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## INTRODUCTION

### *Purpose of the Training Needs Assessment*

The first step of developing an annual training plan includes a needs assessment to identify where gaps exist between organizational or individual-level performance goals and current skill or knowledge levels. The gaps may stem from multiple causes, such as: changes in laws or policy, new equipment, changes in job duties, and the natural perishability of uncommonly used skills. The needs assessment begins the process of deciphering what gaps may be best addressed by training; however, often further processing will be required to fully prioritize the training topics, determine how many training hours are feasible, and identify the best delivery method for the material.

The process of a needs assessment is critical for increasing efficiency in the use of training time and maintaining a more comprehensive view of the training needs, especially in environments where the training needs are vast and compete for allotted training times. The format of needs assessments can vary greatly and can include formal or informal methods of data collection.

This needs assessment focuses on the training needs that are applicable for tenured officers delivered at In-service and Supervisors In-service trainings, although it summarizes new training needs for the Enhanced Crisis Intervention Team In-service training and the Advanced Academy as well. It formalizes the analysis of some data that has been tracked by the Training Division for years. The needs assessment also formalizes the implementation of additional systems to receive further input from In-service attendees and monitors organizational outcomes.

This report focuses on the five core law enforcement disciplines (Control Tactics, Conducted Electronic Weapon, Firearms, Patrol Procedures, and Police Vehicle Operations), re-certification requirements for Oregon law enforcement, training needs pertaining to the DOJ agreement, and the following topics and sources outlined in the DOJ agreement:

- Trends in hazards officers are encountering in performing their duties
- Analysis of officer safety issues
- Misconduct complaints
- Problematic uses of force
- Input from members at all levels of PPB
- Input from the community
- Concerns reflected in court decisions
- Research reflecting best practices
- The latest in law enforcement trends
- Individual precinct needs
- Any changes to Oregon or federal law or PPB policy

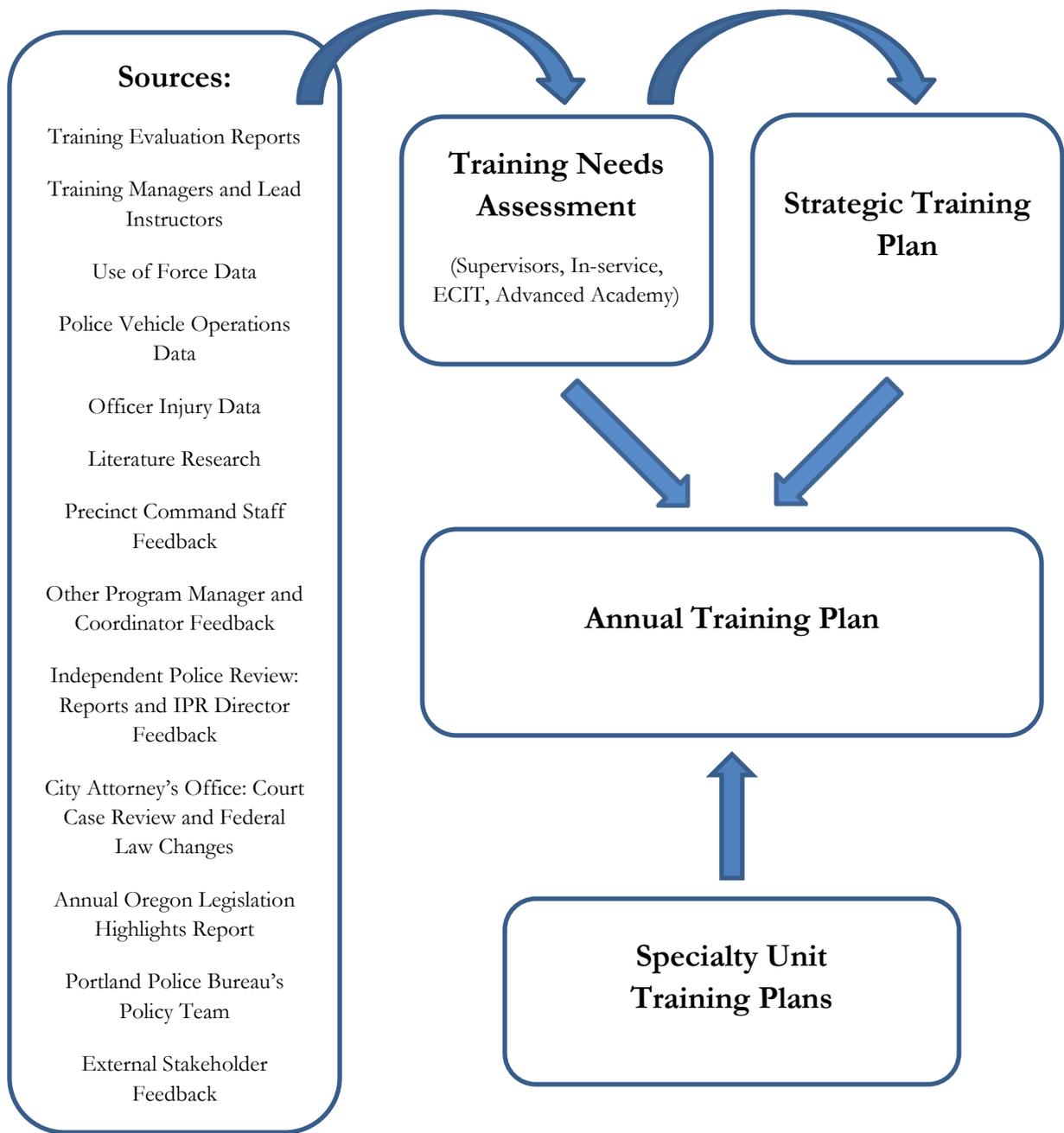


Figure 1. Needs Assessment and Training Planning Process

The process for this needs assessment and the collection of related information will be reviewed and refined as needed in order to best meet the needs for training and curriculum planning. This document is neither intended to be a final plan for what topics will be covered during In-service, Supervisors In-service, or Enhanced Crisis Intervention Team In-service trainings, nor the only source of information to be used during the formation of the Strategic and In-service training plans.

It is critical that any information or suggestions in this document are reviewed within the following context:

- (1) To whom does this information primarily relate?
- (2) What is the best method for disseminating this information?
- (3) Who should distribute this information?

Some information will be best delivered through training events while other information would be better disseminated through webinars, roll call videos, unit managers, direct supervision, or other means of communication. It is also important that training plans prioritize genuine and substantiated training needs and requirements, as opposed to reacting to individual suggestions or events.

#### *Purpose of In-Service Training*

The purpose of in-service for law enforcement is to receive training pertaining to officers' state maintenance certification and Occupational Safety and Health Administration (OSHA) requirements, the maintenance of perishable skills, new trends and equipment, updates on policy and procedural changes, and advanced law enforcement training. In general, skills perish over time when they are not used regularly. Law enforcement on patrol face a particular challenge pertaining to skill perishability as they are forced to make split-second decisions in circumstances that are tense, uncertain, and rapidly evolving. These decision points are analyzed through the totality of the circumstances and reasonableness of the officer's actions. Continual training is critical for ensuring that officers can perform at their best under these unpredictable and complicated circumstances. In addition to these low frequency/high risk situations, officers are faced with various challenges on a regular basis during more routine law enforcement encounters. The Training Division continually re-examines both the procedural and interpersonal skill components of these high frequency/lower risk encounters to enhance officers' abilities to achieve the best possible outcome.

## MAINTENANCE CERTIFICATION REQUIREMENTS FOR OREGON LAW ENFORCEMENT

### **Training Requirements from the Department of Public Safety Standards and Training (DPSST)**

- Every three years officers need to accrue 84 hours of training for their Oregon Law Enforcement re-certification.
  - Twenty-four of these hours need to be in use of force (eight hours annually). Use of force training includes Firearms, Defensive Tactics, Conducted Electronic Weapon, and portions of the Patrol Procedures Program (e.g. scenario training).
  - Three hours need to be in ethics training (one hour annually).
  - Three hours every three years need to be in mental health training.
- All sergeants and above must have 24 hours in leadership training.
- DPSST mandates that every two years officers are required to receive CPR/First Aid re-certification training.

### **Training Requirements from OSHA**

- Every year officers are required to receive training in blood borne pathogens. No specific amount of hours is required for this training.

### **Re-Certification Requirements from Taser**

- Taser requires officers to deploy two cartridges every year to maintain their certification. Deployments that occur both on the job and in training can count towards this requirement. All officers and sergeants assigned to the Operations Branch are required to carry a conducted electronic weapon.

## DOJ AGREEMENT

### Identified DOJ Agreement Related Training Needs for In-Service<sup>1</sup>

Topic / Skill Area	Notes
Duty to Intervene and related organizational cultural changes	The Portland Police Bureau is working on establishing the ABLE Program.
Procedural Justice and communication	This topic was covered during the 2018-3 and 2019 In-services. Additional training is incorporated into the 2020/2021 In-service scenario training.

### Additional CIT Refresher Training Needs<sup>2</sup>

Topic / Skill Area	Notes
Refresh all sworn staff as to proper use of Enhanced Crisis Intervention Team (ECIT) officers and how non-ECIT officers can help set ECIT officers up for success.	The Behavioral Health Unit and Training Division are working on developing an online training that will be delivered in the Fall of 2020.
Reiterate the proper use of “Yes” “No” questions when clearing a call, as well as when and how to change a call to an “ECIT” call.	The Behavioral Health Unit and Training Division are working on developing an online training that will be delivered in the Fall of 2020.
Consider offering the ECIT data points class to non-ECIT officers.	The Behavioral Health Unit and Training Division are working on developing an online training that will be delivered in the Fall of 2020.

Additional training needs pertaining to mental health response are provided in Appendix B.

<sup>1</sup> These DOJ related training needs were obtained from the General Inspector overseeing the implementation of the DOJ agreement.

<sup>2</sup> The In-service CIT refresher training needs are determined by the Behavioral Health Unit, the external Behavioral Health Unit Advisory Committee, and the Training Division’s non-sworn mental health professional. Evaluation findings from the Enhanced Crisis Intervention Team and In-service training evaluation processes are utilized, as well as other sources of information.

## In-Progress Training Requirements within the DOJ Agreement<sup>3</sup>

### For In-Service

Topic / Skill Area	Notes
Continue to train on proactive problem solving and to utilize, when appropriate, disengagement, area containment, surveillance, waiting out a subject, summoning reinforcements, requesting specialized unit (including ECIT officers and mental health professionals), or delaying arrest (DOJ 84 – a.iv).	The Training Division conducted training in these areas during the 2015, 2016, 2017, 2018-3, and 2019 In-services. Additional training is incorporated into the 2020/2021 In-service training schedule.

### For Supervisors In-Service

Topic / Skill Area	Notes
Foster positive career development and impose appropriate disciplinary sanctions and non-disciplinary corrective action (DOJ 84 – b.iii).	The Training Division conducted training on a portion of this item during the 2018 Supervisors In-service. Additional training is being provided during the 2020 Supervisors In-service.

<sup>3</sup> These items were obtained from the DOJ Agreement, case number 3:12-cv-02265-SI. This list includes items that have not yet been fully achieved or need to be continued and may not otherwise be integrated into training planning.

## CONTROL TACTICS

In Control Tactics, officers obtain training in how to safely make contact with subjects, conduct searches, take subjects into custody, and counter when subjects attack an officer (including an attempt to gain control of an officer’s weapon). Inadequate control results in the risk of injury or death to the public and officers, failure to reduce crime, and potential for civil and criminal liability. The program stresses reasonable control given the totality of the circumstances. Control Tactics techniques require refresher trainings due to the natural perishability of the skills. Training on new techniques is necessary to keep current with developments in policy, equipment, and procedure(s).

### Identified Training Needs

Topic / Skill Area	Notes	Source(s) <sup>4</sup>
Ground control (including recovering to a stable platform)	This topic was covered during the 2018-3 In-service. Additional training is to be determined.	1, 6, 7, 8, 9
Segmenting (including avoiding pressure on the neck and lungs, awareness of public perceptions, and its application for cases of excited delirium)	The Training Division is in the process of delivering a training video for this. In addition, this will be reiterated in some aspects of the ground control training.	5
Takedowns	This topic was covered during the 2018-3 In-service. Additional training plans are to be determined.	1, 6, 8
Techniques involving multiple officers	This topic was incorporated into the 2018-3 In-service. Additional training is to be determined.	1, 4, 9
Grappling/close-quarter encounters	This topic was incorporated into the 2018-3 and 2019 In-services. Additional training is planned for the 2020/2021 In-services.	1, 9
Self-defense/defending from assaults	This topic was incorporated into the 2019 In-service. Additional training is planned for the 2020/2021 In-services.	1, 8

<sup>4</sup> Source coding: 1) Feedback obtained from 2015 through 2017-1 In-service survey responses, 4) 2016 feedback from lead instructors on their top priorities, 5) Identified through other sections of the needs assessment, 6) 2017 feedback from lead instructors, 7) 2018 feedback from lead instructors, 8) 2018 In-service learning assessment results, 9) 2019 and 2020 feedback from lead instructors, 10) Retention rate considerations with lead instructor feedback, and 11) Feedback obtained from the 2019 and 2020 In-service survey responses.

Weapon retention	This training is planned for the 2020/2021 In-services.	1, 6
Handcuffing (including high risk prone and multiple officers)	The Training Division is considering a training video for this.	9, 10
Knife defense training	To be determined.	5, 9, 11
Vehicle tactics	To be determined.	10
Striking/clinch techniques	Planning for the 2020/2021 In-services.	5, 9
Con sims/skill drills	This topic was covered during the 2018-3 In-service and the 2020/2021 In-services incorporate a skill drill. Additional training plans are to be determined.	6

### Additional Considerations for Training Planning

- Ongoing training, multiple times a year, is needed to be proficient in control tactics skills.
- There are some requests for tailoring situations towards detectives/investigators (e.g., situations that can come up in an interview room).
- There are some requests for training pertaining to communication, such as verbal judo.
- Two and a half hour training blocks are ideal for retention and maximizing training time.
- With the increased use of having two officers per vehicle, there will need to be additional focus on multiple officer control tactics.
- Other portions of the evaluation process found these additional following areas that intersect with Control Tactics:
  - Refresher training on the reactionary gap (page 27).
  - Ensuring proper control holds and segmenting procedures (page 27).
  - Additional training on how to appropriately handle cases of excited delirium (page 39).
  - More control/defensive tactics training, including weapon defense and strikes (page 22).

### Retention Rates

The Training Division is continuing to collect information pertaining to retention rates of law enforcement skills. This process includes obtaining feedback from training participants, lead instructors, and Training Division supervisory staff, reviewing related external research, and utilizing internal research findings. Future needs assessments will provide progress updates on this research, although this will take years to fully develop. For an update on the estimated retention rate schedule for the core Control Tactics training skills/knowledge areas, please see Appendix D.

## CONDUCTED ELECTRICAL WEAPON

Officers are trained to carry and use a Conducted Electrical Weapon (CEW) to quickly and safely resolve a violent or potentially violent encounter. These tense and quickly evolving encounters necessitate a dynamic training environment. In order to train officers to make the most reasonable decision during these confrontations, the training regimen includes weapons manipulation as well as dynamic, scenario-based training with a role player simulating a real-world situation(s), emphasizing reasonable decision making while under physical and mental stress.

### Identified Training Needs

Topic / Skill Area	Notes	Source(s) <sup>5</sup>
Scenarios (including small spaces, drawing from holster, and decision making)	This is incorporated in the 2020/2021 In-service training schedules. Scenarios utilizing CEW will continue to be incorporated into Patrol Procedures scenarios.	1, 4
Failed deployment	Discussions pertaining to this topic are incorporated in the 2020/2021 In-service training scenarios. The Training Division is also considering covering this in future scenarios more directly, with the CEW not working.	1, 6, 8
CEW usage combined with custody skills	This topic was covered during the 2018-3 and 2019 In-services. Additional training is incorporated into the 2020/2021 In-services.	1, 5, 6
Utilizing CEW within effective distances	This topic was covered during the 2018-3 and 2019 In-services. Additional training is incorporated into the 2020/2021 In-services.	2, 3, 7, 8
Accuracy in probe placement when deploying under stress	This topic was covered during the 2018-3 and 2019 In-services. Additional training is incorporated into the 2020/2021 In-services.	3, 4, 6, 7

<sup>5</sup> Source coding: 1) Feedback obtained from 2015 through 2017-1 In-service survey responses, 2) 2015 In-service learning assessment results, 3) 2016 In-service learning assessment results, 4) 2016 feedback from the lead instructor on their top priorities, 5) Identified through other sections of the needs assessment, 6) 2017 and 2018 feedback from the lead instructor, 7) 2018 through 2020 In-service learning assessment results, and 8) 2019 and 2020 feedback from lead instructors.

CEW policy refresher	This topic was covered during the 2018-3 and 2019 In-services. Additional training is incorporated into the 2020/2021 In-services.	1, 5, 6
Use of the CEW sights with moving subjects	This topic was covered during the 2018-3 In-service. Additional training in this area is to be determined.	7, 8
Familiarity with the Taser 7	An introduction to the Taser 7 was provided during the 2019 In-service. The Training Division is delayed in purchasing additional Taser 7s for deployment due to budget constraints. In the meantime, the Training Division will continue to include reminders at In-service regarding when to request one for a call.	5, 7
Basic manipulation of the X2	This topic was covered during the 2018-3 and 2019 In-services. Additional training is incorporated into the 2020/2021 In-services.	3, 6

### **Additional Considerations for Training Planning**

Conducting CEW stress courses<sup>6</sup> would be beneficial and provide a new training opportunity for PPB officers. This training methodology is used by Taser International and would provide officers with opportunities for quick decision making while under stress and in a variety of circumstances. In general, Taser International encourages the incorporation of dynamic training methodologies. The CEW stress course is staff intensive, ideally requiring 30 to 50 staff people to operate. It also requires more physical exertion.

### **Retention Rates**

The Training Division continues to collect information pertaining to retention rates of law enforcement skills. This process includes obtaining feedback from training participants, lead instructors, and Training Division supervisory staff, reviewing related external research, and utilizing internal research findings. Future needs assessments will provide progress updates on this research, although this will take years to fully develop. For an update on the estimated retention rate schedule for the core Conducted Electrical Weapon training skills/knowledge areas, please see Appendix D.

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<sup>6</sup> These stress courses include officers responding to multiple situations, which vary in intensity and skill requirements. It allows for practice in transitioning from various settings and portions of the stress course purposely induce physiological stress in order to provide practice in responding to situations under stress.

