City of Pittsburgh
Bureau of Emergency
Medical Services

Transition Briefing
## Table of Contents

### Contents

- Executive Summary .......................................................................................................................... 2
- Overview ........................................................................................................................................ 3
- Shifts and Coverage ......................................................................................................................... 4
- Retention ........................................................................................................................................ 4
- Fleet and Storage ............................................................................................................................. 4
- Findings........................................................................................................................................... 6
- Fleet .................................................................................................................................................. 7
- Personnel ......................................................................................................................................... 7
- About the Agency ............................................................................................................................ 8
- Contact Information ......................................................................................................................... 9
- Enabling Legislation ......................................................................................................................... 9
- Mission ........................................................................................................................................... 11
- Organizational Chart ....................................................................................................................... 12
- Descriptions of Services .................................................................................................................. 12
- 2020 Reported Description of Services ......................................................................................... 15
- Agency Goals ................................................................................................................................. 18
- Ischemic Large Vessel Occlusion Stroke (1st year project) ......................................................... 19
- Cardiac Arrest ................................................................................................................................ 19
- Crashing Patients ............................................................................................................................ 19
- Maintain COVID-19 enhancements/surge operations as long as the pandemic persists .......... 19
- Performance Metrics ..................................................................................................................... 20
- Budget ............................................................................................................................................. 22
- Staffing & Salaries ........................................................................................................................... 23
- Other Operating Funds .................................................................................................................... 24
- 5-Year Forecast ............................................................................................................................... 25
- Programs & Projects ....................................................................................................................... 26
- EMS Highly Infectious Disease Transport Team .......................................................................... 27
- EMS Health Programs and Training ............................................................................................... 27
- 2020 Accomplishments .................................................................................................................. 29
- 2021 Accomplishments .................................................................................................................. 30
- Opportunities & Risks ..................................................................................................................... 31
- Reports ............................................................................................................................................ 33
Executive Summary
Overview

The Bureau of Emergency Medical Services is dedicated to the reduction of morbidity and mortality of residents and visitors through the provision of Advanced Life Support pre-hospital care, medically directed Technical Rescue, and transportation of the ill and injured.

The Ambulance Division is comprised of 13 Medic Units and 2 Basic Life Support (BLS) Ambulances and receives calls from the 911 dispatch center 24 hours/day. The Division is overseen by a minimum of two District Chiefs during normal daily operations. Medic Units are spread across Pittsburgh to better allow for the most effective and efficient response. Also, in coordination with the Center for Emergency Medicine, a physician can respond to the scene at the request of our paramedics to assist with the treatment of particularly critical patients. In addition to the emergency treatment and transport of patients, the Ambulance Division provides medical coverage for special events throughout the City of Pittsburgh.

Chief Ronald Romano has held the position of Chief of the Bureau of EMS for 3 years. He reports directly to the Director of Public Safety. Chief Romano estimates that EMS creates around $12 million in billing a year for the City through Medicare and insurance. He has no concerns with the current EMS policies and procedures. Of those employed by the Bureau, 94% are vaccinated against the COVID-19 virus.

On behalf of Emergency Medical Services, the Office of Human Resources conducts 3 hirings a year, but it takes 3–4 months to complete the process for the EMS employee to become active. The process includes:

- Application
- Pre-agility test
- Agility test
- Background test
- Polygraph
- Oral interview
- Psych evaluation
- Medical
- Probationary period
Executive Summary

The EMS is budgeted 166 paramedics and crew chiefs, of which there are 127 paramedics, 39 crew chiefs, 22 EMTs, 7 administrators, and 10 district chiefs (shift supervisors).

The City of Pittsburgh receives an average of 150 calls directed to the EMS in a 24-hour period. Due to the rate of calls and Bureau need, Chief Romano would like additional staff of 16 paramedics and 8 EMTs, resulting in 2 additional ALS (Advanced Life Support) units and 1 additional BLS (Basic Life Support) unit. The department currently runs with 13 ALS, 3 BLS, and 1 River Rescue Coverage employee 24 hours a day.

Shifts and Coverage

The EMS runs on 12-hour shifts (12 hrs. on/12 hrs. off). In a 24-hour period, there are 16 ambulances, 2 rescue, and 1 river rescue personnel on duty (38 personnel during each shift). An employee may often work an 18-hour shift to cover for someone who is off or on sick leave. Working 18-hour shifts to cover deficiencies has impacted morale and increased overtime pay. There are nearly 33 employees who need to be covered for various reasons. There are currently 22 medics on workers’ comp/family leave, 4 medic vacancies, 1 EMT on workers’ comp leave, and 4 EMT vacancies.

Retention

Retaining staff has become an issue for the EMS. The Bureau receives applicants from out-of-state areas, such as Ohio and Maryland, due to its reputation of being a premiere location and the various specialty areas covered. Nonetheless, these applicants often move back to their areas of origin. An Office of Human Resources analyst estimates a loss of 1.5 employees a month.

