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AUTHORS

Corporate Data & Analytics Unit

2024 CPS REPORT

DE-ESCALATION AND USE OF FORCE



**CALGARY
POLICE
SERVICE**

AT A GLANCE

INTRODUCTION

The Calgary Police Service (CPS) is committed to transparency, accountability, and continuous improvement in de-escalation and use of force (DEUoF) policy, training, and practices. Annual reporting is also a requirement under the Alberta Provincial Policing Standards. This report provides a summary of force used by our officers in 2024. It also includes advancements achieved, initiatives in progress and an outline of future work.

Internally, the report informs ongoing organizational learning, the research and adoption of best practices, and response to local and global trends

EXECUTIVE SUMMARY

The volume of officer-public interactions decreased slightly in 2024, both from 2023 and from the 5-year average (by -2%, both). Overall call volume and public calls for service (CFS) volume decreased, and certain crime types (break & enters, theft – including vehicle, and other property crimes) also decreased. These are all factors impacting the annual count of incidents involving force.

Force incidents decreased by -9% from 2023 and by -8% from 5-year average, and deployments of most individual methods of force decreased correspondingly to the overall incident volume decrease. The 818 incidents reported represent officers using force in 0.14% (or one in every 702) officer-public interactions¹.

It is of note to mention 2023 saw the highest counts since the beginning of the Covid pandemic and 2024 is a return to more typical volumes as seen in 2021 and 2022.

De-escalation communication skills and policy compliance continue to be emphasized through training, use of force reporting review and feedback. In 2024, an Officer Safety and Tactics Training Researcher position was added to Chief Crowfoot Learning Centre (CCLC). This position analyzes, assesses and drives improvements and enhancements to the processes the CCLC uses in officer formation, training and performance.

¹ Public contacts are calculated as a sum of (public-generated) dispatched calls for service, on-view calls for service (officer-generated), traffic stops, walk-ins, officer-issued summonses (no automated enforcement) and persons charged. The actual public contact counts are higher than this calculated sum as certain types of in-person officer-public interactions are not quantifiable. See Table 4 for details.

The CPS continues to research and implement equipment improvements with the goal of de-escalating incidents for officers, subjects and overall public safety. Some examples of this include frontline training and equipment of officers with of the Axon Taser® T7 conducted energy weapon (CEW), patrol rifle suppressors and replacing the less lethal extended range impact weapon model. This new technology and corresponding training ensures the CPS is in alignment with best practices.

KEY TRENDS IN 2024 (COMPARED TO 5-YEAR AVERAGE)²

These trends are explored further under Analysis of Selected Methods of Force in this report.

The reported volume of incidents involving police use of force in 2024 saw a decrease compared to previous year, and as compared to the 5-year average. Reductions in deployment are also observed across almost all individual force methods. While the volume of public contacts decreased by -2%, total force incident volume decreased -9%, suggesting a true decrease in officer use of force.

Notable decreases, where the 2024 volumes of use represented a return from a five-year high in 2023 to average or below average counts, were observed in the use of:

- Conducted energy weapons (CEWs) (n₂₀₂₄=162, n₂₀₂₃=211, avg=161)
- Firearm pointed (n₂₀₂₄=23, n₂₀₂₃=32, avg=21)
- Spit mask (n₂₀₂₄=43, n₂₀₂₃=70, avg=73)

Other methods of force also registered volumes lower than in 2023 and from the five-year averages, in particular

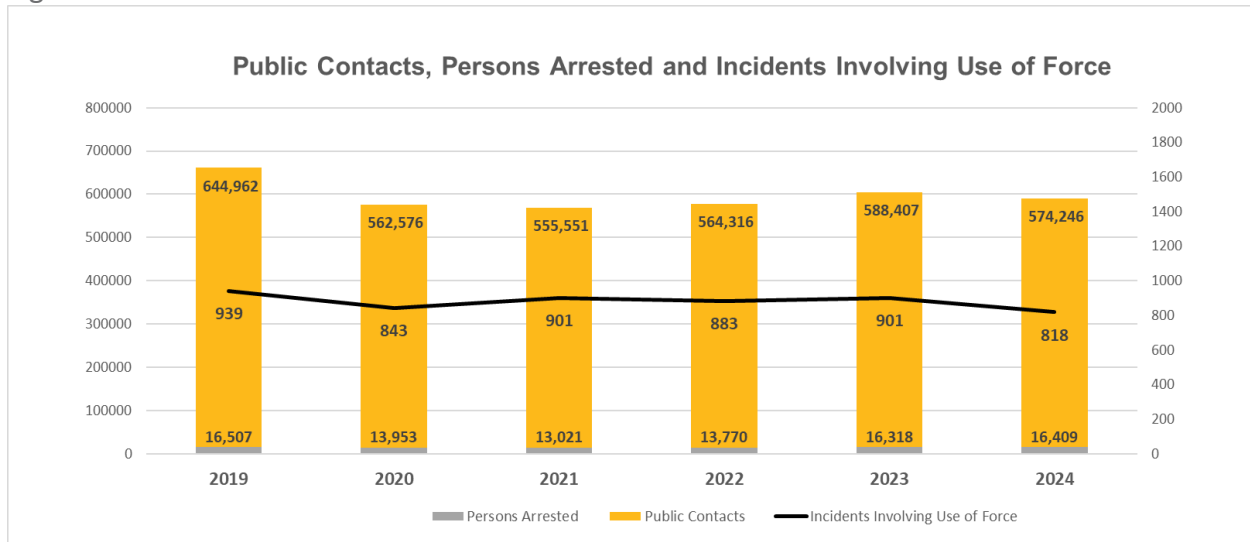
- Dynamic takedowns (n₂₀₂₄=335, n₂₀₂₃=367, avg=265)
- ARWEN®- pointed (n₂₀₂₄=5, n₂₀₂₃=7, avg=11) and ARWEN®- fired (n₂₀₂₄=9, n₂₀₂₃=12, avg=13)
- Other methods³ (n₂₀₂₄=45, n₂₀₂₃=140, avg=88)

² See Table 1 and Table 5.

³ Other methods include techniques such as joint locks, pressure points, weighted force, etc. See Appendix C for a complete glossary of terms and definitions.

ANALYTICAL SUMMARY

Figure 1



Reporting obligations outlined in the CPS DEUoF policy indicate an exhaustive list of force methods for which SBOR⁴ reporting is required. In 2024, approximately 575,000 public contacts⁵ with CPS officers occurred. This represents a slight decrease (-2%) from the 2023 volume, and also from the 5-year average volume. However, it is still the second highest volume since the Covid pandemic. The public contacts decrease is mostly driven by fewer dispatched and walk-in CFS (both are public-generated) and persons charged, which were only partially offset by increases in traffic stops and on-view (officer-generated) CFS and summonses issued.

Force was reported in 818 incidents in 2024, which represents approximately 1 in 702 of the almost 575,000 public contact interactions⁶. As of March 5th, 2025, over 95% of the 818 incidents involving the use of force were already reviewed by the Force Review Officers (FROs) to ensure compliance with training, policies, and SOPs⁷ related to deployment and reporting of force. The remaining 5% of reports are in the review process, to be completed shortly.

The decrease in overall volume and in most individual methods of force correlate with changes observed in volumes of certain CFS types. 2024 saw decreases in calls related to property crimes - break and enters, thefts incl. vehicle theft, and other property crime (both from 2023

⁴ See Appendix B for details regarding reporting requirements. Subject Behaviour/Officer Response (SBOR) is a report designed to capture details of incidents involving officer de-escalation and use of force.

⁵ See Table 8.

⁶ This report presents the counts of incidents where a given method was used, not the counts of officers deploying a specific method. In any incident, more than one method by one or more officers may be used, which means the sum of individual method counts will always be higher than the total incident counts.

⁷ Standard Operating Procedure

and from their 5-year averages). Certain types of disorder decreased from 2023 (disturbances, unwanted guests, mental health concerns, intoxicated persons) but were still higher than average. Violent crimes (including domestic violence), on the contrary, increased from 2023 and also from average – largely driven by increases in assaults and domestic violence⁸.

The elevated dynamics, volatility and often a pronounced violence level in certain calls and public interactions is still present. Crime reporting also shows weapons observed/present (over 14,300 in 2024) and weapons used in the committal of crimes (e.g., firearms, edged weapons and blunt objects), as well as physical force, are encountered frequently.

Figure 2

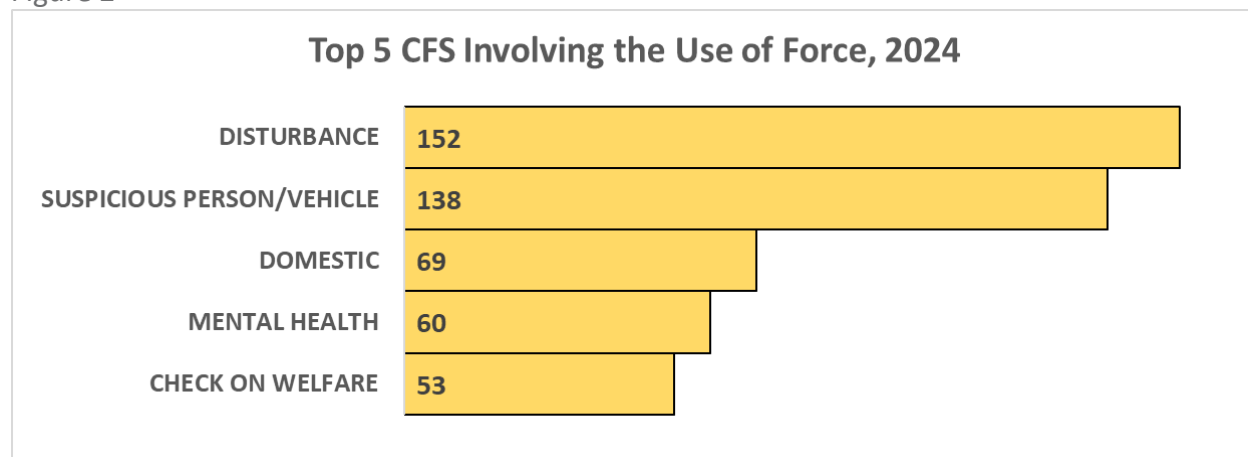


Figure 2 shows a breakdown of the top five call for service (CFS) types resulting in officer force deployment – the majority of these types are consistently the top calls involved in force incidents (disturbances, domestic calls, calls involving suspicious persons and vehicles, mental health calls, assaults). The calls, predominantly public-generated, are calls requiring officers to intervene in emotionally charged and/or volatile situations. These calls often involve persons behaving in an erratic manner that involves or implies violence, typically fueled by alcohol and/or drugs (e.g., methamphetamine, crack cocaine and opioids) and often presenting symptoms of a sudden or ongoing mental health decline.

Data on persons arrested in 2024 shows arrests most frequently occur in relation to assaults, theft, possession of stolen property, break and enters and property mischief; followed by robberies, uttering threats, fraud, resisting/obstructing a peace officer and sexual assaults. The dataset of arrested persons and of force subjects correlate and overlap, and so do their demographics. Additional analysis of force subjects is included in a separate report covering race-based data of force subjects.

⁸ Domestic Violence refers to actual or threatened use of force in an intimate or familial relationship, regardless of age. It may include a single act of violence, or a number of acts forming a pattern of abuse. This may include, but not be limited to any intentional or reckless act that causes injury and/or property damage or intimidates or harms a family member.

