# SFPE 2020 ANNUAL REPORT

JACK POOLE, SFPE PRESIDENT NICOLE BOSTON, SFPE CEO

AUGUST 5, 2021

## 2020 FINANCIAL STATEMENTS

# STATEMENT OF REVENUE

	2019	2020
Membership dues	837,455	918,882
C100	167,316	162,981
Continuing Education	1,002,212	926,883
Royalties	311,617	229,251
Publications	155,034	151,597
Investment Income	70,815	56,992
Other income	11,338	10,970
TOTAL REVENUE	2,555,787	2,457,556

# STATEMENT OF FUNCTIONAL EXPENSES

	2019	2020
Grants	50,000	4,500
Salaries & Benefits	1,057,698	1,098,477
Contracted Services	283,982	337,215
Advertising	43,535	41,221
Office Expenses	94,232	91,432
Information Technology	38,841	168,766
Occupancy	133,955	155,718
Travel	171,071	41,811
Meetings	403,851	173,635
Honorariums	0	45,300
Business Expenses	194,534	121,677
TOTAL EXPENSES	2,605,274	2,279,752

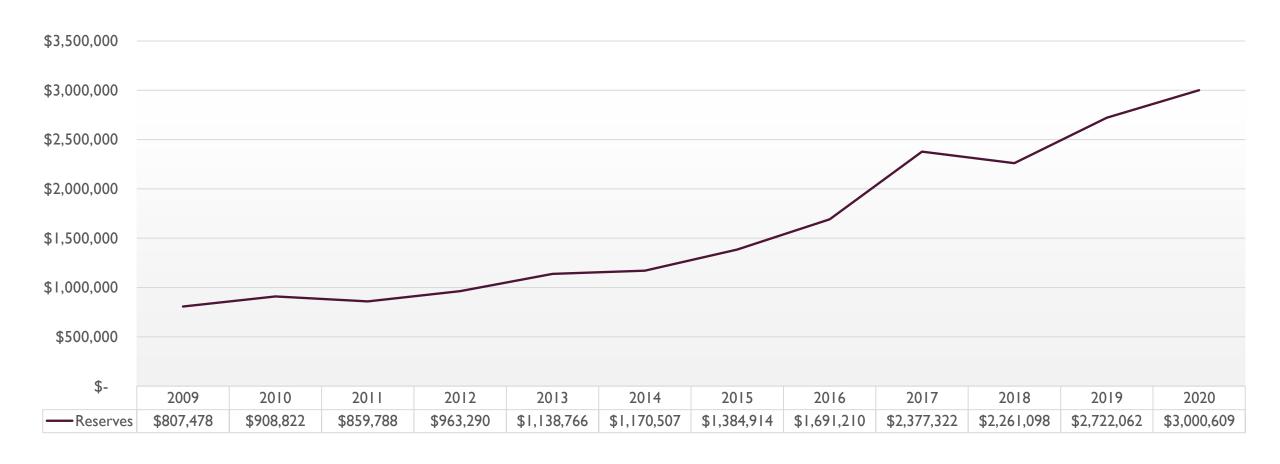
### BALANCE SHEET

Assets	2019	2020
Cash and cash equivalents	83,657	181,756
Accounts receivable	225,441	110,391
Prepaid expenses	150,011	120,536
Publications Inventory	13,695	13,451
Property and equipment	47,866	89,322
Investments	2,722,062	3,000,609
Deposits	21,320	21,320
Due from Foundation		10,844
TOTAL ASSETS	3,264,052	3,548,229

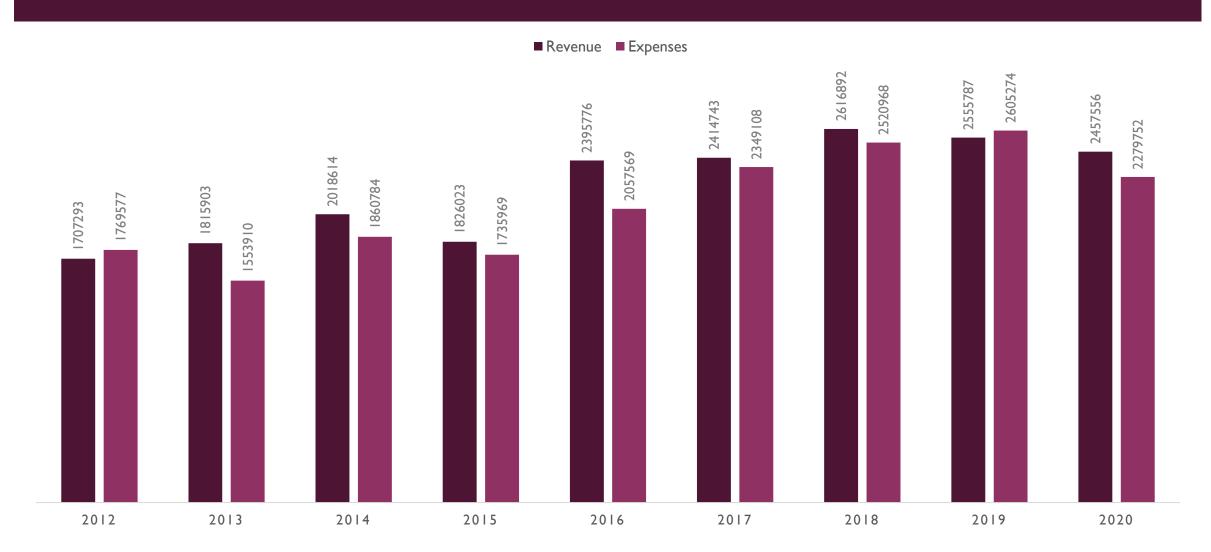
### BALANCE SHEET

Liabilities	2019	2020
Accounts payable and accrued expenses	81,491	162,124
Deferred revenue	677,566	491,525
Other liabilities	170,563	
Deferred rent		146,140
Equity (net assets)	2,334,432	2,748,440
TOTAL LIABILITIES AND NET ASSETS	3,264,052	3,548,229

#### **INVESTMENTS**



#### HISTORICAL REVENUE AND EXPENSES



#### 2020/2021 BOARD OF DIRECTORS

Position	2020	2021
President	Mike Crowley	Jack Poole
President-Elect	Jack Poole	Beth Tubbs
Secretary-Treasurer	Dan Arnold	Amanda Kimball
Past-President	Brian Meacham	Mike Crowley
CEO	Nicole Boston	Nicole Boston
	John Campbell	Dan Arnold
	Jimmy Jonsson	John Campbell
	Shaun Kelly	Jimmy Jonsson
	Amanda Kimball	Shaun Kelly
	Bob Libby	Bob Libby
	Tony Militello	Tony Militello
	Armelle Muller	Armelle Muller
	Shamim Rashid-Sumar	Shamim Rashid-Sumar
	Beth Tubbs	Albert Simeoni



### **SFPE Mission**

To define, develop, and advance the use of engineering **best practices**; expand the scientific and **technical knowledge** base; and **educate** the global fire safety community to reduce fire risk.

