Police Force Analysis System℠
Spokane Police Department
Summary Report

Use of Force Data from 2013 to 2018

Report Prepared for the
Spokane Office of Police Ombudsman

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Background – The Lack of Data on Police Use of Force

In response to a recent series of highly publicized police shootings, the public and policy makers are demanding that law enforcement be more accountable and transparent about its use of force, particularly with regards to the impact on communities of color. But, as made clear in a 2013 survey by the U.S. Department of Justice, there is wide variance in agency approaches to tracking force, a lack of in-depth review of force within many individual police departments, and simply no data allowing for a meaningful evaluation and comparison of use of force practices across the United States. Understanding police use of force in all its complexity requires a systematic examination of when, where, how, and why force is used in the approximately 400,000 force incidents occurring each year throughout the country.

While the FBI has attempted to collect information on justifiable homicides by police officers, this amounts to an extremely small percentage of all police uses of force that occur each year and the data is limited and incomplete. There are no reliable and comprehensive data sources available that could be used to develop evidence-based best practices for use of force. As a result, there currently exists a plethora of policies, training programs and procedures designed to guide officers on how to appropriately use force. Since none of these policies or programs have been evaluated for their effectiveness, agencies have no way of knowing whether their existing practices should be maintained, modified or overhauled. Some organizations such as the Police Executive Research Forum (PERF) have attempted to develop guidelines on how officers should appropriately use force. Unfortunately, with no data or evidence to back up the effectiveness of these new proposals, they are often met with skepticism and resistance by the law enforcement community. By issuing recommendations for sweeping reforms without

providing any data to support those recommendations, the chasm between the public and police may actually widen as we debate how the police should reform themselves.5

The lack of evidence-based policies for use of force is quite shocking when you consider that these policies are being used to guide officers in making life and death decisions that could have criminal consequences and expose departments to significant liability. It is inconceivable that we would allow policies to govern the practice of medicine without ensuring that those policies are backed up by solid scientific research and constant evaluation and assessment.

The Department of Justice (DOJ) has attempted to reform dozens of law enforcement agencies over the last 25 years through a series of consent decrees and collaborative reform projects. Consent decrees can cost local governments millions of dollars and it can take up to a decade to reach compliance with court ordered mandates. Unfortunately, one thing that all consent decrees have lacked is a systematic and comprehensive data collection program that would be capable of assessing the effectiveness of the reforms and the long-term impacts of the decrees. A few studies by academic researchers have determined that the benefits of consent decrees are mixed at best.6

In May 2015 the Obama Administration launched the Police Data Initiative.7 This initiative was the result of recommendations from the Task Force on 21st Century Policing and it has two primary goals: (1) Use open data to build transparency and increase community trust, and (2) Provide internal accountability and effective data analysis. One of the data elements collected by the initiative is police use of force. This data is currently available on an open data portal managed by the Police Foundation.8 Only 24 law enforcement agencies have provided their data on use of force incidents and each of those agencies has a different method for reporting their stats. Some agencies only include 3 fields of information while others have more than 30 fields.

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7 “Launching the Police Data Initiative,” The White House President Barack Obama, May 18, 2015.
8 Police Data Initiative Open Data Portal
Some agencies only report on officer involved shootings while others report on all uses of force including the pointing of a firearm. Unfortunately, the use of force data provided to the Police Data Initiative provides very little insight into how officers are using force and where efforts on reform need to be focused.

The State of California recently adopted one of the most comprehensive use of force data collection programs in the country. The URSUS system uses an online reporting tool to collect data from all law enforcement agencies in the state. The California DOJ recently released its first report on use of force data from 2016. The main limitation of URSUS is that it only collects data on use of force incidents that result in serious bodily injury or death of a civilian or officer or the discharge of a firearm. In 2016 there were just 782 incidents that met the URSUS reporting criteria which is less than 2% of the estimated 45,000 uses of force that occur in the state each year. Only 25 of the state’s 509 law enforcement agencies had more than 5 incidents to report to URSUS in 2016 and more than half the agencies in the state did not have any incidents to report. While the URSUS system is a good first step, the limited amount of data it contains will provide little guidance to departments that want to implement data-driven reforms.

