interpretation and examination. (Maguire, 2004)

2 WORKLOAD MODEL METRICS

The workload model was established to create a basis for the evaluation of demand for service on the patrol division. Initially the demand was analyzed city-wide to determine section boundaries and then once again, within each newly defined section, to determine car beats.

The workload model makes no attempts at evaluating officer efficiency, but rather focuses on the time spent policing as it varies by geography. As noted in the constraints, this is a multidimensional factor that can be influenced by command decisions, an officer's personal policing characteristics, and changes in a complex array of social, economic, and political forces. (Maguire, 2004)

2.1 SECTION WORKLOAD

The percentage of patrol workload as predicted by the workload section model and reported in the reorganization plan will be compared to observed percentages in the evaluation period. Of the six variables in the model, three will be recalculated: Total Hours Worked, Calls for Service, and Average Drive Time. The other three will not have changed significantly, or no new data will be available in the time before and after the reorganization.

The same formula and call type calculated measures will be used:

(Hours Worked = Upper-bound + (Avg. Call Length * Avg. Number of Assisting Cars))

2.2 CAR BEAT WORKLOAD

The percentage of patrol workload as predicted by the workload car beat model and reported in the reorganization plan will be compared to observed percentages in the evaluation period. Of the six variables in the model, three will be recalculated: Total Hours Worked, Calls for Service, and Average Drive Time. The other three will not have changed significantly, or no new data will be available in the time before and after the reorganization.

The same formula and call type calculated measures will be used:

(Hours Worked = Upper-bound + (Avg. Call Length * Avg. Number of Assisting Cars))

2.3 STAFFING WITHIN THE MODEL

The allocation of patrol officers within each section is closely aligned with the expected percentage of patrol workload. Because of this, analysis will be conducted on the expected number compared to actual number of officers assigned to each section at the beginning of the study period. Similar analysis may also be included that examines staffing along other dimensions like platoon or rank.

3 BUDGET METRICS

The reorganization plan identified the three basic cost categories that would be directly impacted by the new purposed staffing model as start-up costs, periodic recurring costs, and long-term annually recurring costs. Estimated projected costs will be compared with actual costs for each identified line item in these categories.

As identified in the Staffing within the Model metric (2.3) the reorganization plan has closely aligned the allocation of patrol officers with the expected workload. The budgetary impact of this decision with regards to police overtime will be examined here. Specifically, analysis will be conducted on personnel shortage overtime, which is the police overtime type most significantly impacted by resource allocation decisions.

3.1 START-UP COSTS

These costs were associated with the planning and implementation of the reorganization. These include, for example, renovation costs to accommodate additional officers at the Sibley Building facility, costs to reprogram the Records Management System (RMS) to reflect the new organizational structure, and an additional temporary Lieutenant position to serve as the Reorganization Project Coordinator for the planning and implementation phase of the project.

3.2 PERIODIC COSTS

These costs consist of line items that will recur on a multi-year basis, but not an annual basis. For example, some additional police vehicles are needed as a result of the reorganization. However, they will not be replaced every year, but on a multi-year replacement cycle, i.e., an average of once every seven years for marked police vehicles, and once every eight years for unmarked vehicles.

3.3 ANNUAL COSTS

These costs reoccur annually on a long-term basis and primarily consist of additional supervisory positions needed to accommodate the additional chains-of-command resulting from the reorganization, and some additional parking and vehicle maintenance costs.

3.4 PERSONNEL SHORTAGE OVERTIME

The number of personnel shortage patrol overtime hours spent in the existing 2-division structure will be compared with the new 5-section model. Data limitations do not allow for more granular analysis by platoon, rank, or shortage reason.

4 COMMUNITY ENGAGEMENT METRICS

Decentralizing police resources to a smaller, neighborhood-based level is one of the core goals of the reorganization. Focusing attention and devoting resources to manageable geographic areas will foster an environment that establishes beat integrity for the officers, and promotes additional opportunities for community engagement. The scope and depth of this partnership with the community cannot be measured using only official police data. A combination of new focused survey instruments and community participation metrics will supplement existing departmental data to measure the impact of the reorganization on both community and internal satisfaction.

4.1 SURVEY DATA

A comprehensive set of survey instruments will allow RPD to gather information directly from its various constituencies and employees on a broad array of issues (e.g., citizens' opinions about the effectiveness of the reorganization, citizens' self-reported interactions with the police, police employee perspectives on reorganization, and overall community satisfaction with police services).