ANALYSIS OF SELECTED METHODS OF FORCE

CONDUCTED ENERGY WEAPON (CEW) – TASER 7 MODEL

The CPS has completed the replacement of the discontinued CEW Taser® X26P model with Taser® 7 in 2023. Officer training on the new model was completed throughout 2023 and the X26P model was decommissioned. An analysis of CEW deployments throughout 2024 (Taser 7 model only) was conducted to assess the method’s “effectiveness”, defined as gaining compliance from the subject and aiding in a successful resolution of the incident. The SBOR report does not allow officers to capture the use of force methods in a chronological order, so the analysis reviews the frequency of CEW use (alone or in combination with other methods). The findings suggest that the CEW methods effectively de-escalate volatile situations, and officers often only need to display and/or illuminate (“light-up” the red sight light of) the CEW or conduct a warning arc to defuse the situation.

The deployment of a CEW is an indicator of officer intervention required to resolve an incident in the safest and quickest manner to avoid additional public/subject harm.⁹

In 2024, CEWs were deployed in 165 incidents by a total of 188 officers, representing a volume of use at par with the five-year average of 161 incidents¹⁰ and a return to volumes seen in 2021 and 2022. It was also a 22% decrease from 2023 which saw the highest deployment volume in the past 6 years with 211 incidents¹¹. CEWs have been reported as effective in resolving 76% of the incidents they have been used in.

Table 1

Annual Report	2019	2020	2021	2022	2023	2024	2024 vs 2023	5Yr Avg	2024 vs 5yr Avg	Trend
CONDUCTED ENERGY WEAPON (CEW) USE - INCIDENT COUNT PER METHOD										
Display or Illumination	50	74	84	64	94	68	-27.7%	73	-7.1%	
Warning Arc*	N/A	N/A	N/A	N/A	12	10	N/A	N/A	N/A	
Contact Mode	10	11	17	14	8	10	25.0%	12	-16.7%	
Probes	73	57	62	66	84	77	-8.3%	68	12.6%	
Combination (Contact Mode/Probes)	5	13	21	27	25	16	-36.0%	18	-12.1%	
METHOD COUNT TOTAL	138	155	184	171	223	181	-18.8%	174	3.9%	
INCIDENT COUNT TOTAL	142	139	158	155	211	165	-21.8%	161	2.5%	
OFFICER COUNT TOTAL	158	158	177	172	241	188	-22.0%	181	3.8%	

* The warning arc function became available in 2023 when the CEW model was upgraded and gradually replaced.

⁹ See Table 1

¹⁰ These incidents frequently involve stabbings, slashings, assaults, choking, and other acts of violence.

¹¹ The increase in CEW deployments in 2023 is consistent with increases in most individual methods of force and the overall volume of force incidents in that year – the underlying factors and drivers are explained on page 5.

COMPARISON OF TASER7 USE (2024 DATA) AND TASER X26P USE (2022 DATA)

A comparison of analyzed data for Taser 7 model (reported CEW uses in 2024) and Taser X26P model (2022 reported CEW uses) shows that:

EFFECTIVENESS

- In 2024, CEWs were reported as *effective* in 73% of their deployments and as *not effective* in 17% (partial effectiveness was recorded for 10% of deployments). In 2022, the reported effectiveness was 70% (with “*not effective*” recorded in 17% and *partially effective* in 13% of deployments). This data shows a consistent effectiveness for both models and years.

NON-CONTACT DEPLOYMENT MODES

- Almost one half (45%) of all CEW deployments in 2024 (Taser 7) consisted of only the illumination or displaying a CEW or conducting a warning arc, which means no contact with a person occurred and probes were not released. The warning arc is a new function added in 2023 when the new Taser 7 model was introduced.
- Available data from 2022 deployments of Taser X26P suggests similar outcomes; a CEW illumination or display were effective in 40% of force incidents involving a CEW use.
- The display/illumination/warning arc activation of a CEW in 2024 resolved 5% more force incidents. This suggests both that the display of a CEW is a proven method assisting in resolving incidents, but also that the warning arc is a valuable new functionality of the newer Taser 7 model.

CEW AND OTHER FORCE METHODS

- In 2024, 39% of CEW-involving incidents saw the deployment of only the CEW (as the only reportable force method). In the remaining incidents (61%) the CEW use was accompanied by the use of another force method, most often a dynamic takedown (20%), and/or stuns/strikes (17%), and/or other physical methods (7%). In 2022, this proportion was 50% and 50%, and the additional force methods were the same - dynamic takedowns (31%), stuns/strikes (18%), and other physical methods (7%). This indicates that in most incidents involving the deployment of a CEW, additional force methods are also being deployed; and those methods tend to be the ones above. This is due to the fact the CEW use itself is often times not sufficient to safely apprehend the subject.¹², requiring the use of additional methods of force.

CEW AND TYPES OF CALL FOR SERVICE

- The top five most frequent CFS types involving the use of a CEW are in close alignment with the most frequent CFS types where any method of force was deployed. The call

¹² This could occur for various reasons, such as not achieving a full neuro-muscular incapacitation of the subject, the need to bring the subject to an alternate plane or when a window of opportunity presents to shorten the duration of the force encounter by using additional methods.

types are consistently the same, even if their ranking varies year-over-year: suspicious persons/vehicles (2024: 21%, 2022:10%), disturbances (2024: 16%, 2022: 12%), calls related to mental health (2024: 11%, 2022: 10%), assaults (2024: 9%, 2022: 8%) and domestics (2024: 8%, 2022: 14%).¹³.

CEW USER FEEDBACK

- Feedback received from CEW users (mostly patrol members) suggests the newer Taser7 model has several benefits over the discontinued X26P model. The warning arc feature which is helpful in gaining subject voluntary compliance, the fact the cartridge can be deployed twice (vs. only once with the old model), the wires are insulated and spool out of the cannister, the two lasers (vs one) make it easier to aim, Taser 7 has a better penetrating power (in situations where the subjects is wearing multiple layers or thick clothing), and the cartridges are safer and not prone to static discharge.
- A disadvantage in the feedback was the smaller handle size of the Taser 7 where the larger handle of the X26P was preferred.

¹³ Amongst the most frequent public calls for service are checks on welfare, unwanted guests, domestics, suspicious persons, and disturbances.

ANALYSIS OF FORCE SUBJECTS

FORCE SUBJECT POPULATION

The 2024 dataset includes 818 occurrences involving a total of 834 subjects (one incident involved three subjects, 11 incidents involved two subjects each and 787 incidents involved one force subject). Of the 834 subjects, 812 were identified.¹⁴

- A vast majority of incidents involving force included only one force subject (97%).
- 48 (6%) subjects were repeat subjects, meaning they were involved in more than one incident involving force in 2024.
- 74% of force subjects were male (556), and 23% female (177). The female proportion has shown gradual increases in the last 6 years, from one in seven subjects in 2019 to one in four subjects in 2024. This correlates with female offenders being increasingly involved in certain types of crime (e.g., theft - incl. from stores and from/of vehicles, and break & enters).
- The average force subject was 33 years old; the average male subject was 34 years old – this is consistent with 2023. The average age for female subjects was 31 years, slightly younger than 33 years in 2023.

Table 2

2024 INCIDENTS	SUBJECTS				
818 incidents	834 total subjects:	812 identified: of which	750 were unique:	702 involved once in 2024	
		22 unknown		48 involved more than once:	41 twice 3 three times 3 four times 1 seven times
		812 identified subjects:	787 incidents involved 1 subject		
			11 incidents involved 2 subjects		
			1 incident involved 3 subjects		

Previous findings presented in de-escalation and use of force reports support the general understanding that the force subject population is not directly comparable with the general population. A large majority of force subjects have previous criminal charges, and involvement in a force incident isn't their only interaction with a CPS officer. The repeat involvement of some force subjects (48 persons) in more than one incident involving force within the same year also correlates.

¹⁴ Unknown subjects relate to people who escape from police before they are identified.

It is important to re-iterate the vast majority of interactions between police and the public (99.85%) do not require any use of force. Most people do not experience a use of force encounter – due to the nature of the interaction, and because of their compliance and/or the officer ability to de-escalate the situation and gain voluntary compliance.

FORCE SUBJECT BEHAVIOURS AND IMPAIRMENT

Incidents which eventually require the deployment of some method of force typically involve persons experiencing an elevated level of distress¹⁵, often fueled by alcohol and/or drug intoxication. The subjects are often agitated, assaultive, display unpredictable mood swings, and/or attempt to actively harm or self harm. The incidents are volatile and present a need for a fast and safe de-escalation to prevent further injuries or harm to the subject or others.

- More than a half of subjects (58%) were described as exhibiting symptoms of being intoxicated by either drugs and/or alcohol.
- One in every five subjects in the dataset presented symptoms of emotional distress (19%), although circumstantial evidence suggests that the majority of force subjects officers encounter in situations where they experience some degree of distress, presented most often in the form of agitation, irritability, anxiety, behaviours suggesting a decrease in rational thinking, and other concerning demeanors.
- One in six subjects (18%) appeared neither impaired nor distressed.

¹⁵ Evident from behaviours like physical and verbal aggression, throwing or breaking objects, shouting, crying, and self-harming.

2024 ACHIEVEMENTS & INITIATIVES UNDERWAY

Continuous improvement remains a focus of the Service. To this end, the Chief Crowfoot Learning Centre (CCLC) works to continuously improve our approach to policy, equipment, training delivery, and supporting our members. The CPS' commitment to public trust, transparency, and accountability is reflected in current projects aimed at achieving these goals in the following areas:

Code 700 (Vehicle-Based Tactics - VBT) Policy: A revised Code 700 policy was published in January 2024. This policy was reviewed back-to-back with the Code 600 (Pursuits) policy to ensure they were complementary and consistent. Portions related to tire deflation devices (TDDs) were added and include a definition, how they are included into tactics, safety guidelines to follow and training requirements to be met.

Tire Deflation Devices (TDD): TDD is the newest use of force tool available to officers. It's training and deployment have been strategically developed for the safest and most effective use at CPS. TDD deployment requires Command approval (Real Time Operations Centre) and uses the same threshold as VBT-Advanced. These devices aid in reducing the need for a driving haste to get into position during a mobile event. The Field Training Unit (FTU) is the designated resource for this device and tactics to maintain consistency and the TDD roll-out process. CPS officers started deploying TDD device and tactics in December, only days after it was added to the selection of force methods and saw a first successful deployment.

Vehicle-Based Tactics (VBT): VBT-Advanced certifications and recertifications are delivered by the Field Training Unit, with more classes being scheduled; these courses are delivered mostly during the summer months' "training freeze". Scheduling of this training requires deconflicting with the Recruit Training Program for the training track use, and this is the best way to ensure qualifications are up to date.

Officer Safety and Tactics Training Unit (OSTTU) Researcher: This new position was filled in 2024 with a psychologist specializing in human performance and behaviour. The researcher works with OSTTU on issues related to training, instructor development and optimization of officer performance as it relates to use of force decision-making. A first tangible product of this initiative is an ongoing, first of its kind, look at "training scars". The researcher is working with approx. 180 internationally recognized use of force experts and trainers to create a definition and a taxonomy ("ranking") of the different ways that well intended police training may be resulting in less than desirable outcomes for officers, related to force/performance. Once this study is complete, a research paper on the subject will be completed with a desire to publish in

an open-source medium available for the entire law enforcement profession. The researcher is also working on a project that will allow members to work through self-directed “tactical decision games”, sequenced to enhance decision-making in matters like driving, policy-related matters, investigative matters and use of force.

