



2020 RESPONSE TO RESISTANCE ANNUAL ANALYSIS

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Executive Summary

The Training Section conducts an analysis of all incidents of force to reveal patterns or trends that could be predictive, indicate program effectiveness, identify the need for training and equipment and evaluate the need for potential policy revision. The information in this report for 2020 provides transparency, accountability and a benchmark for which we measure our progress as we strive for continual improvement. Highlights of the 2020 Response to Resistance analysis are listed below:

- In 2020, there were 1,624 sworn deputies employed with the Orange County Sheriff's Office, which is an increase of 2.72% from the previous year.
- The agency experienced a 12% decrease in calls per service and more than a 19% decrease in arrests in 2020.
- In 2020, deputies used force 149 times and made 19,280 arrests, which results in force being used in .77% (less than 1%) of arrests.
- Male subjects accounted for 91% and females experienced 9% of all force used. The rate of force reported on male subjects regarding race was statistically consistent with the three previous years. In 2020, the rate of force against white females is below the 4 year average and the rate of force against black females is above the 4 year average.
- The Orange County Sheriff's Office used force on eight juveniles during arrest, which represents just 5% of all use of force incidents. The 8 juveniles who experienced force represents 6.61% of the 121 juveniles arrested.
- There were nine deadly force events in 2020 involving eighteen deputies, which resulted in four subjects being fatally injured. All fatalities were a result of a deputy involved shooting. After analysis, the race and gender of the deputies involved aligned with the demographics of sworn staffing.
- Sectors 2 and 4 each experienced four of the nine deputy involved shootings.
- Physical control (weaponless techniques) remained the most common tactic (44%).
- Chemical agent was used on twenty nine occasions or 18% of all force responses. This included six deployments during crowd control situations.
- There were thirty eight Electronic Control Device deployments which accounted for 23% of force responses.
- Impact weapon usage dropped from twelve events in 2019 to two events in 2020, which is an 83% decrease. Both of the impact weapon uses were weapon fired munitions. No expandable or straight batons were used.
- Non-fatal injuries to subjects decreased by 8%.
- Sector 4, Zone 42 realized more incidents of force than any other zone.
- Tuesdays between 1800-0000 hours was the most common day and time frame for recorded force incidents.

Introduction

The Orange County Sheriff's Office is committed to transparency and accountability in all aspects of use of force, also known as response to resistance. The Orange County Sheriff's Office Training Section conducts an analysis of all response to resistance (RTR) incidents. This continuous, critical self-analysis is completed to reveal patterns or trends that could be predictive, indicate program effectiveness, identify the need for training and equipment and evaluate the need for potential policy revision.

As with all law enforcement agencies within the United States, deputies serving with the Orange County Sheriff's Office are governed by policy, state law and the United States Constitution in regard to using force. Deputies are provided with a framework of guidelines, called the force matrix, to aid in making force decisions. As outlined in the landmark United States Supreme Court case, *Graham vs Conner*, 490 US 386 (1989), Orange County Sheriff's Office deputies must apply the *Objective Reasonableness* standard when using force on a citizen during an arrest, investigatory stop or other seizure of a person.

As part of our commitment to the community we serve, the Orange County Sheriff's Office recognizes our obligation to document, analyze and publicly report data on law enforcement use of force incidents.

The purpose of this Response to Resistance Statistical Analysis Annual Report is to further refine deputy responses in the field with the goal of preventing harm to both citizens and deputies. This report contains summary data intended to track, evaluate, and respond with improvements in law enforcement training and practices as it relates to both deadly and non-deadly use of force.

In this review it is important to note that the statistical figures listed for total response to resistance will differ from the annual numbers of response to resistance. In many cases, more than one deputy is required to respond to a subject offering resistance in order to gain control or more than one type of force is used on the same individual. Additionally, not all response to resistance incidents involve an arrest. Examples of an incident where force was used against an individual who wasn't arrested would include, but not be limited to; persons who were experiencing episodes of mental, psychological, emotional or substance abuse and required to be taken into law enforcement custody or a subject who experienced force and fled from law enforcement and was not apprehended or incidents that resulted in a fatality.

Service Area Size and Population

The Orange County Sheriff's Office serves visitors and residents of Orange County, Florida. Orange County sits in the center of the state and is approximately 1,003 square miles (903 square miles of land and 100 square miles of water). The population density in Orange County is 1,411 residents per square mile. Orange County is the state's fifth most populous county. The number of residents has increased dramatically each year since 2017 with the exception of 2020. According to the 2010 United States Census estimate for 2020, the population of Orange County,

Florida was estimated to be 1,415,260 permanent residents. According to *Florida Demographics by CUBIT*, the predominant race in Orange County, Florida is white (40.0%), Hispanic (31.6%), then black or African American (19.8%). The resident population is split almost exactly with 50.9% female residents and 49.1% male residents. Orange County hosts millions of visitors each year due to the robust tourism industry resulting from its internationally recognized theme park industry. Orlando hosted 72 million visitors in 2017 and 75 million in 2018 and 2019. At the time of this report due to the unprecedented nature of the COVID-19 pandemic and the impact it has had on data used to produce visitor estimates, the 2020 tourism and visitor data was not available.

Sworn Make Up of Agency

In 2020, the Orange County Sheriff's Office employed 1,624 sworn deputies. The number of sworn personnel has increased by 8.77% since 2017. Table 1.0 illustrates the number of sworn deputies each year since 2017. The following is the sworn staffing demographic for the 1,624 deputies employed by the agency in 2020: 981 (60.4%) sworn deputies were white, 220 (13.5%) sworn deputies were black, 355 (21.9%) sworn deputies were Hispanic and 68 (4.2%) sworn deputies were listed as "other race." The Uniform Patrol Division (UPD) maintains the largest number of sworn personnel at 794 (48.8%).