Fleet and Storage

Currently, the EMS holds 10 outside parking spaces, placing the vehicles in the elements. Chief Romano suggests using a warehouse to store and protect the vehicles. The inside garage utilized by the EMS holds 7 stocked ambulances, 4 motorcycles, and 2 bicycles, which are all only used for special events, and 3 large ambulances for disasters.

The EMS currently depends on the ELA (Equipment Leasing Authority) to provide units. Each unit costs approximately $350,000 and has a special box design so that all trucks are the same for better efficiency during calls.
Executive Summary

There was no order placed for trucks in 2021 and no order for receipt in 2022 due to budget constraints. Chief Romano stated that constantly rotating between the new and old trucks can be risky, and the age of the current fleet is highly concerning to him.

There are an estimated 1 or 2 ambulances that were manufactured in 2013. The fleet includes 13 ALS trucks, the oldest of which was manufactured in 2017. Although a 2017 model does not seem outdated, high mileage impacts the performance of even the newer models. The scuba truck was manufactured in 1987, and the rescue truck was manufactured in 1982. Spare trucks are used weekly to provide routine preventive maintenance to the newer vehicles. Chief Romano suggested that the current Fleet Manager needs to be operational and not just a “bean counter.”

Chief Romano was very candid and provided additional information regarding his concerns for the current fleet in a post-meeting email.

Comments from Chief Romano Via Email 10/20/21

“I believe that we need three new ALS ambulances every year to continue a solid rotation. By not receiving any new ALS units for two years and no adjunct vehicles, it increases the need and cost into the next year.

I now need nine ALS ambulances for 2023 at almost three million dollars. (Need to order now for 2023 due to ordering window.)

Frontline fleet continues to age and increase in mileage, and the spare trucks age also, causing breakdowns and prolonged out-of-service time while switching. (Two hours to switch unit on each end.)

In summary, the EMS Fleet needs to be addressed.”
Findings

Fleet
The most glaring risk for this Bureau is the age and maintenance of outdated service vehicles. With budget constraints in 2021 and 2022, the EMS has not been able to place an order for new trucks. Completion of an order takes several months, potentially placing the Bureau in a position of not seeing relief until late 2023, if then. Providing additional covered storage may have a positive impact on maintaining existing vehicles.

Personnel
Morale is low and impacted by both COVID-19 restrictions and the need for personnel to regularly work 18-hour shifts to cover varying staff deficiencies.

Training for new employees on basic rescue and vehicle rescue, a 3-week course, is needed.

Retention is a problem for the EMS. Low staff morale will exacerbate this issue and can be addressed through changing shifts, providing necessary training for new employees, and encouraging and educating staff on Mental Health Services provided by the City.
About the Agency

Contact Information
Ronald V. Romano, EMT-P, Chief
Bureau of Emergency Medical Services
EMS Headquarters
700 Filbert Street, Pittsburgh, PA 15232
Pittsburgh, PA 15219
Ph: 412-622-6930
Fx: 412-622-6941

Enabling Legislation
§ 116.01 - BUREAU CHIEFS AND DIRECTOR OF PUBLIC SAFETY

• BUREAU CHIEFS
  o The Department of Public Safety consists of the Police Bureau, the Fire Bureau, the Emergency Medical Services Bureau, and the Administration Bureau. Each of the bureaus that make up the Department of Public Safety shall be under the charge of a Chief who shall be the head thereof and shall have the same powers as a department director as defined in Chapter 111 of this Code.
  o Wherever the terms “Superintendent or Chief of Police,” “Fire Chief” or “Director or Chief of Emergency Medical Services,” “Chief, Emergency Operations Center,” or “Chief, Administration Bureau” appear elsewhere in the Pittsburgh Code, these terms shall be deemed to be equivalent to the heads of major administrative units as defined in the Pittsburgh Home Rule Charter.
  o The Bureau of Animal Care and Control falls within the jurisdiction of the Director of Public Safety.

• DIRECTOR OF PUBLIC SAFETY
  o In addition to the bureau chiefs set forth above, there shall be one (1) Director of Public Safety for the Department who shall be generally in charge of coordinating the various bureaus in addition to the specific duties and powers set forth below and who shall also serve as the Chief of the Administration Bureau.
  o Although the responsibilities of the Director of Public Safety differ from a traditional department director due to the focused scope of the powers and
duties set forth herein, the position of Director of Public Safety shall also be
appointed by the Mayor and shall be subject to confirmation of the City Council
as provided for in Section 209 of the Home Rule Charter. An acting Director of
Public Safety may likewise be designated by the Mayor to serve for a period of
up to ninety (90) days by written designation filed with the City Clerk and
Controller.

- A bureau chief may simultaneously serve as the Director of Public Safety;
  however, the position is not required to be filled by a bureau chief.
- The Director of Public Safety shall provide for and administer the Bureau of
  Animal Care and Control.