## FIREARMS

In Firearms, officers are trained in critical skills for ensuring safe and accurate use of firearms under various circumstances that officers may encounter. Firearms are used infrequently during the course of daily patrol. However, when an incident occurs which requires the use of deadly force, it involves a high level of safety risk and often complex circumstances. Due to the nature of these incidents, it is critical that officers come into these unexpected encounters ingrained with substantial “muscle memory” in firearm skills to allow more cognitive capacity for rapidly evolving decision making. Ongoing refreshers and new trainings in firearms are critical due to the perishability of these skills, new policies, and technological advances in firearms training.

### Identified Training Needs

Topic / Skill Area	Notes	Source(s) <sup>7</sup>
Moving and shooting	This training is being conducted in the 2020/2021 In-services.	1, 6, 8, 9
Tactical courses and/or scenario-based training (including stress, decision making, coordinated team movement, and use of force)	The 2020/2021 In-service trainings include a firearms skills course. Additional training is planned to be conducted within the scenario training.	1, 4, 6, 8
Shooting in non-standard positions (including sitting in a car, shooting through a windshield)	This was incorporated into a post Firearms Qualification training. Additional training is to be determined.	1, 2, 6, 8
Use of cover/shooting from cover	This training is being conducted in the 2020/2021 In-services.	1, 8
Use of firearms under stress (weapons manipulation and mechanics under stress)	The various components of this training get incorporated into multiple training disciplines. The Firearms and Control Tactics program is currently collaborating to offer related training on this during the 2020/2021 In-services.	1, 8, 9

<sup>7</sup> Source coding: 1) Feedback obtained from 2015 through 2017-1 In-service survey responses, 2) 2015 In-service learning assessment results, 3) 2016 In-service learning assessment results, 4) 2016 feedback from lead instructor(s) on their top priorities, 5) Identified through other sections of the needs assessment, 6) 2017 feedback from the lead instructor, 7) 2018 feedback from the lead instructor, 8) 2018 In-service evaluation results, 9) 2019 and 2020 feedback from lead instructors, and 10) 2020 In-service evaluation results (including learning assessments).

Low light conditions	This is planned to be incorporated into the 2021 Winter Firearms Qualification training.	1, 8, 9
Weapon transitions	To be determined.	1, 8, 9
Malfunction drills	To be determined.	1, 6
Target recognition with backdrop changes	The importance of target recognition and backdrop will be reviewed during the 2020/2021 In-service Deadly Force policy discussions.	1, 8
Close-quarter shooting	This training is being conducted in the 2020/2021 In-services.	8, 9, 10
Various sight shooting techniques	This training is being conducted in the 2020/2021 In-services.	9, 10
Multiple target engagement	To be determined.	8, 9
Enos transition drills	This training is being conducted in the 2020/2021 In-services.	9, 10
Trigger control techniques	Considering for 2022 In-service.	9
AR-15 familiarization	Considering for 2022 In-service.	3

### Additional Considerations for Training Planning

- Ongoing training, multiple times a year, is needed to be proficient in firearms skills.
- Other portions of the evaluation process found these additional following areas that intersect with Firearms:
  - Firearms program should instruct on shooting from positions other than standing such as from a kneeling or prone position (page 38).
  - More live tactical firearms training that includes movement (page 43).

## **Retention Rates**

The Training Division continues to collect information pertaining to retention rates of law enforcement skills. This process includes obtaining feedback from training participants, lead instructors, and Training Division supervisory staff, reviewing related external research, and utilizing internal research findings. Future needs assessments will provide progress updates on this research, although this will take years to fully develop. For an update on the estimated retention rate schedule for the core Firearms training skills/knowledge areas, please see Appendix D.

## PATROL PROCEDURES

Patrol Procedures is the discipline of synthesizing all of an officer’s mental and physical skills and tools to accomplish a goal in a police contact or incident. It is the training that prepares officers for the complexity, stress, and fluid nature of patrol work. It prepares them to manage scenes by using a full repertoire of communication skills, legal knowledge, decision making, and tactical skills. Patrol Procedures utilizes a combination of scenario-based, skills-based, and classroom training methods. Training on new techniques is necessary to keep up with trends in calls officers are encountering on the job, national trends, lawsuits, and new procedures.

### Identified Training Needs

Topic / Skill Area	Notes	Source(s) <sup>8</sup>
Active shooter	Training was conducted during the 2019 In-service. Additional training is being considered for the 2024 In-service.	1, 4, 5, 7
Building searches	Considering for the 2022 In-service.	1, 2, 7, 9
High risk vehicle stops	Training was conducted during the 2019 In-service. Additional training is planned for the 2020/2021 In-services. This training topic is tentatively scheduled to be refreshed during the 2023 In-service.	1, 7, 9
Critical incident response, including a perimeter refresher, ensuring sergeants stay in the role of scene management, and developing and communicating tactical plans	Part of this training was conducted during the 2019 In-service and additional training is incorporated into the 2020/2021 Emergency Entry In-service training. Further training is to be determined.	1, 2, 5
Force training in general (e.g. general decision making, deadly force encounters – including reaction times, use of cover fire, CRCRC, shoot/don’t shoot decision making, use of firearms under stress, and firearm backdrop considerations)	Part of this training was conducted during the 2019 In-service. Additional training is included in the 2020/2021 In-service scenario trainings.	1, 4, 5, 8
Ambush response/officer safety	This topic was covered during the 2018-3 In-service. The Training Division is	1, 4, 5, 9

<sup>8</sup> Source coding: 1) Feedback obtained from 2015 through 2017-1 In-service survey responses, 2) 2015 In-service learning assessment results, 3) 2016 In-service learning assessment results, 4) 2016 and 2017 feedback from lead instructor(s) on their top priorities, 5) Identified through other sections of the needs assessment, 6) Added to list due to retention rate feedback, 7) 2018 feedback from lead instructor(s) on their top priorities, 8) 2018 In-service evaluation results, and 9) 2019 and 2020 feedback from lead instructors.

	considering an online Situational Awareness training in 2021. Additional training is in consideration for the 2022 In-service.	
Officer/citizen rescue	This topic was covered during the 2018-3 In-service. Additional training is in consideration for the 2023 In-service.	7, 9
Post-shooting/shield	This topic was partially covered during the 2018-3 and 2019 In-services, and the Training Division is in the process of creating an online post-shooting training. Additional training (including shield training) is being considered for the 2023 In-service.	7, 8, 9
Foot pursuits	The Training Division is planning an online training in 2021. Additional training is to be determined.	1, 9
Scenario training, including force on force decision making, tailored scenarios focused on new skills, incorporating multiple law enforcement roles, plainclothes assignments, increased complexity/fully completed scenarios, interacting with uncooperative people, mental health related scenarios (including disengagement with a plan, Public Safety Support Specialist roles, more challenging/less common mental health symptoms, medical components, increased stress, ambush, shoot/don't shoot decision making, use of cover and movement, crossfire awareness, shields, Control Tactics, Police Vehicle Operations, Firearms, and Conducted Electronic Weapon skills)	This topic was partially covered during the 2019 In-service. Further training is planned for the 2020/2021 In-services.  In addition, the Training Division has acquired a VirTra De-escalation and Use of Force Training Simulator to increase its capacity in scenario-based training.	1, 2, 5, 9
Investigator/detective specific training	A Detectives In-service was conducted in 2019. Additional training is to be determined.	1, 5

Interacting with uncooperative people (e.g. uncooperative occupants during a building clear)	This was conducted during the 2019 In-service scenario training in procedural justice. Additional training is to be determined.	1, 5
De-escalation skills (including identifying when de-escalation attempts are ineffective and utilizing time as a tactic)	This topic was covered during the 2018-3 In-service as well as in the 2019 In-service scenario training in procedural justice. Additional training is integrated into the 2020/2021 In-service scenario trainings.	3, 5, 8
Assessing scene risk and subject threat levels	This topic was covered during the 2018-3 In-service. Additional training is integrated into the 2020/2021 In-service scenario trainings.	3, 5
Crisis entry	Training is being conducted during the 2020/2021 In-services.	9
Counterterrorism and explosive devices	To be determined.	4

### Additional Considerations for Training Planning

- In general, more training time and opportunities are needed for effectively meeting the full scope of training needs.
- Other portions of the evaluation process found these additional following areas that intersect with Patrol Procedures:
  - Integrate reminders, where appropriate, pertaining to officers explaining the reasoning behind their actions or lack of actions in certain circumstances may help reduce some complaints (more information can be found on page 25).
  - Integrate reminders on lifting, where they naturally fit in with scenarios and/or other Patrol Procedures training exercises (page 23).
  - Verbally describe use of force actions, such as when a sergeant arrives on scene to review an incident (page 28).
  - Sergeants maintaining an operational (rather than tactical) role when possible (page 28).
- Development of the upstairs of the Training Complex would allow for conducting more scenarios simultaneously, maximizing training time.
- The lead instructors need more time for curriculum research and development, as well as for further training and mentoring the satellite instructors.

### Retention Rates

The Training Division continues to collect information pertaining to retention rates of law enforcement skills. This process includes obtaining feedback from training participants, lead instructors, and Training Division

supervisory staff, reviewing related external research, and utilizing internal research findings. For an update on the estimated retention rate schedule for the core Patrol Procedures training skills/knowledge areas, please see Appendix D.

## POLICE VEHICLE OPERATIONS

In Police Vehicle Operations (PVO), officers receive training related to safely and efficiently handling police vehicles in challenging traffic environments, various road conditions, during pursuits and emergency situations, and with multiple distractions. PVO training integrates tactical decision making, state law, and Bureau policy with physically operating the police vehicle under stress in different conditions and circumstances. Refresher training is critical for ensuring officers will be able to utilize low frequency vehicle maneuvers, such as pursuit intervention techniques (PIT), safely and accurately when needed. Continual training is also important for reducing liability with collision avoidance, staying proficient in driving fundamentals, practicing PVO techniques with new police vehicles, integrating new policy changes, and staying apprised of technological advances in car safety and driving systems.

### Identified Training Needs

Topic / Skill Area	Notes	Source(s) <sup>9</sup>
Pursuits (including scenarios, pursuit driving on a track, management, decision making, and spike strips)	This was included in the 2018 and 2019 In-services. Additional training is scheduled for the 2020/2021 In-services.	1, 5, 9
Scenarios (including PIT and Box-in techniques, high-risk stops, and ambush with escape driving)	Scenarios involving PVO topic areas will be incorporated into Patrol Procedure and other In-service scenarios. The Training Division is currently conducting high-risk stops training in the 2020/2021 In-services.	1, 8, 9
High risk vehicle stops	Training was conducted during the 2019 In-service and is being refreshed in the 2020/2021 In-services.	5, 9
PIT (including post-positioning)	PIT was included in the 2018-1 In-service. PIT and Post-PIT is being considered for 2022 In-service.	1, 2, 7, 8
Box-in (including post-positioning and making contact with at least two points of the car)	This was covered during the 2018 In-service training and an online refresher training is planned for 2021. Additional training is being considered for 2022 In-service.	1, 7, 8

<sup>9</sup> Source coding: 1) Feedback obtained from 2015 through 2017-1 In-service survey responses, 2) 2015 In-service learning assessment results, 3) 2020 In-service learning assessment results, 4) 2016 feedback from lead instructor(s) on their top priorities, 5) Identified through other sections of the needs assessment, 6) Collision data, 7) 2017 and 2018 feedback from lead instructor(s), 8) Feedback obtained from 2018 evaluation results, and 9) 2019 and 2020 feedback from lead instructors.

High speed driving	This was included in the 2018-1 In-service. Additional training is being considered for 2022 In-service.	1
Backing (with FIUs)	This was included in the 2018-1 In-service. Additional training is being considered for 2023 In-service.	1, 2, 6, 7
Spike strips	This training is being conducted during the 2020/2021 In-services. Additional training is being considered for 2022 In-service.	9, 3
Intersections	To be determined.	1, 7
Collision avoidance drills	Training was conducted during the 2019 In-service. Additional training is being considered for 2022 In-service.	1, 4, 6, 7
Lane changes	Training was conducted during the 2019 In-service. Additional training is to be determined.	1
ABS/threshold braking	Training was conducted during the 2019 In-service. Additional training is being considered for 2022 In-service.	1, 9
Accurately judging distance	This was included in the 2018-1 and 2019 In-service trainings. Additional training is being considered for 2023 In-service.	6

### Additional Considerations for Training Planning

- Other portions of the evaluation process found these additional following areas that intersect with Police Vehicle Operations:
  - Pursuit initiation and management, including clarifications on the new policy regarding when a pursuit has been initiated (page 26).
  - 630.05 Vehicle Interventions and Pursuits (page 35).
  - Police and practice monitoring pursuits from other agencies, those conducted in the City of Portland (page 47).

## **Retention Rates**

The Training Division continues to collect information pertaining to retention rates of law enforcement skills. This process includes obtaining feedback from training participants, lead instructors, and Training Division supervisory staff, reviewing related external research, and utilizing internal research findings. The needs assessments will provide progress updates on this research, although this will take years to fully develop. For an update on the estimated retention rate schedule for the core Police Vehicle Operation training skills/knowledge areas, please see Appendix D.

## TRENDS IN HAZARDS OFFICERS ARE ENCOUNTERING IN PERFORMING THEIR DUTIES AND OTHER OFFICER SAFETY ISSUES

Officers encounter numerous hazards and other officer safety issues on a regular basis as a normal part of their job. These include, but are not limited to, driving hazards, being assaulted during arrests and other policing encounters, exposure to pathogens and hazardous materials, issues with sleep disruption common for shift workers, exposure to excessive amounts of trauma, and exposure to the effects of gunfire. In addition to these hazards and officer safety issues, officers may encounter new hazards due to changes in cars or equipment, road conditions or structures, coverage for their shift or precinct, policy, radio dead spots, crime or call types, etc.

### Identified Training Needs for General In-Service Audience

Topic / Skill Area	Notes	Source(s) <sup>10</sup>
Legal authority for calls for service to abandoned homes of transients moving in the home. No person in charge, owner or bank representative is able to be reached to approve the removal. Sometimes the property does not have a trespass agreement.	A 2020 online training is in progress. This training will incorporate this need as well as some requests under Individual Precinct Needs.	1
Managing job related stress for officers (including reducing and managing stress during work-related investigations and complaint processes, managing anti-police sentiments encountered on the job)	The Training Division conducted a portion of these training needs during the 2020 In-service and is planning additional training for the 2021 In-service.	1, 2, 6, 8
More control/defensive tactics training (including weapon defense and strikes)	The Training Division is working on increasing its training offerings in control/defensive tactics.	1, 2, 4, 5, 6, 8
Reducing stigma of utilizing Employee Assistance Program (EAP) and other services	To be determined. The Training Division has established a Wellness Program to assist with this and other officer health training needs.	2, 6

<sup>10</sup> Source coding: 1) Feedback obtained from 2014 through 2017-1 In-service survey responses, 2) Feedback from the Training Division supervisor and command staff, the PPB's Injury and FPDR Liaison Sergeant and/or Officer, and/or the PPB's nurse, 3) 2016 DOJ Organized Crime Conference, 4) FPDR injury data, 5) Use of Force case injury data, 6) Identified through other sections of the needs assessment, 7) Wellness Program needs assessment and evaluation processes, and 8) 2019 and 2020 In-service surveys.

Balancing use of de-escalation and use of force techniques (officers are relying so heavily on de-escalation techniques that they are waiting to be assaulted before using force)	To be determined.	2
General employee wellness (including fitness, nutrition, cooking, sleep, meditation, and finances)	The Training Division conducted a portion of these training needs during the 2019 and 2020 In-services. Additional training on these topics are being considered for the 2021 In-service and/or as optional standalone classes.	7, 8
Reminders about proper lifting techniques when it relates to what is being covered during skills or scenario training. (Many of these cases may not be preventable as more of the injuries are related to assisting uncooperative subjects than static lifting.)  Utilizing assistance with lifting when possible.	The Training Division's Wellness Program will be implementing strategies for developing core strength.	2, 4

### Identified Training Needs for the Advanced Academy

Topic / Skill Area	Notes	Source(s) <sup>11</sup>
Managing job related stress for officers	The Training Division's Advanced Academy and Wellness Programs have integrated related training and resources into the Advanced Academy (e.g., a wellness and mindfulness classes, fitness, and positive mental imaging exercises).	1, 2, 6, 7

<sup>11</sup> Source coding: 1) Feedback obtained from 2014 through 2017-1 In-service survey responses, 2) Feedback from the Training Division supervisor and command staff, the PPB's Injury and FPDR Liaison Sergeant and/or Officer, and/or the PPB's nurse, 3) 2016 DOJ Organized Crime Conference, 4) FPDR injury data, 5) Use of Force case injury data, 6) Identified through other sections of the needs assessment, and 7) Wellness Program needs assessment and evaluation processes.

## Identified Training Needs for Supervisors In-Service Audience

Topic / Skill Area	Notes	Source(s) <sup>12</sup>
Command staff and supervisory training on organizational health strategies, including:		
How to choose and implement organizational health strategies	Planning for 2021 Supervisors In-service.	2, 6, 7
Identifying and appropriately supporting employees in regards to healthcare needs, including appropriate and inappropriate use of accommodations		

<sup>12</sup> Source coding: 1) Feedback obtained from 2014 through 2017-1 In-service survey responses, 2) Feedback from the Training Division supervisor and command staff, the PPB's Injury and FPDR Liaison Sergeant and/or Officer, and/or the PPB's nurse, 3) 2016 DOJ Organized Crime Conference, 4) FPDR injury data, 5) Use of Force case injury data, 6) Identified through other sections of the needs assessment., and 7) 2019 and 2020 In-service surveys.

## MISCONDUCT COMPLAINTS

### Identified Training Needs for General In-Service Audience<sup>13</sup>

Topic / Skill Area	Notes
<p>Officers explaining the reasoning behind their actions. This includes being aware of how reasonable policing actions may be perceived by community members and taking a moment to explain after the fact, for example, how their direct commands were utilized for the purpose of maintaining safety. Remembering they are often interacting with people at their lowest points of their lives.</p>	<p>This was covered during the 2018-3 and 2019 In-services. It is continuing to be reinforced during the 2020/2021 In-service Procedural Justice scenario training. The Training Division is also considering incorporating this concept and related reporting into additional scenario debriefs where applicable.<sup>14</sup></p>
<p>Officers explaining their lack of action in certain circumstances. For example, people often want officers to make an arrest or take an action they cannot do. At times it may be beneficial for officers to be more thorough in explaining the limits of their authority.</p> <p>How to communicate the news that you cannot take action in certain areas. What is the Bureau's position on why we are not taking action in certain areas?</p>	<p>This was covered during the 2018-3 and 2019 In-services. It is continuing to be reinforced during the 2020/2021 In-service Procedural Justice scenario training. The Training Division is also considering incorporating this concept and related reporting into additional scenario debriefs where applicable.</p>
<p>Increase familiarity with the complaint process (for internal and external complaints), including: how to take a complaint, when to call a sergeant if they are receiving a complaint on the job, what is the investigation and outcome process, and refresher on the new Service Improvement process.</p>	<p>Considering a 2020 Tips and Techniques and/or other online learning.</p>

<sup>13</sup> The information for the misconduct complaint section was gathered through reviewing Independent Police Review (IPR) Annual Reports, additional analyses provided by the IPR Analyst, Internal Affairs reviewed complaints of force, and discussions with the IPR Director, Internal Affairs Lieutenant and Sergeant, and Training Division In-service Lieutenant and Sergeant.