Table 1.0
Sworn Agency Demographics

Agency Demographics	White		Black		Hispanic		Other		Total
	Male	Female	Male	Female	Male	Female	Male	Female	
2017	804 (53.85%)	141 (9.44%)	174 (11.65%)	32 (2.14%)	237 (15.87%)	53 (3.55%)	47 (3.15%)	5 (0.33%)	1,493
2018	818 (53.64%)	144 (9.44%)	172 (11.28%)	34 (2.23%)	251 (16.46%)	52 (3.41%)	48 (3.15%)	6 (0.39%)	1,525
2019	841 (53.19%)	141 (8.92%)	174 (11.01%)	34 (2.15%)	270 (17.08%)	61 (3.86%)	53 (3.35%)	7 (0.44%)	1,581
2020	845 (52.03%)	136 (8.37%)	183 (11.27%)	37 (2.28%)	290 (17.86%)	65 (4.00%)	60 (3.69%)	8 (0.49%)	1,624

Calls for Service, Custodial Situations and Response to Resistance

Two of the many bench marks used to analyze response to resistance frequency is a comparison of the number of force incidents to the number of calls for service and the number of physical arrests. In 2020, deputies used force in 149 times. This figure includes incidents when the subject fled and was not apprehended, was Baker Acted and subsequently not charged with a crime or the force resulted in a fatality. In 2020, the Orange County Sheriff's Office handled 1,133,810 calls for service, which is a 12% decrease from 2019. Therefore the rate of force per call for service was 0.013%.

In 2020, the Orange County Sheriff's Office made 19,280 physical arrests, which is a 19.6% decrease from 2019. This physical arrest figure is defined by someone who was physically taken into custody and delivered to the control of corrections personnel and does not include incidents when the subject fled and was not apprehended, was Baker Acted or the force resulted in a fatality.

In 2020, the rate of force per arrest was 0.77%, which is less than 1% of arrest situations.

The rate of response to resistance per call for service and per arrest has remained consistent from 2017 to 2020. This figure has remained steady despite the fluctuation of resident and visitor population as well as an overall decrease in number of calls for service and arrests in 2020.

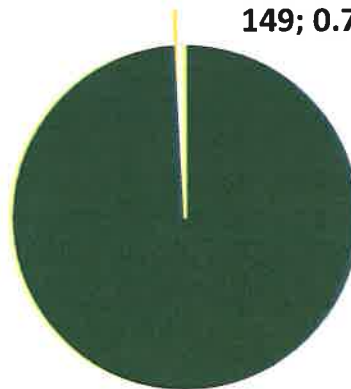
Table 2.0
Response to Resistance Incidences per Call for Service and Arrest

	2017	2018	2019	2020	4 Year Average
Annual Calls for Service	1,248,873	1,261,632	1,289,236	1,133,810	1,233,388
Annual Arrests	26,610	27,318	23,994	19,280	24,301
Annual RTR Incidents	197	191	187	149	181
% of RTR Incidents/Call for Service	0.016%	0.015%	0.015%	0.013%	0.014%
% of RTR Incidents/Arrest	0.74%	0.70%	0.78%	0.77%	0.74%

2020 RTR Incidents vs. Total Arrests

Total Arrests: 19,280

149; 0.77%



■ Annual RTR Incidents

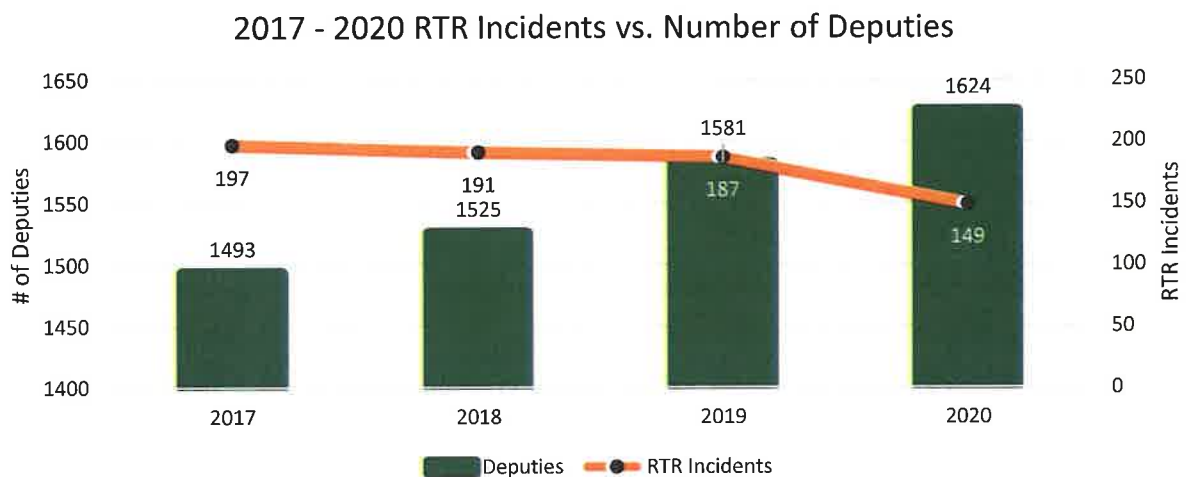
Application of Force per Deputy

Another benchmark used to measure the prevalence of force is to determine the ratio of the number of sworn personnel and the number of force incidents. In 2020, there were 1,624 deputies employed by the agency. In that same year, force was used 149 times, which is a ratio of 0.092. There was a 2.71% increase in sworn staffing from 2019 to 2020, however, the number of force incidents decreased by 20.32%. When comparing the data from 2017 to 2020, the ratio

of force used compared to the number of sworn deputies has declined significantly despite the steady increase of sworn personnel in that same time period.

Table 3.0
Application of Force per Deputy

	2017	2018	2019	2020
Response to Resistance Incidents	197	191	187	149
Total # of Deputies	1,493	1,525	1,581	1,624
Force/Deputy Ratio	0.132	0.125	0.118	0.092



Response to Resistance regarding Gender, Race and Age

An important component of a use of force review includes an analysis and understanding of the frequency of force used against individuals within a community in regard to their gender, race and age, also known as demographics.

Historically, male subjects have accounted for the vast majority of incidents in which deputies have had to use force and comparatively males represent the majority of persons arrested in regard to gender.

This report also analyzes the frequency of which force was used against different races of citizens. This analysis includes the three most common races: white, black and Hispanic, as well as an “other” category¹.

¹ Individuals listed as “other” were not taken into custody and race could not be confirmed. All “other” races were documented as males.

In 2020, there were similar findings regarding the frequency of force by gender. Force was used on a total of 149 persons². Of those persons who experienced force, 135 (90.6%) were male subjects compared to 14 (9.4%) female subjects. Of the male subjects, 42 (31.1%) were white, 56 (41.5%) were black, 31 (23.0%) were Hispanic and 6 (4.4%) were considered “other” race. Of the female subjects, 2 (14.3%) were white, 8 (57.1%) were black and 4 (28.6%) were Hispanic. In regard to gender and race, the 2020 statistics were consistent with the 4-year average figures.

