Eastern Center for Arts and Technology

Program Review

Final Report

PROTECTIVE SERVICES

2020-2021

Occupational Advisory Committee Members

Member	Position	Agency
Earl R. Freese	Chairperson	Bucks County Community College
Timothy Troxel	Vice Chairperson	Lieutenant, Upper Moreland Police Department
Alicia R. Elsetinow, Ph.D.	Member	US Department of Homeland Security, Transportation Security Administration
Andrew Gerth	Member	Firefighter, Willow Grove Fire Department
Charles Moritz	Member	Bucks County Community College
Harry Gaab	Member	Parole Officer, State of Pennsylvania
Ken Davidson	Member	Assistant Chief, EMT-P, 2nd Alarmer's Rescue Squad
Matthew Kolar	Member	Sergeant, Lower Moreland Police Department
Steve Plum, Jr.	Member	K-9 Officer, Warminster Police Department
Noah Cruz	Member	Student, Protective Services Program, PM Session
Zachary Fee	Member	Student, Protective Services Program, AM Session

Executive Advisory Committee Representatives

Gary Bissig LABRepCo

OCCUPATIONAL OUTLOOK

Describe the outlook for employment of future graduates:

The Federal Bureau of Labor Statistics (BLS) reports the following information on the Protective Services related career fields (October 2020) using 2019 data.

Firefighters: Firefighter median pay is $50,850 per annum or $24.45 per hour. A postsecondary nondegree is needed at entry level. The career offers long-term on-the-job training.

There were 335,500 positions in 2019 with a faster than average, 6% job outlook for 2019-2029, i.e. an increase of 20,300 positions. Physically fit applicants with paramedic training will have the best job prospects. The BLS states prospects are good, despite the number of volunteer firefighters.

Additional positions include Wildland firefighters who are specially trained to fight ground fires.

88% work for local governments, the balance for state and the federal government.

Education and Training: The entry-level education is a high school diploma or equivalent. Obtaining one's Emergency Medical Technician (EMT) certification is needed and/or helps in obtaining employment. Most fire academies are run by state or local fire departments. Wildland firefighting usually involves apprenticeships that last up to 4 years. Important qualities include communications skills, compassion, courage, decision making skills, physical stamina and strength.

Advancement to engineer, lieutenant, or higher usually requires an advanced degree, bachelor's (preferably in fire science), public administration or a related field.

Emergency Medical Technician and Paramedics: Emergency Medical Technician and Paramedic median pay is $35,400 per annum or $17.02 per hour. A postsecondary nondegree is needed for entry level in both careers. There is no on-the-job training.

There were 265,200 positions in 2019 with a faster than average, 6% job outlook for 2019-2029. There is an expected increase of 17,000 positions during this time period.

46% work for ambulance services, 28% for local governments, and 19% for hospitals, state, local and private. These numbers do not reflect volunteers who do not receive pay.

Education and Training: The completion of a postsecondary educational program is required. All states and territories require EMTs and Paramedics to be licensed. The requirements vary by state. The National Registry EMT is the preferred certification. A lower certification as an Emergency Medical Responder (EMR) can provide an initial introduction to the career field. Additionally, the Emergency Vehicle Operator Course (EVOC) of 8 hours is part of the instruction for the positions.

Interpersonal skills, listening skills, physical strength, problem solving ability and speaking skills are needed for the positions.

Advancement into other healthcare related fields such as physician assistants and medical assistants as well as administrative positions in various healthcare settings, such as ambulatory care companies and hospitals is possible.

Police/Law Enforcement and Detectives/Investigators: Police Officers, Detective and Investigators median pay is $66,170 per annum or $31.33 per hour.

Positions included in this career field include local, state and federal in a wide range of agencies. *State agencies include*: State Police, Fish and Game, Alcohol-Beverage Control, Municipal Police, Corrections, 9-1-1 Operators and Park Rangers. *Federal positions* include Department of Homeland Security, Border Patrol, Immigration & Customs Enforcement, Bureau of Prisons, Transportation Security Administration, Postal Inspectors Service, State Department Protection Service, Department of Defense, Federal Bureau of Investigation, Alcohol Tobacco and Firearms, U.S. Marshal's Service, Bureau of Land Management, and the Internal Revenue Service. Some of these require advanced degrees (masters, juris doctor).

There were 813,500 municipal and state police in the United States in 2019. The job outlook between 2019-2029 shows a faster than average growth in available positions, approximately 5%. This projection is for an additional 40,600 officers. It does not reflect those positions outside of municipal and state police. Further, this does not reflect the large retirements and decisions that have been made by current and former police officers to leave their careers after May 31, 2020 due to the increased hostility to policing and police.