Some of the items from previous needs assessments remained, as they were identified as still applicable to current training needs. In the 2018 Annual IPR Report there was a substantial increase in the amount of police commendations reported to IPR from the community. The police commendations through IPR continued to increase in 2019.

<sup>14</sup> During the 2020 needs assessment, the concern was brought up from sources both internal and external to the PPB that implementing these follow-up procedures may be becoming more difficult for officers as well. Many of the challenges are due to the increasing staffing capacity issues and budget cuts. It was also noted that officers are having a more difficult time getting community members to engage in related conversations and may be more reluctant to initiate such conversations due to the increased hostility towards the police.

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When and how to utilize the procedural justice principles to assist with difficult person encounters.

This was covered during the 2019 In-service. It is continuing to be reinforced during the 2020/2021 In-service Procedural Justice scenario training.

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Training pertaining to officer health / reducing compassion fatigue

A portion (EAP services) was covered in the 2017-2, 2019, and 2020 In-services. The Training Division is planning additional training related to this topic area for the 2021 In-service.

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### Identified Training Needs for Supervisors In-Service Audience<sup>13</sup>

Topic / Skill Area	Notes
General leadership and management skills, including:	
Dealing with difficult employee behavior, such as interpersonal behavioral issues and performance issues, and how to provide corrective action prior to reaching a level of misconduct.	
Motivating and coaching employees.	
Increase familiarity with additional resources for supervisors: Bureau of Human Resources (BHR), city trainings, etc.	A portion of this was covered in the 2019 Supervisors In-service. Additional training is planned for the 2020 Supervisors In-service, Sergeants Academy, and Sergeants Mentorship Program.
Supervising fairly, including between different groups such as non-sworn, officers, and command staff.	
Setting employee and/or unit goals and expectations.	
Provide base level supervisor training that includes specifics on how to deal with common supervisory challenges, scenarios, or other types of training exercises, and follow-up resources (Tips and Techniques, pocket cards, and/or articles).	

## APPLIED USE OF FORCE DATA

Training needs pertaining to equipping officers for use of force decision making and application are documented throughout this needs assessment. For the officers input on use of force training needs, please see the Control Tactics, Firearms, Patrol Procedures, and Conducted Electronic Weapon sections of this document. This section is specifically for a review of data related to use of force data collection systems, including related complaints and Internal Affairs Investigations.

### Identified Training Needs for General In-Service Audience<sup>15</sup>

Topic / Skill Area	Notes	Source(s) <sup>16</sup>
Refresher training on the reactionary gap (including the differences between this and the “21 foot rule”)	The Training Division is considering creating an online training.	5
Ensuring proper control holds and segmenting procedures (including avoiding pressure on the neck and lungs and awareness of how segmenting a head might be perceived by the public)	The Training Division is in the process of delivering an online training video for this.	2, 3
Use of force and decision making in low frequency, high volatility, high risk/impact situations (including addressing multiple threats and tactical problem-solving under pressure)	To be determined.	5
Pursuit initiation and management (including clarification on the new policy regarding when a pursuit has been initiated)	The Training Division began training on this topic in the 2020 In-service. Due to national event-related interruptions in delivering training, this training will continue in 2021.	2
Continued training on critical incidents and active threat situations (including distinguishing the two situations, communication with other officers such as role announcements, establishment of crime	Most of this was covered in the 2019 Active Threat training and 2020 Emergency Entry training. Due to national event-related interruptions in delivering training, this training will	5

<sup>16</sup> Source coding: 1) Use of Force Audit Report, 2) Feedback from Use of Force Audit Lieutenant and/or Analysts, 3) Feedback from the Training Division and/or Internal Affairs supervisors and command staff, 4) Training Division’s review of problematic uses of force, 5) Training Division’s review of officer involved shootings, 6) Additional analyses of force data, and 7) Training Division’s review of other Internal Affairs reviewed uses of force.

Problematic uses of force are defined as cases outside of the Portland Police Bureau directive. The Portland Police Bureau’s Use of Force Directive is stricter than the constitutional standard. Therefore, cases determined to be unconstitutional would be included. Cases that have the potential for being problematic uses of force are referred to Internal Affairs of the Professional Standards Division, either through internal means or by the Independent Police Review.

scenes, consideration to the location and condition of evidence, communication and use of negotiation with an armed subject in contained versus open scenes, and use of cover officers).	continue in 2021. Training on the specific subtopics of the establishment of crime scenes, and consideration to the location and condition of evidence are to be determined.	
The importance of handcuffing in an officer involved shooting in relation to the safety of paramedics and others.	The Training Division will include this into scenario debriefs when appropriate. An online training on post-shooting procedures is in progress.	5
Verbally describing use of force actions, such as when a sergeant arrives on scene to review an incident.	The Training Division is considering incorporating this item into scenario training and debriefs.	3

#### Identified Training Needs for Supervisors In-Service Audience

Topic / Skill Area	Notes	Source(s) <sup>13</sup>
Notification procedures for officer involved shootings	An online training on post-shooting procedures with a knowledge check is in progress.	5
Sergeants maintaining an operational (rather than tactical) role when possible.	The Training Division will continue to emphasize this during Critical Incident trainings.	3, 5
Critical Incident Management, including rapidly evolving incidents in which the Incident Commander has little information when assuming command and when to remain in the supervisory role.	The Training Division plans on including part of this in the 2021 Emergency Entry scenario training. In addition, the Training Division is considering conducting a Critical Incident Review class for supervisors in 2021 and/or a Directive 315.30 online training.	3, 5

## CONCERNS REFLECTED IN COURT DECISIONS

### Identified Training Needs<sup>17</sup>

The Training Division has been providing extensive training involving case law since 2016, through a combination of yearly In-service training sessions and regular online trainings. At the time of this needs assessment report, the Training Division is up to date in this training category. However, the Training Division and City Attorney's Office will continue to regularly review and provide members training material on new case law.

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<sup>17</sup> The Training Division works in collaboration with the City Attorney's Office for identifying trends reflected in court decisions. The City Attorney's Office examines state and federal court cases to identify court decisions that may be applicable to Oregon law enforcement. The sources for these cases primarily come from the United States Supreme Court, Ninth Circuit Court, Oregon Supreme Court, and Oregon Court of Appeals rulings. The findings from these cases are summarized and provided to the Training Division for review as a part of the training needs assessment process. Since the 2019 needs assessment, the Training Division received 38 additional case summaries. The Training Division examines the findings for trends and relevancy to training for Portland Police Bureau Officers. This examination utilizes the court decision findings as well as other information gathered throughout the needs assessment process.

## CHANGES IN OREGON AND FEDERAL LAW

### Identified Training Needs for Oregon Law Changes<sup>18</sup>

Law <sup>19</sup>	Notes	Year
HB 2987 – Eliminates the specific purpose requirement in ORS 162.385 and expands criminal liability to those who provide false information to the police.	For City Attorney or District Attorney portion of In-service.	2017
SB 257 – Modifies ORS 162.415 to elevate certain cases of official misconduct in the second degree to official misconduct in the first degree.	For City Attorney portion of In-service.	2017
SB 101 – Amends ORS 419B.045 regarding child abuse investigations in school settings. The amendments relate to where investigations can take place, limits of the investigation, and boundaries pertaining to disclosing information.	For City Attorney or District Attorney portion of In-service.	2017
HB 2356 – Creates crime of invasion of personal privacy in the first degree.	Tips and Techniques	2015
HB 2596 – Provides that person who records another person’s intimate areas commits crime of invasion of personal privacy.	Tips and Techniques	2015
SB 173 – Authorizes person licensed to carry concealed handgun to present valid license instead of providing firearm to peace officer for examination when possessing firearm in public building.	Tips and Techniques	2015

<sup>18</sup> Some of the Oregon laws changes for this year’s needs assessment stemmed from the 2020 special Oregon Legislature session. Given the urgency of some of the law changes from this session, many are being fully integrated into training for members at the time of this reporting (e.g. the Temporary Restraining Order pertaining to media and legal observers at civil disturbances and new state laws on use of force for crowd control) and are therefore not applicable to future training needs.

The Oregon State Bar’s 2019 Oregon Legislation Highlights report was also reviewed for any relevant training needs. These were vetted through some of the Training Division’s command staff to determine which warranted a future training need for officers. Several items from the previous needs assessment reports also remained as they are still in progress.

<sup>19</sup> Oregon State Bar’s annual Oregon Legislation Highlights reports.

SB 614 – Provides that peace officer may enter motor vehicle and impound animal when peace officer is authorized by law and has probable cause to believe animal is being subjected to certain criminal offenses.	Tips and Techniques	2015
HB 2317 – Extends statute of limitations of certain sex crimes from six to 12 years after commission of crime or, if victim was under 18 years of age, any time before victim attains 30 years of age.	Tips and Techniques	2015
SB 641 – Prohibits law enforcement agency from obtaining by forensic imaging information from portable electronic device without warrant except when authorized by consent.	Tips and Techniques	2015
HB 3468 – Adds threatening to cause physical injury to animal to induce other person to engage in conduct as manner of committing crime of coercion.	Tips and Techniques	2015
HB 4116 – Modifies ORS 811.507 (offense of driving a motor vehicle while using a mobile electronic device), by modifying the definition of “driving” and “hands-free accessory”.	Tips and Techniques or video training	2018
HB 4145 – Modifies several statutes relating to firearms, firearm offenses, ammunition, background checks, and firearm reporting; including establishing a Class A misdemeanor for certain people who unlawfully possess firearms or ammunition.	Tips and Techniques or video training	2018
HB 4205 - Duty to Intervene	Members have received some initial information regarding this law change. Additional training is to be determined: potentially an online training and/or incorporation into Ethics training.  Furthermore, the Portland Police Bureau is working on establishing the ABLE Program.	2020
HB 4203 - Provisions to use of force by peace officers	Members have received some initial information regarding this law change. Additional training is to be determined: potentially an online training.	2020

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HB 4301 Pressure on throat or neck by an officer

The Training Division  
plans to incorporate this  
into the 2021 In-service.

2020

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### Identified Training Needs for Federal Law Changes<sup>20</sup>

The City Attorney's Office examines federal court decisions for any changes in federal law pertinent to Oregon law enforcement. There were no federal law changes pertinent to law enforcement identified for the time period of May 2019 through September 2020.

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<sup>20</sup> Federal law changes are obtained from the City Attorney's Office throughout the year. A City Attorney reviews and summarizes Oregon and Federal court decisions that are applicable to the Portland Police Bureau.

## CHANGES IN PPB POLICY

### Identified Training Needs<sup>21</sup>

Policy	Notes
315.30 Satisfactory Performance	The online directive updates and knowledge check have been conducted. The Training Division is considering reinforcing the supervisor's role for this directive in Patrol Procedure scenario debriefs.
630.05 Vehicle Interventions and Pursuits	An online knowledge check was conducted with the directive. Additional training is being conducted during the 2020/2021 In-services.
825.00 Protection Orders and Domestic Violence Cases	The online directive updates and knowledge check have been conducted. The Training Division is considering providing additional training pertaining to the Tribal LEA part of this directive. <sup>22</sup>

### Upcoming Directives Still Under Review

Policy	Notes
320.00 Disclosure of potential exculpatory or impeachment	The Training Division is considering providing an online training for this.
1010.00 Use of Force	Planning for an online knowledge check. Additional online or classroom training is to be determined.

<sup>21</sup> A list of Portland Police Bureau directives that were newly formed or amended between May 2019 through July 2020 was obtained from the PPB's Policy Lieutenant and Analysts. The list was vetted through the Policy Lieutenant and Analyst, as well as the Training Division's In-service Lieutenant and Sergeant to determine which directives warranted future consideration during training planning.

<sup>22</sup> In addition, IPR is scheduled to do a policy review of these topics in 2020. The Training Division will review these documents for any additional related training needs.

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660.00 Criminal Intel

Planning for an online knowledge check. Any additional training needs are to be determined.

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630.35 Responding to Alarm Calls for Service

The Training Division is planning to cover this in an online training with Fiscal updates pertaining to alarms and recording false alarm responses.

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A new directive is being developed pertaining to the Brady Law.

Planning for an online knowledge check for all sworn members. Additional online training will be created.

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640.37 Guidelines for Communicating with Limited English Proficient Individuals

Planning for an online knowledge check. Additional online or classroom training is to be determined.<sup>22</sup>

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## INPUT FROM THE COMMUNITY AND OTHER EXTERNAL STAKEHOLDERS

The Training Division tracks and vets community and stakeholder input pertaining to the training needs of tenured officers. Input from the community and external stakeholders come from a variety of sources, and the sources referenced below are not an exhaustive list. The Training Division continues to look for ways to improve our connection with the community and external stakeholders in order to solicit feedback on the training needs of officers.

The recommendations included below are specific to training content. Recommendations related to training processes have been noted and continue to be monitored by the Portland Police Bureau.

### Identified Training Needs for General In-Service Audience

Topic / Skill Area	Notes	Source(s)
Provide members more opportunities to practice interpersonal skills related to procedural justice, design a training scenario where all officers can rehearse the skills needed for respectful, fair, empathic, and effective communication with members of the community, and can receive feedback on their performance.	This was covered in the 2018-3, 2019, and 2020 In-services. The Training Division will continue to reinforce this training topic.	1, 9, 11, 18, 20
Provide specific training on interpersonal aspects of policing, including mental health crisis response, diversity/sensitivity, and de-escalation.	This was included in the 2018-2, 2018-3, 2019, and 2020 In-services. The Training Division will continue to reinforce this training topic.	2, 7, 9, 11, 18, 20
Emphasis on good communication during tactical events	The Training Division will continue to emphasize this in In-service scenario training debriefs where appropriate.	7
Firearms Program should instruct on shooting from positions other than standing such as from a kneeling or prone position.	This is now also incorporated into the post Firearms Qualification training. Additional training is to be determined.	7
Control Tactics Program should continue to instruct officers on ground fighting and recovering to a stable platform.	This was covered during the 2018-3 In-service. Additional training is to be determined.	7

The Training Division should continue to instruct Bureau supervisors on the directives required during the management of a critical incident.	A portion of this was covered during the 2019 Supervisors In-service. In addition, a Tips and Techniques on Public Safety notifications and an online post-shooting training is in progress.	7
Provide training focused on officer physical health including: physical functionality, yoga, mindfulness and nutrition.	The Training Division has provided a portion of this training in the 2019 and 2020 In-services. Additional training is planned for the 2021 In-service.	8
Provide training that strengthens police-community relations and solves neighborhood problems, such as foot patrol and problem-oriented policing.	The Training Division is considering partnering with a local college to develop an online class for this item.	10, 18, 20
Taking steps to reduce an “us vs. them” mentality, which can be reinforced through trainings, procedures and roll call topics.	This was covered in the 2018-3 and 2019 In-services. Additional training is to be determined.	9
PPB should expand on existing efforts to provide emotional intelligence training to officers. This training should be integrated into officer wellness, implicit bias, procedural justice, leadership and public outreach training.	Emotional Intelligence (EI) training is delivered throughout officers’ careers starting at the Basic Police Academy. Training Division members have attended an advanced EI training for Leadership offer by the Washington State Criminal Justice Training Center and are exploring how best to incorporate this training inside the PPB. This should occur in either 2021 or 2022. The Training Division will also continue to work with underrepresented groups to inform these training topics <sup>23</sup> .	13, 20
Train officers on the importance of follow-up in terms of community satisfaction and perceptions of procedural justice.	The Training Division continues to emphasis procedural justice during In-service. This information is being incorporated into the 2020 Supervisor In-service, and the Training Division is exploring the possibility of	17, 18

<sup>23</sup> The Training Advisory Council has informal recommended utilizing video to provide more community voice in training. A formal recommendation is in progress.

	incorporating it into the 2021 In-service	
Bureau-wide training of Directive 870.25 (temporary holding cells) through the Learning Management System with accompanying training video.	The Training Division is planning an online training for 2021.	5
Training should be done with officers on the interpretation of the Retaliation Directive, 310.20.	To be determined. The City of Portland's HR2.02 policy is currently being revised which may impact related Bureau policy.	5
Training should be done with officers on strategies for mitigating a suspect's behavior and communication tools to mitigate impacts on public trust.	The Training Division will continue to emphasize communication, procedural justice principles, and other strategies for mitigating suspect behaviors during In-service scenario training debriefs and other training where appropriate.	5
Cultural competency and community-based training videos	The Training Division is planning to develop online video training which incorporates voices from the community. <sup>23</sup>	19, 20
Additional training for officers on how to appropriately handle cases of excited delirium.	To be determined. The Training Division is considering incorporating this into the next segmenting In-service class.	5

The source coding for the previous section includes the following:

1) Compliance and Outcome Assessment Report of the Compliance Officer and Community Liaison. May 15, 2019

2) Semi-annual Outcome Assessment Report. May 2017

<http://cocloab.org/sites/default/files/COCL%20May%202017%20Outcome%20Assessment%20-%20Final%20with%20appendices.pdf>  
Compliance Report of the Compliance Officer and Community Liaison. First and Second Quarters: January through June 2016. March 3, 2107.

<http://cocloab.org/sites/default/files/COCL%202016%20Q1-Q2%20Compliance%20Assessment%20-%20Final.pdf>

Semi-annual Outcome Assessment Report. November, 2016.

<http://cocloab.org/sites/default/files/COCL%20November%202016%20Outcomes%20Assessment.pdf>

Compliance and Outcome Assessment Report of the Compliance officer and Community Liaison. Third and Fourth Quarters: July through December, 2016. Filed July 10, 2017. <http://cocloab.org/sites/default/files/COCL%202016%20Q3-Q4%20Compliance%20Assessment%20-%20Final%207.10.2017.pdf>

Compliance and Outcome Assessment Report of the Compliance officer and Community Liaison. January through September, 2017. Filed December 7, 2017. <http://cocloab.org/sites/default/files/FINAL%20COMPLIANCE%20AND%20OUTCOME%20ASSESSMENT%20REPORT%20JAN-SEPT%202017.pdf>

5) From the Professional Standards Division's list of training requests that come through the Police Review Board, the Department of Justice, the PPB case review processes, the City Auditor, and various other auditors and community advisory groups.