(Ord. 1-1985, eff. 1-1-85; Am. Ord. 1-1998, eff. 2-13-98; Ord. No. 3-2007, § 1, eff. 2-20-07; Ord.
No. 23-2010, § 2, eff. 7-16-10; Ord. No. 28-2014, § 1, eff. 12-22-14)

§ 116.02 - POWERS AND DUTIES OF BUREAU CHIEFS AND DIRECTOR OF PUBLIC SAFETY

- BUREAU CHIEFS: The chiefs of the respective bureaus of the Department of Public
  Safety shall have the following powers and duties:
  - The care, management, Administration, and supervision of police, fire,
    emergency medical forces, and the City’s emergency communication system;
  - The provision of educational programs concerning police, fire, animal care and
    control, and emergency medical matters to the general public; and
  - The oversight of the police force accreditation process, the supervision of the
    accreditation manager and related staff or committee, and the assurance of
    attainment of police accreditation and continued reaccreditation.

- DIRECTOR OF PUBLIC SAFETY: The Director of Public Safety shall have the following
  powers and duties:
  - Directing liaison activity with other City departments and public safety
    agencies;
  - Holding internal disciplinary hearings and/or making employee disciplinary
    decisions as set forth in the various bureau union contracts and/or applicable
    law;
  - Coordinating the public safety bureaus during emergencies, which shall
    include but not be limited to the authority to make decisions regarding
    evacuations and/or quarantines subject to applicable law;
About the Agency

- Enforcing the City’s nuisance property laws;
- Signing contracts on behalf of the Department; and
- Performing such other related tasks and duties that are assigned by the Mayor as required.

Mission

The Bureau of Emergency Medical Services (EMS) is dedicated to the reduction of morbidity and mortality of residents and visitors through the provision of Advanced Life Support pre-hospital care, medically directed Technical Rescue, and transportation of the ill and injured.
Organizational Chart

Descriptions of Services

The Bureau of EMS provides advanced life support, pre-hospital care, and transportation for the sick and injured through the deployment of advanced life support ambulances, each staffed by Pennsylvania Department of Health Certified Paramedics. In addition to the advanced life support units, the bureau also maintains basic life support ambulances staffed by Pennsylvania Department of Health Certified Emergency Medical Technicians.
With advanced training and technology, the Bureau of EMS is delivering cutting-edge care by providing new treatment modalities that allow for more effective recognition and treatment of heart attacks, strokes, cardiac arrest, and a number of other life-threatening conditions. For patients experiencing ST Elevation Myocardial Infarction (STEMI), the EMS has the ability to screen and directly transmit an EKG to the receiving hospital and activate the cardiac catheterization laboratory prior to arrival, greatly reducing the time to definitive treatment.

The Bureau of EMS also provides integrated medically directed rescue for vehicle accidents, industrial accidents, high- and low-angle rope rescues, confined space emergencies, building collapse, elevator emergencies, and others. The base service is comprised of two specially equipped rescue trucks, each staffed by two paramedics, operating 24 hours a day. All Pittsburgh paramedics are trained and certified for vehicle and basic rescue practices. Those paramedics assigned to the Rescue Division receive additional rescue training and certifications. The Bureau of EMS is also an integral part of three joint public safety teams: River Rescue, SWAT, and the Hazardous Materials (Hazmat) Team. For each team, the EMS provides an administrative and leadership role as well as a cadre of highly qualified personnel and instructors.

Special Operations:

For River Rescue, the EMS provides two Paramedic Public Safety SCUBA divers to staff the units. The Bureau of Police assigns an officer/helmsman who provides a law enforcement component to the units. This unit conducts port security and safety patrols on a routine basis.

For the SWAT Team, the EMS provides trained Tactical EMS (TEMS) personnel who have undergone all of the required SWAT training in addition to specialized treatment under fire training. They respond as an integral element of the SWAT Team to multiple incidents, such as barricaded persons, high-risk warrants, and dignitary protection.

For the Hazmat Team, the EMS participates with the Bureaus of Fire and Police, providing personnel trained and certified to the Hazardous Materials Technician level for entry, evaluation, mitigation, and decontamination. The EMS also provides the required medical monitoring for pre-entry and post-entry for an incident.
The Bureau of Emergency Medical Services also provides the following services to the community:

- Special Event coverage (Heinz Field, PNC Park, PPG Paints Arena, etc.) average 90 events per month using ambulances, EMS motorcycles, bicycles, boats, and medical carts
- First aid and CPR/AED training
- Child car seat inspection and education program
- Envelope of life (EOL) program
- Stroke awareness
- Community and senior center visits for vital sign and glucose evaluations
- High school career days
- Middle school mentoring program
- Pittsburgh Public Schools Emergency Response Technology Education
- Diversity recruitment campaign
- Vaccination clinics (PODS) for influenza and pneumonia
- Clinical field education to paramedic students in the University of Pittsburgh Emergency Medicine Program
- Clinical field education to emergency medicine physician residents in the University of Pittsburgh Emergency Medicine Residency program
- Participation in the Resuscitation Outcomes Consortium

Pittsburgh EMS contributes personnel to the following joint specialty response teams:

**Joint Public Safety Rescue Task Force Training**

Helped develop the Joint Public Safety Rescue Taskforce strategy for response to Active Threat Events with Police and Fire. This team has been conducting training for all EMS, Police, and Fire personnel since May of 2017.