While URSUS captures data on all firearms discharges, most officers will go their entire careers without ever discharging their firearms in the line of duty. By contrast, half of the nation’s 800,000 law enforcement officers will use some type of force at least once this year. We need to begin collecting and analyzing data on all use of force incidents so that agencies can craft evidence-based best practices and closely monitor officer behavior in the field.

10 California Department of Justice URSUS Use of Force Incident Reporting
11 California DOJ URSUS 2016 Report
12 This estimate of the total number of use of force incidents in the state was derived from the total number of arrests in 2016 (1,120,759) multiplied by 4% which is the average use of force rate per arrest of the 32 law enforcement agencies in the Police Force Analysis System™. A use of force incident includes the use of any physical force to overcome resistance and/or the use of any weapon.
Early Intervention (Early Warning) Systems

Many law enforcement agencies have developed Early Intervention Systems (EIS) to identify potentially problematic behavior among their officers at an early stage so that corrective measures can be taken before a serious incident, complaint or lawsuit occurs. A number of these systems include use of force data as one of the risk components. Typically, some type of trigger will be set based upon the frequency of force (e.g. 3 or more uses of force in a 6-month period) and when an officer meets that trigger, they will be flagged for additional review. The efficacy of EIS systems has been challenged and there is little evidence to demonstrate that they are effective at identifying high risk officers.13 The Los Angeles Police Department spent millions of dollars developing its TEAMS II system as part of a federal consent decree. Each month the system flags about 190 officers for additional review based in part on the frequency of use of force incidents. In 70% of the flagged cases supervisors did not find any issues with the officer’s use of force and only 3% of the flagged officers were ordered to undergo retraining, were reprimanded or had some other action taken.14 As will be discussed later in this report, measuring the frequency of an officer’s use of force is a poor measure of the appropriateness of that force.

Building the Data Infrastructure to Support Democratic Policing

The core function of the police in a democratic society is to protect life, liberty, and property, and coercion is the fundamental means by which they achieve those democratic goals. While the police perform many complex and important roles within the communities they serve, the single defining characteristic of the police is their capacity to both verbally and physically coerce individuals to do things that they are not otherwise inclined to do, particularly those individuals who are not obeying the rules. To be able to do this efficiently and effectively, the police must be viewed as a legitimate authority by the citizens they serve. This perceived legitimacy is driven by transparency in police decision-making, the presence of sufficient

accountability structures, and perhaps most important, fundamental fairness in the distribution of coercive authority.

Democratic policing is thus a process rather than an achievable end in itself, and it can only be demonstrated through constant evaluation in order to ensure that these democratic ideals are being satisfied. This process of evaluation requires adequate information about coercion. Recent tragic high-profile events have renewed our focus on an old problem: the fact that we simply do not have enough data about police coercion. The most important task to improve the quality of policing in the United States is to systematically collect and report data on police coercion, and to understand the distribution of coercion across people, places, and time.

- Who is being impacted by police use of coercion and why?
- Are some communities disproportionately impacted by police use of coercive authority?
- How does a subject’s mental health status affect police decision-making?
- Are marginalized populations, such as the homeless, at risk for disproportionate force?
- Does officer knowledge of a subject’s potential threat or level of intoxication influence their use of coercive authority?

Police Strategies LLC has partnered with the Center for the Study of Crime and Justice at Seattle University to develop comprehensive information about the intersection of individual and contextual factors that explain situational, temporal, and spatial variation in the distribution of police coercive authority with attention to the ways in which demographic factors such as race/ethnicity, gender, and age, situational/historical/individual characteristics such as mental illness, homelessness, and location impact police-citizen interactions and police coercive control. Data from this system will produce research and support community engagement about the relationship between the intersection of race, age, gender, status, and behavior on police coercion.
Police Strategies LLC

Police Strategies LLC is a Washington State based company that was formed in February 2015. The company was built by law enforcement professionals, attorneys and academics with the primary goal of helping police departments use their own incident reports to make data-driven decisions and develop evidence-based best practices. The company’s three partners are all former employees of the Seattle Police Department and were directly involved with the Department of Justice’s pattern or practice investigation of the department in 2011 as well as the federal consent decree that followed. They wanted to take the lessons learned from that experience and provide other police departments with the tools they need to monitor their use of force incidents, identify high risk behavior and evaluate the outcomes of any reforms that are implemented. The company has a partnership with the Center for the Study of Crime and Justice at Seattle University to assist in the analysis of the data.