## **SFPE Vision**

The leaders in engineering a fire safe world.

#### 2021-2023 STRATEGIC PLAN GOALS

- I. Advocate for the profession: Represent and advance the interest of professionals who apply engineering principles to the challenges of fire
- 2. Inclusive Environment: Foster a professional environment of diversity, equity and inclusion
- 3. Professional Practice: Advance the competency and promote the ethical practice of professionals who apply engineering principles to challenges of fire
- **4. Technical Leadership:** Advance research and the use of engineering principles to address the challenges of fire



**BILL KOFFEL**, CMC CHAIR

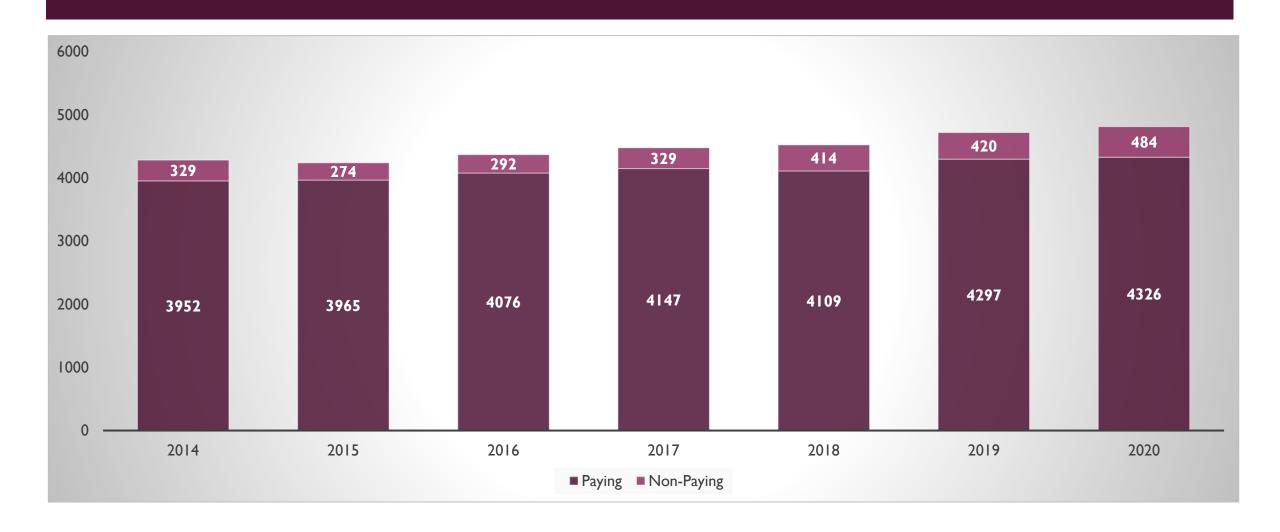
JULIE GORDON, MEMBERSHIP AND MARKETING DIRECTOR