**Pittsburgh Public Safety Flood Response**

Joint Pittsburgh Public Safety Team with Police and Fire that responds to flash flooding events.
Allegheny County Hazardous Material Response Gold Team

City of Pittsburgh Hazardous Materials Response Team is part of the Allegheny County hazardous Materials Response Program. This team is staffed jointly by EMS and Fire.

Pennsylvania Urban Search and Rescue Strike Team-1

This is a regional (Region 13) Urban Search & Rescue Strike Team and functions under PEMA as part of the in-state Urban Search & Rescue Program. Pittsburgh MS has seventeen (17) paramedics that have been selected to be part of this team. This team trains five times a year in addition to exercises.

Special Events:

Pittsburgh EMS provides Paramedic and EMT staffing for special event venues in the City of Pittsburgh:

- Major League Sports
- College Sports
- High School & Middle School Sports Races
- Holiday Events
- Community Events
- Pittsburgh Convention Center Events
- Concerts

2020 Reported Description of Services

Pittsburgh EMS met American Heart Association (AHA) Mission LifeLine metrics by getting > 75% of our patients with ST Elevation Myocardial Infarction (STEMI) into the cardiac catheterization laboratory at the hospital and their lesion vessel reopened in < 90 minutes from EMS contact.

Pittsburgh EMS executes high performance resuscitation measures and over half of persons with a bystander-witnessed cardiac arrest survive to hospital admission; 13.5% survive to discharge with good neurologic outcome. Rates of bystander CPR in Pittsburgh match
national means. Bystander CPR improves survival to discharge to survival with good neurologic function. Unfortunately, the Community CPR program was suspended due to the pandemic.

Pittsburgh River Rescue is staffed 24/7 by two Paramedic/Public Safety Divers and two Police Officers. The unit is responsible for safety patrols, law enforcement, surface rescue, subsurface rescue, evidence recovery, and medical response in the Pittsburgh Pool and on the three rivers.

2020 Pittsburgh River Rescue Activity:

- Training Operations = 32
- Routine Patrol = 102
- Public Service Calls (disabled boat, etc.) = 64
- Hazardous Materials Response = 2
- Rescue Operation = 26
- Calls for Jumper/Possible Jumper = 125
- Body Recovery = 7
- Search Operation = 25
- Law Enforcement Response = 14
- Fire Response = 1
- Routine Patrol = 102

The Pittsburgh EMS Tactical EMS Team (TEMS) consists of 16 paramedics who have completed an 80-hour competitive SWAT course and additional training in Tactical Emergency Medicine to provide forward medical support to the Pittsburgh Police SWAT Team on police deployments. Pittsburgh EMS TEMS also provides medical support to the Allegheny County Police SWAT Team and the Pittsburgh FBI SWAT Team.

Pittsburgh EMS TEMS responded to 151 missions in 2020.

2020 EMS TEMS Activity:

- Callouts (barricaded subject, no notice high-risk warrant, hostage situation, active shooter) = 99
- Preplanned High-Risk Search Warrant Service = 52
The Pittsburgh EMS Motorcycle Unit provides medical coverage at large special events, parades, and races. All members of this team have to successfully complete an 80-hour police motorcycle course and then a 40-hour annual refresher program yearly. The 2020 operations were limited due to pandemic-related shutdowns of large events.
Agency Goals
Ischemic Large Vessel Occlusion Stroke (1st year project)

- 80% FMC to CT time < 50 minutes
- 75% of eligible patients receive reperfusion intervention

Methods to achieve:

- Quality Improvement Review, bureau-wide and small-unit education

Cardiac Arrest

- 90% compliance for post-arrest 12 Lead EKG and pressor support

Methods to achieve:

- Quality Improvement Review, small unit training course 3. STEMI:
- Maintain AHA Gold Plus status > 75% Door to Device time
- Methods to achieve: Current QI process

Crashing Patients

- Reduce Crashing Patients > 5 minutes after contact to < 5% of system cardiac arrests

Methods to achieve:

- Current QI process

Maintain COVID-19 enhancements/surge operations as long as the pandemic persists

Strategies to achieve goal:

- Adhere to current plan and protocols

How success will be measured:

- Continuing operations throughout the pandemic
Performance Metrics
Performance Metrics