Police Force Analysis System℠

In the summer of 2015, Police Strategies LLC launched the Police Force Analysis System℠ (PFAS). PFAS combines peer-reviewed research with state-of-the-art analytical tools to produce a powerful data visualization system that can be used by law enforcement, policy makers, academics, and the public.15 The core of PFAS builds upon the research work of Professor Geoff Alpert and his Force Factor method. Force Factor analysis formed the basis of Professor Alpert’s 2004 book “Understanding Police Use of Force – Officers, Subjects and Reciprocity”16 and has been the subject of several scholarly articles.17

PFAS is a relational database that contains 150 fields of information extracted from law enforcement agencies’ existing incident reports and officer narratives. The data is analyzed using legal algorithms that were developed from the evaluation criteria outlined in the United States

15 Capitola Police creates online database to track use of force stats, Santa Cruz Sentinel, August 2016.
Supreme Court case of *Graham v. Connor*, 490 U.S. 386 (1989). The Court adopted an objective reasonableness standard which evaluates each case based upon the information that the officer was aware of at the time the force was used and then comparing the officer’s actions to what a reasonable officer would have done when faced with the same situation. PFAS uses Force Justification Analysis to determine the risk that a use of force incident would be found to be unnecessary and Force Factor Analysis to evaluate the risk that the force would be found to be excessive.

PFAS examines relevant temporal data from immediately before, during and after an application of force.
PFAS uses powerful data visualization software to display the information on dynamic dashboards. These dashboards can be used by police management to identify trends and patterns in use of force practices and detect high risk behavior of individual officers. The system can also be used to spot officers who consistently use force appropriately and effectively. Since the system can find both high risk and low risk incidents, PFAS can be used both as an Early Intervention System to correct problematic behavior as well as a training tool that highlights existing best practices.

PFAS contains several years of historical data for each agency and is designed to be updated on a regular basis. This allows the department to immediately identify trends and patterns as well as measure the impacts and outcomes of any changes that are made to policies, training, equipment or practices. For example, if a department provides crisis intervention and de-escalation training to its officers, the system will be able to evaluate whether that training has had any impact on officer behavior.

PFAS currently has use of force data from 56 law enforcement agencies in seven states involving more than 8,000 incidents and 3,000 officers who used force a total of 15,000 times. PFAS is the largest database of its kind in the nation. Although the incident reports from each of these agencies uses a different format, all the data extracted and entered into the system has been standardized which allows us to make meaningful interagency comparisons. The Police Force Analysis Network℠ allows agencies to compare their use of force practices with other agencies in the system.

The Police Force Analysis System℠ provides comprehensive information about police use of coercive authority and permits the study of the intersection of individual and contextual factors that explain situational, temporal, and spatial variation in the distribution of police coercive authority. PFAS supports meaningful community engagement about police coercion by providing comprehensive and relevant data to address and inform community concern regarding police-citizen interactions.
Key Findings from the Police Force Analysis System℠

Under our partnership with the Center for the Study of Crime and Justice at Seattle University, we are continuously analyzing the use of force data from all the agencies in the Network to identify trends, patterns, correlations and outcomes. Here are some of our initial key findings that were derived from the 56 agencies currently providing data for the system:

1. Uses of Force are Linked to Arrests

Most use of force incidents are associated with an attempt by an officer to bring an individual into custody. If a subject resists a lawful arrest or detention, then it is usually necessary for the officer to use some type of force to gain control of the subject. To reduce the need to use force, many agencies have sent some or all their officers through crisis intervention and de-escalation training. These courses help officers identify individuals with mental health issues and provides them with the verbal and interpersonal skills needed to help de-escalate and gain control of problematic situations without having to use force. While there are no comprehensive studies that have linked de-escalation training with a reduction in use of force incidents, it is likely that these programs do provide officers with valuable skills that they can use to resolve conflicts.

While many people view any use of force by police as a negative outcome regardless of how or why the force was used, our data shows that officers cannot do their jobs effectively without using some amount of force in appropriate circumstances. No matter how much de-escalation training an officer receives, there will always be a certain percentage of arrestees who will resist or flee regardless what the officer says or does. PFAS data shows that on average 4% of all arrests involve in a use of force.