Of the 813,500 officers:

Police and Sheriff's patrol officers -	688,400
Detectives/Criminal Investigators -	113,500
Fish and Game Wardens -	7,200
Transit and Railroad Police -	4,500

77% work for local government, excluding hospitals and educational institutions

12% work for state government, excluding hospitals and educational institutions

7% work for the federal government

Education and Training: Education requirements range from a high school diploma to a college degree. Most police and detectives must graduate from their agency's training academy before completing on-the-job training. Candidates must be U.S. citizens, usually at least 21 years of age and be able to meet rigorous physical and personal qualifications. Many community colleges, four-year colleges and universities offer programs in law enforcement and criminal justice. Knowledge of a foreign language in many federal agencies and geographical areas is an asset.

Advancement becomes possible after periods of probation, with promotion to ranks of corporal, sergeant, lieutenant, captain with written tests and on-the-job performance evaluated. In larger agencies, promotion may enable an officer to become a detective or to specialize in one type of police work, such as juvenile or homicide. Skills needed include communication, empathy, good judgment, leadership, perceptiveness, physical stamina and strength.

Private Security/Detectives and Investigators: Private security/detectives and investigators median pay is $50,510 per annum or $24.28 per hour. A high school diploma or equivalent is needed for entry level, and there is a preference for having work experience (5 years and under). There is moderate on-the-job training.

There were 36,200 positions in 2019 with a faster than average job outlook of 8% for the years 2019-2029. A predicted employment increase of 3,000 is minimally expected.

Private Security is expanding greatly. These positions are in and out of government. Governmental agencies are hiring security officers and specialists. Private enterprises are looking for entry level security and loss prevention to person protective detail team members. The venues for work include stadiums and corporate facilities. Educational institutions offer many opportunities on campuses.

Education and Training: Education requirements vary greatly with the job, but most positions require a high school diploma. Some may require a 2- or 4-year degree in the field of criminal justice. There are specialized positions requiring degrees in accounting and financial investigations. These are usually in banking or corporate finance investigations. Training is generally on-the-job lasting several months and a year. Much of this is dependent on the firm hiring the person. Insurance, bank fraud, surveillance, motor vehicle crash reconstruction, and fire investigation all requires specialized education, experience and/or training.

39% work in investigation, guard and armored car services, 10% finance and insurance, 8% government and 3% are self-employed.

Work experience in private investigations, law enforcement, the military, or federal intelligence are considered important. Some come from bill and collection agencies, claims adjusters, paralegals and process servers. Most states require licensure. Important qualities include communications skills, decision making ability, inquisitiveness, patience and resourcefulness.

Security Guards and Gaming Surveillance Officers: Security guards and gaming surveillance officers median pay is $29,710 per annum or $14.29 per hour. A high school diploma or equivalent is required.

There were 1,164,600 positions in 2019 with an as fast as average job outlook between 2019-2029 of 3%. The increase is projected to be 33,300 positions.

Education and Training: Security guards generally need a high school diploma or equivalent, although some jobs may not have any education requirements. Gaming surveillance officers also need a high school diploma or equivalent and may need experience with video surveillance technology depending on the assignment. Although most employers provide instruction for newly hired security guards, the amount of training varies significantly. Important qualities include communications skills, good judgement, observation skills and patience.

56% of gaming enforcement officers worked for local governments, 18% for casino hotels, 16% in the gaming industry (not the hotels), 6% for state governments and 3% for spectator sports.

59% of security guards worked for investigation, guard and armored car services, 6% for educational services, state/local/private, 6% for healthcare and social assistance, 5% for accommodation and food services and 4% for government.

Current Program Status and Plans for Growth

Trends:

The Protective Services Program (Program) has experienced a consistent level of students in the years 2016-2020. Enrollment has been at approximately 80% with 2018 dipping to 65% of maximum capacity (40). Attendance remained between 92-93% in all years. The Program is a significant challenge for students. These challenges include learning career specific languages, theoretical and technical knowledge/skills and the rigors of keeping on task. These challenges have similarly resulted in a lower completion rate, between 45% and 78%. The Occupational Advisory Committee in 2018 evaluated the appropriate passing score for written and performance tests and set a standard in both of 80%. This standard is a challenge to students who are not engaging in notetaking, studying and individual work, most significantly on theory/written tests. The students perform much better and usually meet or exceed the 80% standard on performance tests and skills.