See Agency Goals Section
### Staffing & Salaries

#### Position Summary

<table>
<thead>
<tr>
<th>Title</th>
<th>2021 FTE</th>
<th>Rate/Grade</th>
<th>Hours/Month</th>
<th>2021 Budget</th>
<th>2022 FTE</th>
<th>Rate/Grade</th>
<th>Hours/Month</th>
<th>2022 Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMS Chief</td>
<td>1</td>
<td>125,113</td>
<td>12</td>
<td>$125,113</td>
<td>1</td>
<td>133,280</td>
<td>12</td>
<td>$133,280</td>
</tr>
<tr>
<td>Deputy Chief</td>
<td>1</td>
<td>107,478</td>
<td>12</td>
<td>110,702</td>
<td>1</td>
<td>123,975</td>
<td>12</td>
<td>123,975</td>
</tr>
<tr>
<td>Assistant Chief</td>
<td>1</td>
<td>105,254</td>
<td>12</td>
<td>105,254</td>
<td>1</td>
<td>116,858</td>
<td>12</td>
<td>116,858</td>
</tr>
<tr>
<td>Division Chief</td>
<td>3</td>
<td>95,526</td>
<td>12</td>
<td>286,577</td>
<td>3</td>
<td>107,713</td>
<td>12</td>
<td>323,138</td>
</tr>
<tr>
<td>Patient Care Coordinator (start Sept.)</td>
<td>1</td>
<td>41.34</td>
<td>4</td>
<td>28,660</td>
<td>1</td>
<td>46.53</td>
<td>12</td>
<td>96,777</td>
</tr>
<tr>
<td>District Chief</td>
<td>10</td>
<td>41.34</td>
<td>2,184</td>
<td>902,794</td>
<td>10</td>
<td>46.53</td>
<td>2,184</td>
<td>1,016,156</td>
</tr>
<tr>
<td>Crew Chief</td>
<td>39</td>
<td>36.8822</td>
<td>2,080</td>
<td>2,991,884</td>
<td>39</td>
<td>37.9886</td>
<td>2,080</td>
<td>3,081,635</td>
</tr>
<tr>
<td>Paramedic</td>
<td>127</td>
<td>see below</td>
<td>2,080</td>
<td>8,150,726</td>
<td>127</td>
<td>see below</td>
<td>2,080</td>
<td>8,570,789</td>
</tr>
<tr>
<td>Senior Emergency Medical Technician</td>
<td>6</td>
<td>19.7485</td>
<td>2,080</td>
<td>246,461</td>
<td>6</td>
<td>20.3410</td>
<td>2,080</td>
<td>253,856</td>
</tr>
<tr>
<td>Emergency Medical Technician</td>
<td>22</td>
<td>19.4372</td>
<td>2,080</td>
<td>889,446</td>
<td>22</td>
<td>20.0204</td>
<td>2,080</td>
<td>916,134</td>
</tr>
<tr>
<td><strong>Total Uniformed Employees</strong></td>
<td>211</td>
<td></td>
<td></td>
<td><strong>$13,837,617</strong></td>
<td>211</td>
<td></td>
<td></td>
<td><strong>$14,632,597</strong></td>
</tr>
<tr>
<td>Assistant I, Administrative</td>
<td>2</td>
<td>U02-G</td>
<td>12</td>
<td>$70,542</td>
<td>2</td>
<td>U02-G</td>
<td>12</td>
<td>$72,859</td>
</tr>
<tr>
<td><strong>Total Full-Time Permanent Positions</strong></td>
<td>213</td>
<td></td>
<td></td>
<td><strong>$13,908,159</strong></td>
<td>213</td>
<td></td>
<td></td>
<td><strong>$14,705,256</strong></td>
</tr>
</tbody>
</table>

#### FAPP Paramedic Hourly Rates

<table>
<thead>
<tr>
<th></th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paramedic - 5th Year</td>
<td>$34.2922</td>
<td>$35.3210</td>
</tr>
<tr>
<td>Paramedic - 4th Year</td>
<td>30.4944</td>
<td>31.4092</td>
</tr>
<tr>
<td>Paramedic - 3rd Year</td>
<td>26.8834</td>
<td>27.6899</td>
</tr>
<tr>
<td>Paramedic - 2nd Year</td>
<td>23.2350</td>
<td>23.9321</td>
</tr>
<tr>
<td>Paramedic - 1st Year</td>
<td>23.2350</td>
<td>23.9321</td>
</tr>
</tbody>
</table>