**EVA PRZYGODZKI**, CHAPTER ENGAGEMENT MANAGER

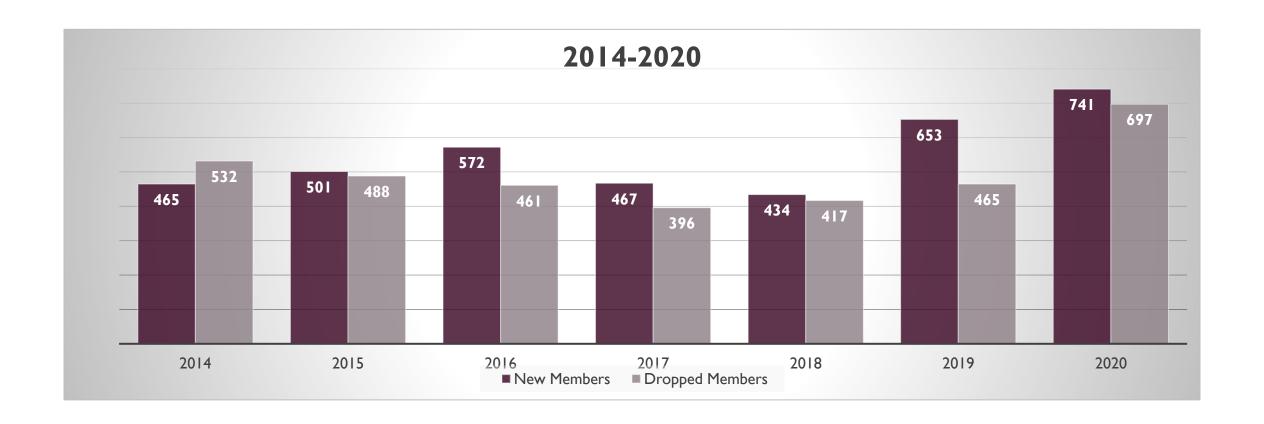
> MAXINE KATZ, ADMINISTRATIVE ASSISTANT

# MEMBERSHIP AND CHAPTER RELATIONS

#### MEMBERSHIP HISTORY



#### RECRUITMENT AND ATTRITION



#### MEMBER GRADES

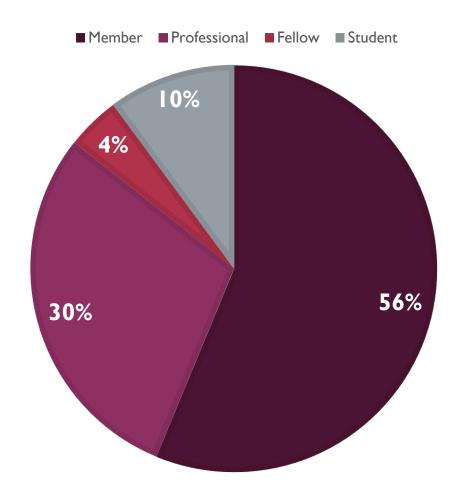
## Of our 4,810 members

Member: 2,689

Professional Member: 1,406

Fellow: 203

Student: 484



# STUDENTS AND EARLY CAREER PROFESSIONALS

- 22 student chapters
- 484 student members
- 28 recent graduates



#### TOP 10 COUNTRIES

United States - 3127

Canada - 253

United Kingdom - 122

Australia - 103

New Zealand – 102

UAE - 37

China - 36

Italy 31

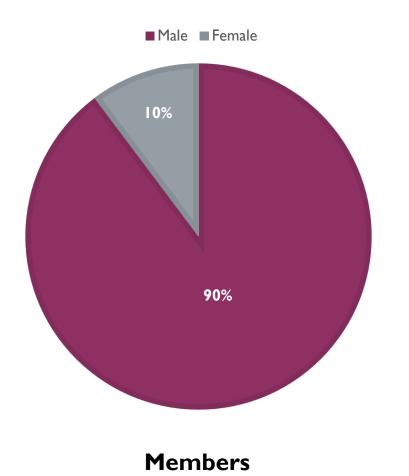
India - 29

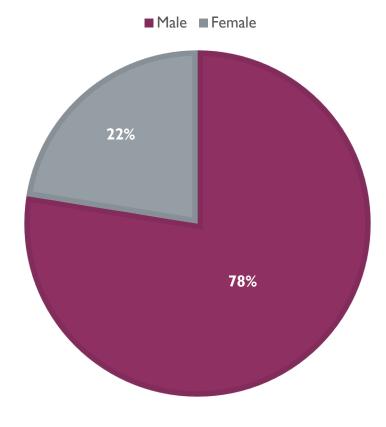
Sweden 26

#### TOP 10 STATES

California – 298 Maryland - 258 Massachusetts - 224 Texas - 192 Illinois – 186 New York -159 Georgia -146 Pennsylvania – 132 Virginia – 129 Florida - 108

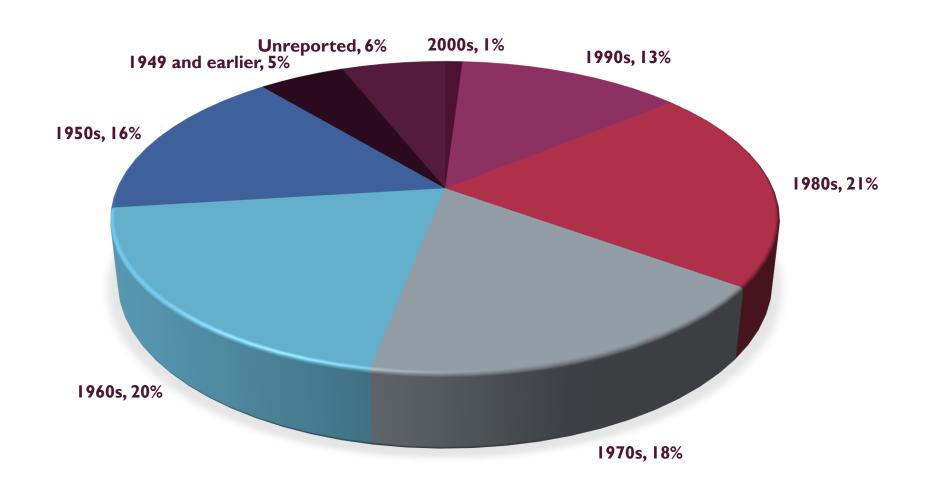
#### NUMBER OF WOMEN IN FPE IS GROWING





**S**tudents

#### GENERATIONAL BREAKDOWN – DECADE BORN



#### 6 NEW CHAPTERS FORMED IN 2020

- Cyrus Chapter
- Egypt Chapter
- Germany Chapter
- Greece Chapter
- Hong Kong Polytechnic Student Chapter
- Pakistan Chapter

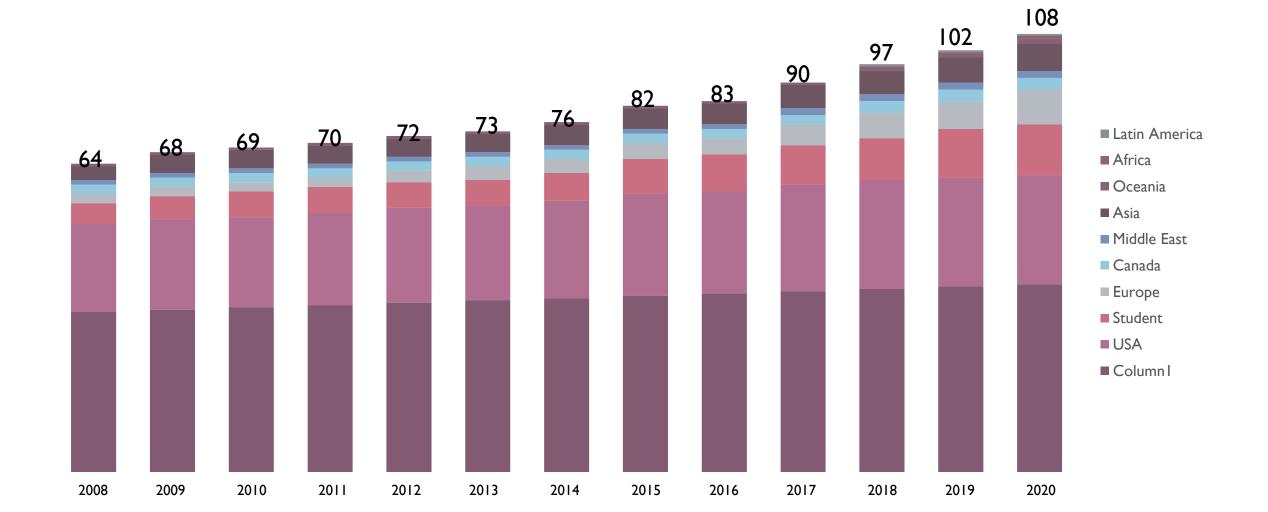








#### **CHAPTER GROWTH**



#### SFPE EUROPE

- Incorporated as SFPE Europe on July 24, 2020 in Brussels, Belgium
- Converted SFPE Europe Conference to virtual event (held March 24-25, 2021)
- Renegotiated contract with Marriott Berlin for March 27-30, 2023
- Focus on:
  - European events
  - Participation on CEN Technical Committees
  - Member growth
  - New chapters
  - Addressing education needs

#### 2020 AWARDS & HONORS

- 9 Fellows inducted
- 5 Under 35 recipients
- 28 Professional Members upgraded
- 14 Society award recipients
- 3 Foundation award recipients