NOCTI results reflect a lower level of competency. Students have earned competent at 67% with 17% achieving advanced results.

Industry certifications have been consistent. Students received certifications in Cardiopulmonary Resuscitation (CPR) and Automated External Defibrillator (AED), HAZMAT Awareness, and

several FEMA Incident Command programs (IS 100, 200, 700,800). The completion rate for the FEMA programs is between 87% and 98%. CPR has been at 100%.

Every student in the Program has achieved at least one (1) industry certification. In 2018 and 2019 this rate was 100%.

There has been a mix of those interested in each of the four career paths (fire, law enforcement, EMS and security), with several opting for a military career.

The placement rates for students in Protective Services have varied from a high of 83% in 2017, 80% in 2018, to a low of 63% in 2019.

Plans for Growth:

Hazardous Materials: The Program has conducted intense HAZMAT Awareness and Operations training in the past four years. Efforts have resulted in a greater understanding of how HAZMAT crosses all career fields. Future HAZMAT training will be sustained at the same level. HAZMAT is instructed biannually. Students test for HAZMAT Awareness through the Bucks County Community College. HAZMAT Operations is taught, but the testing through Bucks County Community College is independent of the Eastern Center for Arts and Technology and the Program.

Emergency Medicine: Emergency medicine similar to HAZMAT is instructed biannually.

CPR/AED: The students receive CPR and AED training. Their cost of their certification is borne by the student at $25.00 (2018) with no increase projected at this time.

BECON: Through the Second Alarmer's Rescue Squad, student received instruction on Bleeding Control (BCON) where each student earned a certificate.

Emergency Medical Responder (EMR): The Program could expand the learning and certifications by adding the EMR course every other year.

EMR:

90 hours, lecture-classroom and lab performance

Instructor: $9,000 AM/PM instruction

Textbook/test prep: $145.00 per student

National Registry EMR Test: $75.00 per/student - per/test attempt ** student funded

Police/Law Enforcement: There are no major projected changes to the police/law enforcement curriculum excepting for minor changes in subject matter, example: handcuffing, arrest or use of force continuum. These changes will be made in accordance with decisions made by the

legislature and the Municipal Police Training Commission and dependent on inclusion in future program of study revisions.

Private Security: Similar to police/law enforcement there are no proposed changes to the Program in this area in the future.

Firefighting: The current firefighting curriculum does not allow for students to earn their certification as a Firefighter I. The instruction is generally an intense familiarization that mirrors the Firefighter (FF) instruction given at some fire schools, however, because the instruction and testing is not administered by a certified FF instructor, the education cannot result in FF I certification. Additionally, the number of hours is not equivalent to that in FF I schools.

One of the issues with FF I instruction is the "live burn" associated with the certification. A student needs to be 18 years of age to participate in a live burn exercise. It is not clear that this requirement can be waived allowing students to participate in a live burn if attending a Career and Technical School.

Firefighter I Certification requirements (Act 61) specifies that 18 is the minimum age required for certification. The instruction includes A. Hazardous Materials Training/Certification at the Operations Level; B. Interior Structural Fire Attack; C. CPR and Emergency Medical Care Training (EMR minimally) and 100% passing of the written and skills tests in the course of instruction. Accommodations in testing must be requested in writing and are reviewed on a case-by-case basis. NFPA 1001 provides the guidance for the FF I instruction.

The Course is approximately 200 hours of lecture and skills instruction. A certified instructor is required.

An overall concern for incorporating the FF I Certification in the Program is the level of interest of students in becoming firefighters. Also, the maturity, dedication to the tasks and requirements of a 200+ hour POI for those who are engaged in Protective Services for other reasons including, surveying to determine their future interest(s).

Program Viability

Currently, the Protective Services program is experiencing steady growth. There has been a 10% increase in enrollment from the 2019-2020 academic year to 2020-2021. The addition of certifications could increase enrollment. The most viable course additions would be those of EMR and FF1.

The Protective Services Occupational Advisory Committee recommends and supports the continuation of the Protective Services Program at EASTERN. The OAC has recommended the implementation of the FF I curriculum into the program as well as the EMR.

The current class size is thirty-eight (38). Fourteen are seniors, thirteen are returning seniors and one is a one-year senior. Twenty-five are anticipated as returning students for the 2021-2022

academic year. The classroom can take up to 44 students; therefore 15 students can minimally attend the Program with possibly, 19 for 2021-2022.