| Total Full-Time Permanent Positions | 213 | $13,908,159 | 213 | $14,705,256 |

| Temporary, Part-Time, and Seasonal Allowances | — | — | — |

| Vacancy Allowance | — | — | — |

<p>| Total Full-Time Positions &amp; Net Salaries | 213 | $13,908,159 | 213 | $14,705,256 |</p>
<table>
<thead>
<tr>
<th>Subclass Detail</th>
<th>2020 Actual</th>
<th>2021 Budget</th>
<th>2022 Budget</th>
<th>Increase/Decrease</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Expenditures</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>51 · PERSONNEL-SALARIES &amp; WAGES</td>
<td>$20,268,711</td>
<td>$18,818,796</td>
<td>$19,438,523</td>
<td>$619,727</td>
<td>3.3%</td>
</tr>
<tr>
<td>51101 · Regular</td>
<td>13,428,890</td>
<td>13,908,159</td>
<td>14,705,256</td>
<td>797,097</td>
<td></td>
</tr>
<tr>
<td>51111 · In Grade</td>
<td>—</td>
<td>180,000</td>
<td>—</td>
<td>(180,000)</td>
<td>—</td>
</tr>
<tr>
<td>51201 · Longevity</td>
<td>633,000</td>
<td>630,000</td>
<td>622,000</td>
<td>(8,000)</td>
<td>—</td>
</tr>
<tr>
<td>51203 · Allowances</td>
<td>7,279</td>
<td>7,000</td>
<td>7,000</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>51205 · Uniform</td>
<td>268,800</td>
<td>252,000</td>
<td>253,200</td>
<td>1,200</td>
<td>—</td>
</tr>
<tr>
<td>51207 · Leave Buyback</td>
<td>153,522.29</td>
<td>100,000.00</td>
<td>100,000.00</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>51401 · Premium Pay</td>
<td>5,777,220</td>
<td>3,741,637</td>
<td>3,751,068</td>
<td>9,431</td>
<td>—</td>
</tr>
<tr>
<td><strong>52 · PERSONNEL-EMPLOYEE BENEFITS</strong></td>
<td>$5,175,060</td>
<td>$5,264,900</td>
<td>$5,625,882</td>
<td>$360,981</td>
<td>6.9%</td>
</tr>
<tr>
<td>52101 · Health Insurance</td>
<td>2,611,620</td>
<td>2,742,455</td>
<td>2,709,276</td>
<td>(33,179)</td>
<td>—</td>
</tr>
<tr>
<td>52111 · Other Insurance/Benefits</td>
<td>302,494</td>
<td>315,940</td>
<td>335,340</td>
<td>19,400</td>
<td>—</td>
</tr>
<tr>
<td>52201 · Social Security</td>
<td>1,505,211</td>
<td>1,391,375</td>
<td>1,499,250</td>
<td>107,875</td>
<td>—</td>
</tr>
<tr>
<td>52301 · Medical-Workers’ Compensation</td>
<td>93,540</td>
<td>93,544</td>
<td>123,633</td>
<td>30,089</td>
<td>—</td>
</tr>
<tr>
<td>52305 · Indemnity-Workers’ Compensation</td>
<td>341,660</td>
<td>372,723</td>
<td>669,848</td>
<td>297,125</td>
<td>—</td>
</tr>
<tr>
<td>52315 · Workers’ Compensation-Fees</td>
<td>20,856</td>
<td>20,864</td>
<td>12,534</td>
<td>(8,330)</td>
<td>—</td>
</tr>
<tr>
<td>52601 · Personal Leave Buyback</td>
<td>277,930</td>
<td>290,000</td>
<td>238,000</td>
<td>(52,000)</td>
<td>—</td>
</tr>
<tr>
<td>52602 · Tuition Reimbursement</td>
<td>16,554</td>
<td>38,000</td>
<td>38,000</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>52605 · Retirement Severance</td>
<td>5,194</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td><strong>53 · PROFESSIONAL &amp; TECHNICAL SERVICES</strong></td>
<td>$46,088</td>
<td>$43,100</td>
<td>$43,100</td>
<td>—</td>
<td>— %</td>
</tr>
<tr>
<td>53101 · Administrative Fees</td>
<td>—</td>
<td>1,000</td>
<td>1,000</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>53301 · Workforce Training</td>
<td>17,558</td>
<td>5,000</td>
<td>5,000</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>53501 · Auditing &amp; Accounting Services</td>
<td>1,243</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>53509 · Computer Maintenance</td>
<td>1,634</td>
<td>11,000</td>
<td>11,000</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>53701 · Repairs</td>
<td>23,282</td>
<td>26,100</td>
<td>26,100</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>53905 · Prevention</td>
<td>2,372</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td><strong>54 · PROPERTY SERVICES</strong></td>
<td>$3,900</td>
<td>$5,500</td>
<td>$37,000</td>
<td>$31,500</td>
<td>572.7%</td>
</tr>
<tr>
<td>54101 · Cleaning</td>
<td>3,881</td>
<td>5,500</td>
<td>5,500</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>54513 · Machinery &amp; Equipment</td>
<td>19</td>
<td>—</td>
<td>31,500</td>
<td>31,500</td>
<td>—</td>
</tr>
<tr>
<td><strong>55 · OTHER SERVICES</strong></td>
<td>$10,547</td>
<td>$13,200</td>
<td>$13,200</td>
<td>—</td>
<td>— %</td>
</tr>
<tr>
<td>55201 · Telephone</td>
<td>177</td>
<td>1,200</td>
<td>1,200</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>55301 · Employment Related</td>
<td>2,860</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>55305 · Promotional</td>
<td>7,510</td>
<td>12,000</td>
<td>12,000</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td><strong>56 · SUPPLIES</strong></td>
<td>$583,539</td>
<td>$873,500</td>
<td>$936,500</td>
<td>$63,000</td>
<td>7.2%</td>
</tr>
<tr>
<td>56101 · Office Supplies</td>
<td>27,904</td>
<td>20,000</td>
<td>20,000</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>56103 · Freight</td>
<td>1,891</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>56151 · Operational Supplies</td>
<td>524,534</td>
<td>775,000</td>
<td>838,000</td>
<td>63,000</td>
<td>—</td>
</tr>
<tr>
<td>56301 · Parts</td>
<td>9,938</td>
<td>4,500</td>
<td>4,500</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>56351 · Tools</td>
<td>7,205</td>
<td>15,000</td>
<td>15,000</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>56401 · Materials</td>
<td>2,130</td>
<td>5,000</td>
<td>5,000</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>56501 · Parts</td>
<td>9,936</td>
<td>15,000</td>
<td>15,000</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>56503 · Repairs</td>
<td>—</td>
<td>39,000</td>
<td>39,000</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>
## Budget

