INNOVATION IN THE FIRE AND RESCUE SERVICE

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Today’s Presentation

• ICMA and CPSE’s history
  ➢ CPSE formed by ICMA and the International Association of Fire Chiefs in 1986
  ➢ CPSE became an ICMA strategic partner in 2018

• White paper development steps

• Areas for exploration

• What we heard

• Global critical issues

• Initiatives highlight

• Q&A
White Paper Development

1. June 2018
   Technical Working Group Formed

2. Jan – May 2019
   Feedback Sessions and Web Surveys

3. June 2019
   Drafting Meeting

4. Oct 2019
   ICMA Presentation

5. Jul 2019 – Mar 2020
   Paper Finalization
Areas to Explore
What we heard about the future?

Comparison of Expected Future Challenges

- An increase in the numbers and/or types of calls for service
- An increase in costs of service and/or declining financial resources
- Additional health, safety, and wellness concerns for fire service personnel
- A lack of cultural and gender diversity among fire service personnel
- Aging or costly equipment and facilities
- A lack of training in new approaches and techniques
- An inability to adopt new technologies

IAFF respondents  CPSE respondents  ICMA respondents
What we heard could be done about the future?

### Three most important ways to facilitate a culture of innovation in the fire and rescue service

<table>
<thead>
<tr>
<th>Most important changes to be implemented</th>
<th>IAFF</th>
<th>CPSE</th>
<th>ICMA</th>
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<tbody>
<tr>
<td>1</td>
<td>Increasing awareness and resources dedicated to personnel health and wellness</td>
<td>Identifying and implementing community risk reduction efforts</td>
<td>Researching and implementing alternative service delivery options</td>
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<td>2</td>
<td>Increasing professional development opportunities for personnel</td>
<td>Increasing usage of data and data analytics</td>
<td>Identifying new partnership opportunities with neighboring jurisdictions and private and/or nonprofit organizations</td>
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<td>3</td>
<td>Researching and implementing time and life-saving technologies</td>
<td>Fostering a culture of innovation in the department and among personnel</td>
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Eight Global Critical Issues

- Inclusiveness
- Re-Identification
- Technology
- Culture
- Sustainability
- Robust Use of Data
- Partnerships
- Health and Wellness

21st Century Fire and Rescue Service

#ICMA2019
Celebrate the heritage while recognizing the services provided have evolved and may continue to experience significant changes over the next 30 years.

Re-Identification

- Explore changes to agency names to better reflect the service provided

Mesa Fire and Medical Department
Culture is defined as the learned behavior patterns of people – including what they think, say, do, value, and feel.

Culture

- Enhance alignment between community, elected officials, management, labor/volunteer representatives, and overall workforce
- Promote an organizational environment that is adaptable, not change averse, innovative, and seeks continuous improvement
- Promote high expectations for employee education, credentialing, and on-going professional development
The fire and rescue service has just scratched the surface of the full potential of using data effectively to, not only respond, but to predict and prevent.

Robust Use of Data

• Conduct evidence-based decision-making utilizing quality data to assess and produce the best outcomes
• Implement advanced data analytics to make informed decisions
• Develop comprehensive records management systems to collect and analyze data effectively
• Focus on outcome-based data for all calls
Health and Wellness

• The Risk Factors:
  • Work Cycle leading to sleep disruption
  • Toxic environments leading to exposure
  • Stressful incidents leading to mental health impacts

• The Solutions:
  • Ensure the proper level of physical fitness and health and wellness is maintained
  • Champion research specific to fire and rescue service

The increase in emergency responder health issues including PTSD, suicides, and other related problems is a critical issue for the profession.
The fire and rescue service is in an enviable position in communities being well-positioned to be a service provision hub.

Partnerships

Mobile Integrated Health Program
Growing and aging population, pension costs, aging infrastructure and apparatus, coupled with the shift of responsibilities from federal/state to local will continue to impact the demand for services by local governments.

Sustainability

• Develop a better understanding of community needs and the changing demands for services and modify the service delivery model(s) to meet them.

• The identification of the “Predictable Surprises”
Adapt to and leverage rapidly evolving technology to improve service delivery

Technology

• Types of technology affecting the fire and rescue service:
  • Drones
  • Electric vehicles
  • Ultra high-pressure water application
  • Heads-up thermal imaging in the SCBA
  • Robotics
  • Artificial intelligence
  • Smart cities
  • Smart buildings
  • Biometrics
A workforce that is reflective of the community make-up helps to build trust and promotes better understanding.

**Inclusiveness**

- Select and promote members who reflect the demographic make-up of the community they serve
  - Remove economic barriers for candidates
  - Remove social barriers for candidates
  - Remove non-validated physical ability barriers
  - Establish an agency goal for the optimal demographic make-up
  - Develop a plan to achieve the optimal goal
THANK YOU

Questions?