Some departments have seen dramatic declines in uses of force when consent decrees are imposed or when departments come under intense public scrutiny or when body cameras have been implemented. However, these declines in uses of force are almost always associated with a corresponding decline in arrests as officers become less proactive and they are more reluctant to engage in situations involving minor crimes, infractions or suspicious circumstances.
There is a strong correlation between the total number of uses of force a department has and the total number of arrests their officers make. Similarly, the more proactive and productive an officer is, the more arrests they will make and the more uses of force they will have. Rather than simply measuring the frequency of force, a better metric to assess risk is the use of force rate compared to arrests. For example, an officer who makes 10 arrests and uses force against 4 of those subjects (40% use of force rate) is a much higher risk than an officer who makes 300 arrests and uses force against 12 subjects (4% use of force rate).

When an agency begins to analyze its use of force incidents, the focus should be on the use of force rate per arrest, the necessity of the force used (i.e. whether the force was justified) and the proportionality of force to resistance (i.e. whether the force was excessive). Unfortunately, most departments and most Early Intervention Systems simply look at the frequency of force and work from the assumption that more force is bad, and less force is good. This type of simplistic analysis tends to penalize more productive and proactive officers and could lead to public safety problems if officers are encouraged to disengage and make fewer arrests.

2. Officers that use force more frequently, tend to use force more appropriately

PFAS examines not only the frequency of force that an officer uses, but also the risk that an individual force incident would be found to be unnecessary and/or excessive under the *Graham v. Connor* legal standard. We have found that officers who rarely use force tend to have higher risk scores than officers who frequently use force. This is probably because an officer who has more experience using force in the field will learn how to use force more appropriately than an officer who has only used force during training exercises.

This finding has significant implications for existing Early Intervention Systems which rely solely on the frequency of force to identify potentially problematic behavior. These systems flag officers with the highest number of force incidents as high risk. Our findings suggest that the opposite is true and that it is the officers who rarely use force who represent the greatest risk to the department. This may explain why most EIS systems have a very high false positive rate. (See the LAPD TEAMS II discussion above).
3. **Less experienced younger officers are more likely to find themselves in situations where use of force is required**

On average about half the officers in any given police department will use force at least once each year. Most of the officers who use force will be assigned to patrol and these officers tend to be the youngest and least experienced officers in the department. As we saw in the previous finding, the less experienced the officer, the more likely it is that the officer will engage in high risk use of force behavior. This has implications for officer deployment and training. As a risk management strategy, it may be prudent to partner more experienced officers with less experienced ones until they have had enough practice in using force in the field. From a training perspective it would be advisable to focus in-service use of force training on younger and less experienced officers and have each of their use of force incidents thoroughly reviewed and discussed with their supervisors.

4. **Members of the public tend to be more concerned about the fact that force was used at all rather than the level of force that was used**

Some of the agencies we are working with have provided us with data on complaints about uses of force and this data has been incorporated into PFAS. An analysis of that data has shown that when individuals complain about an officer using excessive force against them, it is more common for these incidents to have a low Justification Score rather than a high Force Factor Score. It appears as if the motivation for the complaint is not about the level of force that was used, but rather the fact that force was used at all. Complaints about use of force are most common when low levels of force are used against individuals who are engaged in minor crimes or infractions or when they are suspected incorrectly of being involved in criminal behavior. When these individuals fail to cooperate, the officer can usually gain control with a minimal amount of force and no injury. However, the subjects in these types of situations tend to view any force used against them as unwarranted, and therefore any amount of force used is likely to generate a complaint. In situations where a subject was engaged in serious criminal behavior, threatened the officer, actively resisted and/or tried to
flee, subjects are less likely to complain even if the officer used a very high level of force and the subject sustained an injury.

This finding is consistent with a recent study from the John F. Finn Institute for Public Safety:

“In our recently published study of policing, Mirage of Police Reform, we found that citizens’ assessments of procedural justice are shaped much less by how officers use their enforcement powers—such as using physical force or conducting searches—than whether they use them...[I]ndividual officers’ decisions about whether to use their coercive authority matter far more to public perceptions of police legitimacy than how they use it.”18

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Data Collection from the Spokane Police Department

Police Strategies LLC began working with the Spokane Police Department and the Office of Police Ombudsman in 2018. Our first task was to code the Department’s use of force reports from January 1, 2013 to December 31, 2018 and enter the data into the Police Force Analysis System™. Some of the use of force incident reports were obtained from the Department’s website. Spokane PD personnel provided the remainder of the reports through a secure online file sharing system.