### 5-Year Forecast

<table>
<thead>
<tr>
<th>Subclass Detail</th>
<th>2020 Actual</th>
<th>2021 Budget</th>
<th>2022 Budget</th>
<th>Increase/Decrease</th>
<th>Change %</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Expenditures</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>57 - PROPERTY</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>57501 - Machinery &amp; Equipment</td>
<td>77,342</td>
<td>43,500</td>
<td>189,500</td>
<td>146,000</td>
<td>335.6%</td>
</tr>
<tr>
<td>57571 - Furniture &amp; Fixtures</td>
<td>74,912</td>
<td>43,500</td>
<td>189,500</td>
<td>146,000</td>
<td></td>
</tr>
<tr>
<td><strong>58 - MISCELLANEOUS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>58101 - Grants</td>
<td>2,430</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td><strong>Expenditures Total</strong></td>
<td>$26,165,186</td>
<td>$26,426,306</td>
<td>$27,647,515</td>
<td>$1,221,209</td>
<td>4.6%</td>
</tr>
</tbody>
</table>


Programs & Projects
EMS Highly Infectious Disease Transport Team

The Pittsburgh EMS Highly Infectious Disease Transport Team was re-tasked shortly before the onset of the pandemic with the following missions: to support bureau-wide operations and to support containment and mitigation measures with the Allegheny County Health Department and the Allegheny County Department of Human Services. Two (2) of these specialty support units were placed into operation 24/7 to:

- Provide infection control training, advice, and technical support to units in the field
- Provide additional personnel in Maximum Level PPE to assist with high-risk patient care requiring resuscitation and airway procedures
- Assist field units with proper donning & doffing of PPE and personnel and vehicle decontamination
- Assist with containment strategies by collecting COVID-19 testing samples for the Allegheny County Health Department for persons under investigation in the community
- Facilitate transportation of vulnerable persons to isolation/quarantine facilities
- Resupply field units with PPE as needed

The units conducted 50 testing missions throughout Allegheny County for the Allegheny County Health Department and tested at total of 180 individuals. ECHO units relocated 78 vulnerable/at risk individuals to a safe quarantine/isolation facility for the Allegheny County Department of Human Services.

EMS Health Programs and Training

Public Health Programs:

Pittsburgh EMS works with our community partners to develop the following public health programs to develop a more medically resilient community and reduce morbidity and mortality.

- Narcan Leave Behind Program
- Infant Safe Sleeping Initiative
- Car Seat Inspection & Installation Program
- Community CPR/AED Training
- COPE Program (suspended in 2020 due to the pandemic)
Agencies engaged with for these programs include:

- Allegheny County Health Department
- Prevention Point of Pittsburgh
- Mercy Behavioral Health
- Operation Safety Net
- SafeCrib®
- Allegheny County Department of Human Services
- Pennsylvania Department of Health

**Acute Stroke Care:**

Pittsburgh EMS initiated a new Stroke Care Quality Improvement Program to optimize stroke management and “prime the pump” to push patients through the stroke system to care to a reperfusion intervention. This program included the introduction of a Stroke Bundle of Care and time metrics to achieve a goal of < 50 minutes from EMS contact to CT Scan time to maximize the opportunity for stroke intervention. Assistant Chief Pinchalk participated in the development of a national position paper on pre-hospital stroke systems of care. (Suspended in 2020 due to the pandemic.)