Awards for Chapter Excellence (ACE) winners

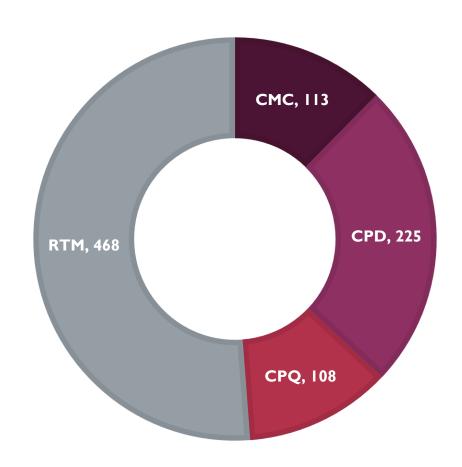
- 12 gold
- 15 silver
- 7 bronze











# STANDING COMMITTEES 928 VOLUNTEERS

#### CMC SUBCOMMITTEES

Awards Subcommittee - Craig Vesely, Chair

Chapter Relations Subcommittee – Tim Hawthorne, Chair

Diversity, Equity and Inclusion (DEI) Subcommittee – Lee Mullin, Chair

Fire Service Subcommittee – Brad Cronin, Chair

Membership Growth & Engagement Subcommittee – Sean Donohue, Chair

Qualifications Subcommittee – Sarge Slicer, Chair

Student Outreach Subcommittee - Matthew Daelhousen, Chair

# SPECIAL INTEREST GROUPS

#### Women in Fire Protection Engineering (WiFPE)

 Held first WiFPE Conversation Circle focused on work life balance on October 26, 2020 sponsored by FM Global, JENSEN HUGHES, and NFPA

#### **Emerging Professionals**

#### Fire Service

• Launched a new Fire Service Resource Page

#### Students

• Launched new Student Outreach Resource Page

#### CORPORATE 100 PARTNERS

No. of Partners: 56

Visionaries: 6

Benefactors: 9

Patrons: 11

Sustainers: 31











# THANK YOU TO OUR CORPORATE 100 PARTNERS AND VOLUNTEERS

# 2020 MAJOR ACCOMPLISHMENTS

- Launched a new SFPE

  Membership Experience
  - New SFPE membership database
  - New SFPE website
  - Launch of SFPE Connect

     a SFPE enhanced member
     online community
    - SFPE Member Forum



Online Community for Those Engineering for a Fire Safe Wor

POST A DISCUSSION SHARE A RESOURCE JOIN A COMMUNITY





Fosted in: RTM - Existing Building Task Group

The minutes for Sub Group A's meeting earlier this week has been uploaded to the library section of the .

#### My Communities

oin a Community –

When you join a community, it will be listed here for quick access. See a list of all communities.

14 total

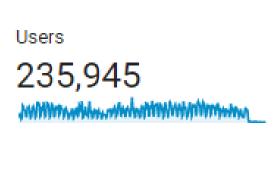
• CMC - Awards Subcommittee

CMC - Chapter Relations Subcommitte

# ON THE CMC HORIZON...

- New Chapter Engagement Manager
- Launch of SFPE Committees and Special Interest Groups in SFPE Connect - our member only online networking platform!
- Bi-monthly Conversation Circles for the Women in Fire Protection Engineering
- Launch of a Fire Service quarterly webinar series
- New Diversity, Equity and Inclusion initiatives
- Newly designed for easy reading SFPeNews Update

# Web Traffic: Jan 2020 – Dec 2020















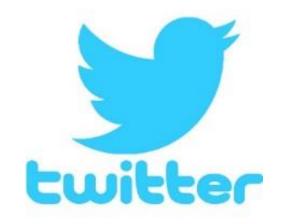
# GLOBAL WEB TRAFFIC (JAN 2020 – DEC 2020)

235,945
0.00% (235,945)

#### SOCIAL MEDIA PRESENCE









#### BE SURE TO FOLLOW US

- Facebook page grew from 8,011 to 8,796 followers
- LinkedIn group increased from 19,783 to 21,593 members
- Twitter has 3,389 followers, 450,200 tweet impressions and 400 mentions
- 217,911+ overall YouTube views

## JOBS BY THE NUMBERS



- 728 job seekers signed up in 2020. 241 total job candidates uploaded a resume in SFPE's Career Center
- 66 employer signups in 2020. 438 total employer signups
- 58 job postings in 2020. 307 total job postings
- 71,813 job views in 2020. 100% more job views in 2020 than 2019.

#### **NEWS BY THE NUMBERS**







FPE MAGAZINE DIGITAL 5,509 UNIQUE READERS AND 15,405 ARTICLE VIEWS; 104,699 PAGE VIEWS SFPE EUROPE MAGAZINE – 22,41 I DIGITAL DISTRIBUTION LIST SFPEUPDATE – 4,569 MEMBER DISTRIBUTION LIST

**GREG BAKER**, RTM CHAIR

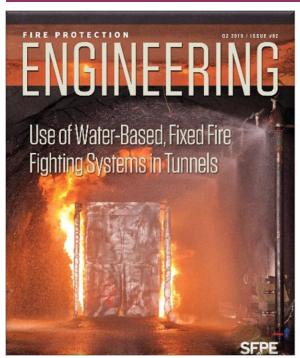
CHRIS JELENEWICZ, TECHNICAL DIRECTOR

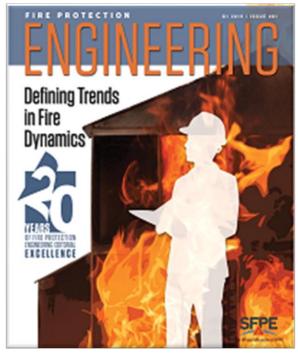
RYAN TUNKEL, PROJECT COORDINATOR

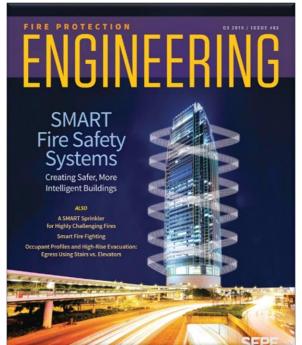
CARLA KALOGEDERIS, MAGAZINE EDITOR

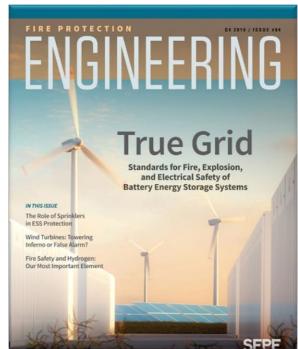
> STEVEN DUNNE, STUDENT INTERN

# RESEARCH, TOOLS & METHODS (RTM)









#### FPE MAGAZINE

#### FIRE TECHNOLOGY JOURNAL

- Guillermo Rein, editor-in-chief
- Published by Springer
- Available digital (members get this for free) and print
- 6X year