Spokane PD provided incident reports and officer narrative statements for each incident where force was used. These reports were received as Adobe Acrobat files. Additional data was provided from the Department’s IAPro records management system. Data was extracted from the incident reports and officer narrative statements and entered into a relational database. Interactive dashboards were then built for use by the Office of Police Ombudsman and Spokane PD.

We began receiving the reports and data from IAPro in February and March 2019. There are several use of force reports from the end of 2018 that were not included in the initial data transfer because they were not yet complete. While these reports were not included in the initial system, they will be added during the 2019 annual update.

PFAS contains data on all use of force incidents where a weapon was used or discharged, or any physical force was used. The system does not contain data on incidents where force was threatened but not used including the pointing of a firearm. Some agencies require their officers to report the pointing of a firearm or a taser as a use of force incident even if those weapons were not discharged and no other force was used. While it is beneficial to track this type of information, most of the agencies using PFAS do not include the pointing of a weapon as a reportable use of force. For those agencies that do collect threat of force data, there is no consistency in how the data is reported. Some agencies that contribute data to PFAS have requested that their threat of force cases be analyzed. The legal algorithms used by PFAS are

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19 https://my.spokanecity.org/police/accountability/use-of-force/
designed for to analyze actual force cases, so a separate system has been developed to examine threat of force incidents.

Spokane PD does require its officers to report on threat of force incidents involving the pointing of a firearm. While these incidents were not included in the initial dashboard system, Police Strategies will be working with the Department and the Ombudsman to develop a modified dashboard system that will be based on the specific policies governing these types of incidents. These dashboards will be provided in the next update of the system in early 2020.

Since threat of force incidents were not included in the current PFAS dashboard system, the annual number of incidents will be smaller than those reported by the Department in its annual reports. However, the interagency comparisons in PFAN are still valid because none of the other 55 agencies contributing data to the system include threat of force data.

**Recommendations for Future Data Collection**

Under section 300.5 of the Spokane Police Department Policy Manual, the following types of incidents are reportable uses of force:

A. The application of force resulted in apparent injury to the subject or unconsciousness (with the exception of minor marks on the wrist consistent with being handcuffed and/or minor marks or abrasions to portions of the body consistent with prone handcuffing);

B. The subject claims an injury resulted from a use of force, even if no injury is visible (with the exception of minor marks on the wrist consistent with being handcuffed and/or minor marks or abrasions to portions of the body consistent with prone handcuffing);

C. All applications of a Lateral Neck Restraint (Level I and Level 11);

D. All applications of a Conducted Energy Weapon (e.g. TASER™);

E. The intentional discharge of firearms (with the exception of training or recreation);

F. Intentional Pointing of a Firearm - When the officer is intentionally "pointed in" (the muzzle is covering the subject) with their firearm, with the intent to use the firearm in defense of themselves or another;

G. Any deployment of OC by means of spray or by means of physically or mechanically delivered techniques where a person is exposed to the substance;
H. Any deployment of CS by means of a spray or by means of physically or mechanically delivered techniques where a person is exposed to the substance;
I. Any application of an impact weapon whether personal, issued or improvised to a subject;
J. Any canine deployment where a reportable contact has occurred; and
K. When an individual alleges any of the above has occurred.

Under SPD’s policy the use of any weapon is a reportable use of force regardless of whether the subject was injured or not. This is consistent with policies from other agencies in the Police Force Analysis Network℠. SPD’s policy regarding the reporting of physical uses of force is more limited than other agencies in the Network. Most agencies require officer to report on any physical force that was used to overcome any level of resistance. This would include pulling a resistant subject’s arms back for handcuffing, the use of joint manipulation and pain compliance techniques, physical strikes, pushes and takedowns, using body weight to hold a subject to the ground and wrestling with a subject. SPD officers are not required to report these types of physical force techniques unless the subject is injured or complains of an injury.