Less Lethal Program Transition: CPS moved from ARWEN® to 40 mm Alsetex Cougar launchers and Blunt Impact Projectiles. Launchers were procured in 2024 and delivered in November 2024. The Firearms Training Team will provide training on the new platform to both in-Service members, current ARWEN® operators and recruits. Training started in November 2024 and to-date 200 uniform patrol members were trained. More courses will be offered in 2025, starting with two new operator courses and another one tailored to the Airport Unit, as well as delivering the training to police recruits.

Pistol Optics: The pistol optical sights procurement was completed in 2023. In-Service training started in 2023 Q3 and continued throughout 2024 with 9 courses delivered and 90 patrol members trained. Ongoing training is being provide during 2025 until all patrol members are transitioned over, with other- and specialty units to follow. A Service-wide transition is expected to take 2-3 years.

C8 Patrol Rifle with Suppressors: A total of 14 courses with 137 operators were successfully completed in 2024 for this equipment. More courses will be offered throughout 2025, pending budget, facilities and schedule availability. The C8 rifle is an equipment piece assigned under a general issue program (i.e., not individually assigned) to increase the availability across all patrol areas and expand it to Traffic and Airport units.

CEW Taser T7: Almost 1500 members have been trained and transitioned over to the Taser T7 model in 2023, including all frontline members. Additional training was offered in 2024, and weekly drop-in qualifications sessions will continue in 2025 to ensure all members have ample time to train and qualify. Transition courses are offered every 6-8 weeks for members returning to patrol from specialty units. Like the C8 rifles, CEWs are a general issue equipment (i.e., a “pooled resource”) to increase the availability across all patrol areas.

Facility Upgrades: Significant upgrades to the Mat Room were completed in 2024, with an overhaul of the training space, including re-painting and installation of new mats and protective mat “top sheets” as a more hygienic and cost-effective solution. Options to modernize the CCLC training hallway with a new-generation projector technology are examined. This would allow projectors to realistically simulate different environments -such as school hallways, storefronts, spaces with graffiti damage- which would be used to simulate commercial break-ins, school shootings, property damage, noise complaints and other scenarios.

Skills Training: The Subject Control Tactics (SCT) training requires annual requalification for all members. In 2024, members had a choice of selecting between four training modules developed in response to trends and ad-hoc needs. The four modules covered takedowns, handcuffing and searching for plainclothes members, dealing with subject resistance while

either subject or officer are facing up/facing down, and duty to intervene/self regulation. Members also have the option to attend all four modules, should they choose to do so.

SCT training is based in real-world issues CPS officers are facing, and the content and topics are derived by ongoing consultations between OSTTU and Continuous Development and Compliance Unit (CDCU) and Professional Standards Section (PSS) to best capture learnings from actual use of force incidents. This allows OSTTU to take an evidence-based approach to current, real-world issues.

2024 training content for uniform members included managing subjects presenting a high resistance to arrest who are not assaulting police. The plan for 2025 is to continue with this still-relevant content, with a possible addition of scenarios including arrested persons who are actively “tabling” (in a position on the ground on their hands and knees). For plainclothes members, 2024 content focused on handcuffing and searching persons, and characteristics of a person carrying concealed weapons. In 2025, the contents for plainclothes members will be self-directed and will review plainclothes/uniform encounters with an emphasis on plainclothes officer safety.

POCMan (Patrol Officer Casualty Management): Approximately 80% of uniform patrol members now have received the POCMan.¹⁶ training. Six courses were delivered in 2024 for patrol and specialty units and district trainers continue training their respective members as needed. 2025 training plans include continued courses for uniform patrol and specialty units, and more POCMan Trainer courses are also scheduled to increase the number of trainers. The chest seal.¹⁷ training is nearly complete for all trained members; recruits have been receiving this training since 2023.

Organizational Learning: OSTTU continues to work closely with CDCU and PSS to close the loop between training and its “real world” practical applications. Information and updates obtained from CPS Force Review Officer’s experiences at court inquiries (into incidents involving force applications by any policing agency; where he attends in the role of a Canadian subject matter expert) is shared to ensure training, course training standards and lesson plans are current and updated with inquiry recommendations and results of court rulings.

¹⁶ The Patrol Officer Casualty Management training equips officers with skills to provide immediate assistance to injured individuals, stabilize them and ensure proper care before professional EMS personnel can take over. The course covers techniques related to wound, bleeding and airway management.

¹⁷ A chest seal is a type of medical bandage used to treat open chest (mostly deep puncture, such as stab) wounds to prevent air from entering the chest cavity and possibly causing a life-threatening pneumothorax.

APPENDIX A

DETAILED DATA TABLES

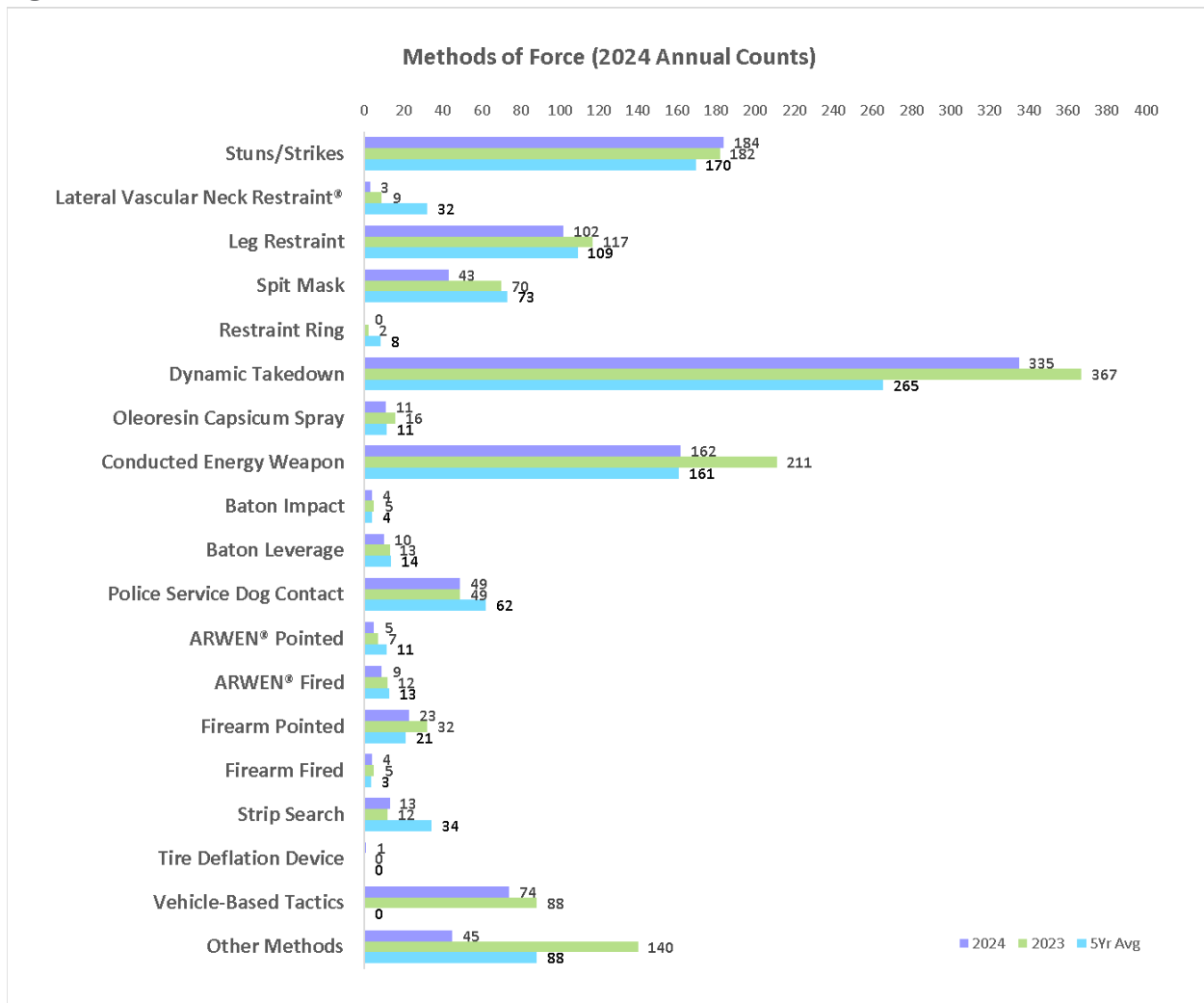
Table 4

Annual Report	2019	2020	2021	2022	2023	2024	2024 vs 2023	5Yr Avg	2024 vs 5yr Avg	Trend
FORCE INCIDENTS										
Incidents Involving Officer Use of Force	939	843	901	883	901	818	-9.2%	893.4	-8.4%	
PUBLIC CONTACTS										
Dispatched CFS	274,886	263,391	260,875	251,197	243,099	220,340	-9.4%	258,690	-14.8%	
On-View CFS	60,811	67,228	57,754	54,737	66,609	70,457	5.8%	61,428	14.7%	
T-Stops and T-Stats	92,052	77,137	80,427	88,221	97,972	110,129	12.4%	87,162	26.4%	
Walk-In CFS	45,815	27,195	30,013	38,797	43,531	29,836	-31.5%	37,070	-19.5%	
Officer-Issued Summonses	144,619	105,404	102,684	105,812	110,715	119,599	8.0%	113,847	5.1%	
Persons Charged	26,779	22,221	23,798	25,552	26,481	23,885	-9.8%	24,966	-4.3%	
TOTAL	644,962	562,576	555,551	564,316	588,407	574,246	-2.4%	583,162	-1.5%	
PROPORTION										
SBOR Reports Submitted to Public Contacts	1 in 687	1 in 667	1 in 617	1 in 639	1 in 653	1 in 702		1 in 653		
Public Contacts Resulting in an SBOR Submission	0.15%	0.15%	0.16%	0.16%	0.15%	0.14%		0.15%		

Table 5

Annual Report	2019	2020	2021	2022	2023	2024	2024 vs 2023	5Yr Avg	2024 vs 5yr Avg	Trend
PHYSICAL CONTROL METHODS										
Stuns/Strikes	197	156	151	162	182	184	1.1%	169.6	8.5%	
Lateral Vascular Neck Restraint®	56	44	40	12	9	3	N/A	32.2	N/A	
Leg Restraint	134	88	103	104	117	102	-12.8%	109.2	-6.6%	
Spit Mask	77	85	63	70	70	43	-38.6%	73.0	-41.1%	
Restraint Ring	22	11	5	1	2	0	-100.0%	8.2	-100.0%	
Dynamic Takedown	214	209	233	304	367	335	-8.7%	265.4	26.2%	
INTERMEDIATE FORCE OPTIONS										
Oleoresin Capsicum Spray	9	9	6	17	16	11	-31.3%	11.4	-3.5%	
Conducted Energy Weapon	142	139	158	155	211	162	-23.2%	161.0	0.6%	
Baton Impact	6	2	4	3	5	4	-20.0%	4.0	0.0%	
Baton Leverage	19	14	13	9	13	10	-23.1%	13.6	-26.5%	
Police Service Dog Contact	93	55	55	58	49	49	0.0%	62.0	-21.0%	
ARWEN® Pointed	18	4	13	15	7	5	-28.6%	11.4	-56.1%	
ARWEN® Fired	20	6	10	15	12	9	-25.0%	12.6	-28.6%	
Firearm Pointed	17	24	12	21	32	23	-28.1%	21.2	8.5%	
Firearm Fired	5	0	3	4	5	4	-20.0%	3.4	17.6%	
OTHER OPTIONS										
Strip Search	89	32	29	10	12	13	8.3%	34.4	-62.2%	
Tire Deflation Device	N/A	N/A	N/A	N/A	N/A	1	N/A	N/A	N/A	
Vehicle-Based Tactics	N/A	65	91	108	88	74	N/A	N/A	N/A	
Other Methods	83	69	69	79	140	45	-67.9%	88.0	-48.9%	