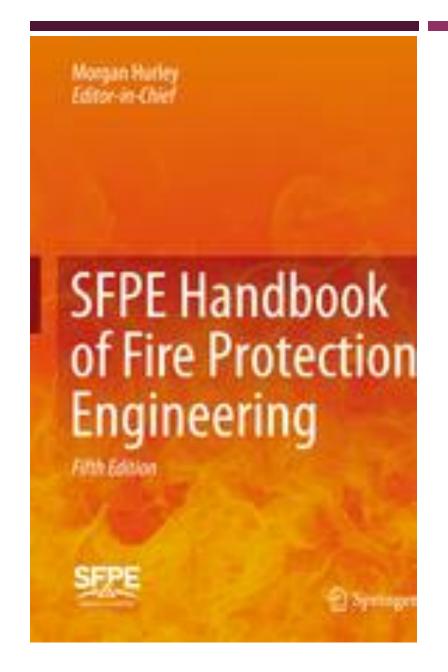








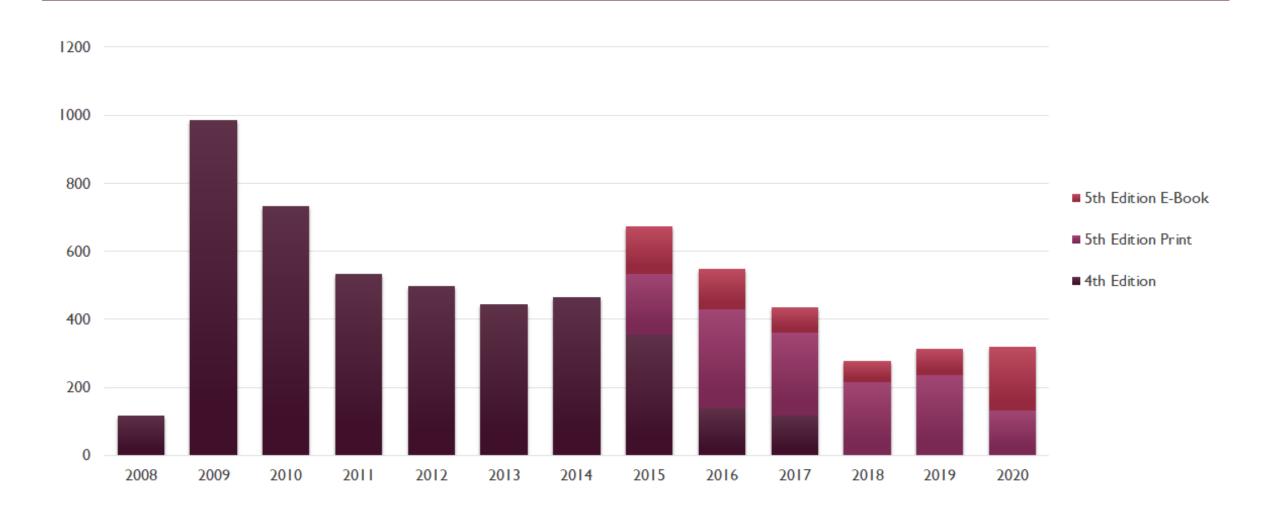
#### E-NEWS



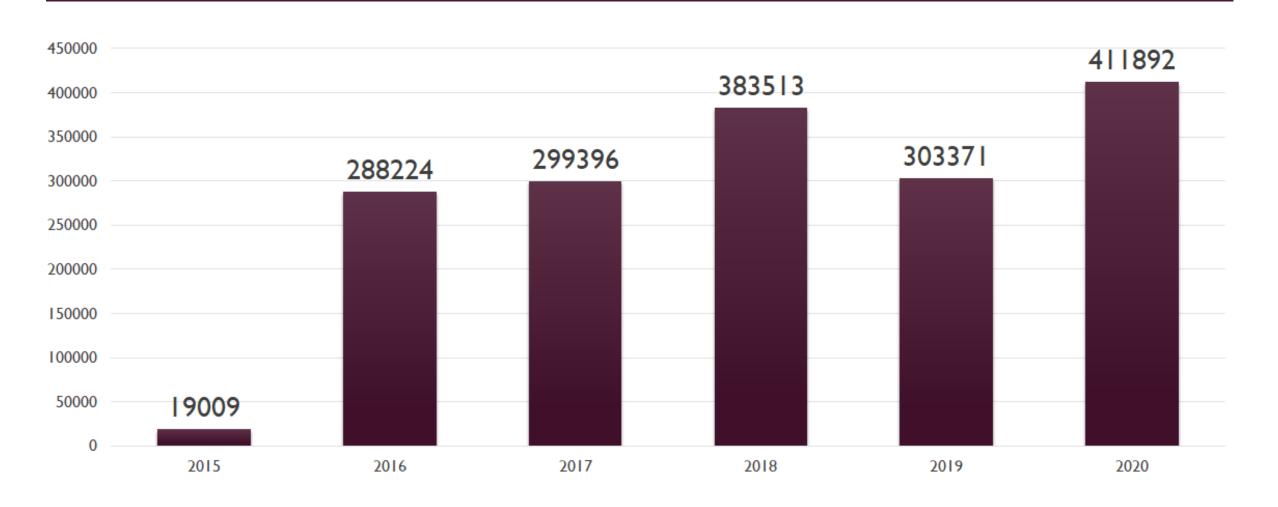
#### 5<sup>TH</sup> EDITION SFPE HANDBOOK OF FIRE PROTECTION ENGINEERING

- The definitive reference on fire protection engineering, now expanded to three volumes
- Available in electronic format for the first time
- Work underway on 6<sup>th</sup> edition and should be completed in 2022 and published in 2023 through Springer

#### HISTORICAL SFPE HANDBOOK SALES



#### 5<sup>TH</sup> EDITION SFPE HANDBOOK DOWNLOADS



Harold S. Wass Jr. Russell P. Fleming P.E., FSFPE

# Sprinkler Hydraulics

A Guide to Fire System Hydraulic Calculations

Revised by Russell P. Fleming P.E., FSFPE

Third Edition





#### SPRINKLER HYDRAULICS, 3RD EDITION

- Updated by Russ Fleming former president of the National Fire Sprinkler Association
- Provides guidance to engineers, engineering technicians, and code enforcement personnel on how to perform fire sprinkler system hydraulic calculations
- Provides guidance on how to perform these calculations by hand and by computer