7) Report to City of Portland, Portland Police Bureau, Officer Involved Shootings. Sixth Report. January 2019. OIR GROUP

<https://www.portlandoregon.gov/ipr/article/711304>

- 8) Training Advisory Council Official Recommendation, Establishing an Effective Wellness Program. May 8, 2019. <https://www.portlandoregon.gov/police/article/731482>.
- 9) The Portland Police Bureau Strategic Insights Report. <https://www.portlandoregon.gov/police/article/725900>.
- 10) Compliance and Outcome Assessment Report of the Compliance Officer and Community Liaison: Section VIII and IX. October, 2017 to December, 2019.
- 11) Compliance and Outcome Assessment Report of the Compliance Officer and Community Liaison: Section IV and VII. October, 2017 to December, 2019.
- 13) Training Advisory Council Official Recommendation – Emotional Intelligence, September 11, 2019. <https://www.portlandoregon.gov/police/article/745937>.
- 14) Training Advisory Council Coursework Comments and Suggestions – Procedural Justice Scenario, August 19, 2019. <https://www.portlandoregon.gov/police/article/751927>.
- 15) Portland Committee on Community-Engaged Policing (PCCEP), 3<sup>rd</sup> Draft September, 2019. <https://www.portlandoregon.gov/pcecp/article/741358>.
- 16) Compliance and Outcome Assessment Report of the Compliance Officer and Community Liaison Quarterly Report: 2019 Updates and Quarter 4 Analysis, March 24, 2020. <https://static1.squarespace.com/static/5a319f76a9db0901e16c6433/t/5e7b070b284dcc611e0884a1/1585121036114/Q4+2019+COCL+Compliance+and+Outcome+Assessment+Quarterly+Report+FINAL+03242020.pdf>.
- 17) National Law Enforcement Applied Research & Data Platform, Perceptions of Portland Police Bureau among Persons with Recent Police Contact: Results of an SMS Survey, December 20, 2019.
- 18) DHM Research City of Portland Community Policing Report, February 2019.
- 19) Additional technical assistance provided by the COCL.
- 20) The Portland Police Bureau Community Engagement Plan, <https://www.portlandoregon.gov/Police/article/744533>.

### Identified Training Needs for Supervisors In-Service Audience

Topic / Skill Area	Notes	Source(s) <sup>24</sup>
Ensure that the requirements found in Section IV of the Settlement Agreement – Training are applied to ECIT, Advanced Academy, In-service, and Supervisors In-service.	The Training Division will continue to integrate these items into the 2021 In-service and Supervisors In-service trainings.	2, 7

<sup>24</sup> Source coding: 1) Plaintiff's Notice of Second Periodic Compliance Assessment Report *United States v. City of Portland*; Case No. 3:12-cv-02265-SI Document 124 Filed 10/18/16 <https://www.portlandoregon.gov/police/article/595056>

2) Semi-annual Outcome Assessment Report. May 2017 <http://coclcoab.org/sites/default/files/COCL%20May%202017%20Outcome%20Assessment%20-%20Final%20with%20appendices.pdf>

Compliance Report of the Compliance Officer and Community Liaison. First and Second Quarters: January through June 2016. March 3, 2107.

<http://cocl-coab.org/sites/default/files/COCL%202016%20Q1-Q2%20Compliance%20Assessment%20-%20Final.pdf>

Semi-annual Outcome Assessment Report. November, 2016.

<http://cocl-coab.org/sites/default/files/COCL%20November%202016%20Outcomes%20Assessment.pdf>

3) 2017 Settlement Agreement Compliance Assessment, Case 3:12-cv-02265-SI, Document 158-1, Filed 12/26/17.

[http://media.oregonlive.com/portland\\_impact/other/DQJ2017DECcompliancereport.pdf](http://media.oregonlive.com/portland_impact/other/DQJ2017DECcompliancereport.pdf)

4) From the Training Advisory Council. The Report is available to read on the TAC website <http://www.portlandoregon.gov/police/61449>

5) From the Professional Standards Division's list of training requests that come through the Police Review Board, the Department of Justice, the PPB case review processes, the City Auditor, and various other auditors and community advisory groups.

6) Rosenbaum, D., Watson, A., and Christoff, T. Views from Inside the Portland Police Bureau: A Survey of Sworn and Civilian Employees, May, 2015.

Many of the items above are provided by a Training Division curriculum development specialist assigned to tracking and vetting community input pertaining to the training needs of tenured officers and a Training Division Auditing Sergeant. The Training Division Auditing Sergeant position became vacant in July 2017.

7) Report to City of Portland, Portland Police Bureau, Officer Involved Shootings. Sixth Report. January 2019. OIR GROUP <https://www.portlandoregon.gov/ipr/article/711304>.

Provide Organizational Change Management leadership training (or something similar) for the Chief, all senior management, and selected trainers.	To be determined.	4
Training should remind supervisors about donning ballistic helmets as part of their critical incident training.	The Training Division is considering providing members a reminder for this through online training (potentially in combination with the announcement of new equipment).	7
Provide supervisor coursework related to “good supervision”; addressing problematic behavior, coaching, and organizational justice.	A portion of this topic was covered in the 2019 Supervisors In-service, Sergeants Mentorship Program, and the 2020 Sergeants Academy. Additional training on this topic is to be determined.	2
General leadership and management skills, including:  Motivating employees, supervising fairly, fostering employee development, utilizing positive interventions, such as coaching and counseling for some corrections, holding employees accountable, and rewarding good work ethic.	A portion of this topic was covered during the 2019 Supervisors In-service. Additional training on this topic is planned for the 2020 Supervisors In-service.	6

## INDIVIDUAL PRECINCT NEEDS

### Identified Training Needs for General In-Service Audience<sup>25</sup>

Topic/Skill Area	Year Suggested <sup>26</sup>	Notes
Additional Control Tactics training needs / Precinct Control Tactics Training reinstated (quarterly)	2014, 2017, 2018	The Training Division is continuing to work on providing members other Control Tactics training opportunities. The reinstating of the Precinct Control Tactics training program will be revisited after COVID.
D.A. legal updates	2015, 2018	To be determined.
More live tactical firearms training that includes movement.	2017, 2018	This was covered during the 2018-3 In-service, and additional training is currently being conducted in the 2019 In-service. Additional training is planned for the 2020/2021 In-services.
Homelessness / Houselessness:  How to address and utilize current abatement strategies  Current rules pertaining to clean up of camps  Trespassing	2017, 2018	A 2020 online training is in progress. This training will incorporate this need, another in this section, and one under Trends in Hazards.
Landlord tenant law, ORS 90.100: including squatter and campers on private property rights, public property, and evictions from hotels/shelters		

<sup>25</sup> Some Detectives In-service training needs were provided during the 2019 and 2020 needs assessment processes. These included having detective-specific training in 1) interview and interrogation, and surveillance, 2) officer involved shooting/line of duty cases – including what to look for, case debriefs, and tactics to avoid, 3) Investigative Unit case studies, 4) Legal Updates with a DA and federal level perspective, and 5) Investigator specific Patrol Procedures and Control Tactics. The Training Division began providing a detectives-specific in-service training, in addition to the all sworn In-service training, in 2019. These training needs will continue to be retained and considered in the development of the future Detectives In-services.

<sup>26</sup> The Training Division Captain or Lieutenant reviews these training needs and receives new ones from Precinct and Responding Unit Command Staff each year. The feedback is vetted through the Training Division sergeants and command staff to determine which concerns are applicable to the general population of patrol officers and the most appropriate venue for delivery.

Under what circumstances and timing to notify Detectives.	2018	Considering a Tips and Techniques or another online training format.
Dealing with difficult people: co-workers and community members.	2018	To be determined. The Training Division is considering combining this topic with the Critical Conversations Training.
Sexual Assault Investigations (including basic trauma-informed interviewing with a victim-centered approach)	2019	The Training Division plans to work with the Sex Crimes Unit to create an online training in 2020.
Child/Elder Abuse Investigations	2019	Considering for the 2020 or 2021 In-service.
Customer service training: including active listening, empathy, and scenarios	2018	This was partially covered in 2018-2, 2018-3, 2019, and 2020 In-service trainings. The Training Division will continue to reinforce these concepts during In-service.
Media relations (including how the media works, what to expect when they show up to scenes, and how to best work with them)	2020 <sup>27</sup>	The Training Division is planning to create an online training video for this.
Suspect identification / photo line-up procedures (e.g., for hit and run cases)	2020	The Training Division is considering creating an online training video for this.

<sup>27</sup> In addition, during the 2020 needs assessment process the need for the Bureau to create a new, more comprehensive communications strategy was noted. The Training Division will continue exploring any additional related training needs during the future training planning and evaluation processes.

## Identified Training Needs for Supervisors In-Service Audience

Topic/Skill Area	Year Suggested <sup>28</sup>	Notes
Fiscal Updates: fleet and the replacement cycle, facilities, alarms and recording false alarm responses	2017	The Training Division is planning to cover this in an online training.
Leadership and supervisory skills and development: including performance management, fundamentals of supervisors' roles (including leadership self-assessment), mentoring/coaching/counseling, resolving conflicts, communication (including specifically for enhancing coaching, leadership, and mentoring), mindset, and change management.	2018, 2019	Planning for portions of this to be delivered in the 2020 Supervisors In-service. This is also being incorporated into the Sergeants Academy.
Equity Lens Toolkit	2019	The Training Division is working in partnership with the Equity and Inclusion Office to provide this training to supervisors. It is currently being delivered to command staff and professional staff supervisors.
Developing and implementing internal legitimacy and procedural justice (including allowing employees input to be genuinely heard and considered).	2019	This is planned for 2020 Supervisors In-service. This is also being incorporated into the Sergeants Academy.
Officer/employee health and stress management (including when to provide officers with a Portland Police Association (PPA) representative and/or peer support, and how to reduce job related stress for officers during work-related investigations and complaint processes).	2018, 2019	Planning a portion of this topic to be covered in the 2020 Supervisors In-service.

<sup>28</sup> The Training Division Captain or Lieutenant receives new training suggestions from Precinct Command Staff via email each year. The feedback is vetted through some of the Training Division Lieutenants and Sergeants to determine which concerns are applicable to the general population of patrol officers and/or supervisors, and the most appropriate venue for delivery. In addition, in 2018 and 2019, the following survey item was included in the Supervisors In-service survey: "What training topics would you like to see in future Supervisors In-service training?". In 2018, the survey also included an item asking: "How would you prioritize the following training needs for the officers you supervise: (ambush/fatal attack on officers; managing stress from sources inside PPB; managing stress from sources outside PPB; more frequent control/defensive tactics training; District Attorney legal updates; update on person-encounters/detentions, stops, mere conversation, reasonable suspicion; and active shooter training) to obtain additional feedback from supervisors".

Knowledge of Bureau of Human Relations (BHR) Directives, PPB Directives, Oregon Family Leave Act (OFLA), Family and Medical Leave Act (FMLA), Americans with Disabilities Act (ADA), the various PPB union rules, and laws pertaining to managing employees and how to appropriately apply them (including where to find help, timelines, and requirements for managing ADA accommodations).	2019	Part of this is being incorporated into the 2020 Supervisors In-service (Oregon Family Leave Act, Family and Medical Leave Act, Americans with Disabilities Act) and the PPB Sergeant Academy.
Internal Affairs processes – following up on corrective action or an identified issue, who a supervisor can discuss the case with, and who a supervisor can talk with for more information regarding a complaint (e.g. supervisors can talk with the involved employee).	2019	To be determined.
An understanding of equity and how to appropriately apply equity principles and strategies (including generational changes in what type of leadership people are responsive to).	2019	The PPB’s Equity and Inclusion Office is collaborating with the PCCEP and Training Division to plan a series of racial equity trainings in 2021. <sup>29</sup>
How to use BHR as a business partner.	2019	To be determined. The Training Division is considering an online training video.
Basic training on the recruitment processes for external and internal hires.	2019	To be determined. The Training Division is considering creating an online training with the Personnel Division.
Appropriate team building and creating a positive work environment (including how to leverage your team / know your team and their skills).	2019	This is being incorporated into the 2020 Supervisors In-service, as well as in the Sergeants Academy.

<sup>29</sup> The Training Advisory Council has also made informal recommendations pertaining to the importance of this training topic. This is also a part of the Bureau’s Community Engagement Plan.

An introduction to the Public Information Office work.	2019	To be determined.
Conducting more meaningful performance evaluations as well as other check-ins (including effectively writing performance evaluations).	2019	This is in consideration for the 2021 Supervisors In-service. This is also being incorporated into the Sergeants Academy.
Knowledge of and how to utilize Homelessness and Urban Camping Impact Reduction Program, Strategic Prosecution, Park Exclusions, and Property Abatement.	2019	A 2020 online training is in progress. This training will incorporate this need, another in this section, and one under Trends in Hazards.
Addressing problem employees and/or problematic behavior (including related intervention strategies, dealing with employees with interpersonal behavioral and/or performance issues, addressing employees who were previously your peers and/or friends, providing corrective action prior to reaching a level of misconduct, and procedures for supervisory investigations of minor employee misconduct).	2019	A part of this is scheduled for the 2020 Supervisors In-service.
General active leadership skills pertaining to managing critical incident scenes. Including expanding the Active Shooter Incident Management principles to other critical incidents (e.g. active shooter, earthquakes, etc.), scenario training, and table top exercises.	2019	A portion of this was covered during the 2019 Supervisors In-service. Additional training on critical incidents is being considered for the 2021 Supervisors In-service.
Managing officer involved shootings.	2019	An online training on post-shooting procedures with a knowledge check is in consideration for supervisors.
Police and practice monitoring pursuits from other agencies (those conducted in the City of Portland).	2018	Considering a Tips and Techniques or incorporation into Supervisors In-Service.

Crime scene management	2019	This is scheduled for 2020 Supervisors In-service and will also be incorporated into the online training regarding GVRT calls.
Knowledge of and how to implement the Incident Command System (including associated roles).	2019	The training of all sergeants in the Incident Command System is in progress.
Dynamic Risk Assessment	2019	This has been incorporated into the Active Threat, Critical Decision Making, and Emergency Entry curriculum. Some of this training is still in progress with the 2020/2021 In-services.
Critical Decision Making/decision making (including table top exercises and making decisions under stress)	2019	This is planned for 2020 Supervisors In-service.

#### Identified Training Needs for Advanced Academy

Topic/Skill Area	Year Suggested	Notes
Media relations (including how the media works, what to expect when they show up to scenes, and how to best work with them)	2020	To be determined. The Training Division is considering creating an online training video for this.

## RESEARCH REFLECTING BEST PRACTICES AND LATEST IN LAW ENFORCEMENT TRENDS

For many years the Training Division has sent staff to trainings, conferences, and agencies, in order to gain information on training trends and new innovations in law enforcement training. In 2014, the Training Division implemented a system to begin tracking information obtained from these events. The Training Division has also developed a system for reviewing and tracking literature findings pertaining to law enforcement training research, equipment, and trends. This information is utilized for identifying training needs, developing curriculum content, advancing training methods, and enhancing training related research.

### **Staff Trainings/Conferences, and Agency Visits**

From July 2019 to October 2020, the Training Division staff continued to attend trainings and conferences, and visits to other agencies. This included, but is not limited to the, Advanced Law Enforcement Rapid Response Training conference, Extreme Ownership training, Oregon Association of Chiefs of Police Conference, Association of Threat Assessment Professionals, Force Science Institute training, National Association of Women Law Enforcement Executives, NW Leadership Seminar, CIT International Conference, and the International Association of Chiefs of Police. Some of the main topic areas researched were leadership, officer health, ethics, close quarter self-defense, de-escalation, 21<sup>st</sup> Century Policing, conducted electrical weapon, Courageous Conversations, and Crisis Intervention. This information is being utilized to refine and update several of the training programs, including the Wellness, Leadership, and Procedural Justice Programs.

### **Literature Research Pertaining to Law Enforcement Training**

The Training Division has formalized its review of literature and research on law enforcement training. The sources for information include, but are not limited to, peer-reviewed research journal articles, the International Law Enforcement Educators and Trainers, the Criminal Justice Abstracts and PsycINFO databases, the Community Oriented Policing Services, the Police Executive Research Forum, policing journals, recommendations from the COCL team, reports from other police agencies, and web searches.

The focus of these searches and reviews are on the following topics:

- Active Shooter
- Crisis Intervention
- Defensive Tactics
- Electronic Control Equipment
- Firearms

- Leadership
- Officer Health
- Organizational Health
- Patrol Procedures
- Police Legitimacy
- Police Vehicle Operations
- Procedural Justice
- Racial Equity
- Use of Force

Within these topic areas, some of the categories of information gathered are:

- Best methods for delivery of particular training topics
- Retention rates and other information pertaining to the perishability of the skill
- Training/curriculum models
- Related teaching methods to increase learning
- Suggestions for related key learning objectives, training components, and exercises
- Trends in the number of training hours provided
- Training for performance under stress
- New training technologies

Since the 2019 Training Needs Assessment Report, the Training Division has focused its literature research on the topics of use of force (including as it pertains to bias), active threat, community problem solving, ethics, leadership, training retention and perishability of skills, officer health, and crisis intervention/mental health response training. A listing and brief summaries for some of these articles can be found in Appendix E.

The Training Division is continuing to review articles pertaining to these and the other topics above. To date, the current considerations that may warrant some follow-up pertaining to future training topic areas:

#### *In-Service*

Overall, the Use of Force and Officer Health literature support the need for trainings that help reduce officer stress and burnout, officer fatigue<sup>30</sup>, and dealing with complex and/or stressful situations.<sup>31</sup> The Training Division has developed a Wellness program, which is working on organizing trainings and other strategies for increasing employee health.

The Ethics and Officer Health literature support the need for trainings that help reduce officer stress, burnout, and dealing with complex job related ethical strains.<sup>32</sup> The Training Division has

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<sup>30</sup> 2019 literature review finding.

<sup>31</sup> 2018 literature review finding.

<sup>32</sup> 2020 literature review finding.

developed Ethics and Wellness programs, and is working towards implementing the ABLE Program.

Some of the literature pertaining to learning and training methodology discusses the value of storytelling in training. The Training Division does utilize case studies for learning currently, however, they are exploring ways to utilize this technique more frequently and effectively.

One article noted that when social movement participants perceived police officers using unjust force against protestors, they are more likely to endorse violence against the police. Although using force justly and utilizing de-escalation skills when possible is already reinforced throughout several PPB trainings, it was noted that it may be helpful to inform officers of related tactics used by some groups to provoke officers to make a mistake. Thus reinforcing the importance of staying calm and focused.

#### *Supervisor's In-Service*

The research on use of force<sup>33</sup>, ethics<sup>32</sup>, and officer health<sup>34</sup> supports the needs for reducing organizational/bureaucratic stressors and factors that lead to officer strain and burn out. The Training Division's Wellness and Leadership programs are working on organizing and/or developing related trainings. The Training Division is also working towards implementing the ABLE Program.