Summary of Protective Services Field Trends

Trends by the Bureau of Labor and Statistics (BLS) show that employment in Protective Services' career fields is increasing. The pending retirements, those leaving the career fields via frustration, and for other reasons have created an expanding market. While the positions may not be local to the metropolitan Philadelphia area, nationwide the market for entry level and then advancement is plentiful. Further, educational opportunities to increase marketability are present and readily available. Adding to this increased market is the local, state and federal governments hiring emergency medical responders and firefighters to replace the shrinking volunteer squads, companies and organizations. The need for paid protective service personnel will be ever increasing.

As shown above, the career fields need qualified, intelligent, dedicated people who can serve for 20-30 years. These people need communication, decision making, listening, problem-solving, and speaking skills, as well as physical strength and endurance. The Protective Services Program at Eastern affords the students an introduction to the career fields, provides the foundation for the needed skills and builds on the qualities they already possess.

Program Specific Questions – Protective Services

1. What current and new certifications are available or should be made available to students?

   These certifications include the emergency medical responder (EMR) and Firefighter 1 (FF1)

2. Are there any changes in technology that Eastern needs to obtain to keep the program viable?

   Should Eastern purchase the G1 SCBA system or other systems to permit students to use the most current equipment available and what expanded learning opportunities could enhance the educational process: mass casualty training, extrication, fire ground, bleeding control, railway familiarity, corrections, parole, probation, 9-1-1 visits.

3. What new safety concerns are there in the career fields and how can they be incorporated into the program?

   As science advances and hazards increase, what precautions in the classroom and during training need to be evaluated, improved, eliminated and replaced.

Skills and Credentials Required for Employment

Students completing the Program should have the opportunity to earn industry recognized and accepted (including lifetime) credentials and certifications. These professional credentials and certifications enhance the learning, will bring in students desiring the careers, and improve the academic scores, NOCTI written and performance test results. The desire to succeed is founded in the motivation to have the career and begin that career on the completion of the Program.

Post-secondary educational institutions that offer credit from EASTERN's learning will add to the success of students in the Program, make joining the Program more desirous and focus students on the "career" not the "job" they are seeking. Lastly, while many jobs offer rewards and benefits, few offer the pensions, health benefits and salaries along with employment security as those in the Protective Services venue. This itself is a huge attraction although not initially realized by students entering the EASTERN Protective Services Program and/or the career fields of the Program.

Recommendations

Based on the industry trends, the Committee makes the following recommendations:

1. Add additional instruction to lead students towards Firefighter 1 certification.

2. Add additional instruction to lead students towards Emergency Medical Responder certification.

3. Look at replacements to the aging SCBA system.

4. Update hand tools and minor equipment as needed

Timelines and Budgeting Requirements

Timelines and Budgeting Requirements

2021-2022 Academic Year (Year 1)

- Firefighting Training and Instruction ***
    - Hazardous Materials Awareness Training and Testing
    - Hazardous Materials Operations Training and Testing
    - Heart Saver First Aid CPR AED

Total: $6,000

***Instruction and Testing with Bucks County Community College Packages or independent instructors or contracted Adjunct certified Firefighting Instructor

- M7 MSA Fire Hawk SCBA Tanks (11) replacement

Total: $11,000

- M7 MSA Fire Hawk SCBA Mask (10) replacement

Total: $2,000

Year 1 Total $19,000

2022-2023 Academic Year (Year 2)

- Firefighting Training and Instruction ***
    - Interior Structural Fire Attack Training and Firefighting 1 Certification Review and Preparation

Total: $6,000

*** Instruction and Testing with Bucks County Community College Packages or independent instructors or contracted Adjunct certified Firefighting Instructor

- Emergency Medical Responder Training Total: $9,000
- Textbooks Total: $6, 000

Year 2 Total $ 21,000

2023-2024 Academic Year (Year 3)

- Firefighting Training and Instruction ***
    - Hazardous Materials Awareness Training and Testing
    - Hazardous Materials Operations Training and Testing
    - Heart Saver First Aid CPR AED

Total: $6,000

***Instruction and Testing with Bucks County Community College Packages or independent instructors or contracted Adjunct certified Firefighting Instructor

Year 3 Total: $6,000

2024-2025 Academic Year (Year 4)

- Firefighting Training and Instruction ***
    - Interior Structural Fire Attack Training and Firefighting 1 Certification Review and Preparation

Total: $6,000

*** Instruction and Testing with Bucks County Community College Packages or independent instructors or contracted Adjunct certified Firefighting Instructor

- Emergency Medical Responder Training Total: $9,000

Year 4 Total $15,000

Program Review Total: $61,000