Most uses of force by police officers involve only physical force and often these are low levels of force that do not result in an injury. Since SPD does not report on these types of force incidents, the Department’s use of force statistics cannot be compared with other agencies in the Network. In order to conduct a thorough analysis of use of force incidents, it is necessary to capture data on all types of force including low level physical force. Under current policies SPD has about 108 reportable use of force incidents each year. If all types of force incidents were recorded like other agencies in the Network do, we estimate that there would be 300 to 400 reportable incidents each year. If all force incidents were identified we could make meaningful comparisons with the other agencies in the Network and the Department would have a more comprehensive database that could be used for risk management, training and policy development.
**Recommendation:** We recommend that SPD begin identifying all incidents involving physical force that officers use to overcome subject resistance. It is not necessary for the Department to enter data from these incidents into their IAPro/BlueTeam system. Instead, all that is required is to flag these cases so they can be sent to Police Strategies LLC for data extraction and coding. These incidents will then be added to the SPD PFAS system.
1) Date, Time and Location of Use of Force Incidents

Over the last six years 241 Spokane police officers used force a total of 1,024 times during 645 incidents. Each incident involves one subject who had force used against them. On average there were 108 use of force incidents each year.

There is some seasonal pattern in uses of force with more incidents occurring in the summer months. The highest number of force incidents occurred in July 2013 (21 incidents) and the lowest number of force incidents in any given month is 4. Uses of force occur more frequently earlier in the week from Sunday to Thursday and are lowest on Fridays and Saturdays.

There is pattern with the time that force incidents occur. Use of force incidents begin ramping up from noon to 4pm and then there is a decline for one hour. They ramp up again from 5pm to 8pm and then there is another decline for one hour. A final ramp up occurs from 9pm to midnight. The hour with the highest number of incidents is between 11pm and midnight. After midnight the numbers decline until 2am when there is another peak. The high number of incidents between 2am and 3am may be due to late night businesses closing. Other hourly patterns may be cause by shift or deployment changes and/or variations in calls for service.

Most use of force incidents occurred on the street (40%) or at a residence (42%). Only 12% of incidents were associated with a business and 5% occurred at a park or a medical facility.

Two-thirds of the use of force incidents arose from a dispatched call for service while 14% were the result of an officer-initiated stop. In 19% of the incidents the officers who responded to assist other officers were the only officers who used force. Some of these incidents involved SPD officers responding to assist other jurisdictions.

A violent crime was the most common call type for force incidents (40%) followed by property crime calls (18%).
Locations of Use of Force Incidents

Heat Map of Use of Force Incidents
2) Force Frequency

Over the last six years 241 Spokane police officers used force a total of 1,024 times during 645 incidents. On average there were 108 use of force incidents each year.

One officer used force 53 times and another officer 40 times over the six-year period and together they were involved in 14% of all the force incidents for the Department. Both officers are canine handlers and most of their uses of force involved canine bites. Over the last six years, four officers used force between 20 and 28 times each. Altogether the six officers who used force the most frequently made up 2.5% of the 241 officers who used force but accounted for 18% of all the force that was used. There were 127 officers who only used force once or twice during the last six years.

3) Force Justification

The Force Justification Score is based upon the four Graham Factors: (1) the seriousness of the crime being investigated; (2) the level of threat to the officer or others; (3) the level of resistance; and (4) whether the subject fled from the officer. Low Justification Scores are indicative of incidents where subjects were not committing serious crimes, did not pose a significant threat to the officer or others, did not present a high level of resistance and did not flee.

Over the last six years, 13% of Spokane’s use of force incidents had low Force Justification scores (<6). The average Force Justification score was 10.7 on a scale of 0 to 20. For each of the four Graham factors, Spokane scored highest in the resistance level and the crime level categories and lowest in the flight level category. This indicates that when Spokane officers use force, they are facing more serious crimes and higher levels of resistance, but subjects are not very likely to flee from officers.

Fourteen percent of incidents received the highest Force Justification score of 20. Most of these cases involved assaults on the officers before the officer made the decision to use force.
In the last six years 75 officers were involved in at least one incident with a low Force Justification score and 23 of these officers were involved in more than one low Force Justification incident. Four officers were involved in 5 or 6 incidents and all were canine officers. It is common to have a low Force Justification score when the only force used is a canine bite. This is because the subject is often hiding from officers, only passively resisting, does not present an immediate threat and does not actively flee from officers.

Low Force Justification incidents were more likely to have the following characteristics than cases with higher Force Justification scores:

- Subject has a mental health issue (37%) or is suicidal (24%)
- No charges were referred for prosecution (28%).

Average Force Justification Scores are not significantly different by gender or age of the subject. Asian subjects had lower Force Justification scores than other racial groups while Native American subjects had the highest scores.