4.1.1 General Community Survey

The community will have the option to participate in a voluntary survey. Due to previously stated budgetary and personnel constraints, the instrument will consist of a survey questionnaire on the RPD website. An initial survey will be administered prior to reorganization to establish a baseline for comparison during the reorganization evaluation process.

4.1.2 Community Partner Survey

RPD will compile a list of neighborhood, community, business, and religious organizations with established partnering relationships with the police. Organizational representatives will be given the opportunity to participate in a structured interview survey.

4.1.3 RPD Internal Survey

All RPD personnel will have the option to participate in a voluntary survey. An initial survey will be administered prior to reorganization to establish a baseline for comparison during the reorganization evaluation process.

4.1.4 ECD Internal Survey

All ECD dispatchers will have the option to participate in a voluntary survey. An initial survey will be administered prior to reorganization to establish a baseline for comparison during the reorganization evaluation process.

4.2 DIRECTED POLICE ACTIVITY

A comparative analysis of pre- and post-reorganization levels will be conducted on existing CFS types determined to be formal measures of focused policing. The measures include, but are not limited to personnel hours spent on activities such as Directed Patrol, Walking Beats, or Corner Posts. Disclaimer: As part of the reorganization, RPD will be reviewing existing call types to determine if revised definitions would project a more accurate view of work activity.

4.3 NEIGHBORHOOD SERVICE CENTER (NSC) ACTIVITY

The five RPD NSC offices to be established under the reorganization are designed to use a team-oriented approach to solve problems, address quality of life concerns, support local businesses, and enhance neighborhoods. The assigned RPD personnel partner with Neighborhood & Business Development to work directly with the citizens and the local business community. A comparative analysis of pre- and post-reorganization levels will be conducted on existing CFS types determined to be formal measures of NSC activity. The measures include, but are not limited to, personnel hours spent on activity like Crime Prevention Activities and Neighborhood Meetings. Disclaimer: As part of the reorganization, RPD will be reviewing existing call types to determine if revised definitions would project a more accurate view of work activity.

4.4 COMPLAINT DATA

A comparative analysis of pre- and post-reorganization service complaints levels will be conducted. RPD has two methods of citizen complaint intake, calls for Quality of Service Investigations (QSI), and in-person complaints to the Professional Standard Sections (PSS). Measures will include, but are not limited to the number of opened, reviewed, and closed complaints.

4.5 POLICE AND CITIZENS TOGETHER AGAINST CRIME (PAC-TAC) PARTICIPATION

PAC-TAC is a volunteer organization that works with on-duty patrol officers or crime prevention officers in neighborhoods to interact with other citizens and local merchants to assist in crime prevention. An analysis of current active membership, PAC-TAC events and PAC-TAC details will be conducted prior to reorganization to establish a baseline for comparison during the reorganization evaluation process.

4.6 CFS PERCEPTION METRIC

Research has shown that the single most important factor in citizen satisfaction with police response was whether the response time matched citizen expectations, even if the response time was lengthy. In other words, providing citizens with an accurate estimate of the response time is often more important than providing a rapid response. (Percy, 1980)

RPD will analyze the average response time for the 20 most frequently used non-discretionary call types and publish the results on the departmental website. Questions will be developed in the survey instruments (4.1) to examine the relationship between CFS

expectations and satisfaction. Additionally, the percentage of calls above the average response time for the 20 most frequent call types will be analyzed in the reorganization evaluation phase to identify any potential impacts of reorganization.

5 SERVICE METRICS

Maintaining or exceeding current levels of service was identified as a goal of the reorganization plan. Traditional measures of law enforcement performance include analysis of frequency, type, response, and outcomes of criminal incidents. These metrics are most commonly represented in three categories: Calls for Police Service, Crime Levels, and Clearance Rates. Police are not the only factor that influences crime rates. Crime is the product of a complex array of social, economic, and political forces. (Maguire, 2004) These measures alone would not be an accurate gauge for evaluation of the reorganization plan; rather they will be utilized to identify potential impacts of resource allocation decisions.

5.1 CALL FOR SERVICE (CFS)

All CFS data will be provided by the Emergency Communications Department (ECD). Analysis will be conducted within the framework of existing ECD operational practices. Current data collection and reporting policies will be followed to maintain consistency for evaluation. Disclaimer: The workload model focused on non-discretionary calls for service call types. These metrics contains all call types unless otherwise noted.