The police legitimacy and procedural justice literature supports supervisor and command-level training pertaining to ensuring fairness in discipline and general employee treatment, an understanding of what environmental factors enhance an officer's ability to convey procedural justice characteristics, factors besides officer interactions that impact the public's views with respect to police legitimacy and procedural justice, and general organizational health strategies.<sup>27</sup> The Training Division's Procedural Justice Program provided an introduction to this training topic during the 2019 Supervisors In-service and additional training is being considered for the 2021 Supervisors In-service.

In addition, the Training Division has been reviewing Rand's Fostering Innovation to Respond to Top Challenges in Law Enforcement study findings. The findings support many of the Portland Police Bureau's trainings and programs, such as those pertaining to officer health, Procedural Justice, and the hiring and training of officers. It is anticipated that PPB may be behind in regards to technology innovations pertaining to patrol and addressing crime issues given funding limitations (e.g. patrolling and collecting data from self-driving vehicles). The Training Division plans to further assess related training needs pertaining to these topic areas in the future.

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<sup>33</sup> 2017 literature review finding.

<sup>34</sup> 2020 literature review finding.

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**APPENDIX A: DOJ AGREEMENT, SECTION III.A.3**

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Section III.A.3: Use of Force Supervisory Investigations and Reports

70. PPB shall continue enforcement of Directive 940.00, which requires supervisors who receive notification of a force event to respond to the scene, conduct an administrative review and investigation of the use of force, document their findings in an After Action Report and forward their report through the chain of command. PPB shall revise Directive 940.00 to further require that supervisory officers:

- a. Complete After Action Reports within 72 hours of the force event;
- b. Immediately notify his or her shift supervisor and PSD regarding all officer's Serious Use of Force, any Use of Force against persons who have actual or perceived mental illness, or any suspected misconduct. Where the supervisor suspects possible criminal conduct, the supervisor shall notify the PPB Detective Division. Where there is no misconduct, supervisors also shall determine whether additional training or counseling is warranted. PPB shall then provide such counseling or training consistent with this Agreement;
- c. Where necessary, ensure that the subject receives medical attention from an appropriate medical provider; and
- d. Interview officers individually and not in groups.

71. PPB shall maintain adequate patrol supervision staffing, which at a minimum, means that PPB and the City shall maintain its current sergeant staffing level, including the September 2012 addition of 15 sergeants.

72. PPB shall develop a supervisor investigation checklist to ensure that supervisors carry out these force investigation responsibilities. PPB shall review and revise the adequacy of this checklist regularly, at least annually.

73. PPB shall revise its policies concerning chain of command reviews of After Action Reports, as necessary, to require that:

- a. EIS tracks all Directives 940.00 comments, findings and corrections;

- b. All supervisors in the chain of command are subject to and receive corrective action or discipline for the accuracy and completeness of After Action Reports completed by supervisors under their command;
- c. All supervisors in the chain of command are accountable for inadequate reports and analysis;
- d. A supervisor receives the appropriate corrective action, including training, demotion, and/or removal from a supervisory position when he or she repeatedly conducts deficient investigations. Where a shift commander, or precinct commander, repeatedly permits deficient investigations, the shift commander, or precinct commander, receives the appropriate corrective action, including training, demotion, and/or removal from a supervisory position;
- e. When, after investigation, a use of force is found to be out of policy, PPB shall take appropriate corrective action consistent with the Accountability provisions of this Agreement;
- f. Where the use of force indicates policy, training, tactical, or equipment concerns, the immediate supervisor shall notify the Inspector and the Chief, who shall ensure that PPB timely conducts necessary training and that PPB timely resolves policy, tactical, or equipment concerns; and
- g. The Chief or designee, as well as PSD, has discretion to re-assign a use of force investigation to the Detective Division or any PPB supervisor.

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**APPENDIX B: MENTAL HEALTH RESPONSE RELATED TRAINING NEEDS**

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In-Service Considerations

Topic / Skill Area	Notes
Refresh non-ECIT officers as to proper use of ECIT officers and how non-ECIT officers can help set ECIT officers up for success.	The Behavioral Health Unit and Training Division are working on developing an online training for 2020.
Reiterate the proper use of “Yes”/“No” questions when clearing a call, as well as when and how to change a call to an “ECIT” call.	The Behavioral Health Unit and Training Division are working on developing an online training for 2020.
Consider offering the ECIT data points class to non-ECIT officers.	The Behavioral Health Unit and Training Division are working on developing an online training for 2020.
Interactions with Project Respond and navigating clinician and officer interaction.	To be determined.
Increase the level of difficulty for the crisis communication training.	The Patrol Procedures Program has been increasing the complexity of related crisis intervention In-service training scenarios.
Critical incident response components during more serious, complex, and or unusual calls, such as ensuring all teams are set up prior to making contact, conducting a tactical retreat after disengaging from a call, assessing scene risk, setting up perimeters, developing and communicating tactical plans. Consider another all-play scenario.	The Patrol Procedures Program has been increasing the complexity of related crisis intervention In-service training scenarios.
Effectively handling calls involving a person who is both violent and has a mental health issue.	To be determined.
Extreme Risk Protection Orders (ERPOs) – general introduction/information to patrol officers regarding law.	A Tips and Techniques online training is planned for 2020.

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## ECIT In-Service Considerations

Topic / Skill Area	Notes
More training practice in the “coach” role, as well as reinforcing the importance of timely and ongoing communication to the rest of the team.	Additional training is to be determined.
Utilizing more videos	The Behavioral Health Unit incorporated this into the 2020 ECIT In-service training. Additional use of videos will be considered for future trainings.
More training on communication strategies that may be more effective given a person’s mental health condition.	The Behavioral Health Unit incorporated this into the 2020 ECIT In-service training. Additional training on this topic will be considered for future trainings.
More scenarios and hands-on training, including more comprehensive scenarios and multiple officers to make it more realistic.	To be determined.
Review of actual ECIT calls, especially unique or challenging ones (analyze/debrief, what worked, what did not work, how officers used resources outside of the box).	The Behavioral Health Unit incorporated this into the 2020 ECIT In-service training. Given the beneficial discussions this generated, additional use of case studies will be considered for future trainings.

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## APPENDIX C: ADVANCED ACADEMY TRAINING NEEDS

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The majority of the training needs for the Advanced Academy Program are identified through the evaluation process and addressed within or between Advanced Academies. This includes identifying gaps or redundancy between the Advanced Academy and other training the new recruits receive, inconsistencies in instruction, additional curriculum needs and/or enhancements, and other logistical considerations for improving the program. During 2019 and 2020, the Advanced Academy management and lead instructors continued to refine the program based on evaluation results, logistical needs, and other information. A brief summary of some of the most current updates and/or identified needs are below. More detailed information regarding past identified training needs and related changes for the Advanced Academy can be found in the Advanced Academy Program Modifications Reports<sup>35</sup>.

### *In-Progress and/or Potential Upcoming Advanced Academy Training*

The Advanced Academy Police Vehicle Operations Programs (PVO) has been restructuring their class sequencing to allow related policy to be covered during the beginning of the Academy, so that the students have more time to integrate it into the rest of their PVO training. They have eliminated the SkidCar program given the technological advancements pertaining to winter weather conditions in newer vehicles, to provide more time on other PVO skills. They are also now conducting all the applied Advanced Academy PVO skills training with the FIU vehicles, to provide them more training time with the vehicles they will be operating during the beginning of their career.

The Advanced Academy Firearms Program would like to create more opportunities for students to have more repetition/skills practice time in movement and shooting prior to some of the Patrol Procedures scenarios. This is time intensive and will depend on time allocation and scheduling requirements. They are also exploring some changes to the shotgun training, however, this is dependent on whether the Police Bureau is going to be able to redesign its shotgun program.

The Patrol Procedures Program is working on reducing redundancies between the Basic and Advanced Academies. They would also like to add additional Decision Making Exercises and Emergency Entry curriculum if time permits.

The Crisis Intervention Program is exploring some areas of redundancy between the Basic and Advanced Academy CIT curriculum, as well as making some updates to the curriculum pertaining to the most critical on-the-job skills for patrol officers. This may include skills pertaining to use force, knowing when to put someone in a hold, risk analysis and threat mitigation.

Through the evaluation process, it has been noted that additional training time in the following areas may be beneficial: choke defense, ground defense, firearms training involving stress and realistic scenarios, and takedowns. In addition, the Training Division recognizes that updates to various

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<sup>35</sup> The Advanced Academy Program Modification Reports can be found at <https://www.portlandoregon.gov/police/73428>.

components of the Advanced Academy curriculum may be needed due to 2020 national changes for law enforcement, related changes in Oregon law, and advancements to DPSST's Basic Academy curriculum. The Training Division management plans on conducting a more extensive review of the Advanced Academy training needs in 2021 and is exploring the possibility of increasing training time for new recruits.

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**APPENDIX D: RETENTION RATES**

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**Conducted Electronic Weapon: Retention Rates**

Topic / Skill Area	Current Estimated Timeframe for Refresher/Updated Training
Refresher on Basic Operations	One to two times per year
CEW Manipulation	One to two times per year
Deploying within Preferred Target Zones	Two or more times per year
CEW Decision Making	Once per year
Weapon Transitions	Once per year
CEW Policy	Once a year (at least on selected portions)

**Control Tactics: Retention Rates**

Topic / Skill Area	Current Estimated Timeframe for Refresher/Updated Training
Handcuffing	Every five years or as needed per Patrol Procedures scenario performance
Searches	Every five years or as needed per Patrol Procedures scenario performance
Standing Self-Defense	Three to five times per year
Range Drill	One to three times per year
Ground Control	Three to five times per year
Takedowns	Three to five times per year
Weapon Retention	One to three times per year
Vehicle Tactics	Every three years

## Firearms: Retention Rates

Topic / Skill Area	Current Estimated Timeframe for Refresher/Updated Training
Firearm Safety Fundamentals	Integrate into every firearms training
Handgun Fundamentals (e.g. reloads)	Once per month
Handgun Marksmanship: Strong Hand	Once per month
Handgun Marksmanship: Support Hand	Once per month
Handgun Malfunction Drills	Once per month
Positional Shooting	Two to three times per year
Moving Targets	Two to three times per year
Moving and Shooting	Two to three times per year
Weapon Transitions	One to two times per year
Shoot / Don't Shoot	Once per year
Flashlight and/or Firearm Light	Three times per year
Low-light Conditions	Once per year
Shotgun Fundamentals; e.g. reloads, BEES & function check	Every other year
Shotgun Marksmanship	One to two times per year
Shotgun Malfunction Drills	One to two times per year
Deadly Force Policy / ORS 161.209 State Statute	Refresher/reminder Every two years or as needed with updated policies/statutes

## Patrol Procedures: Retention Rates

Topic / Skill Area	Current Estimated Timeframe for Refresher/Updated Training
Building Searches	Once a year
Active Shooter	Once a year
Ambush Response	Every other year
Critical Incident Response	Once a year
High Risk Vehicle Stops	Every other year
Tactical Emergency Casualty Care	Once a year
Officer/Citizen Rescue	Every other year
Post-Shooting / Shield	Once a year
Foot Pursuits	Every other year

## Police Vehicle Operations: Retention Rates

Topic / Skill Area	Current Estimated Timeframe for Refresher/Updated Training
PIT	Every one to two years
Post-PIT	Every two years
Box-in	Every two years
Pursuit Policy	Yearly refresher/reminder
five Fundamentals (e.g. SLALOM, eyes up, smooth steering inputs, smooth pedal inputs, maintain stable platform)	Yearly refresher/reminder
Backing	Every two years
Pursuit Driving (Higher Speed Driving)	Every two years
Pursuit Training (Scenario-Based)	Every two years
Collision Avoidance	Every three years
ABS Braking	Every three years
Radio Communication	Every three years
Spike Strips	Every three years

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## APPENDIX E: LITERATURE REVIEWS

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As a part of the Training Division's research on best practices and latest trends, the Training Division has a formal process for reviewing literature and research on law enforcement training. Below are the names and a brief description of the articles reviewed since the 2019 Needs Assessment.<sup>36</sup> The Training Division is continuing to review articles pertaining to these and other topics.

### Active Threat

U.S. Fire Administration, Federal Emergency Management Agency. (n.d.). *Fire/Emergency Medical Services Department Operational Considerations and Guide for Active Shooter and Mass Casualty Incidents* (September 2013 ed., pp. 1-17).

Since the Columbine High School shooting in 1999, more than 250 people have been killed in active shooter and mass casualty incidents (AS/MCI) in the United States. These types of events can occur in any community and can have an impact on the fire and police departments regardless of capacity. The United States Fire Administration (USFA) and Federal Emergency Management Agency (FEMA) developed a guide to help support public safety personnel in building resources for potential AS/MCIs by fostering common tactics, communication, and operations among intergovernmental agencies. The ultimate goal of this document is to help agencies plan, prepare, and save the maximum number of individuals possible during their response to an AS/MCI. In short, this article offers insight to agencies who are planning and training for AS/MCIs by offering checklists, additional publication resources, and recommendations for agencies to assess their own needs.

If agencies are unprepared for an AS/MCI, they may experience a phenomenon known as the *reverse triage effect*. Research from prior AS/MCIs has shown that casualties with minor injuries may seek assistance from responding fire, emergency medical services (EMS), and law enforcement personnel. This can cause a delay in these agencies treating individuals with serious or life-threatening injuries. In addition to this experience, individuals with minor injuries may also self-transport to nearby hospitals thus creating crowding before the critically injured individuals are transported to the facility.

The USFA and FEMA have also identified a way of maximizing survival of casualties using the THREAT principles put forth by the Harford Census (threat suppression, hemorrhage control, rapid extrication to safety, assessment by medical providers, and transport to definitive care). The agencies have advocated that the THREAT principles should be integrated into training and standard operating procedures (SOPs) for fire and EMS agencies. In addition to these principles,

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<sup>36</sup> The Training Division creates more extensive literature reviews for internal use. However, it would be most prudent for readers to refer to the original article if a full and comprehensive understanding of these articles is desired.

the USFA and FEMA have recommended using the National Incident Management System (NIMS) and the Incident Command System (ICS) for the coordination of personnel and resources during an AS/MCI.

In addition to the general operational principles, the USFA and FEMA have demonstrated in detail about how important it is have interagency collaboration, on-scene practices among these entities, how to handle or approach the media during these types of events, why planning is necessary for a public information officer, operational practices for agencies en route and on-scene, and efficient demobilization.

### **Community Problem-Solving**

Jenkins, M. J. (2016). Police Support for Community Problem-Solving and Broken Windows Policing. *American Journal of Criminal Justice*, (41), 220–235.

The study explored the acceptance of community problem-solving policing, tactics, and the tenants of broken windows theory among police officers. A survey, both in electronic and paper form, was distributed to 227 sworn police personnel. The sworn personnel were located in two urban police departments – one situated in the Midwest and the other positioned in the Mid-Atlantic region – in the United States of America. After conducting the analysis of the survey results, the findings of the study revealed there was support for community problem-solving policing. The results also indicated there was a reliance on traditional policing methods, and investigators were less supportive in accepting community problem-solving. There was also a differential in acceptance regarding the broken windows theory and rapid response tactics among different ethnic groups of police officers which lends support to future research in this area. Additionally, the acceptance of particular police tactics supports innovation or moves towards innovation in law enforcement agencies.

The study presented that police personnel for these two police departments may have not wholly realized all elements of the community problem-solving strategy. They rely more heavily on tactics such as vehicle patrol and rapid response. The research recommended for citizens and law enforcement executives to examine if there is room to improve delivery of services that are in line with community problem-solving strategy while taking budgetary constraints into consideration.

The researcher also proposed that law enforcement agencies can adopt a more robust community problem-solving strategy approach by focusing on the role of detectives. This focus can be adopted by reforming criminal investigations and make them more responsible for community problem-solving activities and outcomes. While the researcher did not specifically state what these reformed criminal investigations should look like, it has been established there is a patrol-investigation divide. By having police executives focusing on the detectives to adopt the community problem-solving strategy, this could potentially result in more law enforcement personnel being in line with their agency's goals and strategies.

The exploratory analysis suggested Latino officers are more likely to agree with the elements of broken windows policing, and use them throughout their career. The researcher called for future research to examine social identity, double marginality, illusory correlation, and unconscious stereotyping to explain the differences between ethnic and racial groups.

### **Crisis Intervention Training**

Normore, A.H., Ellis, B., & Bone, D.H. (2015). The Defragmentation of Mental Health Services, Police, and the Homeless. *Policing: A Journal of Policy and Practice*, 10(2), 134-142.

Normore and colleagues argue that policing has shifted from enforcement to being problem-orientated and community-based as a result of deinstitutionalization during the 1960s to 1980s, curtailed mental health funding, and changes in legal reforms. These types of societal changes and lack of funding have resulted in police officers having more contact with homeless and mentally ill individuals. As a whole, law enforcement, mental health services, and society are working independently of each other instead of collectively in order to tackle mental health issues and homelessness. In their research, Normore and colleagues argue that building “adaptable prevention and intervention solutions, strategies, and community partnerships” is needed for the success of law enforcement and their interactions of this marginalized group in the 21<sup>st</sup> century (p. 134). Throughout the course of their paper, the researchers offered recommendations to enhance partnerships by defragmenting services so that the communities across the United States can provide adequate care to the homeless individuals who have a mental illness.

The researchers argued that the Multi-Disciplinary Model should be utilized between law enforcement agencies and mental health practitioners to create mutual successes in providing assessments, developing best practices for support and treatment, wrap-around services, and fostering understanding about the challenges both law enforcement and mental health providers face and their resolutions. The lack of collaboration among community service providers and law enforcement agencies leads to inadequate resources.

Normore and colleagues also advocated for law enforcement to adapt a CIT Program, as this type of model allows for collaboration and partnership among law enforcement, mental health practitioners, and advocacy groups.

Steadman, H.J., Deane, M.W., Borum, R., & Morrissey, J.P. (2000). Comparing Outcomes of Major Models of Police Responses to Mental Health Emergencies. *Psychiatric Services*, 51(5), 645-649.

Steadman and researchers compared three models of police responses to incidents involving mentally ill persons in order to determine the effectiveness and responses of specialized programs. They used three study sites (Birmingham, AL; Knoxville and Memphis, TN) to examine how each specialized team responded to a police dispatch call involving “emotionally disturbed persons.”

All three of the programs had a low arrest rate when a specialized response occurred. In Birmingham's model, the professionals often resolved the incident on-scene versus the Memphis model, which often referred individuals to mental health professionals. All three programs were designed to divert persons suspected of having a mental illness from jail and into social services. The findings from this study strongly suggests that collaborations among the criminal justice system, the mental health system, social services, and community reduce arrests of individuals with mental illness.