In regard to female use of force statistics, due to the low occurrence rate, there is no significant statistical conclusion.

Table 4.0
Total Agency Custodial Arrests

	White		Black		Hispanic		Other		Total
	Male	Female	Male	Female	Male	Female	Male	Female	
2017	23.97% (6378)	9.65% (2567)	33.78% (8990)	8.52% (2268)	19.40% (5162)	4.57% (1217)	0.07% (18)	0.04% (10)	26,610
2018	21.79% (5953)	9.26% (2530)	34.46% (9413)	9.39% (2566)	20.19% (5516)	4.77% (1302)	0.11% (31)	0.03% (7)	27,318
2019	20.66% (4956)	8.22% (1973)	35.63% (8548)	9.58% (2298)	20.33% (4878)	5.42% (1300)	0.12% (28)	0.05% (13)	23,994
2020	19.64% (3786)	8.74% (1685)	35.63% (6870)	9.39% (1811)	21.28% (4102)	5.11% (986)	0.16% (30)	0.05% (10)	19,280
Total	21.68% (21073)	9.01% (8755)	34.79% (33821)	9.20% (8943)	20.22% (19658)	4.94% (4805)	0.11% (107)	0.04% (40)	97,202

Table 4.1
Total Force Utilized against Subjects by Gender and Race

	White		Black		Hispanic		Other		Total
	Male	Female	Male	Female	Male	Female	Male	Female	
2017	37 (18.8%)	6 (3.0%)	87 (44.2%)	8 (4.1%)	50 (25.4%)	8 (4.1%)	1 (.5%)	0 (0%)	197
2018	46 (24.1%)	6 (3.1%)	81 (42.4%)	8 (4.2%)	45 (23.6%)	3 (1.6%)	2 (1.0%)	0 (0%)	191
2019	56 (29.9%)	7 (3.7%)	61 (32.6%)	11 (5.9%)	43 (23.0%)	7 (3.7%)	2 (1.0%)	0 (0%)	187
2020	42 (28.2%)	2 (1.3%)	56 (37.6%)	8 (5.4%)	31 (20.8%)	4 (2.7%)	6 (4.0%)	0 (0%)	149
Total	181 (25.0%)	21 (2.9%)	285 (39.4%)	35 (4.8%)	169 (23.3%)	22 (3.0%)	11 (1.5%)	0 (0%)	724

² In previous annual use of force analysis reports, the numbers listed for force against persons only included force incidents during an arrest. In an attempt to be as accurate as possible, the 2020 report includes all situations to include: arrests, Baker Act, subjects who successfully fled and were not charged and incidents that resulted in fatalities. Additionally as seen in tables 2.0 and 3.0, the 2020 report retroactively re-calculated the number of force incidents to include all force situations rather than just force incidents during arrest.

Table 4.2
Application of Force on Males

	White Males	Black Males	Hispanic Males	Other & Unknown Males	Total
2017	21.1% (37)	49.7% (87)	28.6% (50)	0.6% (1)	175
2018	26.4% (46)	46.6% (81)	25.9% (45)	1.1% (2)	174
2019	34.6% (56)	37.7% (61)	26.5% (43)	1.2% (2)	162
2020	31.1% (42)	41.5% (56)	23.0% (31)	4.4% (6)	135
4 Year Average	28.02% (181)	44.12% (285)	26.16% (169)	1.70% (11)	646

Table 4.3
Application of Force on Females

	White Females	Black Females	Hispanic Females	Other Females	Total
2017	27.3% (6)	36.4% (8)	36.4% (8)	0.0% (0)	22
2018	35.3% (6)	47.1% (8)	17.6% (3)	0.0% (0)	17
2019	28.0% (7)	44.0% (11)	28.0% (7)	0.0% (0)	25
2020	14.3% (2)	57.1% (8)	28.6% (4)	0.0% (0)	14
4 Year Average	26.92% (21)	44.87% (35)	28.21% (22)	0.00% (0)	78

In 2019, the Orange County Sheriff's Office arrested 316 juveniles. In 2020, the agency arrested 121 juveniles, which is a decrease of 62%. A primary objective of the Orange County Sheriff's Office in 2020 was to reduce the number of juveniles³ physically arrested. In 2020, the Orange County Sheriff's Office revised the Juvenile Civil Citation program and expanded its use. As demonstrated in Figure 4.4, in 2020, the Orange County Sheriff's Office responded to resistance on 8 juvenile subjects, which is 5.4% of the total force incidents (149). The 8 juveniles who experienced force represents 6.61% of all juveniles' arrested (121) in 2020. The number of juveniles arrested decrease significantly in 2020 and those incidents involving response to resistance remained very low. Prior to 2019, Use of Force or Response to Resistance incidents were not differentiated based on age in statistical records.

³ Juveniles are classified as individuals 17 years of age or under.

Figure 4.4
Application of Force Comparison: Adults and Juveniles

2020	White		Black		Hispanic		Other		2020 Adult/Juvenile Response to Resistance Breakdown
	Male	Female	Male	Female	Male	Female	Male	Female	
Adult	39	2	53	6	31	4	0	0	141
Juvenile	3	0	3	2	0	0	0	0	8
Total	42	2	56	8	31	4	0	0	149

Juvenile Arrest vs. Force	2019	2020
Juvenile Arrests	316	121
Juvenile (RTR)	9	8
% of RTR per Juvenile Arrest	2.85%	6.61%
Total RTR (Includes adult and Juvenile)	187	149
% of RTR utilized on a Juvenile	4.81%	5.37%

Application of Force by Type

Use of force, also known as response to subject resistance, is governed by Orange County Sheriff's Office General Order 8.1.0, Florida State Statute 776 as well as the United States Constitution. One of the objectives of the Response to Resistance General Order is to clearly outline when deputies are required to complete a Response to Resistance Form subsequent to the application of certain force events. When force is needed, deputies must assess and continuously evaluate each incident to determine which use of force option and tactic(s) would best bring the incident under control in a safe, prudent and reasonable manner, based on applicable law, policy, training, experience and subject or situational factors. The Orange County Sheriff's Office provides deputies with a Response to Resistance Matrix. By its very nature, the force matrix is designed to provide guidance on proportional force options based on a subject's resistance while considering situational and subject factors. The Orange County Sheriff's Office Accreditations Unit captures the data on all response to resistance incidents documented on the Response to Resistance Form and records a variety of information, to include the type of force used for statistical analysis and interpretation. The types of force recorded are separated into 6 categories (Firearm discharge, Electronic Control Device (ECD) Discharge, baton, chemical agent/Oleoresin Capsicum (OC) discharge, weaponless/physical force and Canine (K9) bite). Force used on an animal is not included (i.e. vicious dog, injured deer). It should also be noted there could be numerous types of force used in one incident and subsequently documented on a single Response to Resistance Form. For instance, in 2020 there were 163 types of force used on a total of 149 subjects. This report's analysis on force is separated into two categories: Deadly force and non-deadly force.