**Published September 2020** 



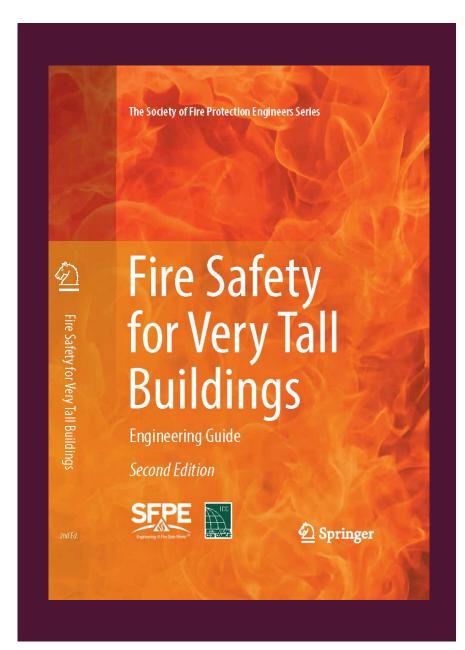
#### GUIDELINES FOR PEER REVIEW IN THE FIRE PROTECTION DESIGN PROCESS



- A listing of definitions related to peer review terminology
- More defined description of qualifications aligned with the SFPE Recommended Minimum Technical Core Competencies for Practice of Fire Protection Engineering
- Information complementing the SFPE Code of Ethics for Fire Protection Engineers
- Added details on the important components of a peer review
- Added content related to the limitations of the document

Available for free digital download.





#### 2<sup>nd</sup> edition published in September 2021. Will include new sections:

- Existing building considerations
- Energy storage systems
- Aerial vehicle platforms
- Unique features (i. e. observation decks, amusement rides, fireworks, etc.).

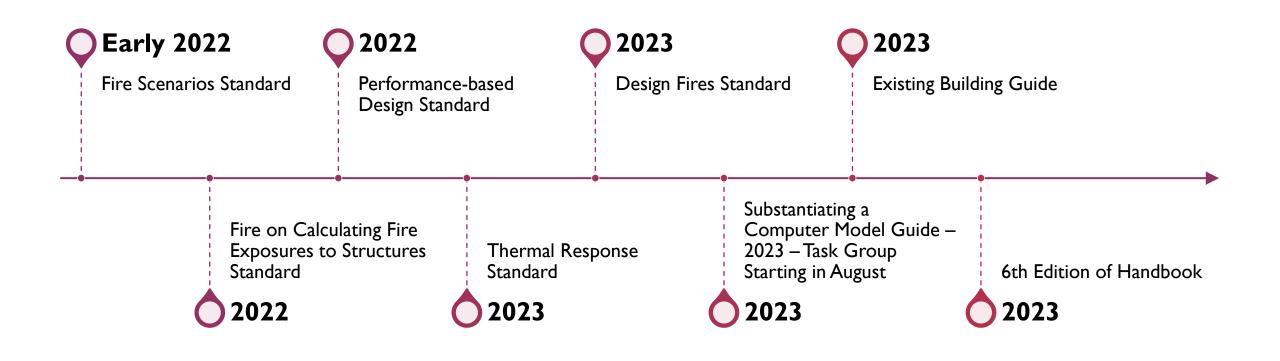
#### And significant updates to:

- Structural fire protection
- Facades/building envelope including information on green walls and LCD displays
- Notification including social media and other forms of electronic communication
- Timed egress analysis and using computer models

# ENGINEERING GUIDE ON FIRE RISK ASSESSMENT

- Final ballot on 2<sup>nd</sup> edition coming soon
- Includes new information on:
  - New flow chart that outlines the risk assessment process
  - F-N curves
  - Risk Perception
  - Risk communication
  - Residual risk management
  - Risk monitoring
  - Sensitivity analysis
  - It also provides clear guidance on conducting qualitative and quantitative analysis.
  - Uses examples that re-enforce topics discussed in the guide

#### UNDER DEVELOPMENT



#### CODES AND STANDARDS DEVELOPMENT

- Working to increase SFPE standards and guides references in all global model building / fire codes
- Subcommittee established to focus on:
  - ✓ NFPA over 200 public inputs
    - ✓ SFPE Guides & Standards currently referenced over 400 times in NFPA documents
  - ✓ ICC
    - ✓ Code Change Proposal Resulted on New Appendix "O" on PBD in 2022
    - ✓ Subcommittee assisted in writing commentary for smoke control section of the IBC
    - ✓ CEN creating task group to work on references in Europe
  - ✓ ISO Liaison on ISO TC 92, SC04 (Fire Protection Engineering)

Research Needs for the Fire Safety Engineering

**TOOL, APPLICATIONS, & METHODS** 

	Profession	Data	Innovative Technology /Materials	Design Tools	Risk /Probabilistic Approaches
	Human Behavior	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
	Building Fires	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
	Resilience/Sustainability	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
	Fire Service	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
	Fire Dynamics	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
	Fire Safety Systems	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
	Forensics/Investigations	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
	Wildland/WUI Fires	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
	Non-Building Fires	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$

### RESEARCH ROADMAP

HREADS

**DOUG FISHER**, CPQ CHAIR

VICTORIA B.
VALENTINE, DIRECTOR
PROFESSIONAL
QUALIFICATIONS

# PROFESSIONAL QUALIFICATIONS

#### MAINTAINING LICENSURE EXAM

#### Sessions in 2018

- Annual Conference (TN)
- Central Savannah River
- Greater Atlanta
- New England
- New York Metro
- Rocky Mountain

#### Sessions in 2019

- New York Metro
- Greater Atlanta
- Central SavannahRiver Area
- New England
- Tennessee Valley
- Annual Conference (Arizona)

#### Sessions in 2020

- New York Metro
- Greater Atlanta
- Virtual

#### FPE PE EXAM STATISTICS

	1010	1110	1210	1310	2014. P10	2015. P10	2016. P10	2017. P10	2018. P10	2019. P10	2020. C10*	2020.C 01*
Total Number Examinees	213	201	208	210	212	203	199	234	241	299	205	74
No. of 1st Time Examinees	134	120	142	137	147	140	133	164	165	210	I	71
1st Time Pass Rate	52%	68%	60%	69%	64%	61%	68%	64%	56%	55%	88%	88%
Repeat Pass Rate	29%	44%	29%	37%	32%	25%	39%	44%	28%	29%		0%

#### FPE CORE COMPETENCIES

- Recommended Minimum Technical Core Competencies for the Practice of Fire Protection
   Engineering sets a baseline for global understanding of the knowledge and skills
   needed to work as a fire protection/fire safety engineer. (Issued December 2018)
  - "A Fire Protection Engineer is an individual who, by formal training and professional experience, carries the necessary competency, and has the skills to provide guidance and direction to protect life, property and environment from threats posed by fire and its related mechanism."
- Defining roles that FPEs perform, and the competencies needed for those jobs.
  - Visit: <u>sfpe.org/fperoles</u> for up-to-date information on this step.