Figure 3



APPENDIX B

REPORTING REQUIREMENTS

CPS DEUoF policy.¹⁸ requires officers to report the use of force by completing an SBOR report by end of shift in every instance, other than training or qualification where officer(s):

- a. apply any empty hand physical force to a subject above the level of handcuffing or low-level pain compliance such as joint locks or pressure points, including but not limited to:
 - i. stuns, punches, strikes or kicks; or
 - ii. leverage or impact (dynamic) takedowns where a person has been taken to the ground;
- b. use a chemical agent when a subject is present (for example, OC spray);
- c. strike a subject with a baton or use a baton as a leverage tool;
- d. use a leg restraint strap;
- e. use a restraint ring;
- f. use a spit mask;
- g. use a police vehicle to intentionally contact an occupied motor vehicle (per the Code 700 (Vehicle-Based Tactics) policy);
- h. deploy a tire deflation device (TDD) (per the Code 700 (Vehicle-Based Tactics) policy);
- i. point, illuminate, conduct a warning arc, or discharge a CEW at a person;
- j. point a firearm, specialty munition or impact munition at a person;
- k. discharge a firearm, specialty munition or impact munition. If using a firearm to dispatch an animal, an Info Post needs to be completed (per the Assistance to Animal Control Officer policy when dispatching an injured animal);
- l. deploy a police service dog and contact occurs;
- m. when force is used on a subject during a forced entry and/or when a subject is injured during a forced entry;
- n. are involved in an unintentional firearm discharge at a Service firearm range or an unintentional discharge of any other Service weapon;
- o. apply force to a subject that results in visible injury, loss of consciousness or medical distress; or
- p. any other use of force that is not an approved tactic but can be articulated in exigent or grievous body harm or death situations.

¹⁸ Source: CPS Policy Development Section; July 2024

APPENDIX C

GLOSSARY OF TERMS AND DEFINITIONS

Conducted energy weapon (CEW): an electronic device designed to physically incapacitate a subject to allow officers to restrain and gain control of the subject. The only CEW authorized for use by CPS members is Taser 7®.

Dynamic takedown: a displacement technique which requires an officer to use a degree of measured force to take a subject from an upright position to the ground to gain lawful control over them. Taking a subject to the ground in a controlled manner lowers the risk of physical harm both to the subject and to the officer.

Extended range impact weapon (ERIW): less-lethal launcher which fires less-lethal rounds of foam, wooden or tear gas payloads. The system includes a launcher and impact munitions (standard, non-irritant, “rubber”) known as projectiles. A Less Lethal Officer is an officer who has received training and has met the standards required to use the ERIW system.

Force: The International Association of Chiefs of Police defines force as the “amount of effort required by police to compel compliance by an unwilling subject”.

Force Review Officer (FRO): a designated CPS officer, assigned to review all reported use of force applications to ensure compliance with policy, relevant legislation, and training standards. The FRO may conduct feedback sessions with officers as necessary.

Joint lock: a grappling technique involving manipulation of subject’s joints in a way that the joints (typically wrists, arms, or knees) reach their maximal degree of motion. These pain compliance holds typically include arm-, leg- and wristlocks and small joint manipulation.

Leg restraint: a device applied to legs or ankles that, just like handcuffs, limits the subject’s movement. It greatly reduces the chance of escape, reduce injury to officers, self-injury to subjects and damage to transportation vehicle. CPS does not apply leg restraint strap in the maximum restraint position.

Lateral Vascular Neck Restraint® (LVNR®): The LVNR® is a method of controlling a resisting subject’s head and utilizing their neck to shift body balance to rear and gain compliance. It can be used standing, kneeling or on the ground. (Not to be confused with a chokehold that affects the respiratory system.) The LVNR® is a technique officers use to control combative individuals

that considers the subject's age and health. CPS officers were trained, certified and periodically re-qualified (mandatory) in the use of LVNR® System until 2022. when the Service discontinued the use of this method.

Oleoresin capsicum (OC) spray: a naturally occurring biodegradable substance used as lachrymatory agent that causes physiological reactions such as involuntary swelling of eyes and of airway mucous membranes in subjects, allowing for easier restraining and gaining compliance.

Other methods: include techniques such as joint locks and pressure points.

Person in crisis: a person experiencing an event that is beyond their ability (or perceived ability) to cope. Their emotions, not their ability to reason, may be controlling their actions.

Police service dog (PSD): PSD deployment is an effective use of force option often deployed in the tracking and subsequent apprehension of subjects fleeing dumped stolen vehicles. In incidents involving a PSD contact, the arrestable subjects failed to comply with officer commands and attempted to evade apprehension despite opportunities to surrender peacefully.

Pressure point: A technique using application of pressure to a subject's sensitive areas of body, e.g. behind the ear, under the nose or jaw, at the collar bone, to gain compliance.

Restraint ring: A restraint ring could be used to control detainee behaviour in person attempting self-harm or displaying precursor behaviours, being combative or violent, damaging CPS property and/or obstructing security cameras in cells; or creating a biohazard situation.

Spit mask: a protective head covering which prevents the transfer of body fluids from one person to another.

Tire deflation device (TDD): a tool that punctures tires, resulting in a controlled deflation.

Unintentional discharge: an inadvertent firing of a service weapon (a firearm, CEW or a less lethal device) for any reason, including user induced and/or mechanical malfunction and/or discharge of a CEW or CEW cartridge due to static electricity and/or due to an undetermined cause.

Vehicle-based tactics (VBT): refers to a range of measures officers can employ to safely apprehend the driver of a motor vehicle. These include prevention and intervention techniques and may include the use of preventative tools or tactics, vehicle disabling devices or an intentional vehicle contact. It is often deployed to avoid police pursuits and/or to prevent escalation of use of force in situations potentially presenting an increased public and officer safety risks.

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AUTHORS

Corporate Data & Analytics Unit

2024 CPS REPORT

ANALYSIS OF RACE DATA OF USE OF FORCE SUBJECTS



**CALGARY
POLICE
SERVICE**

ANALYSIS OF RACE DATA OF USE OF FORCE SUBJECTS

This is the second annual report to examine racial data associated to use of force subjects. The first report was released in 2024 and the findings here are relatively consistent with those found in the previous analysis.

Key Findings

- The proportion of females as subjects of force is increasing.
- The use of force subject population and arrested persons populations are highly correlated, but there is little alignment between the use of force subject population and the general Calgary population.
- Black females are over-represented as subjects of police use of force¹. A focused analysis on this subject population segment revealed 7 of the individual subjects accounted for 46% of all force incidents involving Black female subjects in the six years analyzed (i.e., these subjects had multiple involvements in 2019–2024, ranging from two to eleven). They also amassed over 350 documented interactions with police in the same six years; criminal (mostly assaults, domestics, theft and mischief) and non-criminal (mental health-related, missing persons), suggesting they are high system users.
- Physical methods of force are used more frequently than intermediate methods (across all populations); and 2023 saw the largest volume of physical and intermediate methods used.
- Stuns/strikes, CEWs, and police service dogs contact were methods deployed slightly more towards Black subjects than towards White subjects (CEWs 1.2x more, stuns/strikes 1.1x more, PSD contacts 1.4x more, respectively).

¹ A focused analysis on this subject population segment revealed 7 of the individual subjects accounted for 46% of all force incidents involving Black female subjects in the six years analyzed (i.e., these subjects had multiple involvements in 2019–2024, ranging from two to eleven). They also amassed over 350 documented interactions with police in the same six years; criminal (mostly assaults, domestics, theft and mischief) and non-criminal (mental health-related, missing persons), suggesting they are high system users.

- Indigenous persons are less likely to become force subjects in CFS involving mental health than White persons (4x less) .
- Black persons are more likely to become force subjects in CFS involving disturbances (1.9x more) and assaults (1.5x more) than White persons but less likely to become force subjects in CFS involving mental health (2x less) .

Introduction

The collection and analysis of race-based data (RBD) has become an essential tool for understanding disparities in law enforcement contacts. While police-citizen interactions can occur for many legitimate reasons, evidence consistently shows that certain racialized and Indigenous populations experience disproportionately higher levels of police interactions. Understanding why people come into interactions with the police – and why racialized disparities persist – is essential for creating equitable policing practices.

Police use of force refers to actions taken by officers when enforcing or maintaining order or preserving human life – and involves an array of methods employed, from verbal techniques to the application of force. These applications must adhere to the principles of being necessary, proportionate, and reasonable given the circumstances. All Canadian police agencies are required to collect, assess, analyse, and report² data on use of force incidents, and the CPS has specific guidelines³ for reporting incidents that meet the use of force threshold.

CPS officers and the public enter into 550,000 to 650,000 face-to-face contacts each year. Only 800 to 940 (2019-2024) of these interactions resulted in the application of police force – so only approximately one in every 620 to 700 of public contacts (0.14-0.16%) .

² The CPS continually analyzes officer de-escalation and uses of force; the results of these analyses are summarized in annual reports and available publicly.

³ CPS officers need to adhere to several policy documents related to de-escalation and use of force.

Concepts

The concepts of proportionality and disparity were applied to allow the CPS to identify and monitor indicators of bias and systemic racism.

- Proportionality considers how the use of force subjects compare to a reference population. Often, census data is used, but a reference population can also be derived from a specific sub-set of police interactions, such as “all arrested persons”.
- Disparity refers to a state of *being unequal*. It is used to detect unequal treatment or outcomes experienced by different groups. More specifically, it compares the outcomes between different racial groups within the sub-set of individuals subjected to one or more force methods. A disparity test can help answer questions such as “Is a Black person more or less likely to face force than a White subject?”.

Methodology

This analysis is based on a combination of data collected through SBOR⁴ reporting and in the CPS records management system (RMS – Sentry). The Sentry data is related to incident classification and the personal information of use of force subjects.

In 2020, the Calgary Police Service (CPS) made a commitment to collect and report on race-based data, driven by community consultation, and the belief that true transparency and equity are the foundations of trust. At that time, the Indigenous and Black communities called out for disaggregated data – as such, the racial categories in this report are Black, Indigenous, Racialized⁵, White and Racially Ambiguous.

The analysis of disproportionality and disparity contained in this report is presented through calculated values, where a value of 1.00 represents no disparity. The values are summarized in colour-coded tables. Values above 1.00 suggest a disparity (an “over-representation”) and values below 1.00 suggest a negative disparity (an “under-representation”) of a group or cohort when compared to a base population.

In this report, the base population for calculating disparity was White subject group to identify if disparity with other racial subject groups exists.