Use of Non-Deadly Force

From a law enforcement administrator's perspective, non-deadly force techniques are expected and predicted to be more frequent since deputies are trained to use force progressively along a proportional continuum. The Orange County Sheriff's Office uses a Response to Resistance Matrix (Appendix A) to provide a framework of guidelines to deputies when using force. Weaponless force is consistently the most common type of force used in response to resistance each year. Another affiliated finding with these statistics is that deputies use "hands on" techniques more frequently than intermediate weapons and rarely use lethal weapons, such as firearms. Weaponless force, or physical force, is defined as all types of force not listed in another category. It may include, but not be limited to; empty hand and control techniques such as takedowns, transporters, pain/mechanical compliance, strikes, and blocks. In addition to weaponless force options, the Orange County Sheriff's Office provides each deputy with a host of less lethal or intermediate weapons to include: a Chemical Agent Individual Protection Device (IPD), an expandable baton and an Electronic Control Device (ECD). Certain select and specially trained members are provided with less lethal shotguns that utilize a flexible baton munition. The use of these intermediate weapons have remained statistically consistent from year-to-year other than the exceptions noted below.

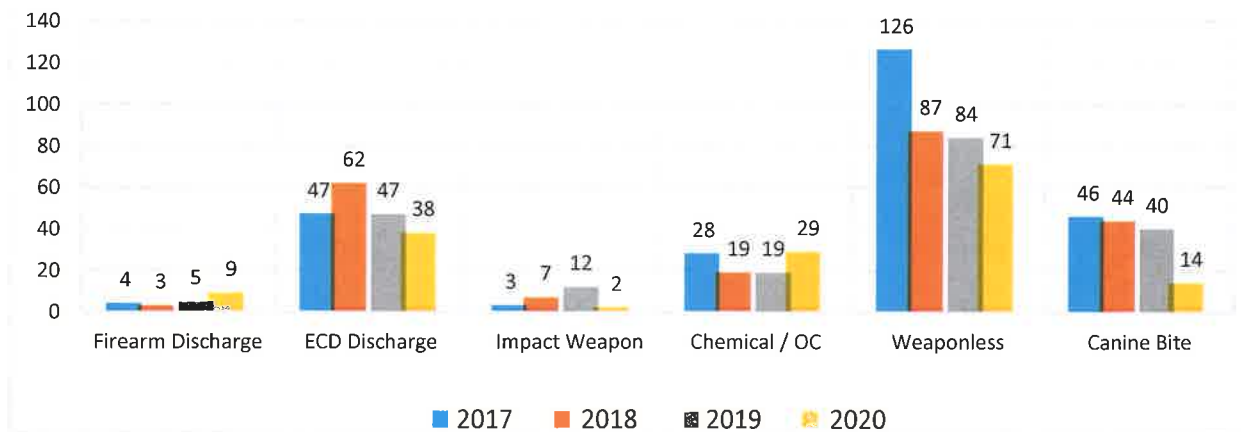
- Of the force used in a four year period, deputies used weaponless force nearly 44% of the time resistance was encountered. In 2020, weaponless physical force continued to be the most common type of force used with seventy-one reported incidents which is 43.6% of all force used.
- ECD deployments dropped from forty-seven in 2019 to thirty-eight in 2020, which was a 19.2% decrease. The ECD accounted for 23.3% of all incidents of force used in 2020. This is consistent with the 4 year ECD rate average of 22.9%. For statistical purposes, the numbers represented in this report do not include unintentional discharges, to include the pre-shift functionality test, also known as the "spark test." This category only records intentional ECD deployments or an unintentional discharge during a subject encounter.
- In 2020, deputies utilized chemical agent on twenty-nine occasions, which is 17.8% of all force responses. Of the twenty-nine chemical agent deployments, twenty-three were Individual Protection Device (IPD) Oleoresin Capsicum (OC) deployments and six hand held grenade deployments conducted under the control of the Emergency Response Team (ERT) Commander for crowd control during protests. This is an increase from 2019 when chemical agent was deployed nineteen times and is above the 4 year average rate of chemical agent use.
- The rate of impact weapon use dropped significantly in 2020, from twelve in 2019 to two in 2020. This is an 83% decrease. The two incidents involved weapon fired flexible baton

munitions and there were no documented incidents involving an expandable or straight handle baton⁴. There are no identifiable factors that can be attributed to this decline.

Table 5.0
Types of Force Used

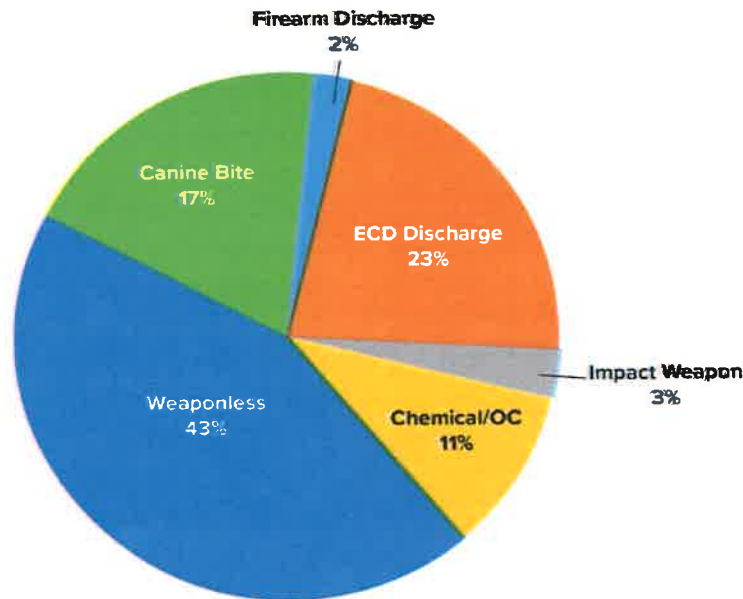
	2017	(254)	2018	(222)	2019	(207)	2020	(4)	Total	(846)
Firearms Discharge	1.57%	(4)	1.35%	(3)	2.42%	(5)	5.52%	(9)	2.48%	(21)
ECD Discharge	18.50%	(47)	27.93%	(62)	22.71%	(47)	23.31%	(38)	22.93%	(194)
Impact Weapon	1.18%	(3)	3.15%	(7)	5.80%	(12)	1.23%	(2)	2.84%	(24)
Chemical/OC Agent	11.02%	(28)	8.56%	(19)	9.18%	(19)	17.79%	(29)	11.23%	(95)
Weaponless	49.61%	(126)	39.19%	(87)	40.58%	(84)	43.56%	(71)	43.50%	(368)
Canine (K9) Bite	18.11%	(46)	19.82%	(44)	19.32%	(40)	8.59%	(14)	17.02%	(144)