Officers were less likely to use only weapons during a low Force Justification incident and were less likely to use physical strikes as well.

4) **Force Factor**

The Force Factor Score is based upon the proportionality of force to resistance and scores can range from -6 to +6. A negative score means that the subject’s resistance level was higher than the officers’ force level. A medium Force Factor Score is between 0 and +2. This is the range where most officers are able to gain control of a subject by using force that is at least proportional to the level of resistance or slightly above. A Force Factor of +3 or above is considered a high score. This does not mean that the force was excessive, but these incidents do present a higher risk to the Department.
Over the last six years 15% of use of force incidents had a high Force Factor score (+3 or above). There were 56 incidents that had a +4 Force Factor and no incidents had a score of +5 or +6.

There were 64 officers who were involved in at least one high Force Factor incident and 25 of those officers were involved in multiple incidents over the six-year period. Three canine officers were involved in 9 to 12 high Force Factor incidents each. Canine bites often result in a high Force Factor score because the subject is usually hiding from officers (Level 2 - passive resistance) when they are bitten by the canine (Level 6 - less lethal weapon force) leading to a +4 Force Factor.

The most common Force Factor Score was +1 (29%) followed by +2 (26%) and 0 (24%). These numbers indicate that most officers in the department behave very consistently when faced with a given level of resistance and they tend to use the minimal amount of force necessary to gain compliance.

Almost all the high Force Factor incidents involved the use of a weapon (99%). Canines and ECDs were involved in four out of five high Force Factor incidents.

The table below demonstrates that when high levels of force are used against lower levels of resistance, the subjects are controlled much faster with lower injury rates for officers but higher injury rates for subjects.

<table>
<thead>
<tr>
<th>Force Factor</th>
<th>Low (-1 to -2)</th>
<th>Medium (0 to +2)</th>
<th>High (+3 to +4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject brought under control quickly (within 1 or 2 Force Sequences)</td>
<td>34%</td>
<td>31%</td>
<td>74%</td>
</tr>
<tr>
<td>Subject Injury Rate</td>
<td>61%</td>
<td>80%</td>
<td>93%</td>
</tr>
<tr>
<td>Officer Injury Rate</td>
<td>26%</td>
<td>17%</td>
<td>3%</td>
</tr>
<tr>
<td>Weapon Used by Officer</td>
<td>18%</td>
<td>52%</td>
<td>99%</td>
</tr>
</tbody>
</table>

5) Force Tactics

Of the 645 use of force incidents that occurred over the last six years, 43% involved physical force only, 35% involved only the use of a weapon by officers and 22% involved both physical force and the use of a weapon.
Of the physical tactics that were used, grabbing/pulling/holding was the most common (55%) followed by takedowns (43%).

ECDs (25%) and canines (23%) were the most common weapons used by officers.

In the last six years, 109 officers deployed their ECDs 185 times. Most deployments involved the use of the probe 77% while drive-stun mode was used 11% of the time. In 12% of deployments both probe and drive stun modes were used. The ECD was fully effective 64% of the time and in 22% of deployments it had no effect. There were two officers who deployed their ECDs 7 times during the six-year period and two officers who deployed their weapon 5 times.

Over the last six years officers have used 2,132 individual physical force tactics and weapons. The six-year trends for physical force show that officers wrestling with subjects
and using their body weight to hold subjects down has declined while the use of lateral neck restraints has increased.
The use of ECDs has been increasing from 6.2% of all force tactics in 2013 to 12.7% by 2018. The use of canines and OC have also increased. By 2018 projectile weapons and impact weapons were rarely used.
6) Subjects

The subject demographic groups that are most commonly found in the Department’s use of force incidents have the following characteristics:

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<thead>
<tr>
<th>Race</th>
<th>Gender</th>
<th>Age</th>
<th>Residence</th>
<th>Number of Subjects</th>
<th>Percentage of Force Incidents</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>Male</td>
<td>30-49</td>
<td>Spokane</td>
<td>149</td>
<td>23.3%</td>
</tr>
<tr>
<td>White</td>
<td>Male</td>
<td>18-29</td>
<td>Spokane</td>
<td>117</td>
<td>18.3%</td>
</tr>
<tr>
<td>White</td>
<td>Male</td>
<td>30-49</td>
<td>Transient</td>
<td>31</td>
<td>4.9%</td>
</tr>
<tr>
<td>White</td>
<td>Male</td>
<td>30-49</td>
<td>Another City</td>
<td>31</td>
<td>4.9%</td>
</tr>
<tr>
<td>Black</td>
<td>Male</td>
<td>18-29</td>
<td>Spokane</td>
<td>29</td>
<td>4.5%</td>
</tr>
<tr>
<td>All Other Demographic Groups</td>
<td></td>
<td></td>
<td></td>
<td>288</td>
<td>44.1%</td>
</tr>
</tbody>
</table>

Seventy-three subjects possessed a knife, 23 possessed a firearm and 51 had some other type of weapon.