⁴ SBOR – Subject Behaviour/ Officer Response form, completed by officers for reporting incidents involving the use of force.

⁵ Persons, whose race/ethnicity is other than Black, Indigenous or White.

AGGREGATE DATA⁶

This report uses aggregate race information data of force subjects (persons subjected to officer use of force). Aggregate data is compiled via data mining and examines the last five years of data for each person, aggregating them into one descriptor. For this report covering 2019–2024, subject records from 2015–2024 were used.

In 2024, force subjects were White (43%), Indigenous (18%), Black (11%), and Racialized (9%).

- The race data in 2024 was Racially Ambiguous⁷ for 15% of subjects, and no race data was collected for another 4% of subjects.

FORCE SUBJECT DEMOGRAPHICS

The Calgary census (“general”) population shows a ~50% males and ~50% females split consistently over time. Figure 1 shows that when compared to the Calgary census population, the force subject population looks quite different. It is disproportionate, in that males are over-represented (2024: 74% of force subjects vs. 50% in general population) and females are under-represented (2024: 23% of force subjects vs 50% in general population).

- Three out of four force subjects (2024: 74%) were male. The proportion of male subjects has decreased slightly over the last six years; in years prior to 2024, males represented close to 80% of subjects.
- The proportion of female subjects has increased in the last four years (2021–2024) and females now represent 23% of all force subjects (2024). In 2019, one in seven subjects was female, this increased to one in five in 2022 (19%) and then to one in four subjects in 2024 (23%).

The increase in the proportion of female use of force subjects corresponds to

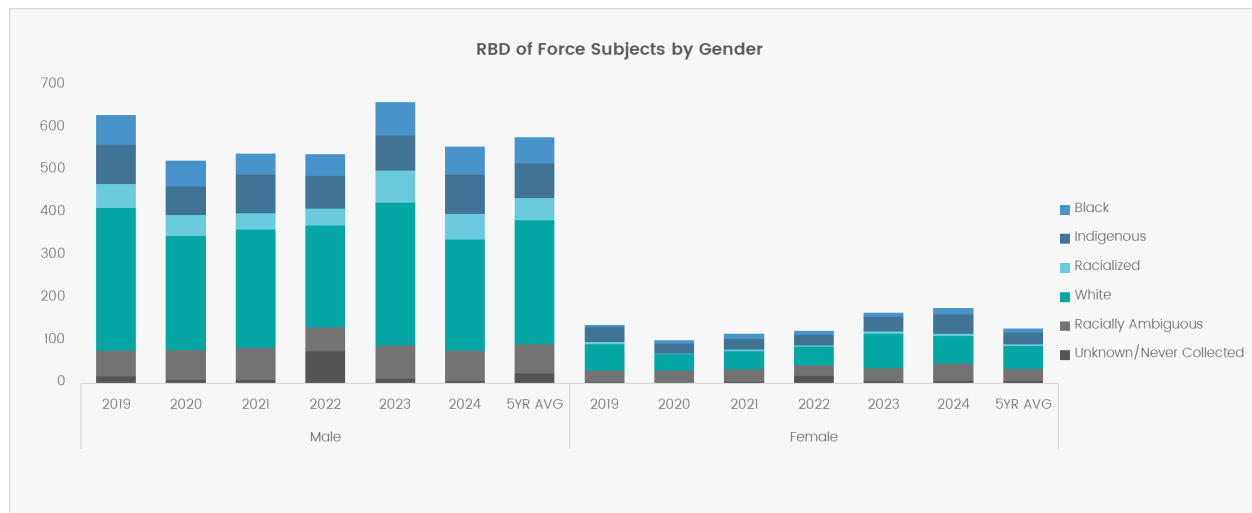
⁶ Race data collection is not mandatory and is often missing from SBOR reports. To correct for missing data, the analysis leverages race data from other records in the Records Management System (Sentry), by data-mining all interactions over the past five years. Data obtained in this manner is referred to as *aggregate* data. *Disaggregated* data, on the contrary, is data collected at the time the occurrence report is submitted.

⁷ Using aggregate data derived from the data-mining approach, many individuals have differing descriptors recorded over time (e.g., White in one record, but Indigenous in another). As a result, the data for those individuals is considered racially ambiguous.

the increasing number of females involved in crime, such as break & enters, stolen vehicles, and retail store thefts.

- For comparison, female arrestees represented 24% of all arrested persons in 2019, 22% in 2022 and 23% in 2024.

Figure 1



Use of Force Review

Policy requires that officers report all use of force incidents. Their reports are reviewed by a subject matter expert and an analyst to ensure adherence to the NRP principles and policy. These reports form the basis for this report as well as informing training standards.

Figure 2 compares race group compositions of the force subjects, the Calgary census population, and arrested persons. While the force subject datasets and Calgary population differ, the force subject and arrested persons datasets are aligned - as they correlate. Since the force subject and arrested persons populations closely correlate, all analyses in this report are based on these two datasets. The comparisons against general Calgary census population are included for illustrative purposes and to visualise how the force subject population is not reflective of the general population.

Figure 2

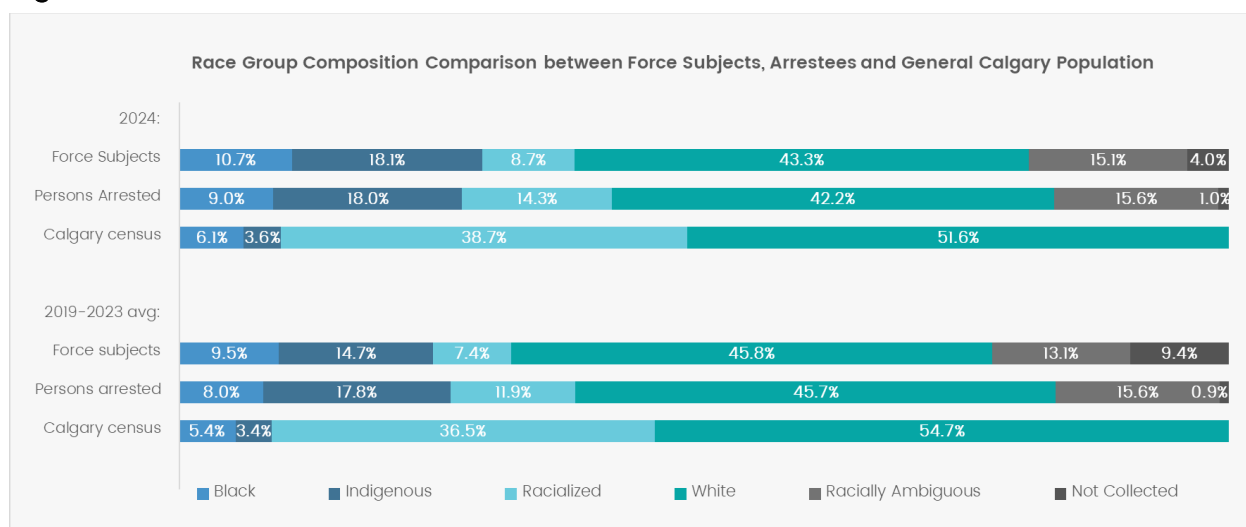


Table 1 breaks down the disproportionality of force subject gender by race group, compared to general population (left half of the table). It shows:

- Indigenous males and females are over-represented.
- Black males and females are over-represented.
- Racialized females and males are under-represented.

These findings suggest that compared to Calgary general population, Indigenous and Black persons are the subject of force more often than what would be proportionate to their general population, and Racialized persons are the subject of force less often than what would be proportionate to their general population in Calgary.

However, when the force subject population is compared to persons arrested by Calgary police officers (“arrested persons”), the disproportionality diminishes. Black, Indigenous and White males are proportionate, and Indigenous females are slightly under-represented. Racialized males and females are under-represented but less than when compared to general population. Black females are over-represented – on average, approx. 1.7 times.

Deeper Dive into Incidents Involving Black Females

A review of case files involving Black females was conducted to assess potential drivers for the over-representation. The review showed the incidents involved individuals acting erratically, who were aggressive and combative, with rapidly escalating behaviours – even prior to police involvement, and who were a danger to themselves and others (e.g., jump out of windows, breaking objects like furniture and glass panes, throwing objects at other people, pouring fuel on themselves).

The disproportionality of force subjects compared to arrestee population can be observed in the right-hand side portion of Table 1.

Table 1

PROPORTIONALITY OF FORCE SUBJECT GENDER														
Compared to Calgary Census Population							Compared to Arrested Persons							
MALES							MALES							
2019	2020	2021	2022	2023	2024	5YR AVG		2019	2020	2021	2022	2023	2024	5YR AVG
2.19	2.16	1.67	1.61	1.99	1.90	1.93	Black	1.24	1.23	1.03	1.03	1.28	1.16	1.17
5.05	4.35	5.55	4.69	4.00	5.24	4.70	Indigenous	0.88	0.89	1.21	1.00	0.82	1.14	0.95
0.26	0.28	0.20	0.21	0.31	0.29	0.26	Racialized	0.72	0.69	0.53	0.56	0.83	0.65	0.67
0.91	0.90	0.92	0.80	0.94	0.88	0.90	White	1.10	1.09	1.06	0.95	1.11	1.09	1.06
FEMALES							FEMALES							
2019	2020	2021	2022	2023	2024	5YR AVG		2019	2020	2021	2022	2023	2024	5YR AVG
0.75	1.71	1.92	1.30	1.03	1.39	1.30	Black	1.03	2.99	2.43	1.53	1.20	1.77	1.70
7.84	6.77	6.09	5.86	5.80	7.07	6.44	Indigenous	0.81	0.83	0.80	0.76	0.70	0.86	0.78
0.10	0.03	0.12	0.04	0.10	0.09	0.08	Racialized	0.62	0.17	0.57	0.22	0.50	0.50	0.44
0.80	0.69	0.66	0.67	0.93	0.71	0.76	White	1.05	0.87	0.89	0.91	1.22	0.93	1.01
							legend:	< 0.5	0.5 - 1.0	1.0 - 1.5	1.5 - 2.0	2.0 and >		

Table 2 examines the gender disparity of Black, Indigenous and Racialized force subjects – that is, whether force was used more or less towards male/female subjects who are Black, Indigenous or Racialized than towards White male/female subjects. The red highlighted areas in the arrested persons comparisons show that in 2024, Black females are over-represented as being subject of police force.