Types of Force Used



⁴ In 2018, the agency began recording the impact munition use in this category where it had previously been recorded separately.

TYPES OF FORCE USED: 4 YEAR AVERAGE



Deadly Force Overview

Each deadly force incident requires individual analysis and thorough investigation. The Orange County Sheriff's Office provides every sworn deputy with response to resistance training annually which includes de-escalation strategies. In the annual de-escalation training, techniques are discussed such as utilizing time, distance, cover, communication, less lethal weapons and back-up, to prevent the need of lethal force. Force Science Institute defines De-escalation as a range of integrated strategies and tactics used by deputies to lower the intensity of potentially volatile situations with the aim to reduce the necessity or level of force required for successful resolution while ensuring officer and public safety is optimized. Deputies are reminded to use de-escalation techniques, when practical and when responding to all incidents. This includes critical incidents where the subject is reported to be armed, under the influence of drugs or alcohol, or is mentally or emotionally unstable.

From 2017 to 2020, there were twenty-one deadly force events involving forty-nine deputies. In 2020, there were nine deadly force events involving eighteen deputies with four subjects being fatally injured. Of the 149 force incidents in 2020, the nine deadly force events accounted for 6.04%. The number of deadly force incidents is an 80% increase from 2019 and is above the four year average of 5.25%. All of the deadly force events in 2020 were the result of Deputy Involved Shootings (DIS) versus other types of lethal force. Of the four subjects fatally injured in 2020, three (75%) were black males and one (25%) was a white female.

Table 6.0
Four Year Trend of Deadly Force Encounters

	2017	2018	2019	2020	Total
Total	4	3	5	9	21

Table 6.1
Characteristics (Race/Gender/Ethnicity) of Deadly Force Encounters

Year	White		Black		Hispanic		Other		Total
	Male	Female	Male	Female	Male	Female	Male	Female	
2017	0	0	3	0	1	0	0	0	4
2018	2	0	1	0	0	0	0	0	3
2019	1	0	2	0	2	0	0	0	5
2020	2	1	4	0	2	0	0	0	9
Total Encounters	5	1	10	0	5	0	0	0	21
Total Fatal Injuries	4.8% (1)	4.8% (1)	28.6% (6)	0.0%	9.6% (2)	0.0%	0.0%	0.0%	47.7% (10)

Table 6.2
Characteristics (Race/Gender/Ethnicity) of Subjects Receiving Fatal Injuries

Year	White		Black		Hispanic		Other		Total
	Male	Female	Male	Female	Male	Female	Male	Female	
2017	0	0	2	0	0	0	0	0	2
2018	1	0	1	0	0	0	0	0	2
2019	0	0	0	0	2	0	0	0	2
2020	0	1	3	0	0	0	0	0	4
Total	1	1	6	0	2	0	0	0	10

The predominant race of deputies involved in shootings during the past four years have been white. Of the forty-nine DISs between 2017 and 2020, thirty-two of the involved deputies (65.3%) have been white. In 2020, of the eighteen deputies involved in DIS events, twelve (66.7%) were white, two (11.1%) were black and four (22.2%) were Hispanic. The race of the agency's 1,624 sworn deputies in 2020 was, 60.4% white, 13.5% black, 21.9% Hispanic and 4.2% listed as "other race." When you compare the race of the deputies involved in deadly force incidents in 2020 to the overall, sworn population based on race, there is a consistent correlation.

Of the forty-nine deputies involved in deadly force events within the last 4 years, five (10.2%) were female, and forty-four (89.8%) were male. In 2020, three (16.7%) of the eighteen deputies involved in deadly force events were female and the remaining fifteen (83.3%) were male. In 2020, of the 1,624 sworn deputies, 15.1% were female and 84.9% were male. Therefore, the

gender ratio of the deputies involved in deadly force incidents in 2020 align with the gender ratio in regard to sworn staffing.

Table 6.3
Characteristics (Race/Gender/Ethnicity) of Deputies Involved in Deadly Force

Year	White		Black		Hispanic		Other		Total
	Male	Female	Male	Female	Male	Female	Male	Female	
2017	5	0	0	0	3	0	0	0	8
2018	6	1	1	0	2	0	0	0	10
2019	7	1	2	0	2	0	1	0	13
2020	10	2	1	1	4	0	0	0	18
Total	28	4	4	1	11	0	1	0	49

Of the twenty-one deadly force events within the last four years, 40.8% of the involved deputies had 1-5 years of experience. In 2020, of the eighteen deputies involved in DIS events, nine (50%) had 1-5 years of service, four (22.2%) deputies had 6-10 years of service, four (22.2%) had 11-19 years of service, and one (5.6%) had more than 20 years of service. In 2020, the average tenure of a deputy involved in a deadly force event remains 1-5 years of tenure.

Table 6.4
Deputy Tenure of Deadly Force Incidents

Year	1-5 Years	6-10 Years	11-19 Years	20+ Years
2017	1	2	3	2
2018	4	3	2	1
2019	6	6	1	0
2020	9	4	4	1
Percentage	40.82%	30.61%	20.41%	8.16%

In reviewing the agency assignment of deputies involved in the forty-nine deadly force encounters from 2017-2020, deputies assigned to the Uniform Patrol Division (UPD) represented over 50% of those involved. High Risk Incident Command (HRIC) is an additional assignment where personnel participate, regardless of Division assignment and report directly to the Operational Services Bureau during their HRIC assignment. HRIC includes the Special Weapons and Tactics Team (SWAT), Hostage Negotiation Team (HNT), Emergency Response Team (ERT), Special Response Team (SRT), Hazardous Device Team (HDT) and Critical Incident Management Team (CIMT). Personnel participating with these entities during deadly force encounters shall be categorized under their HRIC assignment as opposed to their primary duty divisional assignment.