#### EXPLORING CREDENTIALING

- Strategic Outcome Determine metrics to measure competency.
- Create competency information tied to roles FPEs perform to aid recognition of knowledge in skills in areas to ensure qualified personnel is completing the jobs.
- Plans to bring on expertise to evaluate credentialing options and resources that can move fire protection forward, especially in areas where there is no recognition.
  - 2021 Update Mickie Rops Consulting has been hired and is working with the Professional Competency and Credentialing Subcommittee

#### **ADVOCACY**

- Raise awareness of the value of engineering fire safety globally.
  - Develop the scope of this project which includes a strategy for SFPE's advocacy, messaging, identifying audiences, and public relations.
    - Outward focus explaining:
      - What is an FPE? And how to become an FPE?
      - Who is qualified to be an FPE?
      - Fire protection professionals are part of the SFPE family.
  - Incorporate existing projects into the advocacy including the core competencies, career guide/career portal, and professional development opportunities.
  - 2021 Update: SFPE has hired Sage Communications and is building the plan and PR network.

#### PROFESSIONAL QUALIFICATIONS PROJECTS UNDERWAY

- Define FPE roles and specific competencies needed
- Develop and ensure continuity of the PE Exam
- Update FPE and FPET criteria for ABET accreditation
- Administer ABET accreditation reviews
- Enhance the FPE Career Guide website and prepare content for 2021 publication (tri-annually)



MARK FESSENDEN, CPD CHAIR

LOUIS GUERRAZZI, PROFESSIONAL DEVELOPMENT

DIRECTOR

THEONA SALMON PONDER,

MEETINGS MANAGER

**HOLLY KLARMAN**, SALES

**MANAGER** 

**TBD**, VIRTUAL LEARNING MANAGER

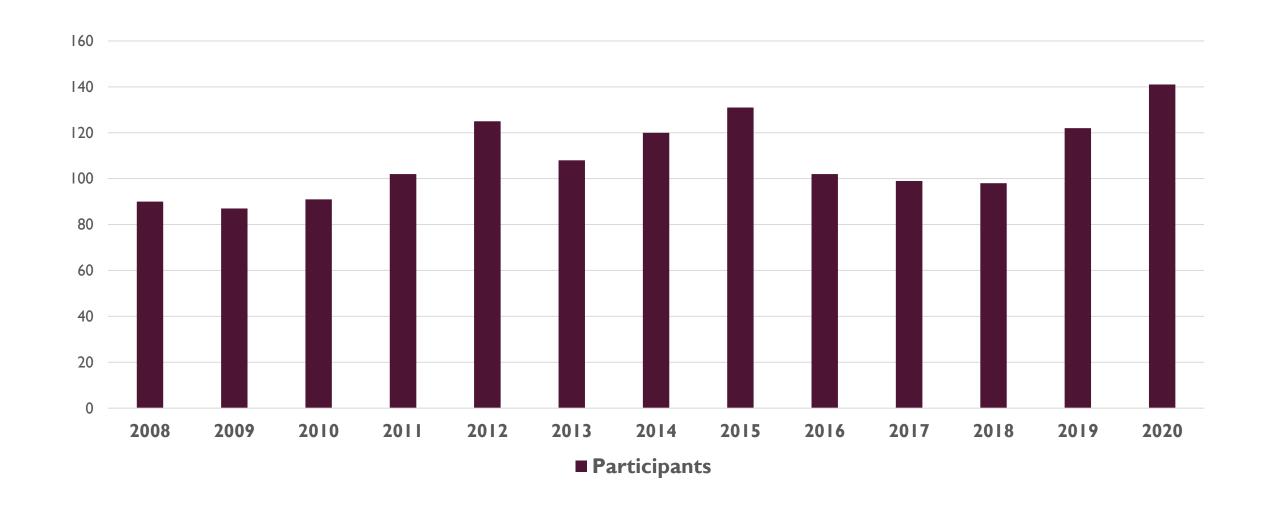
**TBD**, EDUCATION COORDINATOR

# CONTINUING PROFESSIONAL DEVELOPMENT

#### **SEMINARS**

Year	FDS	Flammable	PBD	Risk	Cause		Dust Explosion		Principles	Smoke
2019	26	13	46	76	10	47	-	31	25	10
2020	105	-	58	35	-	55	56	25	31	-

#### PE EXAM REVIEW



#### **UPDATED SEMINARS**

- Advanced Fire Alarm Systems Design 2020
- Dust Explosion: Hazard Recognition, Assessment and Management 2020
- Fire Dynamics Simulator and Smokeview 2020
- Human Behavior 2020
- Principles of Fire Protection Engineering 2021
- Application of Fire Risk Assessment 2021
- Sprinkler Design for Engineers 2021
- Fire and Life Safety Design for Very Tall Buildings 2021
- Performance-Based Design and the Codes 2021

#### SFPE WEBINAR SERIES



Member webinars are complimentary and exclusive to members, featuring topics to advance understanding of fire protection engineering.

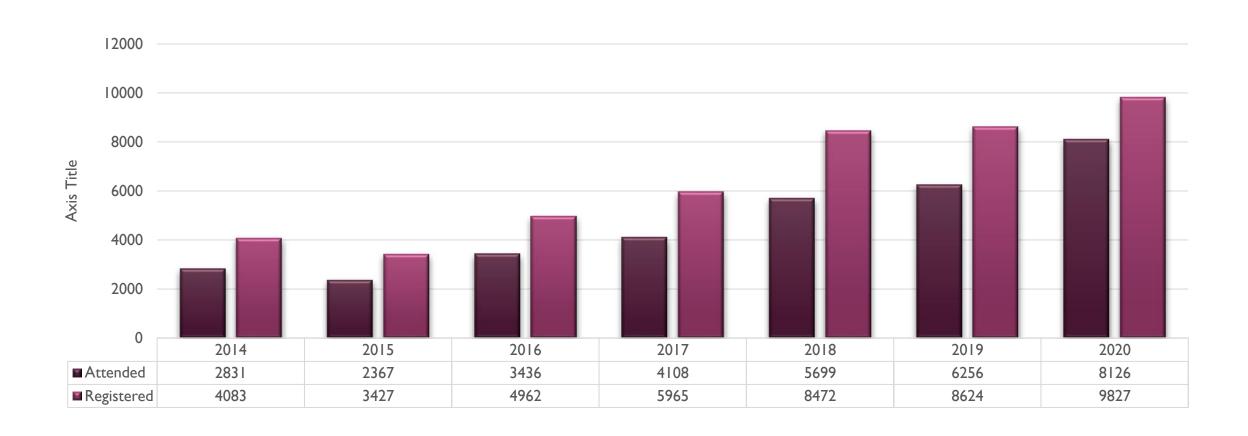


Perspective webinars partner with industry leaders to keep you current on emerging technologies, methods and trends. These are available to both members and non-members.