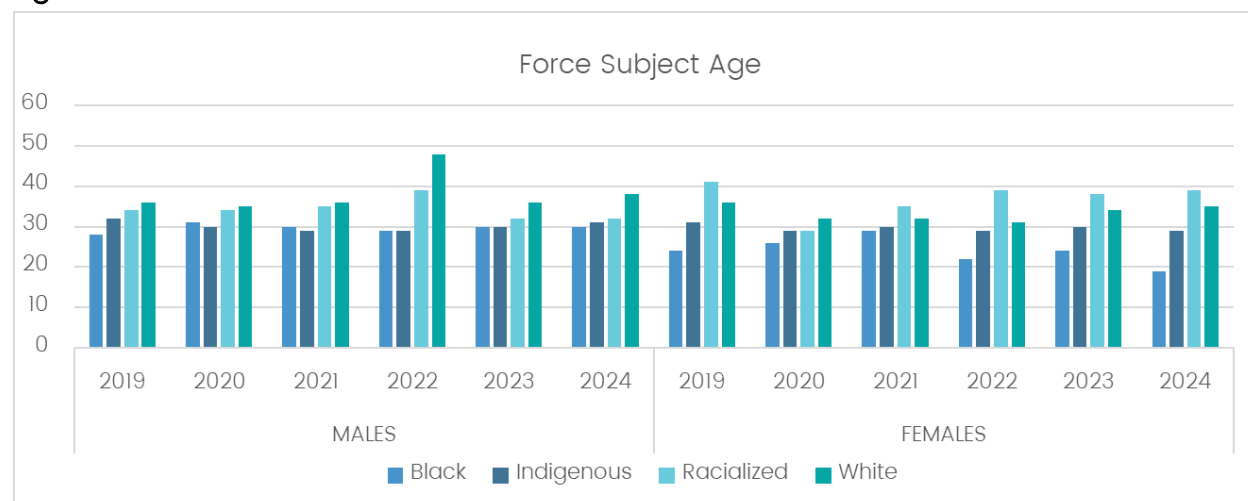
Table 2

DISPARITY OF FORCE SUBJECT GENDER														
Compared to Calgary Census Pop.							Compared to Arrested Persons							
MALES							MALES							
2019	2020	2022	2021	2022	2024	5YR AVG		2019	2020	2021	2022	2023	2024	5YR AVG
2.40	2.41	2.00	1.82	2.00	2.16	2.15	Black	1.12	1.13	0.97	1.09	1.15	1.07	1.09
5.53	4.85	5.84	6.06	5.84	5.94	5.31	Indigenous	0.80	0.82	1.14	1.05	0.74	1.05	0.91
0.29	0.31	0.26	0.22	0.26	0.33	0.28	Racialized	0.65	0.63	0.50	0.59	0.75	0.60	0.62
FEMALES							FEMALES							
2019	2020	2021	2022	2023	2024	5YR AVG		2019	2020	2021	2022	2023	2024	5YR AVG
0.94	2.50	2.90	1.95	1.11	1.96	1.88	Black	0.98	3.43	2.72	1.69	0.98	1.90	1.96
9.84	9.87	9.19	8.79	6.25	9.93	8.79	Indigenous	0.77	0.95	0.90	0.84	0.57	0.92	0.81
0.13	0.04	0.18	0.07	0.10	0.12	0.10	Racialized	0.59	0.20	0.63	0.25	0.41	0.53	0.37
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Subject age (shown in Figure 3) has been quite consistent over the past six years. Black and Indigenous males are the youngest group (30 years old, on average), followed by Racialized males (35 years). White males show the highest average age of 38 years.

Black females tend to be the youngest female category, with an average age of 25, followed by Indigenous and White females (30 and 33 years, respectively). Racialized females tend to be of the highest average age, 36 years, and are also the category with the fewest total counts.

Figure 3



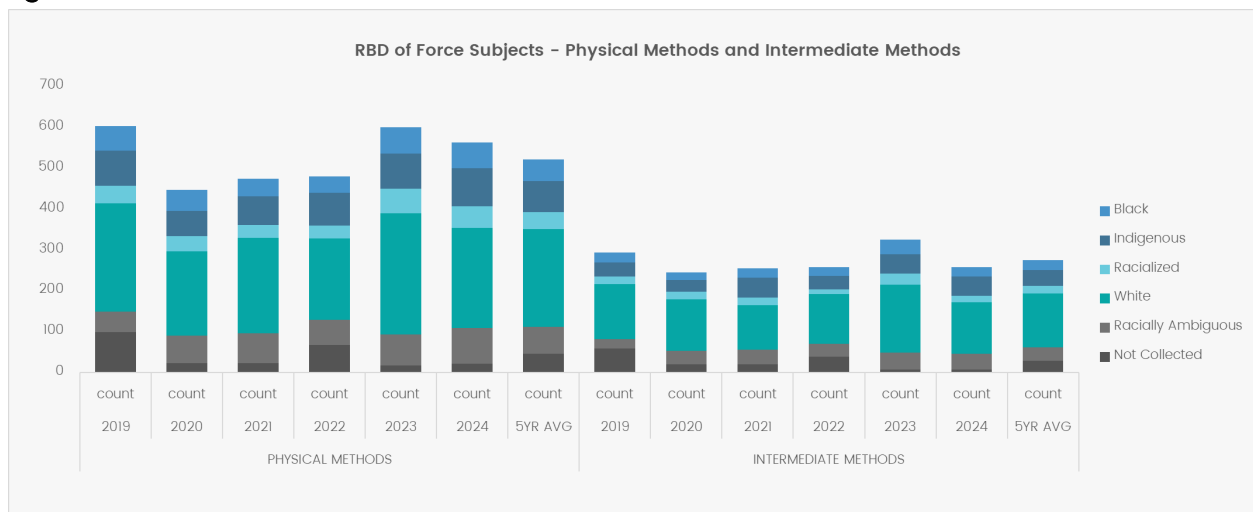
FORCE SUBJECTS AND FORCE METHOD CATEGORIES

For this section of the analysis, individual force methods were grouped into two categories:

- Physical methods – includes stuns/ strikes, dynamic takedowns, LVNR®, leg restraints, spit masks, restraint rings, and other physical methods.
- Intermediate methods – includes batons, OC spray, CEWs, PSDs, ARWEN® and firearms.⁸

Figure 4 presents the force subject count comparisons by race category for both method groups between 2019 and 2024 (including a five-year average) . It shows that physical methods are used more frequently than intermediate methods (across all subjects) , and that in 2023, the highest volume of physical and intermediate methods was deployed.

Figure 4



Proportionality in relation to Physical and Intermediate methods is examined in Table 3, and shows:

When portrayed against arrested persons population (bottom half of the table) , both force method groups, physical and intermediate, were distributed proportionately to

⁸ OC Spray refers to oleoresin capsicum spray, CEW refers to conducted energy weapon, PSD to police service dog contact, and ARWEN® refers to less lethal weapon deployment.

the subject population across racial categories.

- An under-representation is observed for Racialized subjects in both physical and intermediate methods.
- Indigenous subjects in both method groups are under-represented.
- A slight over-representation is seen for Black subjects in physical methods.

Table 3

RBD PROPORTIONALITY COMPARED TO CALGARY CENSUS POPULATION														
PHYSICAL METHODS							INTERMEDIATE METHODS							
2019	2020	2021	2022	2023	2024	5YR AVG		2019	2020	2021	2022	2023	2024	5YR AVG
2.03	2.26	1.68	1.48	1.84	1.83	1.85	Black	1.67	1.43	1.74	1.45	1.88	1.40	1.66
4.38	4.09	4.40	4.86	4.00	4.63	4.33	Indigenous	3.55	3.55	5.52	3.69	4.08	5.06	4.08
0.20	0.24	0.18	0.18	0.27	0.24	0.22	Racialized	0.18	0.22	0.19	0.12	0.22	0.16	0.19
0.77	0.82	0.90	0.77	0.94	0.84	0.84	White	0.81	0.92	0.79	0.87	0.97	0.95	0.87

RBD PROPORTIONALITY COMPARED TO ARRESTED PERSONS														
PHYSICAL METHODS							INTERMEDIATE METHODS							
2019	2020	2021	2022	2023	2024	5YR AVG		2019	2020	2021	2022	2023	2024	5YR AVG
1.30	1.46	1.14	1.04	1.30	1.25	1.25	Black	1.07	0.92	1.18	1.02	1.33	0.95	1.12
0.71	0.80	0.91	0.98	0.77	0.93	0.83	Indigenous	0.57	0.69	1.14	0.75	0.78	1.01	0.78
0.66	0.70	0.53	0.54	0.83	0.66	0.66	Racialized	0.60	0.64	0.57	0.38	0.67	0.43	0.58
0.94	0.99	1.06	0.92	1.11	1.03	1.00	White	0.98	1.10	0.93	1.05	1.15	1.17	1.04

legend	< 0.5	0.5 -	1.0 -	1.5 -	2.0 and
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Disparity of force subject race groups when compared against arrestee population is shown in the bottom half of Table 4, and shows:

- Both physical and intermediate methods of force were used less frequently against Racialized subjects when compared to White subjects.
- Indigenous subjects, for both physical and intermediate methods were less likely to be subjected to physical force or intermediate force methods than White subjects.
- Disparity in the application of physical methods was found for Black subjects. This means that Black subjects were more likely (1.2x more) to be subjected to physical force methods than White subjects. There is no disparity when the intermediate force methods are assessed.

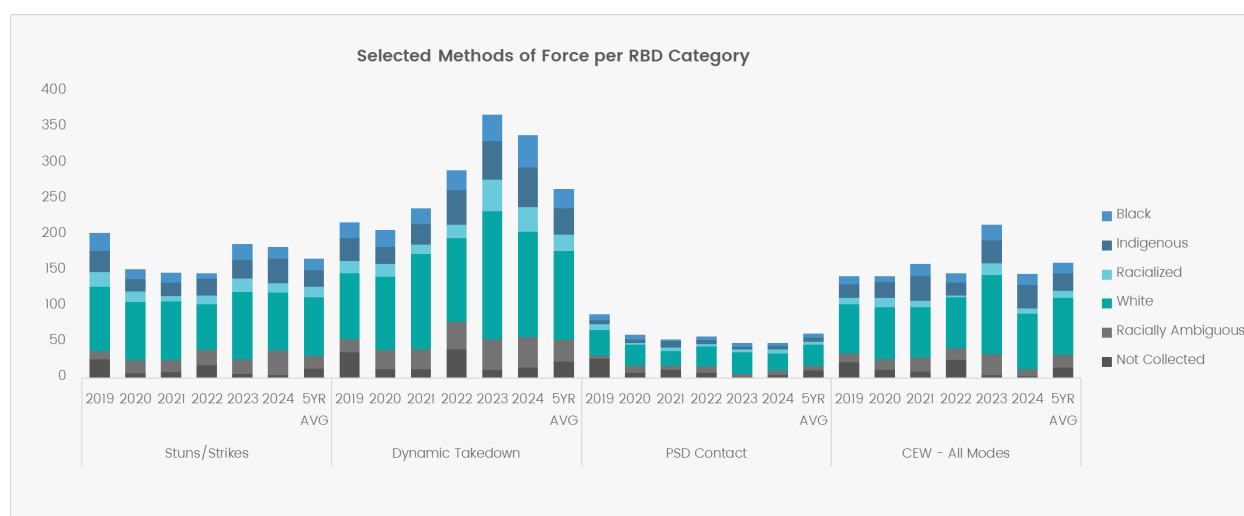
Table 4

RBD DISPARITY COMPARED TO CALGARY CENSUS POP.														
PHYSICAL METHODS								INTERMEDIATE METHODS						
2019	2020	2021	2022	2023	2024	5YR AVG		2019	2020	2021	2022	2023	2024	5YR AVG
2.64	2.73	1.86	1.92	1.97	2.19	2.20	Black	2.06	1.56	2.21	1.65	1.95	1.47	1.90
5.68	4.96	4.88	6.33	4.28	5.53	5.16	Indigenous	4.39	3.88	7.02	4.22	4.22	5.31	4.68
0.26	0.29	0.20	0.23	0.29	0.29	0.26	Racialized	0.23	0.24	0.24	0.14	0.23	0.17	0.22
RBD DISPARITY COMPARED TO ARRESTED PERSONS														
PHYSICAL METHODS								INTERMEDIATE METHODS						
2019	2020	2021	2022	2023	2024	5YR AVG		2019	2020	2021	2022	2023	2024	5YR AVG
1.39	1.47	1.08	1.13	1.17	1.22	1.25	Black	1.09	0.84	1.28	0.97	1.16	0.82	1.07
0.76	0.80	0.86	1.07	0.69	0.91	0.82	Indigenous	0.58	0.63	1.23	0.71	0.68	0.87	0.75
0.71	0.70	0.50	0.59	0.74	0.64	0.66	Racialized	0.61	0.58	0.62	0.36	0.59	0.37	0.55
legend: < 0.5 0.5 - 1.0 1.0 - 1.5 1.5 - 2.0 2.0 and >														

INDIVIDUAL FORCE METHODS

Most methods of force have annual counts too small for statistical analysis, as such, only four methods were selected for an analysis of proportionality and disparity: stuns/strikes, dynamic takedowns, CEW (overall), and PSD contacts. The counts are summarized in Figure 5.