Table 6.5
Division Assignment of Deputy involved in Deadly Force Incidents

Year	Uniform Patrol	Criminal Investigations	Special Operations	Human Resources	Court Services & Communications	Support Services	High Risk Incident Command	Total
2017	3	4	0	0	0	0	1	8
2018	3	2	0	0	0	0	5	10
2019	8	0	2	0	0	0	3	13
2020	12	6	0	0	0	0	0	18
Total	26	12	2	0	0	0	9	49

Geographically, of the twenty-one deadly force incidents between 2017 and 2020, eight (38.1%) occurred in Sector 2, seven (33.3%) occurred in Sector 4. Sector 1 had four (19.1%) and Sector 3 experienced two (9.5%) of the deadly force events. The tourist corridor (sector 5 and 6) did not encounter any deputy involved deadly force incidents within the 4 year period. Specific to 2020, Sectors 2 and 4 each experienced four (44.4% each) deputy involved shootings. Sector 1 experienced one (11.1%). Sectors 3, 5 and 6 did not experience any deadly force events in 2020.

Table 6.6
Geographical Location of Occurrence of Deadly Force

	2017	2018	2019	2020	Total	Percent per Sector
Sector 1	1	1	1	1	4	19.05%
Sector 2	1	0	3	4	8	38.10%
Sector 3	1	0	1	0	2	9.52%
Sector 4	1	2	0	4	7	33.33%
Sector 5	0	0	0	0	0	0.00%
Sector 6	0	0	0	0	0	0.00%
Out of County	0	0	0	0	0	0.00%
Total per Year	4	3	5	9	21	100.00%

Post Critical Incident Review

Subsequent to any incident involving a deputy's use of deadly force, a thorough investigation is conducted. The initial investigation is conducted by the Florida Department of Law Enforcement (FDLE). The findings of the independent investigation are forwarded to the State Attorney's Office for review and determination of charges. If no criminal charges are warranted, the case is turned over to the Orange County Sheriff's Office Professional Standards Section (PSS) for an internal review. In conjunction with this internal review process, the case is also brought before the Tactical Event Review Committee or TERC. The TERC is comprised of the High Risk Incident Commanders (HRIC), the Training Section Captain, additional members of the Training Section, and the Criminal Investigation Division (CID) investigating authority. The Professional Standards

Section will have members in attendance but does not participate in the discussion. The TERC shall review initial facts after receiving a verbal briefing from the Homicide Unit "Shooting Team" to determine if the tactics and techniques used were consistent with agency training. The review may be used as an investigative tool when evaluating the actions of a deputy, to identify future training needs, and to identify effective tactics used in specific incidents. All deputies who were directly involved in a deadly force incident are mandated to attend post-critical incident follow up training and evaluation before being released back to full duty assignment. The Professional Standards Section is responsible for the determination and final disposition on whether a policy violation was committed.

Non-Fatal Injuries to Subjects and Deputies

Over the four year period of review, non-fatal injuries to subjects during a use of force incident decreased from 72 injuries out of 197 events (36.6%) in 2017 to 66 injuries out of 149 incidents (44.3%) in 2020. While the number of injuries were lower in 2020, the rate of injury was higher by 7.7%. However, when comparing 2020 to 2019, there was a significant decrease in both the number of injuries and the rate of injury during force. In 2020, there were 32 fewer injuries and the rate of injury dropped by 8.1%. The criteria for a non-fatal injury to a subject is any injury where the subject was taken to a medical facility for treatment. This could include a subject who simply complains of an injury and requested transport or a subject who was refused admittance by the Orange County Corrections Department Booking and Release Center (BRC) staff and was required to receive hospital medical treatment.

Non-fatal injuries to deputies have decreased steadily over the four-year period of review from 43 in 2017 to 25 in 2020. This is a 41.9% decrease. This decline may be a result of several factors. The number of sworn deputies employed with the agency has increased which offers a faster back-up response time as well as more deputies being present on a scene. De-escalation, communication and scenario training were prioritized over the past four years. The average number of deputies injured over the 4 year period was thirty four, while only twenty five were injured in 2020, which is well below the average. Injuries listed in this document are determined by the reporting deputy notating an injury in the Response to Resistance Form. It is irrespective of completing a First Notice of Injury report and filing a claim with Risk Management Unit.

Table 7.0
Non-Fatal Injuries to Subjects

	2017	2018	2019	2020	Total
Total Use of Force Incidents	197	191	187	149	724
Incidents of Non-Fatal Subject Injury	72 (36.55%)	107 (56.02%)	98 (52.41%)	66 (44.29%)	343 (47.38%)

Table 7.1
Non-Fatal Injuries to Deputies

	2017	2018	2019	2020	Total
Total Use of Force Incidents	197	191	187	149	724
Incidents of Deputy Injury	43 (21.83%)	28 (14.66%)	40 (21.39%)	25 (16.78%)	136 (18.78%)

Application of Force by Day of the Week and Time of Day

Over the last four years, the application of force statistically occurred more frequently on Tuesdays and Sundays than any other day of the week. In 2020, the Orange County Sheriff's Office saw more response to resistance events on Saturdays and Sundays. The application of force also occurred more frequently during evening hours, which for the purpose of this report is defined as 1800-0000 hours. From a statistical perspective over the four year period, resistance is most commonly encountered on Tuesdays between 1800 hours and midnight.