The researchers contribute the success of these programs to two key factors: a) the existence of a drop off center where police can transport individuals in a mental health crisis and b) the centrality of community partnerships.

All three of these programs are innovative and are taking steps to address the needs the mentally ill population, their family members, and the community. Through their study, Steadman and colleagues determined who shows up on the scene and how the police and the mental health personnel address the situation. The Memphis CIT program was the most active in linking individuals with mental illness to social services by providing transportation to mental health facilities. Birmingham's CSO program has specially trained officers who excel at on-scene crisis intervention. As for Knoxville, the collaboration between the police and the mobile crisis unit resulted in a high percentage of mentally ill individuals being referred to treatment and a low arrest rate. The findings from this study strongly suggests that collaborations among the criminal justice system, the mental health system, social services, and the community reduces arrest of individuals with mental illness.

## **Ethics**

Blumberg, M., Papazoglou, K., & Creighton, S. (2018). Bruised Badges: The Moral Risk of Police Work and a Call for Officer Wellness. *International Journal of Emergency Mental Health and Human Resilience*, 20(2), p. 1-14, doi: 10.4172/1522-4821.1000394

The paper put forth by Blumberg and colleagues raises awareness on police misconduct and various factors that foster these types of transgressions. The authors argued that agencies should design and implement comprehensive programs, such as wellness, and goal-orientated policies to assist in combating police misconduct on an ongoing basis. Blumberg and colleagues structured their arguments in two ways: first, they discussed the individual characteristic of integrity and secondly, how being employed as a police officer may lead to personal integrity decline while utilizing a variety of ethical theories. By using these explanations, the researchers offered several prevention and intervention strategies for combating police misconduct while arguing that integrity should be thought of as perishable skill instead of a fixed personality trait. The researchers also encouraged police executives to improve their discipline, supervision, and training processes.

Integrity is defined as a personality trait that involves honesty, fidelity, incorruptibility, keeping one's word and/or obligation, trustworthiness, or unwillingness to violate one's principles regardless of the cost, preferences of others, and/or temptations. By using this working definition, the researchers employed the Integrity Scale in their study. Using the data from the police recruits collected in the 2016 study, the researchers compared the Integrity Scale scores from their participants before and after their academy training and found that the academy training had little to no impact on the recruits' self-reported levels of integrity. This finding also demonstrates that no significant changes occurred in the recruits' integrity within the confines of their training academy. The findings of this research indicate three points. First, the initial year of police work after academy training plays a crucial role in the decline of ethical principles among law enforcement. Second, a potential downward trend in ethical principles may be predicted. Third, an important discussion needs to occur about why some officers experience personal integrity decline after a short duration in the occupation. Blumberg and colleagues advocate that future research is needed to assess self-reported integrity scores throughout the duration of officers' careers. They also encouraged future research of ethical decision making to be tested using law enforcement samples.

Throughout their paper, Blumberg and colleagues presented numerous ethical decision making theories, such as moral licensing and moral disengagement, to explain police misconduct at the organization and individual levels. The researchers advocated that in order to understand the police misconduct phenomenon a comprehensive police-specific theory needs to be developed; however, it can be argued the Blumberg and colleagues are forging the path for such a theory based upon their exploration of existing ethical decision making theories and applying them to current police practices.

Clinical conditions, such as depression and anxiety, is one of the areas that authors suggested to be researched with a law enforcement sample. Drawing upon existing literature, the researchers concluded that individuals who have clinical conditions are more likely to engage in unethical decision making. The researchers suggested for this area to be explored with police officers to examine if there is a link between law enforcement personnel, who experience anxiety and/or depression, and unethical behavior. Additionally, the authors advocated for future research to empirically study intuitive decision making in law enforcement. Current research on intuitive decision making have been studied in other populations and allowed for Blumberg and colleagues to infer that police officers may behave unethically because of their legally approved acts of deception.

Lastly, there is a need for future empirical research on moral disengagement. A strong argument can be made that police practices and training foster unethical decision making. Moral disengagement is an important theory that explains or attempts to explain the understanding of police misconduct. For instance, the mechanisms of moral disengagement may flourish in police officers from the time they are hired, and throughout their training and careers, when notions of being part of the elite, the best of the best, special, or the top 10 percent are reinforced and continually supported to believe they are better than members of the community.

## Leadership

Biggs, A., Brough, P., & Barbour, J. P. (2014). Enhancing work-related attitudes and work engagement: A quasi-experimental study of the impact of an organizational intervention. *International Journal of Stress Management*, 21(1), 43-68.

Informed by job demands-resources theory, Biggs and colleagues (2014) used a quasi-experimental approach to evaluate the effectiveness of an organizational leadership-development program on psychosocial work characteristics and psychological outcomes. The authors predicted that direct subordinates of leadership-development intervention participants would report more positive perceptions of strategic alignment, work-culture support, and supportive leadership; greater job satisfaction and work engagement; and fewer job demands, turnover intentions, and psychological strain following the intervention than the control group. In addition, the authors hypothesized that job demand, strategic alignment, work-culture support, and supportive leadership would mediate the relationship between the leadership-development intervention and job satisfaction, work engagement, turnover intention, and psychological strain.

The organizational intervention consisted of a leadership-development program that was offered to senior leaders in two regions of a state police service in Australia. Within the two organizational regions, the highest ranking (above sergeant) officers with people-management responsibilities were invited to participate in the intervention. Of 76 officers invited to participate, six declined the invitation largely due to roster conflicts. The intervention was designed to improve upstream organizational resources by training participants on supportive and transformational leadership behaviors, which in turn would enhance employees' perceptions of psychosocial work characteristics (job demand, strategic alignment, work-culture support, and supportive leadership) and psychological outcomes (job satisfaction, work engagement, turnover intention, and psychological strain).

The intervention included a range of training topics, such as leadership styles (e.g., supportive, transformational), effective communication, and strategic leadership. The intervention consisted of three main components: (1) 360° review process by intervention participants and their immediate supervisors and direct subordinates; (2) action-learning workshops over the course of five days (e.g., training on leadership behaviors and practical resources, implement action-learning project); and (3) individual coaching throughout the duration of the intervention (e.g., personalized feedback based on 360° review process, discussions on newly implemented leadership practices). The authors facilitated the 360° review process, while an external facilitator conducted both the action-learning workshops and coaching sessions.

All employees in the two organizational regions were invited to complete electronic surveys four months prior to (T1) and seven months following (T2) the leadership-development intervention. Respondents were removed from the final dataset if they were not police officers; moved in or out of the intervention regions after T1; participated in a concurrent intervention; were leadership-

development intervention participants; or had missing data greater than 50% for any variable. Respondents were also excluded from the final dataset if their data included multivariate outliers.

The total matched T1-T2 sample consisted of 368 participants who were divided into one of two subgroups: (1) intervention subordinates or (2) control group. *Intervention subordinates* ( $n = 146$ ) consisted of police officers who worked directly with leadership-development intervention participants and were not enrolled in the intervention themselves. The *control group* ( $n = 222$ ) consisted of remaining police officers who did not work directly with leadership-development intervention participants and were not enrolled in the intervention themselves.

In addition to the leadership-development intervention, job demand, strategic alignment, work-culture support, supportive leadership, job satisfaction, work engagement, turnover intention, and psychological strain were also included in the analyses. The authors conducted independent  $t$ -tests and chi-square tests to determine if significant group differences existed for demographic characteristics. In addition, a series of ANOVAs were conducted to determine if significant group differences existed for the research variables. Descriptive statistics and correlations were computed for each measure at T1 and T2. Multiple regression analyses were also conducted to test the research hypotheses. Notable findings included:

- Rank and tenure of the leadership-development intervention subordinates were significantly higher than participants in the control group, suggesting that rank and tenure were significantly different among the two groups prior to the intervention.
- Work-culture support and supportive leadership of the leadership-development intervention subordinates were significantly lower than participants in the control group, suggesting that work-culture support and supportive leadership were significantly different among the two groups prior to the intervention.
- There were significant positive relationships among strategic alignment, work-culture support, supportive leadership, job satisfaction, and work engagement.
- Strategic alignment, work-culture support, supportive leadership, job satisfaction, and work engagement were significantly and negatively related to turnover intention and psychological strain prior to and following the intervention. In other words, as strategic alignment, work-culture support, supportive leadership, job satisfaction, and work engagement increased, turnover intention and psychological strain decreased.
- Turnover intention was significantly and positively associated with psychological strain prior to and following the intervention, suggesting that as turnover intention increased, psychological strain also increased.
- Job demand was significantly and positively correlated with turnover intention and psychological strain prior to the intervention, indicating that as job demand increased, turnover intention and psychological strain also increased.

- Job demand was significantly and negatively related to work-culture support and job satisfaction prior to the intervention, meaning that as job demand increased, work-culture support and job satisfaction decreased.
- Job demand was significantly and positively associated with psychological strain following the intervention, suggesting that as job demand increased, psychological strain also increased.
- The leadership-development intervention significantly predicted greater levels of work-culture support, strategic alignment, work engagement, and job satisfaction.
- Work-culture support and strategic alignment significantly predicted greater levels of work engagement and job satisfaction following the intervention.
- The leadership-development intervention had indirect effects on work engagement and job satisfaction through work-culture support and strategic alignment. In other words, the intervention predicted greater levels of work-culture support and strategic alignment, which subsequently predicted greater levels of work engagement and job satisfaction.

Hammer, L., Kossek, E., Anger, W., Bodner, T., and Zimmerman, K. (2011). Clarifying Work-Family Intervention Processes: The Roles of Work-Family Conflict and Family-Supportive Supervisor Behaviors. *Journal of Applied Psychology, 96* (1), 134-150.

The authors explored the impacts of a Family-Supportive Supervisor Behavioral (FSSB) intervention on employee health, job satisfaction, and turnover within the framework of employee levels of work-to-family and family-to-work conflict. This study was conducted with a pretest-posttest control group design and utilized all four levels of the Kirkpatrick's Model of training evaluation.

The study utilized 12 grocery stores in the Midwest; with six serving as the control group and six serving as the treatment group. The intervention for this pretest-posttest control group study design included a computer-based training, an in-person training, and a behavioral self-monitoring process for supervisors. The trainings included information on the benefits of work-family conflict interventions in the workplace (e.g., employee and family wellbeing, increasing retention, reducing health costs), employee and supervisor gaps in perceived family-supportive supervisory characteristics (e.g. supervisors evaluating themselves higher in these qualities than their employees), the organization's work-family policies and resources, and FSSB definitions, dimensions, and strategies. The classroom training incorporated in-person examples of how to implement FSSB principles and opportunities for questions and discussion.

The main evaluation measures included training evaluation feedback surveys, a pre/post knowledge test delivered in the computer-based training, self-monitoring of FSSB concepts on daily data cards for supervisors, and pre and post-intervention employee surveys (which included measures on their

supervisor's use of Family-Supportive Supervisor Behavioral concepts, work-family conflict, job satisfaction, turnover intention, and physical health).

Overall, the researchers found the intervention appeared to be effective for those with high family-to-work conflict but potentially had unintended negative impacts for others. The intervention was associated with a significant increase in physical health for some groups (e.g., those high in family-to-work conflict) but not others (e.g. those low in family-to-work conflict). The high in family-to-work conflict group also had higher rates of job satisfaction and slightly lower rates of turnover intentions compared to their control group counterparts. The outcomes for those in the low family-to-work conflict group were contrary to desired, with worse ratings for physical health, job satisfaction, and employee turnover compared to their comparison groups.

Although less highlighted in the report, the findings also show an interactive effect with those with work-to-family conflict, with an increase in physical health ratings for those in the low work-to-family conflict treatment group but very little difference for the high work-to-family conflict treatment group, as compared to the comparison groups.

It was unknown why some groups, particularly those in low family-to-work conflict, appeared to have undesired impacts. The authors proposed that this may have been due to differences in how supervisors applied the techniques (e.g., they may have focused their efforts on those with more family-to-work conflict), resentment of the allocation of resources for the program, and/or perceptions of the program contributing to favoritism or unfairness.

Kirmeyer, S. L, & Dougherty, T. W. (1988). Work load, tension, and coping: Moderating effects of supervisor support. *Personnel Psychology*, 41(1), 125-139.

Kirmeyer and Dougherty (1988) examined the buffering role of supervisor support on the relationships between objective and perceived work load, tension-anxiety, and coping behavior among police radio dispatchers. The sample ( $n = 60$ ) consisted of police officers (78%) and civilians (22%) employed at a statewide police organization. Employees were randomly selected from personnel rosters at 12 police stations located in rural and urban communities. Between 85% and 100% of selected employees at each station volunteered to participate in the study.

Participants were observed by one of five trained observers for an entire 8-hour shift. Trained observers remained in the same room with each participant and recorded information into an electronic digital recorder. Participants completed questionnaires measuring perceived work load, felt tension-anxiety, and coping behaviors at the end of each shift. Participants completed questionnaires measuring supervisor support during private, individual interviews two weeks following their observations.

Objective and perceived work load, supervisor support, tension-anxiety, and coping behavior were included in the analyses. Descriptive statistics and correlations were computed for all measures.

Multiple regression analysis was conducted to determine if supervisor support significantly predicted tension-anxiety and coping behaviors beyond work load. Hierarchical multiple regression analysis was also conducted to examine the moderating effect of supervisor support on the relationships between objective and perceived work load, tension-anxiety, and coping behavior. Notable findings included:

- There was a significant and positive relationship between objective and perceived work load, indicating that as objective work load increased, perceived work load also increased.
- Perceived work load was significantly and positively associated with tension-anxiety and coping behavior, suggesting that as perceived work load increased, tension-anxiety and coping behavior also increased.
- There was a significant and negative relationship between supervisor support and tension-anxiety, meaning that as supervisor support increased, tension-anxiety decreased.
- Supervisor support had a significant interaction on the relationship between objective work load and tension-anxiety. As objective work load increased, tension-anxiety also increased among participants with low supervisor support but not for those with high supervisor support.
- Supervisor support had a significant interaction on the relationship between perceived work load and tension-anxiety. As perceived work load increased, tension-anxiety also increased among participants with low supervisor support but not for those with high supervisor support.
- Supervisor support had a significant interaction on the relationship between perceived work load and coping behavior. As perceived work load increased, coping behavior also increased among participants with high supervisor support. For those with low supervisor support, greater perceived work load had little to no relationship with coping behavior.

### **Learning Retention and Training Techniques**

Rantatalo, O., & Karp, S. (2018). Stories of Policing: The Role of Storytelling in Police Students' Sensemaking of Early Work-Based Experiences. *Vocations and Learning*, 11(1), 161-177.

Rantatalo and Karp conducted an ethnographic study on police students in Sweden. Their study aimed to examine how police students verbally recounted their occupational experiences. The researchers used participation observations of field training sessions and drew their analysis from concepts of Karl Weick's ESR model of sensemaking. Rantatalo and Karp conducted their participation observation with four to seven students in 12 two-hour follow-up sessions. They used a total of 66 students from two classes, 44% female and 56% male. The first session, which

consisted of four observations, occurred during the fall of 2015 and the remaining eight observations (second session) took place in the fall of 2016. The field notes and observations protocols from these sessions were the researchers' primary source of data. Their field notes focused on openly describing the "practices of storytelling and on capturing the features and elements of stories that were shared by the students" (p. 166). The researchers also conducted short, informal interviews with the police students and instructors.

The results of their study yielded that police students tended to retell stories of their work experience as it related to action and extremeness, such as calls relating to deceased individuals or the excitement of a foot chase, and downplayed mundane realities of police work such as report writing and dealing with shoplifters. Their findings also showed that open dialogue among police recruits and a facilitator can foster communication and experiential knowledge throughout the students' probationary period. This type of training can also contribute to the overall training and education of the staff within the organization. The initiative taken by these researchers highlighted the influence of the above communication theory, how storytelling aided in the learning process, and the pitfalls of telling war stories. The researchers identified issues and questions, and asked for additional follow-up studies to improve vocational education/training.

## **Officer Health**

Basinska, B. A., Wiciak, I., Daderman, A. M. (2014). Fatigue and burnout in police officers: The mediating role of emotions. *Policing: An International Journal of Police Strategies & Management*, 37(3), 665-680.

Basinska and colleagues noted that while it is important to examine both positive and negative emotions in high-risk professions, there is insufficient knowledge concerning the role of positive emotions and the intensity of emotions on fatigue and burnout among police officers. To fill this knowledge void, the authors investigated the mediating role of high- and low-arousal positive and negative emotions experienced at work on the relationship between acute fatigue and burnout among police officers ( $n = 169$ ). The sample was comprised of sworn police officers undergoing additional education for future commissioned police officers at the Police Academy in Szczytno, Poland. All participants were non-commissioned police officers (sergeants and warrant officers) from the uniformed, criminal investigation, and other divisions.

Data were collected using survey research. The independent variables included acute fatigue and high- and low-arousal positive and negative emotions. Burnout served as the dependent variable. Acute anxiety was measured using the Fatigue Scale, which assessed levels of activation, motivation, and physical fatigue immediately following work on a five-point Likert scale. Emotions were measured using the Job-Related Affective Well-Being Scale (shortened version), which assessed low-arousal positive emotions, high-arousal positive emotions, low-arousal negative emotions, and high-arousal negative emotions on a five-point Likert scale. Burnout was measured using the Oldenburg Burnout Inventory, which assessed exhaustion and disengagement on a four-point Likert scale.

Descriptive, Pearson correlations with Bonferroni correction, and hierarchical multiple regression analyses were conducted. Mediation analysis was also performed to determine if positive and negative emotions indirectly effected the relationship between acute fatigue and burnout. The authors used an online calculator to apply the Sobel test to confirm the mediating role of emotion. Squared semi-partial correlations and Cohen's effect sizes were also conducted. Notable findings included:

- Acute fatigue, low-arousal positive emotions, high-arousal positive emotions, low-arousal negative emotions, high-arousal negative emotions, exhaustion, and disengagement were all moderately correlated with one another.
- All correlation coefficients were statistically significant after applying the Bonferroni correction.
- Acute fatigue was significantly associated with low-arousal negative emotions, and low-arousal negative emotions was significantly related to exhaustion.
- The Sobel test confirmed a significant mediating effect of low-arousal negative emotions on the relationship between acute fatigue and exhaustion, suggesting that more fatigued officers experienced more low-arousal negative emotions and exhaustion.
- Acute fatigue was significantly associated with high-arousal negative emotions and negatively related to high-arousal positive emotions.
- High-arousal negative emotions was significantly associated with disengagement, while high-arousal positive emotions was negatively related to disengagement.
- The Sobel test confirmed significant mediating effects of both high-arousal negative and positive emotions on the relationship between acute fatigue and disengagement, suggesting that more fatigued officers experienced more high-arousal negative emotions, less high-arousal positive emotions, and more disengagement.