Most subjects engaged in some type of physical resistance (76%) while 47 subjects used a weapon against the officer during the force incident. Nine percent of subjects were only
passively resisting when force was used, and 7% only made threats to the officer but did not physically resist.

7) Injuries
In the last six years there were 73 officers who were injured a total of 97 times. One officer was injured 6 times and one officer was injured 3 times while 17 officers were injured twice. None of the officer injuries were serious and most involved a complaint of pain only (29%) a minor scrape (52%) or a minor cut (18%). Two officers received some type of fluid or chemical contamination. Officers received about half of their injuries on their hands or arms.

Nine percent of force applications by officers resulted in an injury to the officer who used force. Officers were more likely to get injured when they used physical force only (26% injured) and were least likely to get injured when they used only a weapon (0.4% injured).

Of the officers who were injured, 7% were treated by EMTs and 10% were treated at a hospital.

Over the last six years 519 subjects that had force used against them were injured (76% of all incidents). Of the subjects who were injured, a majority of the injuries were minor: complain only (7%), ECD probe (16%), scrape (18%) or minor cut (18%). The most common type of injury was a canine bite (25%). Forty-two subjects lost consciousness, 22 were shot or killed and 14 received a fracture or broken tooth. Subjects received 39% of their injuries on the head and 33% of injuries were on the torso.

Subjects were most likely to receive an injury during a canine application (95% injured), the use of a firearm (95% injured), an ECD (90% injured), or an impact weapon (88% injured). Of all the physical force techniques used, the following were most likely to injure the subject: wrestling with the subject (86% injured) and pain compliance techniques (83% injured). The use of lateral neck restraint resulted in the lowest injury rate (65% Injured).

Of the all the subjects who were injured, 29% were treated by EMTs only and 56% were treated at a hospital.
8) Trends

Over the period from 2013 to 2018 the following force trends were observed:

- The annual number of force incidents has hovered around 108 with every year above 100 incidents except 2014 with 90 incidents.
- The average Force Justification Scores remained high until 2018 when it dropped to 9.6.
- The average Force Factor Scores remained stable throughout the six-year period indicating that officers consistently used proportional force to resistance.
- By 2018 subjects were less likely to use a less lethal weapon against an officer (0.9% of incidents) and more likely to be physical non-compliant (54% of incidents).

<table>
<thead>
<tr>
<th>Subject/Incident Characteristic</th>
<th>2013</th>
<th>2018</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject had a Mental Health Issue</td>
<td>15%</td>
<td>30%</td>
<td>+100%</td>
</tr>
<tr>
<td>Subject Received Medical Treatment</td>
<td>76%</td>
<td>63%</td>
<td>-17%</td>
</tr>
<tr>
<td>Subject Assaulted Officer During Force</td>
<td>42%</td>
<td>32%</td>
<td>-24%</td>
</tr>
<tr>
<td>Subject Fled from Officers</td>
<td>34%</td>
<td>25%</td>
<td>-26%</td>
</tr>
<tr>
<td>Subject Assaulted Officer Before Force</td>
<td>22%</td>
<td>15%</td>
<td>-32%</td>
</tr>
<tr>
<td>Subject Transported to a Hospital</td>
<td>17%</td>
<td>11%</td>
<td>-35%</td>
</tr>
<tr>
<td>Female Subject</td>
<td>13%</td>
<td>8%</td>
<td>-38%</td>
</tr>
<tr>
<td>Subject Possessed a Knife</td>
<td>16%</td>
<td>6%</td>
<td>-63%</td>
</tr>
<tr>
<td>Subject was Non-Spokane Resident</td>
<td>20%</td>
<td>7%</td>
<td>-65%</td>
</tr>
</tbody>
</table>