Figure 5



Analysis of these four methods of force (shown in Table 5) found they were deployed relatively proportionately to the arrestee population. A small exception, found to be

consistent across all years analyzed, was that Racialized and Indigenous subjects were somewhat under-represented in all four force methods.

Table 5

PROPORTIONALITY OF FORCE SUBJECT INVOLVEMENT IN SELECTED METHODS OF FORCE													
Compared to Calgary Census Pop.							Compared to Arrested Persons						
STUNS/STRIKES							STUNS/STRIKES						
2019	2020	2021	2022	2023	2024	5YR AVG	2019	2020	2021	2022	2023	2024	5YR AVG
2.90	1.49	1.42	0.85	2.01	1.43	1.68	1.86	0.96	0.97	0.60	1.42	0.98	1.14
4.86	2.79	3.05	4.74	3.93	5.32	3.70	0.79	0.54	0.63	0.96	0.76	1.06	0.70
0.33	0.23	0.10	0.22	0.27	0.18	0.22	1.07	0.67	0.31	0.67	0.83	0.50	0.68
0.87	0.79	0.82	0.82	0.96	0.86	0.82	1.05	0.96	0.96	0.98	1.14	1.05	0.98
DYNAMIC TAKEDOWN							DYNAMIC TAKEDOWN						
2019	2020	2021	2022	2023	2024	5YR AVG	2019	2020	2021	2022	2023	2024	5YR AVG
1.33	1.38	1.20	1.71	1.71	2.18	1.46	0.85	0.89	0.82	1.21	1.21	1.48	0.98
2.90	2.13	2.52	4.77	4.15	4.51	3.25	0.47	0.41	0.52	0.97	0.80	0.90	0.62
0.14	0.15	0.10	0.18	0.31	0.27	0.18	0.47	0.44	0.31	0.54	0.97	0.72	0.55
0.48	0.54	0.72	0.75	0.92	0.84	0.67	0.58	0.65	0.84	0.90	1.10	1.03	0.80
PSD CONTACT							PSD CONTACT						
2019	2020	2021	2022	2023	2024	5YR AVG	2019	2020	2021	2022	2023	2024	5YR AVG
3.34	2.38	1.14	1.53	2.09	1.34	2.12	2.13	1.54	0.77	1.08	1.47	0.91	1.43
3.76	3.06	5.40	2.98	1.73	2.84	3.48	0.61	0.60	1.12	0.60	0.33	0.57	0.66
0.47	0.17	0.28	0.14	0.21	0.32	0.26	1.52	0.50	0.83	0.42	0.66	0.86	0.79
1.29	1.06	0.75	0.90	1.20	0.95	1.07	1.57	1.28	0.88	1.08	1.43	1.16	1.29
CEW - ALL MODES							CEW - ALL MODES						
2019	2020	2021	2022	2023	2024	5YR AVG	2019	2020	2021	2022	2023	2024	5YR AVG
1.55	1.07	2.17	1.58	1.75	1.70	1.82	0.99	0.69	1.48	1.11	1.24	1.16	1.23
4.02	4.56	6.90	3.56	4.23	6.33	5.07	0.65	0.89	1.43	0.72	0.81	1.27	0.97
0.18	0.25	0.17	0.04	0.20	0.12	0.19	0.58	0.74	0.51	0.11	0.61	0.34	0.57
0.84	0.90	0.90	0.92	0.99	1.04	1.00	1.02	1.09	1.05	1.10	1.17	1.28	1.19
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Disparity analysis, which tests for differences in the deployment of individual force methods across racial groups, is summarized in Table 6. It can help answer questions such as “Are Indigenous people more or less likely than White people to be the subject of a PSD contact?”. The analysis found these four methods of force (compared to arrestee population) were deployed relatively equally amongst subjects of all racial groups. Exceptions included:

- All four methods were deployed less towards Racialized subjects than towards White subjects.
- All four force methods were deployed somewhat less towards Indigenous subjects than towards White subjects.

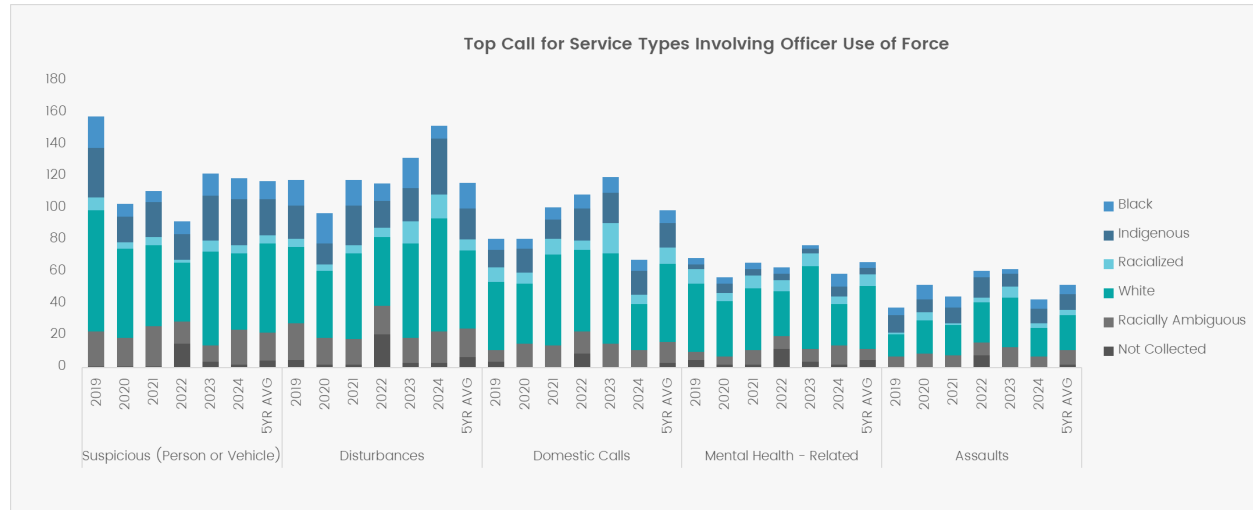
- Dynamic takedowns were deployed slightly more towards Black subjects than towards White subjects (1.2x more).

Table 6

DISPARITY OF FORCE SUBJECT INVOLVEMENT IN SELECTED METHODS OF FORCE														
Compared to Calgary Census Pop.							Compared to CPS Arrestee Pop.							
STUNS/ STRIKES								STUNS/ STRIKES						
2019	2020	2021	2022	2023	2024	5YR AVG		2019	2020	2021	2022	2023	2024	5YR AVG
3.35	1.87	1.73	1.04	2.10	1.67	2.05	Black	1.77	1.01	1.00	0.61	1.25	0.93	1.16
5.62	3.51	3.73	5.80	4.12	6.20	4.50	Indigenous	0.75	0.57	0.66	0.98	0.66	1.02	0.72
0.38	0.29	0.13	0.27	0.28	0.21	0.27	Racialized	1.02	0.71	0.32	0.69	0.73	0.47	0.69
DYNAMIC TAKEDOWN								DYNAMIC TAKEDOWN						
2019	2020	2021	2022	2023	2024	5YR AVG		2019	2020	2021	2022	2023	2024	5YR AVG
2.78	2.55	1.68	2.28	1.85	2.59	2.17	Black	1.46	1.37	0.97	1.34	1.10	1.44	1.23
6.06	3.94	3.51	6.35	4.49	5.37	4.83	Indigenous	0.81	0.64	0.62	1.07	0.73	0.88	0.77
0.30	0.27	0.15	0.23	0.34	0.32	0.27	Racialized	0.80	0.67	0.37	0.60	0.88	0.70	0.68
PSD CONTACT								PSD CONTACT						
2019	2020	2021	2022	2023	2024	5YR AVG		2019	2020	2021	2022	2023	2024	5YR AVG
2.58	2.24	1.52	1.70	1.74	1.41	1.98	Black	1.36	1.21	0.88	1.00	1.03	0.79	1.12
2.91	2.89	7.24	3.32	1.44	2.99	3.24	Indigenous	0.39	0.47	1.27	0.56	0.23	0.49	0.52
0.36	0.16	0.37	0.15	0.18	0.33	0.24	Racialized	0.97	0.39	0.95	0.39	0.46	0.74	0.61
CEW - ALL MODES								CEW - ALL MODES						
2019	2020	2021	2022	2023	2024	5YR AVG		2019	2020	2021	2022	2023	2024	5YR AVG
1.85	1.19	2.43	1.72	1.78	1.63	1.82	Black	0.97	0.64	1.40	1.01	1.06	0.91	1.03
4.80	5.04	7.70	3.87	4.29	6.07	5.08	Indigenous	0.64	0.82	1.35	0.65	0.69	0.99	0.81
0.21	0.28	0.19	0.04	0.20	0.12	0.19	Racialized	0.57	0.68	0.48	0.10	0.52	0.27	0.47
							legend:							
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Figure 6 summarizes the counts and proportions of these five types of CFS where officer use of force was involved.

Figure 6



The disproportionality of race categories is illustrated in Table 7. It shows that when compared to arrested persons population, on average:

- Black subjects of CFS involving force are over-represented in CFS involving disturbances, and under-represented in CFS related to mental health.
- Racialized subjects are under-represented in all five CFS types, especially in calls related to assaults, disturbances, and a suspicious person/vehicle.
- Indigenous subjects are under-represented in calls for service, especially in CFS related to mental health.
- White subjects are over-represented (1.3x) in CFS related to mental health.