Brough, P., & Biggs, A. (2010). Occupational stress in police and prison staff. In J. M. Brown & E. A. Campbell (Eds.), *Cambridge handbook of forensic psychology* (pp. 707-717). Cambridge, NY: Cambridge University Press.

Brough and Biggs (2010) provided a summary of particular aspects of job demand, control, and support typically related to occupational stress among police officers and prison staff. Specifically, the authors discussed definitions and theoretical frameworks as well as antecedents, consequences, and moderators of occupational stress. Interventions for managing occupational stress, including Critical Incidence Stress Management and Employee Assistance Programs, were also discussed. Notable findings included:

- Antecedents of occupational stress were grouped into eight categories, including work relationships, the job itself, overload, control, job security, resources and communication, work-life balance, and pay and benefits.
- Years of exposure to death, violence, and personal attacks and harassment were noted as work demands (operational stressors) that cause high levels of strain.
- Recurring minor job stressors that cause occupational stress among police officers and prison staff included interpersonal conflict in the workplace, insufficient pay, inadequate training, lack of career advancement opportunities, missing or faulty equipment, bureaucracy, excessive paperwork, “red tape,” lack of decision making, understaffing, formal complaints, and management support, all of which were related to poor psychological health and low job satisfaction.
- Exposure to traumatic workplace events was related to poor health and symptoms of post-traumatic stress disorder (PTSD).
- Aspects of organizational culture (e.g., expectation to suppress emotions) and how traumatic workplace events are dealt with by the organization may contribute to the etiology of PTSD.
- Exposure to long-term, chronic stressors was associated with psychological strain, and there were associations between psychological strain and physiological health outcomes, such as coronary heart disease, malignant neoplasms, digestive diseases, and arteriosclerotic heart disease.
- Alcohol abuse, aggression, and suicide ideation were noted as behavioral outcomes of acute and chronic occupational stress as well as cultural factors among police officers.
- Suicide rates were higher among police officers and prison staff compared to the general public. Other research demonstrated associations between suicide and access to firearms, social isolation, and maladaptive coping strategies.
- Police officers and prison staff were regularly exposed to risk factors related to burnout, including emotional suppression, cynicism, and suspicion.
- Psychological burnout was associated with employee characteristics, certain job functions, lack of support, role conflict, organizational stress, job dissatisfaction, and favorable attitudes concerning the use of force in conflict circumstances.
- Support, job control, gender, age, and personality characteristics were noted as common moderators of occupational stress.
- Sufficient workplace support and utilization of adaptive coping strategies may offset the interactions between age, gender, and occupational stress.

- Critical Incidence Stress Management and Employee Assistance Programs were described as two of the most frequently employed stress management interventions in the police and prison industries.

Giardini, A., & Frese, M. (2006). Reducing the negative effects of emotion work in service occupations: Emotional competence as a psychological resource. *Journal of Occupational Health Psychology, 11*(1), 63-75.

Giardini and Frese (2006) tested the assertion that emotional competence operates as an important psychological resource among service workers due to its influence on the relationships between work characteristics (emotional demands and time pressure), emotional dissonance, general wellbeing, and job satisfaction. Specifically, the authors argued that emotional competence helps employees cope with emotional demands and time pressure of their service work and emotional dissonance by the simultaneous process of perspective taking, affective self-regulation, and regulation of customers' affect. The authors predicted that emotional competence would moderate the relationships between: (1) emotional demands and emotional dissonance, (2) time pressure and emotional dissonance, (3) emotional dissonance and general wellbeing, (4) emotional dissonance and job satisfaction, (5) emotional demands and general wellbeing, (6) emotional demands and job satisfaction, (7) time pressure and general wellbeing, and (8) time pressure and job satisfaction. The sample consisted of service employees at a clothing retail business in Germany ( $n = 84$ ). Employees were recruited during their scheduled work hours. Participants completed a questionnaire and received another questionnaire to distribute to one of their peers who knew them well. Participant questionnaires were collected in the business after three to five working days. Peer questionnaires were mailed directly to the authors. The authors received 129 completed questionnaires out of 169 distributed questionnaires (response rate = 76%). Peer questionnaires were returned for 84 of the 129 participants who completed a self-report questionnaire (response rate = 65%).

*Emotional demands* was measured using items from the Frankfurt Emotion Works Scales (Zapf et al., 1999). The scale consisted of seven items (e.g., "Do you have to express positive feelings toward the customer?") scored on a five-point scale (1=*never* to 5=*very often*).

*Time pressure* was measured using a scale developed by Semmer (1982). The scale consisted of four items (e.g., "How often do you have to serve a customer faster than normal to get the work done?") scored on a five-point scale (1=*never* to 5=*very often*).

*Emotional dissonance* was measured using a subscale from the Frankfurt Emotion Works Scales (Zapf et al., 1999). The scale consisted of three items (e.g., "How often do you have to show emotions that do not correspond to your actual emotions?") scored on a five-point scale (1=*never* to 5=*very often*).

*General wellbeing* was measured using a scale developed by Bradburn (1969). The scale consisted of nine items and required respondents to indicate how frequently they experienced certain emotions

during the past six months (e.g., “I felt depressed and very unhappy.”) scored on a five-point scale (1=*never* to 5=*always*).

*Job satisfaction* was measured using a scale developed by Warr et al. (1979). The scale consisted of 14 items and assessed employee satisfaction with various aspects of the task and work environment (e.g., opportunities, salary, supervisor) scored on a seven-point scale (1=*extremely dissatisfied* to 7=*extremely satisfied*).

The authors applied an indicator approach to assess emotional competence, which included perspective taking, affective self-regulation, and regulation of others’ affect. The authors emphasized that these indicators are included in most conceptualizations of emotional competence and reflect three of the four dimensions of the Mayer-Salovey Model (Mayer et al., 2000). Emotional competence was measured by asking peers to rate the emotional competence of the participants using a peer questionnaire comprised of six established and newly developed scales (two scales for each indicator).

*Perspective taking* was measured using a subscale of the Interpersonal Reactivity Index (David, 1983). The scale consisted of seven items (e.g., “Before criticizing somebody, ‘A’ tries to imagine how he or she would feel if he or she were in their place.”) scored on a six-point scale (1=*not at all* to 5=*absolutely*). *Perspective taking* was also measured using a newly developed scale by the authors. The scale consisted of three items (e.g., “In general, ‘A’ is very good at taking the perspective of others.”) scored on a six-point scale (1=*not at all* to 5=*absolutely*).

*Affective self-regulation* was measured using a subscale of the Trait Meta Mood Scale (Salovey et al., 1995). The scale consisted of four items scored on a six-point scale (1=*not at all* to 5=*absolutely*). *Affective self-regulation* was also measured using a newly developed scale by the authors. The scale consisted of three items (e.g., “‘A’ knows very well how he or she can maintain a good mood.”) scored on a six-point scale (1=*not at all* to 5=*absolutely*).

*Regulation of others’ affect* was measured using a scale informed by Schutte et al. (1998), Ciarrochi et al. (2002), and Petrides and Furnham (2000). The scale consisted of five items scored on a six-point scale (1=*not at all* to 5=*absolutely*). *Regulation of others’ affect* was also measured using a newly developed scale by the authors. The scale items (e.g., “In general, ‘A’ has the ability to influence other people’s emotions.”) were scored on a six-point scale (1=*not at all* to 5=*absolutely*).

Confirmatory factor analyses (CFA) were conducted to determine the structure of emotional competence. Correlation and hierarchical regression analyses were conducted to test the hypotheses. Notable findings included:

- Emotional demands and time pressure were significantly and positively associated with emotional dissonance. In other words, as emotional demands and time pressure increased, emotional dissonance also increased among participants.

- Emotional competence had a significant interaction on the relationship between emotional demands and emotional dissonance.
- Emotional competence had a significant interaction on the relationship between time pressure and emotional dissonance. As time pressure increased, emotional dissonance also increased among participants with low emotional competence.
- Emotional competence had a significant interaction on the relationship between emotional demands and general wellbeing.
- Emotional competence had a significant interaction on the relationship between time pressure and general wellbeing.
- Emotional competence had a significant interaction on the relationship between emotional dissonance and general wellbeing. As emotional dissonance increased, general wellbeing decreased among participants with low emotional competence.
- Emotional competence had a significant interaction on the relationship between time pressure and job satisfaction. As time pressure increased, job satisfaction decreased among participants with low emotional competence.
- Emotional competence had a significant interaction on the relationship between emotional dissonance and job satisfaction.

Overall, results demonstrated that emotional competence had a moderating effect on most of the hypothesized relationships among work characteristics (emotional demands and time pressure) and emotional dissonance, emotional dissonance and outcomes (general wellbeing and job satisfaction), and work characteristics (emotional demands and time pressure) and outcomes (general wellbeing and job satisfaction).

Hurrell, J. J., Nelson, D. L., & Simmons, B. L. (1998). Measuring job stressors and strains: Where we have been, where we are, and where we need to go. *Journal of Occupational Health Psychology*, 3(4), 368-389.

Hurrell and colleagues summarized approaches and measures commonly applied by job stress researchers to assess aspects of the work environment and employee reactions to working conditions. The authors discussed problematic areas and contemporary factors that impact job stress assessment. Recommendations for instrument selection and measurement improvements were also provided, such as greater use of objective measures and triangulation strategies and careful examination of existing constructs and measures. The authors concluded that addressing measurement-related issues is essential to advance our understanding in the field. Notable findings are described in sections below.

*Comprehensive Self-Report Measures of Job Stressors*

- Comprehensive self-report job stress instruments differed in the number and type of job stressors assessed and quantity and quality of information obtained.
- Many instruments also measured modifiers and mediators of the stress-strain relationship.
- Common problems associated with job stress instruments included:
  1. They only assessed one dimension of job stressors.
  2. They only assessed the frequency of job stressors.
  3. They only assessed the presence of negative work features as predictors of adverse health conditions (versus the absence of positive features).
  4. They only assessed general job characteristics (versus specific problematic conditions).
  5. Many were developed and validated 25+ years ago and may no longer be applicable to the current workforce (e.g., less workers in manufacturing, more service-oriented professionals, corporate restructuring, advanced computer technology, greater workplace diversity).

*Table 4. Examples of Comprehensive Self-Report Measures of Job Stressors*

Stress Diagnostic Survey	Occupational Stress Inventory	Job Stress Survey
Work Environment Scale	Occupational Stress Indicator	Job Diagnostic Survey & Job Characteristics Index
Job Content Questionnaire	Generic Job Stress Questionnaire	

*Observational Measures of Job Stressors*

- Observational measures rely on trained observers to make judgments about the variable of interest in a standardized way.
- While observational approaches are presumed to be more objective than self-report measures, they may require extensive training before use and adaptation to particular occupations being analyzed.

*Self-Report Measures of Strain*

- Self-report measures of strain have been used to assess anxiety, depression, psychological and physiological distress, and burnout.

- Common problems associated with self-report measures of strain included:
  1. Potential for conceptual overlap in studies using both job stressor and strain measures.
  2. Potential for response bias and social desirability. Some strain measures include items about personal matters (e.g., mental health, substance use) that individuals may not wish to disclose.
  3. May lack predictive validity with respect to morbidity, which has prompted many occupational stress researchers to use more general instead of job-related strain measures.

*Table 5. Examples of Self-Report Measures of Strain*

<b>Anxiety</b>	<b>Depression</b>	<b>General Distress</b>	<b>Burnout</b>	<b>Other</b>
Stait-Trait Anxiety Inventory	Beck Depression Inventory	Profile of Mood States	Maslach Burnout Inventory	Cornell Medical Index
Tosi Measure	Self-Rating Depression Scale	Symptom Distress Checklist	Burnout Measure	Daily Log of Stress-Related Symptoms
Rizzo Scale	Center for Epidemiologic Studies Depression Scale	General Health Questionnaire		

*Physiological Measures of Strain*

- Physiological measures of strain can have validity problems with respect to sensitivity and specificity.
- Sensitivity is defined as the degree to which a test identifies individuals with a particular condition.
- Specificity is defined as the extent to which a test separates individuals with a given condition from those who do not have it.
- Collaboration among social scientists and medical researchers may enhance knowledge of physiological measures of strain and help standardize measurement protocols.
- Lipids, lipid fractions, fibrinogen, cigarette smoking, physical inactivity, and absences may be more definitive measures for examining the effect of job stressors on health.

Table 6. Examples of Physiological Measures of Strain

<b>Cardiovascular</b>	<b>Stress Hormone</b>	<b>Immune Response</b>
Heart Rate	Cortisol	Lymphocyte and Natural Killer Cell Counts
Blood Pressure	Catecholamine	Plasma & Salivary Concentrations of Immunoglobulins
Rizzo Scale	Collection of Blood, Urine, or Saliva Samples	Antigen-/Mitogen-Induced Lymphoproliferative Reactions

*Contemporary Issues Affecting Job Stress Measurement*

- Emerging trends in research literature that help improve job stress measurement included:
  1. Occupationally specific stressor measures (e.g., police officers, consultant physicians, hospital nurses, mental health nurses).
  2. Objective measures (e.g., hours worked per week).
  3. Recognition of cognitive appraisal processes (e.g., meaning assigned to stressful events as opposed to the actual event).
  4. Unique indicators of occupational strain (e.g., periodontal status, plasma fibrinolytic activity, serum lipids).
  5. Multiple measurement approaches (e.g., self-report, physiological, nonverbal stress indices).
  6. Negative and positive affect measures to determine their influence (if any) on the measurement of and associations among stressors and strains.
  7. Use of strong data analytic techniques, such as structural equation modeling.

James, S. M., & Vila, B. (2015). Police drowsy driving: Predicting fatigue-related performance decay. *Policing: An International Journal of Police Strategies & Management*, 38(3), 517-538.

The authors examined the influence of operational fatigue on post-shift driving performance among 78 police officers in driving training simulators. The authors also explored fatigue indicators that may be used to alert police officers of declining driving performance as a result of fatigue. Police

officers of the Spokane, Washington Police Department were recruited to participate in the study. Participants were experienced officers assigned to full-time patrol shifts. Participants represented roughly half of the officers in each of four patrol shifts, and similar numbers of participants were recruited from each shift. Approximately half of the participants were assigned to night shifts.

The study was conducted in the Simulated Hazardous Operational Tasks Laboratory at Washington State University. The study was part of a larger research project that examined the influence of operational fatigue on deadly force judgment and decision making, driving, cognition, and non-operational driving. Each experiment lasted approximately five hours, with the non-operational driving component beginning around the fourth hour. For the non-operational driving task, participants drove a Toyota Camry in a driving training simulator. The simulator included a standardized 28-mile daytime driving course on a rural highway. The course was free of adverse weather or other vehicles and was comprised of 10 straight and eight curved road segments, all of which were uneventful. The course included “random events” at various points throughout the course, in which pedestrians or dogs crossed the roadway. Participants were instructed to drive 55 miles per hour in the same lane and brake without swerving for pedestrians or dogs in the roadway. Vehicle data collected during the experiment included speed, accelerating, braking, steering-wheel angle, and heading.

Non-operational driving performance was measured using well-established metrics, including standard deviation of vehicle position within a lane, leaving the assigned lane, and braking latency. Non-operational driving performance was assessed for each participant at two points in time, once immediately following the last shift in a five-day sequence of 10:40-hour patrol shifts (fatigued condition) and again 72 hours following the last shift in a work cycle (rested condition). The minimum duration between the experimental conditions was 12 days, while the average number of days was 32.4 ( $SD = 24.5$ ). Participants maintained their normal work routine during the study and did not accept overtime assignments 72 hours prior to the rest condition. A 10-minute psychomotor vigilance task (PVT) occurred before and after each driving condition to objectively measure sleep-related fatigue. Each PVT required participants to quickly press a keyboard spacebar when a number appeared on a computer screen. Objective sleep was measured using a watch-sized device that tracked movement in one-minute increments as either sleep or awake. The Karolinska Sleepiness Scale (KSS) was also administered to measure subjective sleepiness on a nine-point scale (1 = *extremely alert* to 9 = *extremely sleepy*).

The authors computed power calculations to determine the number of participants needed for each experimental condition. To examine generalizability, demographics and workload (local crime rates and staffing levels) were compared across the study sample and national-level data from similar sized law enforcement agencies. Police officer fatigue, operational performance, and wellness were also compared across the study sample and prior studies. Finally, age, sex, and years of service of study participants were compared with police officers who were killed in on-duty vehicle accidents in 2013 (most recent data available at the time of the study) using the FBI's Law Enforcement Officer Killed and Assaulted (LEOKA) (2015) data. Generalized linear mixed models with hierarchal structures

were conducted to examine the relationships among independent and dependent variables. The models included a combination of ANOVA and regression analyses. Notable findings included:

- Results are likely generalizable to other law enforcement agencies, though the level of operational fatigue may be slightly higher in the study sample due to significantly lower-than-average staffing ratios and relatively higher workloads.
- Demographic and experiential characteristics of the study sample were similar to those killed in on-duty vehicle accidents in 2013 (FBI LEOKA, 2015).
- Day-, swing-, and graves-shift participants slept significantly more hours per day before the rested condition than the fatigued condition.
- Swing- and graves-shift participants experienced significantly greater lane deviation during post-shift, non-operational driving compared to day- and power-shift participants.
- The amount of sleep participants obtained in the 72 hours preceding the experiments significantly predicted probability of a collision.
- Day-shift participants demonstrated significantly faster PVT response times and fewer lapses in attention than graves-shift participants.
- Time awake before testing, amount of sleep in the 72 hours preceding the experiments, and work shift all significantly predicted KSS score, with work shift having the greatest impact.
- Lane deviation significantly predicted probability of a collision, especially among day- and graves-shift participants.
- Braking latency significantly predicted probability of a collision, especially among swing- and graves-shift participants.
- PVT response time, PVT lapses, and KSS score all significantly predicted probability of a collision.
- PVT response time significantly predicted lane deviation and braking latency, with increased response time predicting greater lane deviation and braking latency.
- KSS score significantly predicted lane deviation and braking latency, with higher scores predicting greater lane deviation and braking latency.

Overall, performance on the non-operational driving task was significantly influenced by fatigue. Participants who worked night shifts experienced significantly more collisions and greater lane deviation than participants who worked day shifts. In addition, participants who worked night shifts reacted significantly slower to PVT stimuli and experienced greater lapses in attention than those

assigned to day shifts. The objective PVT and subjective KSS measures significantly predicted driving performance, with PVT producing stronger estimates than KSS.

Johnson, J. V., & Hall, E. M. (1988). Job strain, work place social support, and cardiovascular disease: A cross-sectional study of a random sample of the Swedish working population. *American Journal of Public Health*, 78(10), 1336-1342.