5.1.1 All CFS

Total number of CFS in study period compared to 5-yr average and prior 2 years.

5.1.2 Priority 1 CFS

Total number of Priority 1 CFS in study period compared to 5-yr average and prior 2 years. Priority is determined by combination of the CFS call type and ECD dispatcher discretion based on urgency.

5.1.3 Response Time - Priority 1 Average

Average of priority 1 CFS response time in the study period compared to 5-yr average and prior 2 years.

5.1.4 Response Time - Priority 1 Median

Median of priority 1 CFS response time in the study period compared to 5-yr average and prior 2 years.

5.1.5 % of Priority 1 Calls responded to in 5 minutes or less

Responded to is defined as the total minutes from ECD event-creation time to arrival time.

5.1.6 % of Priority 1 Calls responded to in 30 minutes or more

Responded to is defined as the total minutes from ECD event-creation time to arrival time.

5.1.7 Priority 2 Average

Average of priority 2 CFS response time in the study period compared to 5-yr average and prior 2 years.

5.1.8 Priority 2 Median

Median of priority 2 CFS response time in the study period compared to 5-yr average and prior 2 years.

5.1.9 % of Priority 2 Calls responded to in 5 minutes or less

Responded to is defined as the total minutes from ECD event-creation time to arrival time.

5.1.10 % of Priority 2 Calls responded to in 30 minutes or more

Responded to is defined as the total minutes from ECD event-creation time to arrival time.

5.2 CRIME

While it was not a specific objective of the reorganization to reduce criminal and other unlawful or undesirable activity within the city, that clearly is a desired outcome of any law enforcement decision. It may not be possible to directly attribute any increase or decrease in crime rate to reorganization. However, we will review crime data as part of the reorganization evaluation to provide context. All crime data utilized in the evaluation will be official RPD statistics as reported to the New York State Division of Criminal Justice Services per Federal Bureau of Investigation Uniform Crime Reporting (UCR) specifications.

5.2.1 Violent

Totals of each Violent Part I crime in the study period compared to 5-yr average and prior 2 years. Violent crime is composed of four offenses: murder and non-negligent manslaughter, forcible rape, robbery, and aggravated assault. Violent crimes are defined in the UCR Program as those offenses which involve force or threat of force. (U.S. Department of Justice—Federal Bureau of Investigations, 2012)

5.2.2 Property

Totals of each Violent Part I crime in the study period compared to 5-yr average and prior 2 years. Property crime includes the offenses of burglary, larceny-theft, motor vehicle theft, and arson. The object of the theft-type offenses is the taking of money or property, but there is no force or threat of force against the victims. (U.S. Department of Justice—Federal Bureau of Investigations, 2012)

5.2.3 Part II

Totals of each relevant Part II crime in the study period compared to 5-yr average and prior 2 years. Relevant Part II crimes include one measure of aggregated narcotics related offenses and one measure of weapon-related offenses (possession and illegal use.)

5.3 CLEARANCE RATES

Clearance rates track the proportion of reported crimes solved by the police. Clearance rates can be a useful measure within an organization as they are partly dependent on

police/community relations. A statistically relevant change in clearance rates through the study period may, in some part, be correlated with positive or negative shift in community perception.

5.3.1 By Crime Type

All Part I crime categories (Violent and Property) individually as a percentage of reported cleared and as a total of all Part I crimes cleared.

6 REFERENCES

- Kelling, G. (1996). Defining the bottom line in policing: Organizational philosophy and accountability. *Quantifying quality in policing*, 22-36.
- Maguire, E. R. (2004). Measuring the Performance of Law Enforcement Agencies. *CALEA Update Magazine*. Retrieved from <http://www.calea.org/calea-update-magazine/issue-83/measuring-performance-law-enforcement-agencies-part-1of-2-oart-articl>
- McCleary, R., Nienstedt, B., & Erven, J. (1982). Uniform Crime Reports as Organizational Outcomes: Three Time Series Experiments. *Social Problems Vol. 29, No. 4, April 1982*.
- Percy, S. (1980). Response time and citizen evaluation of police. *Journal of Police Science and Administration*, 8,75-86.
- U.S. Department of Justice—Federal Bureau of Investigations. (2012). *Crime in the United States, 2012*. Retrieved from Criminal Justice Information Services Division: <http://www.fbi.gov/about-us/cjis/ucr/crime-in-the-u.s/2012/crime-in-the-u.s.-2012/>