Table 7

DISPROPORTIONALITY OF FORCE SUBJECT INVOLVEMENT IN SELECTED CFS TYPES														
							Compared to Arrested Persons							
CFS: Disturbances							CFS: Disturbances							
2019	2020	2021	2020	2023	2024	5YR AVG		2019	2020	2021	2022	2023	2024	5YR AVG
2.77	3.81	2.52	3.81	2.45	0.86	2.59	Black	1.77	0.93	1.71	1.18	1.73	0.59	1.75
5.46	4.02	6.23	4.02	4.50	6.40	4.91	Indigenous	0.88	1.08	1.29	0.86	0.86	1.28	0.94
0.12	0.12	0.12	0.12	0.28	0.26	0.16	Racialized	0.39	0.71	0.35	0.42	0.86	0.69	0.49
0.72	0.78	0.84	0.78	0.85	0.90	0.77	White	0.87	1.01	0.99	0.83	1.01	1.11	0.93
CFS: Domestic							CFS: Domestic							
2019	2020	2021	2022	2023	2024	5YR AVG		2019	2020	2021	2022	2023	2024	5YR AVG
1.77	1.44	1.47	1.47	1.42	1.69	1.51	Black	1.13	0.93	1.00	1.03	1.00	1.15	1.02
4.17	5.56	3.49	5.29	4.48	6.13	4.61	Indigenous	0.67	1.08	0.72	1.07	0.86	1.23	0.88
0.32	0.24	0.27	0.15	0.42	0.23	0.28	Racialized	1.03	0.71	0.81	0.45	1.29	0.62	0.87
0.93	0.84	1.03	0.87	0.90	0.83	0.91	White	1.13	1.01	1.22	1.04	1.07	1.01	1.09
CFS: Suspicious							CFS: Suspicious							
2023	2020	2021	2022	2023	2024	5YR AVG		2019	2020	2021	2022	2023	2024	5YR AVG
1.42	1.51	1.17	1.54	1.96	1.79	2.25	Black	1.65	0.98	0.80	1.09	1.38	1.22	1.52
4.48	4.66	5.83	5.02	6.50	6.77	4.51	Indigenous	0.97	0.91	1.21	1.02	1.25	1.36	0.86
0.42	0.11	0.12	0.06	0.15	0.11	0.22	Racialized	0.47	0.32	0.37	0.18	0.47	0.29	0.68
0.90	0.98	0.84	0.75	0.92	0.78	0.75	White	1.03	1.17	0.99	0.90	1.09	0.96	0.90
CFS: Mental Health							CFS: Mental Health							
2019	2020	2021	2022	2023	2024	5YR AVG		2019	2020	2021	2022	2023	2024	5YR AVG
1.18	1.36	1.12	1.13	0.44	2.23	1.01	Black	0.76	0.88	0.76	0.79	0.31	1.51	0.68
1.33	3.16	1.78	1.83	1.10	2.83	1.77	Indigenous	0.22	0.62	0.37	0.37	0.21	0.57	0.34
0.37	0.25	0.33	0.30	0.27	0.22	0.31	Racialized	1.21	0.72	0.99	0.91	0.85	0.59	0.93
1.10	1.10	1.08	0.83	1.28	0.85	1.08	White	1.33	1.33	1.27	0.99	1.53	1.04	1.30
CFS: Assault							CFS: Assault							
2023	2020	2021	2022	2023	2024	5YR AVG		2019	2020	2021	2022	2023	2024	5YR AVG
0.44	3.36	2.89	1.16	0.83	2.29	1.22	Black	1.72	2.18	1.96	0.82	0.58	1.56	0.82
1.10	4.62	6.54	6.15	3.65	5.82	6.27	Indigenous	1.44	0.90	1.35	1.24	0.70	1.17	1.19
0.27	0.27	0.06	0.13	0.30	0.18	0.13	Racialized	0.24	0.79	0.18	0.40	0.92	0.49	0.41
1.28	0.72	0.77	0.76	0.95	0.81	0.75	White	0.79	0.87	0.91	0.91	1.13	0.99	0.90
legend:								< 0.5	0.5 - 1.0	1.0 - 1.5	1.5 - 2.0	2.0 and >		

Disparity is illustrated in Table 8 and suggests that when force subject population is compared to arrested persons, on average:

- Racialized persons are less likely than White persons to become force subjects in CFS involving suspicious persons/vehicles (3x less), disturbances (2x less) and assaults (2x less).
- Indigenous persons are less likely to become force subjects in CFS involving mental health than White persons (4x less).
- Black persons are more likely to become force subjects in CFS involving disturbances (1.9x more) and suspicious persons (1.2x more) than White persons but less likely to become force subjects in CFS involving mental health (2x less).

Table 8

DISPARITY OF FORCE SUBJECT INVOLVEMENT IN SELECTED CFS TYPES														
Compared to Calgary Census Pop.							Compared to Arrested Persons							
CFS: Disturbances							CFS: Disturbances							
2019	2020	2021	2022	2023	2024	5YR AVG		2019	2020	2021	2022	2023	2024	5YR AVG
3.87	4.90	3.01	2.44	2.89	0.95	3.34	Black	2.04	2.64	1.74	1.43	1.72	0.53	1.89
7.63	5.18	7.45	6.12	5.30	7.07	6.35	Indigenous	1.02	0.84	1.31	1.04	0.86	1.16	1.01
0.17	0.15	0.14	0.20	0.33	0.28	0.21	Racialized	0.45	0.36	0.35	0.51	0.85	0.63	0.53
CFS: Domestic Violence							CFS: Domestic Violence							
2019	2020	2021	2022	2023	2024	5YR AVG		2019	2020	2021	2022	2023	2024	5YR AVG
1.89	4.90	1.42	1.68	1.57	2.05	1.65	Black	1.00	0.92	0.82	0.99	0.93	1.14	0.93
4.46	5.18	3.39	6.07	4.96	7.42	5.04	Indigenous	0.59	1.07	0.60	1.03	0.80	1.22	0.80
0.34	0.15	0.26	0.17	0.46	0.28	0.31	Racialized	0.91	0.70	0.66	0.43	1.20	0.61	0.79
CFS: Suspicious							CFS: Suspicious							
2019	2020	2021	2022	2023	2024	5YR AVG		2019	2020	2021	2022	2023	2024	5YR AVG
3.06	1.55	1.39	2.06	2.13	2.29	2.99	Black	1.61	0.83	0.80	1.21	1.26	1.28	1.17
7.11	4.78	6.94	6.69	7.07	8.67	6.00	Indigenous	0.95	0.77	1.22	1.13	1.14	1.42	1.04
0.17	0.11	0.15	0.08	0.16	0.14	0.29	Racialized	0.46	0.27	0.37	0.20	0.43	0.31	0.36
CFS: Mental Health							CFS: Mental Health							
2019	2020	2021	2022	2023	2024	5YR AVG		2019	2020	2021	2022	2023	2024	5YR AVG
1.08	1.24	1.04	1.36	0.35	2.61	0.93	Black	0.57	0.67	0.60	0.80	0.20	1.45	0.52
1.22	2.87	1.65	2.21	0.86	3.31	1.63	Indigenous	0.16	0.46	0.29	0.37	0.14	0.54	0.26
0.34	0.22	0.31	0.36	0.21	0.26	0.28	Racialized	0.91	0.54	0.78	0.92	0.55	0.57	0.72
CFS: Assault							CFS: Assault							
2019	2020	2021	2022	2023	2024	5YR AVG		2019	2020	2021	2022	2023	2024	5YR AVG
4.15	4.64	3.74	1.52	0.87	2.82	1.63	Black	2.18	2.50	2.16	0.90	0.52	1.57	1.46
13.70	6.38	8.47	8.04	3.84	7.17	8.37	Indigenous	1.82	1.03	1.49	1.36	0.62	1.17	1.17
0.12	0.37	0.08	0.17	0.31	0.22	0.18	Racialized	0.31	0.91	0.20	0.44	0.81	0.49	0.59
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CONCLUDING REMARKS

This report presents the CPS examination of race data pertaining to use of force from 2019–2024. All collected data is based on officer perception of subject race and the data categorization is constrained by the Calgary Police Service's records management system (Sentry).

Limitations also relate to the census data, which is a point-in-time count and does not consider the rapidly changing volume and diversity of Calgary area population nor the number of people who have interactions with CPS officers but do not live in Calgary. The findings here align with other CPS race data analysis that documents over-representation of the Black and Indigenous communities and under-representation of Racialized communities.

The use of force analysis shows the most frequently used methods of force are deployed relatively equally amongst subjects of all racial groups; with only small variation shown in somewhat less towards Racialized and Indigenous subjects and somewhat more towards Black subjects than towards White subjects.

Racialized persons are also less likely to become force subjects in CFS involving suspicious persons/vehicles, disturbances and assaults, and Indigenous persons in CFS involving mental health. Black persons are more likely to become force subjects in disturbances and suspicious persons.

This is an annual report that is shared internally to provide understanding and inform business practice (i.e., training, policy). It is also shared externally to ensure accountability and transparency with the public. As Calgary's diversity increases, an assessment of the "racialized" category will be conducted to see whether the category can be refined to disaggregate other communities.

GLOSSARY OF TERMS AND DEFINITIONS

Force: The International Association of Chiefs of Police defines force as the “amount of effort required by police to compel compliance by an unwilling subject”.

ARWEN®: a non-lethal launcher which fires 37mm non-lethal rounds of foam, wooden or tear gas payloads. CPS used the munition variant ARWEN® AR-1 Impact Baton (i.e., standard, non-irritant, “rubber” munition). ARWEN® represents another option in less-lethal use of force methods.

Conducted Energy Weapon (CEW): an electronic device designed to physically incapacitate a subject to allow officers to restrain and gain control of the subject. The only CEW authorized for use by CPS members is TASER 7®.

Dynamic takedown: a displacement technique which requires an officer to use a degree of measured force to take a subject from an upright position to the ground to gain lawful control over them. Taking a subject to the ground in a controlled manner lowers the risk of physical harm both to the subject and to the officer.

Joint lock: a grappling technique involving manipulation of subject's joints in a way that the joints (typically wrists, arms, or knees) reach their maximal degree of motion. These pain compliance holds typically include arm-, leg- and wristlocks and small joint manipulation.

Leg restraint: a device applied to legs or ankles that, just like handcuffs, limits the subject's movement. It greatly reduces the chance of escape, reduce injury to officers, self-injury to subjects and damage to transportation vehicle. CPS does not apply leg restraint strap in the maximum restraint position. Leg restraints allow a subject to walk only, and with a restricted stride. CPS officers use leg restraints to prevent subjects from kicking out at other persons or at objects/pieces of equipment such as a silent partner inside of a police vehicle or vehicle doors. Applying leg restraints effectively prevents a subject from injuring another person or themselves, as well as from damaging CPS property.

Lateral Vascular Neck Restraint® (LVNR®): The LVNR® is a method of controlling a resisting subject's head and utilizing their neck to shift body balance to rear and gain compliance. It can be used standing, kneeling or on the ground. (Not to be confused with a chokehold that affects the respiratory system.) The LVNR® is a technique officers use to control combative individuals that considers the subject's age and health. CPS officers were trained, certified and periodically re-qualified (mandatory) in the use of LVNR® System until 2022 when the Service discontinued the use of this method.

OC spray: Oleoresin capsicum is a naturally occurring biodegradable substance used as lachrymatory agent that causes physiological reactions such as involuntary swelling of eyes and of airway mucous membranes in subjects, allowing for easier restraining and gaining compliance.

Other methods: include techniques such as joint locks and pressure points.

Police Service Dog (PSD): PSD deployment is an effective use of force option often deployed in the tracking and subsequent apprehension of subjects fleeing dumped stolen vehicles. In incidents involving a PSD contact, the arrestable subjects failed to comply with officer commands and attempted to evade apprehension despite opportunities to surrender peacefully.

Pressure point: A technique using application of pressure to a subject's sensitive areas of body, e.g. behind the ear, under the nose or jaw, at the collar bone, to gain compliance.

Restraint ring: A restraint ring could be used to control detainee behaviour in person attempting self-harm or displaying precursor behaviours, being combative or violent, damaging CPS property and/or obstructing security cameras in cells; or creating a biohazard situation.

Spit mask: a protective head covering which prevents the transfer of body fluids from one person to another.