Premium webinars are specially curated, extended sessions that feature leading subject matter experts. These are typically packaged as sets and explore timely topics and challenges that the industry is facing. They conclude with a "Power Hour" panel discussion.

#### **LIVE WEBINARS 2014 – 2020**



#### SFPE WEBINAR IMPACT

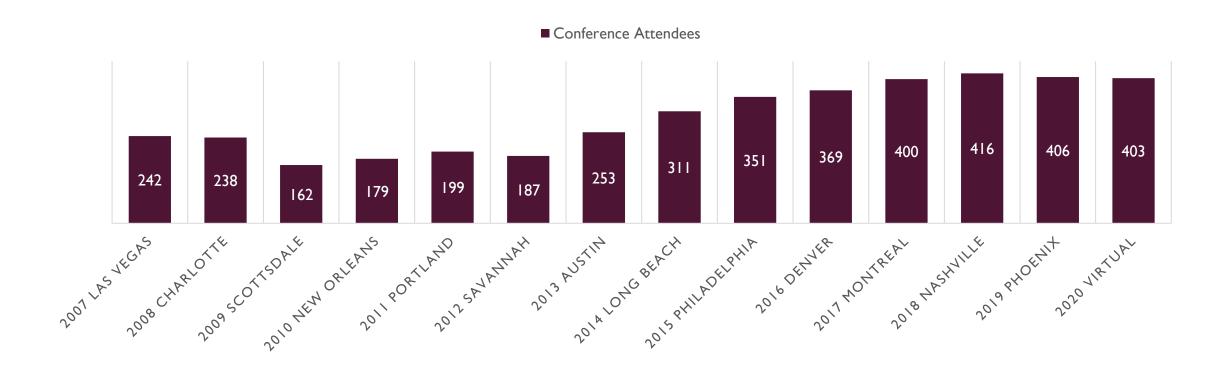
In 2019

6,256 participants watched 22 live webinars

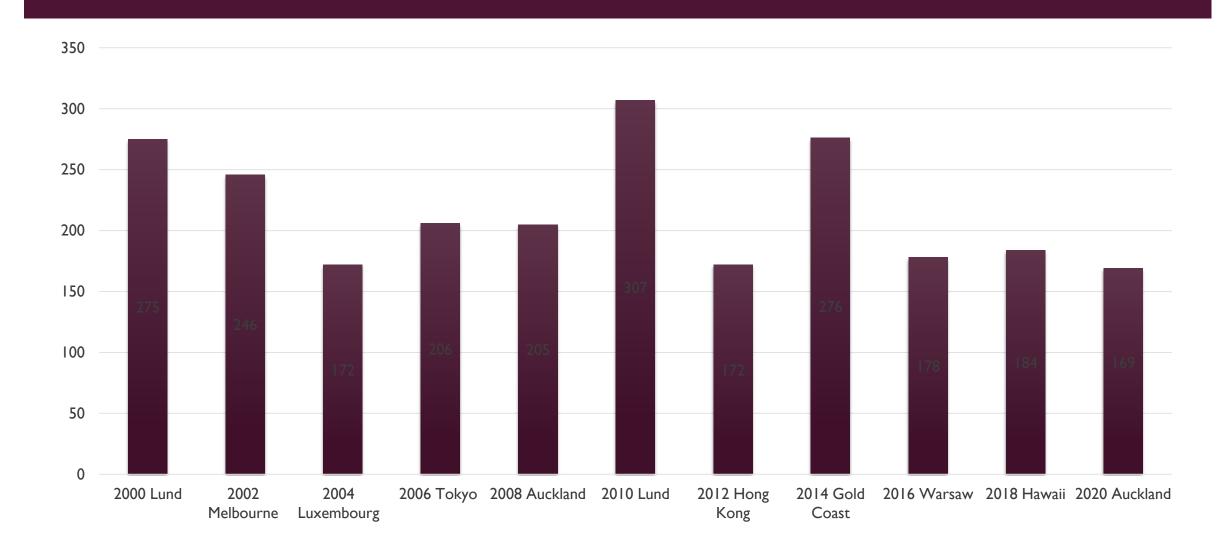
In 2020...

8126 participants watched 40 live webinars

#### ANNUAL CONFERENCE HISTORY



## PBD CONFERENCE HISTORY



#### PROFESSIONAL DEVELOPMENT INITIATIVES UNDERWAY

- Defining a core curriculum aligned with core competencies
- Developing core curriculum courses aligned with
- Enhancing PE exam review
- Enhancing webinar series to include local/regional events (Europe, Latin America, Middle East, etc.)
- Managing global meetings based on pandemic (in-person v. online)
- Developing specialty conferences focused on specific topics in FPE (Cultural Heritage, WUI, Healthcare, Energy, etc)

#### 2020 SUMMARY

- A year of disruption and uncertainty as result of global COVID pandemic
- Managed and navigated successfully
- Successful event in Auckland, New Zealand but reduced numbers due to pandemic
- Virtual Annual Conference w/ high attendance but lower revenue (lowered fees for attendees, sponsors, no exhibits)
- Launched a new legal entity SFPE Europe in Brussels, Belgium
- Created new webinar series and delivered seminars online for first time
- Converted member database to new platform
- Redesigned website
- Launched new online community SFPE Connect
- Completed 3-year Strategic Plan
- Inaugural computerized FPE exam

JACK POOLE, FSFPE 2021 SFPE PRESIDENT JPOOLE@POOLEFIRE.COM

NICOLE TESTA BOSTON, CAE

CHIEF EXECUTIVE OFFICER

NTBOSTON@SFPE.ORG