**Training Division:**

Pittsburgh EMS Training delivers quality improvement focused training to improve the quality of care being provided to our patients.

**2020 Training Sessions included:**

- Core Resuscitation Competency Training
- Pediatric Advanced Life Support Recertification
- Pennsylvania Department of Health Online Con-Ed modules
- Infection Control Just in Time Training
- Police Recruit Medical Training
- New Hire Introduction Training
2020 Accomplishments

Despite a national shortage of paramedics, aggressive recruiting efforts by Pittsburgh EMS resulted in only a 2.5% vacancy rate for Paramedic positions. There was a 17.9% vacancy rate for Emergency Medical Technician (EMT) positions. Two (2) additional Paramedics and four (4) EMTs were hired and started work in January 2021.

The EMT units that provide basic life support continue to evolve and become a vital part of the system. The EMT program began in May 2017. EMT units saw a 11.7% increase in call volume in 2020 while the system as a whole had a 10.2% decrease in call volume. The EMT units have been invaluable in decompressing the system and increasing ALS unit availability.

- Pittsburgh EMS was a regional leader in planning and response operations for COVID-19 and assisted our local, county, and regional public safety partners with planning and training for COVID-19 operations. Through the end of 2020, Pittsburgh EMS treated 725 test-confirmed COVID-19 patients. For the year, a total of 19 field providers tested COVID positive (10.9% of the system), and no providers required hospitalization. Of the positives, most cases were believed to be community- or family-acquired, and only a couple of cases could be linked to a patient care encounter. This is a testament to training and the Pittsburgh EMS Infection Control Plan developed for COVID-19.
- Pittsburgh EMS was awarded the AHA Gold Plus Recognition Award for the third year in a row!
- Pittsburgh EMS outperformed the Western Pennsylvania Region, Pennsylvania, and National Benchmarks for cardiac arrest resuscitation outcomes. Thirty-seven percent of our cardiac arrest patients survived to hospital admission, and 10.2% were discharged with good neurological function. Nearly a third of our patients with shockable rhythms (Ventricular Fibrillation) were discharged with good neurological function.
- Pittsburgh EMS received Pennsylvania Emergency Medical Services for Children (EMSC) recognition for Pediatric Care in 2020 at the Expert Level. To receive Master Level Recognition, the service had to meet the following metrics:
  - Carry appropriate pediatric-specific medical equipment
  - Have child abuse background clearances for all EMS providers
  - Provide a minimum for four (4) hours of pediatric-specific continuing education annually
Programs & Projects

- Provide community outreach programs
- Have Child Passenger Safety Technicians trained and providing car seat safety checks to the public

2021 Accomplishments

- Supported City and County public safety and health agencies with COVID-19 training, planning, infection control, and testing
- Implemented the Pittsburgh EMS Stroke project for quality care, resulting in 42% of all stroke patients and 57% of LVO strokes receiving a reperfusion intervention
- Received the American Heart Association Mission Lifeline Gold Plus award for the fourth year in a row
- Restarted the Infant Safe Sleep program, which includes screening for safe sleeping conditions while on calls, providing education, and leaving behind cribs if needed
- Attained a 95% survival rate for penetration trauma through August
Opportunities & Risks

In 2020, the Pittsburgh EMS Training Division delivered more than 3,700 man hours of training that exceeded yearly state continuing education requirements for EMT & Paramedic Recertification.

Risks Ahead

Fleet

Ordering new trucks in 2021 or 2022 was not allowed by the budget. Due to the amount of time it takes to receive a new truck, an order should have been placed months ago in order to receive vehicles for 2023. The constant rotation between the new and old trucks can be risky. The age of the current fleet is of high concern. There are 1 or 2 ambulances manufactured in 2013. The fleet includes 13 ALS trucks, with the oldest having been manufactured in 2017. High mileage is an issue even for the newest vehicles. The scuba truck was manufactured in 1987, and the rescue truck was manufactured in 1982. Spare trucks are used weekly to provide routine preventive maintenance to the newer vehicles.

Personnel and Shifts

EMS runs on 12-hour shifts (12 hrs. on/12 hrs. off). An employee may often work an 18-hour shift to cover for someone who is off or on sick leave. Working 18-hour shifts to cover deficiencies has impacted morale and increased overtime pay.

Retention of staff has become an issue, and the HR department estimates a loss of 1.5 employees a month.

Wilkensburgh

Wilkensburgh is a Burrough next to Pittsburgh that currently contracts with the Bureau of Fire for one-unit coverage. There have been talks for EMS to also cover Wilkensburgh, which the Chief believes would require an additional ALS and BLS unit. Chief Romano believes coverage with the limitations of existing units would prove dangerous for the City of Pittsburgh by leaving a huge gap in normal coverage for the City.
Reports
None.