Using a cross-sectional design, Johnson and Hall redefined the demand-control model of job stress to investigate whether a lack of social support combined with job strain to increase the likelihood of cardiovascular disease (CVD) prevalence among randomly selected, Swedish male and female workers ( $n = 13,779$ ). Data were collected using the Swedish Central Bureau (SCB) of Statistics Survey of Living Conditions, an annual survey mandated in the early 1970s by Swedish Parliament to examine the distribution of health status, income, education, and components of the social and work environment.

The independent variables included psychological job demands, work control, and work-related social support, while CVD prevalence served as the dependent variable. Age, sex, marital status, income, intergenerational class mobility, occupational class level, immigrant status, region, smoking, physical exercise, physical job demands, and non-work-related social support variables were also included in the analyses to determine if they confounded or otherwise modified the association among work environment characteristics and CVD prevalence. Psychological job demands was measured by two items: (1) Is your job hectic? and (2) Is your job psychologically demanding? A Guttman scale was created using the combined responses of these items to assess low, medium, and high psychological job demands. Work control was measured by a linear composite of 11 items that assessed decision making authority, task variety, and personal freedom on the job (never = 0, sometimes = 1, and often = 2). Work-related support was measured by five dichotomous items that assessed opportunities to interact with colleagues at work and if those interactions carried over into non-work life. CVD prevalence was measured by interviewing participants about their health status and use of regular medication. Participant responses were rated using a health classification coding system developed by two physicians who were consultants to SCB. Symptoms were matched with the International Classification of

Disease (8<sup>th</sup> edition). The Mantel-Haenzsel Chi and Rothman Interaction Ratio were conducted to examine the hypotheses. Notable findings included:

- High levels of job strain were significantly related to high rates of CVD prevalence.
- Work-related social support accentuated the effect of job strain; participants with the lowest levels of work-related social support had higher prevalence rates and ratios for each job strain level.

- The combination of low work-related social support and low work control was significantly related to high rates of CVD prevalence, even when psychological job demands were absent.

Zohar, A. H., Cloninger, R., & McCraty, R. (2013). Personality and heart rate variability: Exploring pathways from personality to cardiac coherence and health. *Open Journal of Social Sciences*, 1(6), 32-39.

Zohar and colleagues argued that individual differences in personality influence physical, mental, and social aspects of health and wellbeing. The authors contended that personality impacts one's emotional state, autonomic stability, immune response, capacity to self-regulate stress, health behavior, and response to medical treatments. Pathways from personality to heart rate variability (HRV) were examined using an integrative and comprehensive measurement of personality. The study measured various personality traits among community volunteers ( $n = 271$ ) believed to increase HRV and resilience, including self-directedness, cooperativeness, self-transcendence, creativity, organization, forgiveness, physical aggression, and avoidance. Data were collected using an online self-report questionnaire and a consecutive 24-hour monitoring period of HRV. Correlations and hierarchical regression analysis were conducted to examine the hypotheses. Notable findings included:

- Self-directedness, cooperativeness, self-transcendence, and creativity were negatively related to autonomic balance, suggesting that more mature character development is associated with greater parasympathetic activity and lower overall sympathetic activity.
- Openness was negatively associated with HRV measures indicative of both low sympathetic and parasympathetic activity, suggesting that HRV is only weakly regulated in people high in openness.
- Physical aggression was related to high sympathetic activity, while avoidance was associated with low parasympathetic activity.
- Creativity decreased autonomic balance, whereas forgiveness, physical aggression, and avoidance increased autonomic balance. In other words, creativity predicted greater parasympathetic activity, while the other measures predicted greater sympathetic activity and/or lower parasympathetic activity.
- Creativity and physical aggression increased HRV, whereas openness decreased HRV.

## Use of Force

James, L., Vila, B., & Daratha, K. (2013). Results from experimental trials testing participant responses to White, Hispanic, and Black suspects in high-fidelity deadly force judgment and decision making simulations. *Journal of Experimental Criminology*, 9(2), 189-212.

The authors examined racial/ethnic bias and use of deadly force among three separate experiments. In each experiment, the authors used a repeated measures design to determine if suspect race/ethnicity influenced participant decisions to shoot in a deadly force judgement and decision making simulator.

The first experiment consisted of 24 participants who volunteered for a Defense Advanced Research Projects Agency (DARPA)-funded study that examined expert and novice performance in simulated deadly force scenarios. Participants with five or more years of policing or active military duty experience were considered experts ( $n = 12$ ), while civilians with no police, military, or firearms experience were considered novices ( $n = 12$ ). The second experiment consisted of 48 participants who volunteered for a follow-up DARPA-funded study that examined whether novice participants could be trained to the expert level in simulated deadly force scenarios. Participants did not have police, military, or firearms experience. The third experiment consisted of 30 patrol officers who volunteered for a pilot study that examined performance of operational tasks in simulated scenarios.

The experiments occurred in the Simulated Hazardous Operational Tasks Laboratory at Washington State University, which is equipped with two deadly force judgement and decision making simulators that featured 60 high-definition video scenarios and included a gun belt, holster, and modified Glock model 21 handgun. The scenarios were developed by two of the authors and based on 30 years of data on officer-involved shootings. Examples of scenarios included responding to a disturbance call, crime in progress, investigation of suspicious person, traffic stop, etc. Scenario suspects were Black, White, or Hispanic who were either armed or unarmed. Scenario difficulty was manipulated into three levels (naïve, intermediate, and journeyman) and controlled for factors associated with situational difficulty (e.g., number of individuals in the encounter, rate at which the scenario unfolded, suspect demeanor, suspect intoxication).

Participants were screened one week before the experiments to ensure that they were physically and psychologically healthy (i.e., no clinical disorders or physical illnesses). During the informed consent process, the authors did *not* discuss the issue of suspect race/ethnicity. Participants were provided equipment, briefed on how to operate the weapon system, and oriented to the range procedures. In the second experiment, participants completed a pre-test training session in the simulator to practice and receive feedback from law enforcement trainers.

In the first day-long experiment, participants responded to 27 scenarios. Participants responded to 18 scenarios in the second day-long experiment. Participants responded to 10 scenarios in the third day-long experiment. To circumvent learning effects, scenarios were randomly selected from the pool of 60 and randomized into sets for each participant. There were 3-minute rest periods between each scenario. Participants also had a 30-minute rest period after finishing a set of scenarios.

Suspect race/ethnicity, level of scenario difficulty, reaction time to shoot, and shooting errors (shooting an unarmed suspect and failing to shoot an armed suspect) were examined. The Kolmogorov-Smirnov test, unconditional means models, and multi-variate and logistic regression analyses were conducted. Notable findings included:

- Participants were significantly slower to shoot suspects in intermediate and journeyman scenarios.
- Participants were more likely to shoot unarmed suspects in intermediate and journeyman scenarios.
- Participants were more likely to fail to shoot armed suspects in journeyman scenarios.
- Participants were significantly slower to shoot Black suspects.
- Participants were significantly more likely to fail to shoot armed Black suspects.
- Participants were more likely to shoot unarmed White suspects.

Overall, the authors concluded that participants exhibited significant bias favoring Black suspects (as opposed to discriminating against them) in their decisions to shoot. While reaction times to shoot and shooting errors were similar across participants, police and military participants outperformed civilian participants with respect to shooting accuracy, firing faster follow-up shots, interacting with suspects (e.g., verbal commands to drop their weapon), and command presence, none of which were variables in the analyses.

James, L., Klinger, D., & Vila, B. (2014). Racial and ethnic bias in decisions to shoot seen through a stronger lens: Experimental results from high-fidelity laboratory simulations. *Journal of Experimental Criminology*, 10(3), 323-340.

Using a within subjects, repeated-measures design, the authors examined behavioral and subconscious threat responses among 48 non-police participants to determine if suspect race/ethnicity influenced participant decisions to shoot in a deadly force judgment and decision making simulator. The authors conducted a post hoc analysis using data from James and colleagues (2013). The James et al. (2013) study did not explicitly test whether suspect race/ethnicity predicted decisions to shoot, but rather, behavioral and neurophysiological responses of civilian participants were measured to determine if participants could be trained to the expert level (i.e., policing and military experience) in simulated deadly force scenarios. Neither the research team nor participants believed that racial/ethnic bias was being studied or expected that the data collected would be used to examine racial/ethnic bias in a post hoc analysis. Residents of the Spokane, Washington area were recruited via Craigslist to participate in the study. Participants had no policing, military, or firearms experience and were physically and mentally healthy.

The study was conducted in the Simulated Hazardous Operational Tasks Laboratory at Washington State University, which is equipped with two deadly force judgement and decision making simulators that featured 60 high-definition video scenarios and included modified Glock model 22 semiautomatic handguns. Scenarios were developed using FBI data on officer-involved shootings and included domestic disturbances, robberies in progress, investigations of suspicious persons, and traffic stops. Scenario suspects were White (50%), Black (40%), or Hispanic (10%) who were either armed (65%) or unarmed (35%). Scenarios were categorized by level of difficulty, including naïve, intermediate, and journeyman.

Four different participants were tested each day over the span of 12 days. On each day, participants were equipped with electroencephalogram (EEG) devices and oriented to the research study. Each participant received two pre-test training sessions with certified firearms instructors prior to the experiment. Participants were oriented to the safety issues, weapon system, marksmanship, range layout, and rules governing when to “shoot” or “don’t shoot” in the first training session. Interacting with the scenarios (e.g., using assertive language) was the topic of the second training session. Participants also practiced scenarios in the simulator and received trainer feedback in the second training session. Each participant responded to 18 scenarios following the training sessions. Scenarios were randomized and grouped into six sets (three scenarios per set) for each participant. Each scenario lasted approximately two minutes. There were 3-minute rest periods between each scenario and 30-minute rest periods between each set.

Suspect race/ethnicity (White, Black, or Hispanic), level of scenario difficulty (naïve, intermediate, or journeyman), reaction time (milliseconds) to shoot, and alpha suppression were examined for null (unarmed suspects) and threat (armed suspects) scenarios. Alpha suppression (reduction of alpha brain waves) occurs when individuals are aroused by external stimuli and may be considered as an indicator of subconscious threat response. The authors computed mean reaction time (seconds) to shoot for each suspect racial/ethnic group and level of scenario difficulty. Multi-level mixed effect models were estimated to determine if reaction time across racial/ethnic groups could be explained by level of scenario difficulty in threat scenarios. Multi-level mixed effects models were also estimated to determine if arousal varied systematically with suspect race/ethnicity and level of scenario difficulty in both null and threat scenarios. Notable findings included:

- There were 239 null scenarios.
  - 184 scenario suspects were White.
  - 47 scenario suspects were Black.
  - 8 scenario suspects were Hispanic.
- There were 588 threat scenarios.
  - 321 scenario suspects were White.

- 267 scenario suspects were Black.
- 0 scenario suspects were Hispanic.
- Participants were significantly slower to shoot armed Black suspects compared to armed White and Hispanic suspects.
- Participants were significantly slower to shoot armed suspects in intermediate and journeyman scenarios compared to naïve scenarios.
- Participants were significantly slower to shoot armed Black suspects in intermediate and journeyman scenarios.
- Participants exhibited significantly greater subconscious threat response when they encountered unarmed and armed Black suspects compared to unarmed and armed White and Hispanic suspects.
- Participants exhibited significantly greater subconscious threat response when they encountered suspects in journeyman scenarios compared to naïve and intermediate scenarios.

Overall, the authors concluded that participants displayed significantly greater racial/ethnic bias towards Black suspects than White and Hispanic suspects. While participants exhibited greater subconscious threat response when they encountered Black suspects in both null and threat scenarios, participants displayed a behavioral bias favoring Black suspects. Specifically, participants were significantly slower to shoot armed Black suspects compared to armed White and Hispanic suspects.

James, L., James, S., & Vila, B. (2017). Does the “reverse racism effect” withstand the test of police officer fatigue? *Policing: An International Journal of Police Strategies & Management*, 40(2), 184-196.

James and colleagues argued that public perceptions of racial bias and officer fatigue due to shift work assignment and long work hours are critical problems in policing. Using a within subjects, repeated-measures design, the authors examined whether the “reverse racism effect” was mediated by level of fatigue among sworn, full-time patrol officers with more than two years of service ( $n = 80$ ) in the Spokane Police Department. Specifically, the authors tested the effect of level of fatigue on participant decisions to shoot and whether a significant interaction existed between level of fatigue and suspect race on participant decisions to shoot.

The study occurred in the SHOT laboratory at Washington State University, which is equipped with computerized deadly force judgment and decision making simulators. The scenarios featured in the simulators included domestic disturbances, vehicle stops, robberies in progress, and investigations of suspicious persons and circumstances. The scenarios depicted roughly equivalent numbers of white

and black suspects and deadly (armed suspects) and null (unarmed suspects) scenarios. Participants went to the lab on four separate occasions (twice for each testing condition). On each occasion, participants responded to six consecutive scenarios, with a one-minute break in between scenarios. The testing order was counterbalanced, while the scenario order was randomized.

The independent variables included testing condition (fatigued or rested), scenario type (deadly or null), and suspect race (black or white). The fatigued condition was measured by arrival at the laboratory immediately following their fifth consecutive 10:40 hours shift. The rested condition was measured by arrival at the laboratory immediately following their third consecutive day off. The dependent variables included reaction time to shoot and shooting an unarmed suspect. Reaction time was measured in milliseconds between when a suspect's weapon was detected and when the participant shot. Shooting an unarmed suspect was measured as a dichotomous (yes/no) variable. Unconditional means models were computed to determine if the assumption of independence of observations had been violated. Since results demonstrated that the assumption had not been violated, generalized linear and logistic equation models were conducted to examine the hypotheses. Notable findings included:

- Level of fatigue did not significantly predict shooting behavior.
- There was no significant interaction between level of fatigue and suspect race on reaction time to shoot or shooting unarmed suspects.
- The reverse racism effect was observed among participants in both the fatigued and rested conditions.

Maguire, E., Barak, M., Wells, W., & Katz, C. (2018). Attitudes towards the Use of Violence against Police among Occupy Wall Street Protestors. *Policing: A Journal of Policy and Practice*, 1-17.

The article written by Maguire and colleagues examined the nature and correlation of attitudes regarding the use of violence against police officers from the Occupy Wall Street (OWS) protestors in New York City. On the six-month anniversary of the March 2012 movement, the researchers received 302 in-person surveys from the OWS participants. Their findings revealed that when social movement participants perceived police officers using unjust force against protestors, they are more likely to endorse violence against the police.

The study illustrates the importance of policy implications for protest policing or crowd control events. The researchers suggest that having a heavy-hand police response to a protest can increase the support among protestors to use violence against law enforcement personnel. The researchers also suggest that there is a concern for officer safety and encourage law enforcement agencies to reconsider the heavy-handed approach to crowd control events and protests.

The researchers recommended that police training should focus on prevention and de-escalation strategies. They recommended these strategies to help minimize coercion and the need to use force. The researchers created this recommendation based on their multivariate results. Their study revealed that protesters were more likely to endorse the use of violence when law enforcement use repressive tactics.

The researchers also advocated for body-worn cameras because it has been found that the cameras reduce complaints against law enforcement. The cameras also provided an added layer of accountability, oversight, and allows for supervisors to review actions taken by officer(s) and other individuals.

Maguire and colleagues noted that there were limitations in their study. Sampling was difficult to obtain because people fluctuated in and out of the OWS setting. They are unable to determine to what extent their findings generalize to all of the OWS participants. The researchers were also limited in drawing strong inferences about cause and effect because their data is cross-sectional. An additional limitation that the researchers faced was they were unable to learn more about the OSW participants' social identities, their rational identification with police, and the measure for emotion (such as anger). This limitation was caused by keeping their survey to a single double-side page.

The researchers suggested future research to be conducted on the role of relational identification and how anger intercedes the effects of procedural justice for the use of force against law enforcement.

Morrison, G.B., & Garner, T.K. (2011). Latitude in deadly force training: progress or problem?, *Police Practice and Research*, 12 (4), 341-361.

The researchers critically examined differential approaches used by United States police departments regarding handgun training, certification programs, and high-risk encounters from existing literature. Their study addressed the scope of latitude exercised by police academies and departments by examining their approaches to training content, delivery, and evaluation of deadly force encounters. In the twentieth century, police agencies experienced reform through comprehensive basic police training for recruits coupled with in-service trainings for veteran officers. These reforms were not widespread for most agencies until the late 1970s (basic training) and in-service training was uncommon prior to the 1980s. Firearms instruction and proficiency testing were also prominent in both basic and in-service trainings. In recent decades, law enforcement training has incorporated deadly force training. The evolution in twentieth century law enforcement reform demonstrates the utilization of discretion by individual police officers in their daily work. The use of discretion in law enforcement is considered to be routine decision making during their regular peacekeeping activities. Encounters with the public sometimes involve the use of force by law enforcement. Officers rarely use their firearms; however, when weapons are utilized, they can have an impact upon the community, the law enforcement agency, and the suspect(s).

Preparing police officers to perform their duties appropriately, effectively, and safely during a high-risk encounter, which may or may not involve use of force, is critical. It is the responsibility of the agency to prepare the officers for high-risk encounters. Morrison and Garner examined and questioned the latitude agencies exercise within their training programs. Doubts were raised if the deadly force training programs, within past several decades, had significantly improved officer performances during high-risk encounters. The researchers noted there is currently no studies offering empirical evidence linking deadly force approaches and officers' performance in the field; however, they offered a way to bridge this chasm. Morrison and Garner proposed a new research and evaluation agenda which guides the creation of knowledge on evidence-based best practices for deadly force training for policy-makers, managers, and trainers. The four probing questions the researchers provided for their proposal are: 1) is there evidence of latitude in deadly use of force training practices, policies, and programs; 2) which external organizations can assist law enforcement agencies with improving deadly force training; 3) what issues should policy-makers consider while building an verifiable foundation for approving, developing, evaluating, and implementing deadly force trainings; and 4) what research and evaluation initiatives support or would support the development of verified standards to law enforcement agencies.

Morrison and Garner advocate evaluating deadly force programs is the proper place to focus on what works best for police training. They suggested significant improvements can happen to police training programs when identifying, developing, and implementing components into model programs. But which of the current approaches are superior to others? And how are they measuring performance? The researchers proposed the following four inter-related activities to provide a framework for developing and implementing evidence-based models that produce an array of importance performance criteria: 1) implementing feedback loops, 2) reformulating the qualifying concept and process, 3) developing valid standards, and 4) disseminating research findings and adopting robust approaches. Following through on these four approaches would be a substantial undertaking and require cooperation and collaboration with numerous organizations; however, the outcomes would provide measureable results in deadly force training in high-risk situations.