Table 8.0
Use of Force Incidents by Day of Week

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total
2017	31	19	36	24	31	32	24	197
2018	24	26	30	27	34	28	22	191
2019	29	15	31	30	24	23	35	187
2020	32	6	23	17	17	24	30	149
Total	116	66	120	98	106	107	111	724

Table 8.1
Use of Force Incidents by Time of Day

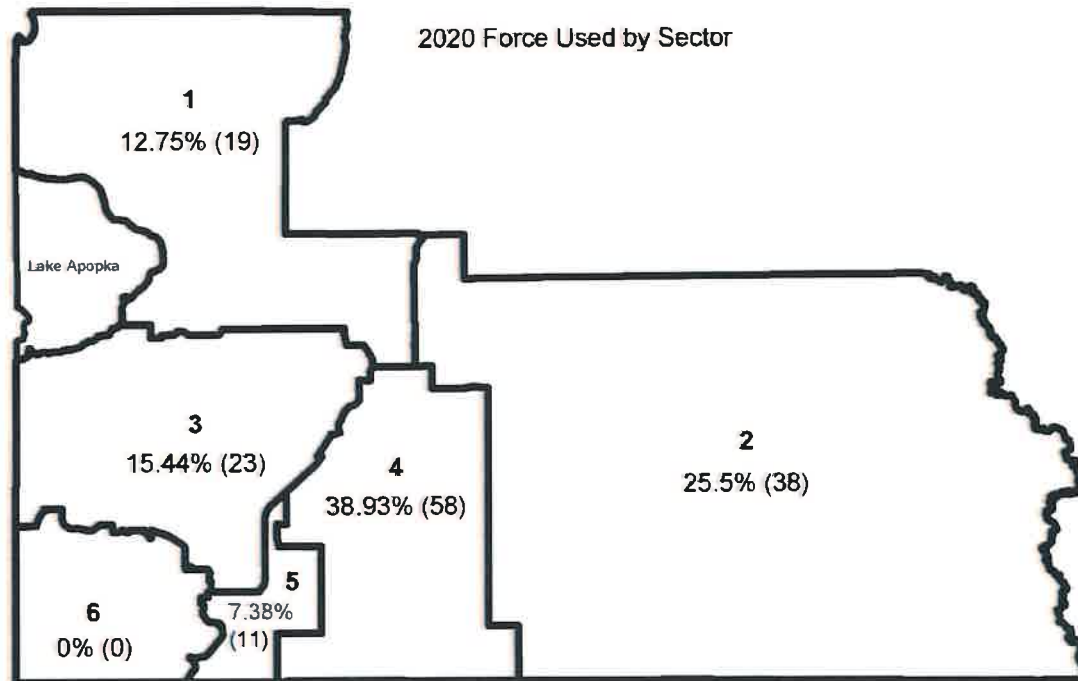
	2017	2018	2019	2020	Total	%
0000-0600	41	54	46	29	170	23.48%
0600-1200	37	23	29	17	106	14.64%
1200-1800	62	51	43	46	202	27.90%
1800-2400	57	63	69	57	246	33.98%
Total	197	191	187	149	724	

Use of Force by Geographical Area

As illustrated in Table 9.0, Sectors 4 and 2 continue to experience the highest incidents of force each year. When averaging the four year total, Sector 4 accounted for 30.9% of all response to resistance incidents followed closely by Sector 2, which accounts for 26.8%. Of the six geographical sectors, Sectors 5 and 6 continue to have vastly lower incidents where force is used.

Table 9.0
Total Use of Force Incidents by Sector

	2017		2018		2019		2020		Total	4 Year %
Sector 1	31	15.74%	31	16.23%	24	12.83%	19	12.75%	105	14.50%
Sector 2	56	28.43%	48	25.13%	52	27.81%	38	25.50%	194	26.80%
Sector 3	43	21.83%	42	21.99%	33	17.65%	23	15.44%	141	19.48%
Sector 4	56	28.43%	52	27.23%	58	31.02%	58	38.93%	224	30.94%
Sector 5	7	3.55%	14	7.33%	15	8.02%	11	7.38%	47	6.49%
Sector 6	4	2.03%	4	2.09%	3	1.60%	0	0.00%	11	1.52%
Out of County	0	0.00%	0	0.00%	2	1.07%	0	0.00%	2	0.28%
Total	197		191		187		149		724	



When analyzing the rate of force at the zone level in 2020, as seen in Table 5.2, Zone 42 in Sector 4 realized more incidents of force than any other zone. Over the 4 year period, Zone 22 in Sector 2 maintains the highest incident of force rate. It is opined that this consistent high rate of force can be attributed to the University of Central Florida (UCF) which has maintained one of the highest “on campus” student enrollment populations in the United States. UCF is located in Sector 2, Zone 22, and the area surrounding the campus has a high density of alcohol

establishments which would correlate to the high rate of force. However, in 2020, it is believed this decreased rate of force is a result of the COVID-19 pandemic and the subsequent cessation of in-person classes and the restrictions placed on the local alcohol service industry.

Table 9.1
Force Used by Sector and Zone in 2020

2020	Zone 0	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Total	%
Sector 1	0	9	2	4	4	0	19	12.75%
Sector 2	4	2	15	0	6	11	38	25.50%
Sector 3	2	0	5	9	7		23	15.44%
Sector 4	1	2	27	13	11	4	58	38.93%
Sector 5	9	2					11	7.38%
Sector 6	0	0	0				0	0.00%
Out of County	0						0	0.00%
Total		• Equals more than 20 in a year					149	

Table 9.2
Force Incidents by Sector and Zone (2017-2020)

2017 - 20	Zone 0	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Total	%
Sector 1	2	27	24	28	22	2	105	14.50%
Sector 2	32	8	83	13	25	33	194	26.80%
Sector 3	18	7	33	37	46		141	19.48%
Sector 4	19	14	73	62	36	20	224	30.94%
Sector 5	39	8					47	6.49%
Sector 6	3	6	2				11	1.52%
Out of County	2						2	0.28%
Total		• Averaging more than 20 in a year					724	

Both Sector 2 and Sector 4 have more personnel assigned to their respective rosters compared to the other four primary sectors. Table 9.3 lists the ratio of force per deputy by comparing the current residential population to the total number of deputies assigned to the corresponding Sector, 1 through 4. For example, when comparing the raw amount of response to resistance incidents between Sectors 1 and 4, Sector 4 had more than three times as many incidents in 2020 than Sector 1. However, when considering the population and number of assigned deputies to the respective sector, the force ratio is actually lower in Sector 4 by less than half when compared to Sector 1.

Based on this analysis, Sectors 2 and 4 constitute the highest frequency of response to resistance incidents each year, however they actually have lower force ratios than Sectors 1 and 3. Sectors 5 and 6 were not included due to the low incidence rates of force as well as insignificant permanent residential population which would skew the data and outcome. The population

values are supplied by the Orange County Sheriff's Office Research and Development Unit and do not include tourists, visitors or residents within incorporated jurisdictions.

Table 9.3
Comparison of Population to Deputy Rate of Force

	Population	Response to Resistance	Deputies	1 UOF per deputy
Sector 1	110,201	19	121	6.37
Sector 2	286,235	38	178	4.68
Sector 3	128,775	23	149	6.48
Sector 4	178,751	58	177	3.05
Total	703,962	138	625	
Average		Above Avg.	Below Avg.	4.53

*Data obtained in December 2020 and does not include Sectors 5 and 6

Training, Equipment and Written Directive Analysis

In 2020, law enforcement faced unprecedented challenges. The global pandemic required the profession to adapt and accept new response tactics and training methodologies. Additionally there were several high profile incidents involving law enforcement that sparked civil unrest and social justice reform movements across the nation. Orange County, Florida experienced several days of large scale protests requiring mobilization of several parts of the agency to include, but not limited to, mobile field force response and activation of the Emergency Operations Center (EOC).

In 2020, training was adversely affected by these events. The guidelines establishing restrictions on person-to-person contact created unparalleled challenges to the ability to provide training. Numerous face-to-face courses were canceled, to include defensive tactics and CPR training. Additional high liability topics, such as firearms training and vehicle operations training were significantly reduced. Training was prioritized to meet minimum certification requirement standards. All non-essential training was moved to virtual means to include remote delivery systems such as PowerDMS. Recognizing the need for focused training, in 2020 the Training Section continued to emphasize de-escalation techniques during citizen encounters. Also in 2020, the Training Section recognized the need for a professionally developed training curriculum regarding fair and impartial, implicit-bias-awareness techniques. After a diligent search, the agency selected Fair and Impartial Policing LLC to certify internal trainers to deliver the Fair and Impartial Training curriculum to the entire sworn population in 2021.

In regard to equipment upgrades in 2020, the Orange County Sheriff's Office completed an upgrade to the Virtra® V-300 simulator. In addition to a complete hardware upgrade we added the V-Author Pro software. This new program software affords the ability to film and create scenarios specific to our agency and location. The agency also completed the transition to the Taser 7 electronic control device (ECD), which is the latest technology of conducted energy

weapon (CEW). Compared to the older model ECD, the Taser 7 improves battery life, and automates auditing. It also contains “signal” technology, to automatically activate any Axon body worn camera (BWC) within a Bluetooth radius of the ECD when activated. The new Taser 7 also affords two cartridge deployment opportunities without the need to reload. In an effort to improve the collection of statistical data as it relates to force, the agency purchased and implemented IA Pro software. This software replaced the manual process of completing and recording use of force incidents. The goal is for the software to provide more accurate and timely review of data for analysis and transparency. In 2020, the Training Section purchased several 9mm handguns with Ruggedized Miniature Reticle optics to begin testing the concept that a smaller caliber handgun coupled with a red dot optic can increase a deputy’s speed and accuracy without compromising field of view and human performance when utilizing a firearm.

In regard to written directive review, in June 2020, Sheriff John W. Mina tasked the Orange County Sheriff's Office Citizen Advisory Committee (CAC) with reviewing the agency’s policy and procedures as it relates to the use of force. The CAC was directed to submit recommendations based on the review of in-depth research on current operations, policies, and training in order to confirm best practices in law enforcement were in place. After a thorough review, the CAC agreed to the following four recommendations:

1. The agency should provide a definition of a chokehold and/or lateral vascular neck restraint and clarify in policy, if and when chokeholds are permitted
2. Include language relating to the duty to intervene and the requirement of supervisory notification in the Response to Resistance policy as opposed to a separate Legal Bulletin.
3. Add de-escalation strategies into training and document de-escalation techniques in policy
4. Place poster sized Response to Resistance Matrix in all training classrooms and issue copies of the matrix to all deputies

In conjunction with the CAC review of the agency’s policy and procedure relating to use of force, the agency formed an internal Use of Force Policy Review Committee. The committee included expertise from various areas within the agency, to include the Training Section, Professional Standards Section, Quality Assurance Section, Uniform Patrol Division and Legal Services. The following is a synopsis of the implemented changes:

1. The terminology and General Order title was changed from the term “use of force” to “response to resistance”
2. To clarify and provide ease of understanding, intermediate weapon policies (i.e. chemical agent and impact weapons), which were previously mentioned in the Response to Resistance General Order, were re-established in stand-alone directives specific to the type of weapon
3. Created and added duty to intervene and de-escalation language to the Response to Resistance General Order, in compliance with the CAC recommendation

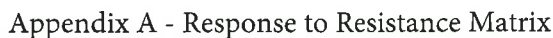
4. Created and added a definition for neck restraint in the Response to Resistance General Order in compliance with the CAC recommendation
5. Revised directives pertaining to rendering aid following the application of force and the discharging of a firearm at a moving vehicle
6. Created and added language requirement for verbal warnings prior to deadly force if possible

Conclusion

The Orange County Sheriff's Office Training Section conducted an annual review of all force and weapon related policies during 2020. All employees who are authorized to utilize any force option, to include Field Service Officers (FSO), Civil Process Officers (CPO) and Court Security Officers (CSO), are required to review the Response to Resistance policy on an annual basis and acknowledge this in PowerDMS. During the annual defensive tactics training, instructors review the Response to Resistance policies with all applicable personnel. Prior to being issued any firearm or authorized weapon, all newly hired deputies (and applicable employees), will complete the requisite training, to include acknowledging receipt of the Response to Resistance and Firearms Policies.

In 2020, the Training Section continued to analyze all incidents of force to reveal patterns or trends that could be predictive, indicate program effectiveness, identify the need for training and equipment and evaluate the need for potential policy revision. The information in this report for 2020 provides transparency, accountability and a benchmark for which we measure our progress as we strive for continual improvement. The two biggest takeaways from this review are sworn staffing has continued to increase while incidents of force have declined.

Moving forward, the Training Section will continue to prioritize skill retention, while incorporating de-escalation techniques and communication skills. We will continue to research, test, and incorporate the latest technologies in both software and equipment to optimize both deputy and community safety.



Levels of Resistance

DEADLY FORCE						6
Incapacitation Intermediate	5					✓
Weapons/ECD	4					✓
Counter Moves						✓
REACT						✓
Pain Compliance						✓
Take Downs						✓
Transporters						✓
Chemical Agent						✓
Restraint Devices						✓
Touch						✓
Verbal Direction						✓
Dialogue						✓
Interview Stance						✓
Presence						✓

RESPONSE LEVELS