

Agenda

- Understanding the challenge
- The facts from SBE data
- SBE's education efforts
- SBE's certification efforts
- SBE's mentoring program
- Other sources for technical knowledge
 - Online
 - In-person training
- Your questions



Chuck Kelly
Regional Sales Manager
Asia Pacific, Nautel



John Poray
Executive Director
Society of Broadcast Engineers



Wayne Pecena
Education Committee Chair
Society of Broadcast Engineers

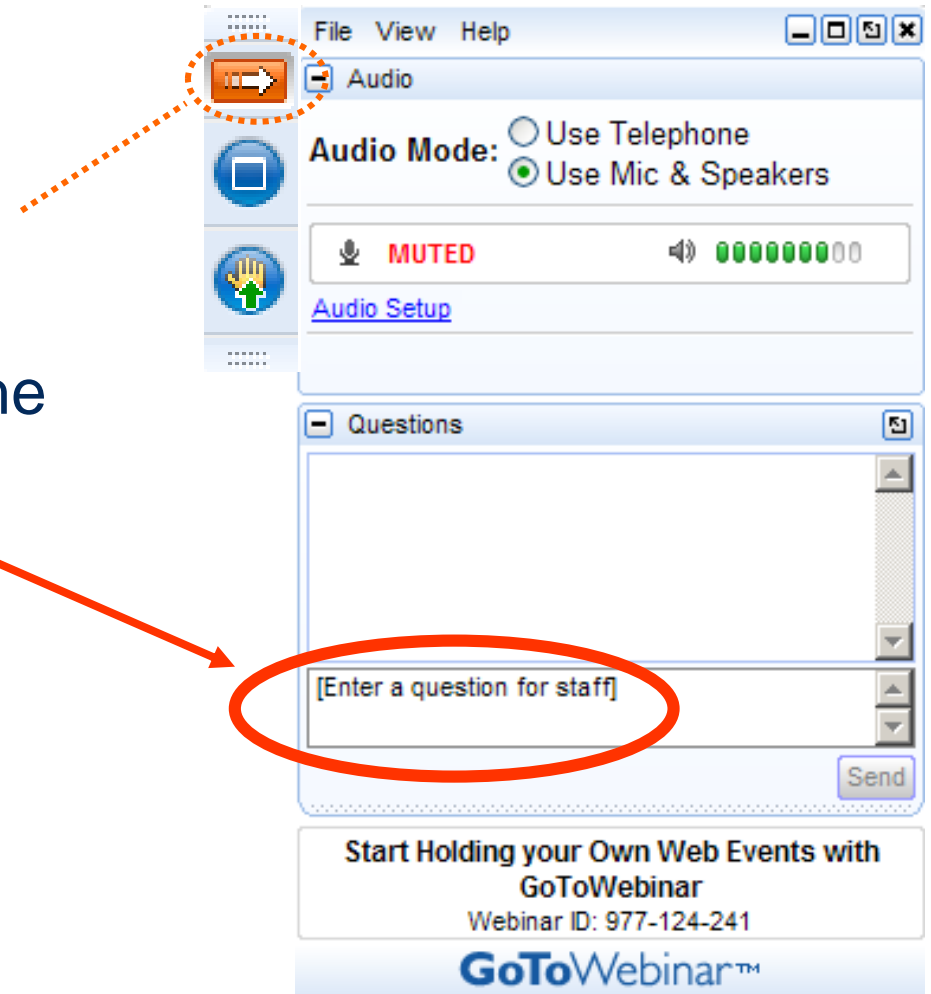
Your questions please?

(If you don't see the control panel, click on the orange arrow icon to expand it)

Please enter your questions in the text box of the webinar control panel (remember to press send)



Remember: The completion of a Nautel webinar qualifies for ½ SBE re-certification credit, identified under Category I of the Re-certification Schedule for SBE Certifications.



Employment Trends



US Bureau of Labor Statistics

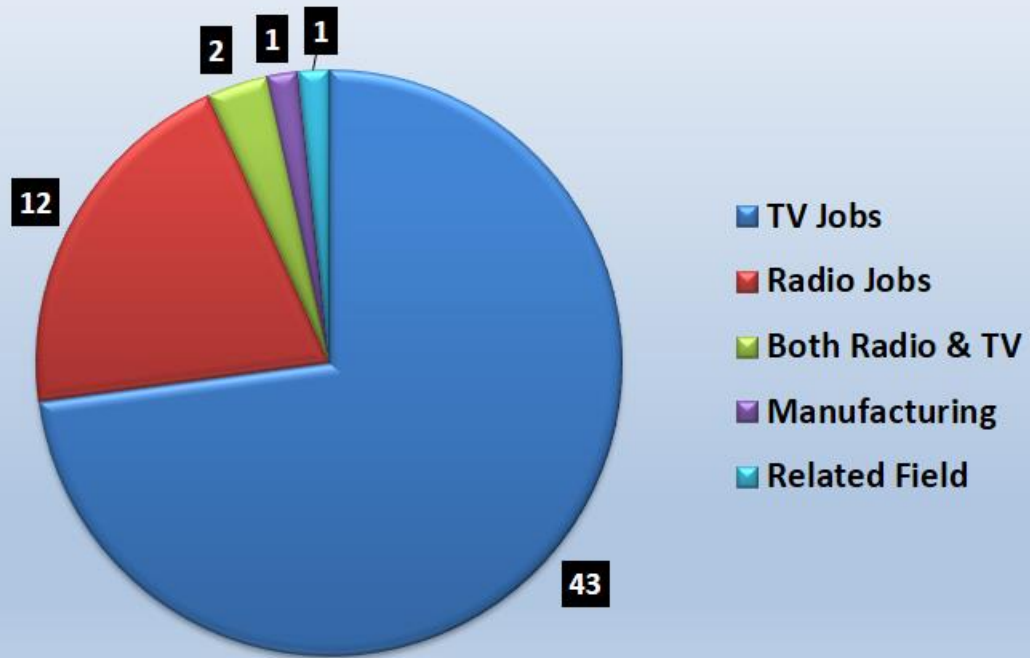


1999	25,570 employed in technical positions at radio and television stations
2008	Technical broadcast employment down to 22,200
2017	Technical broadcast employment rises slightly to 23,400

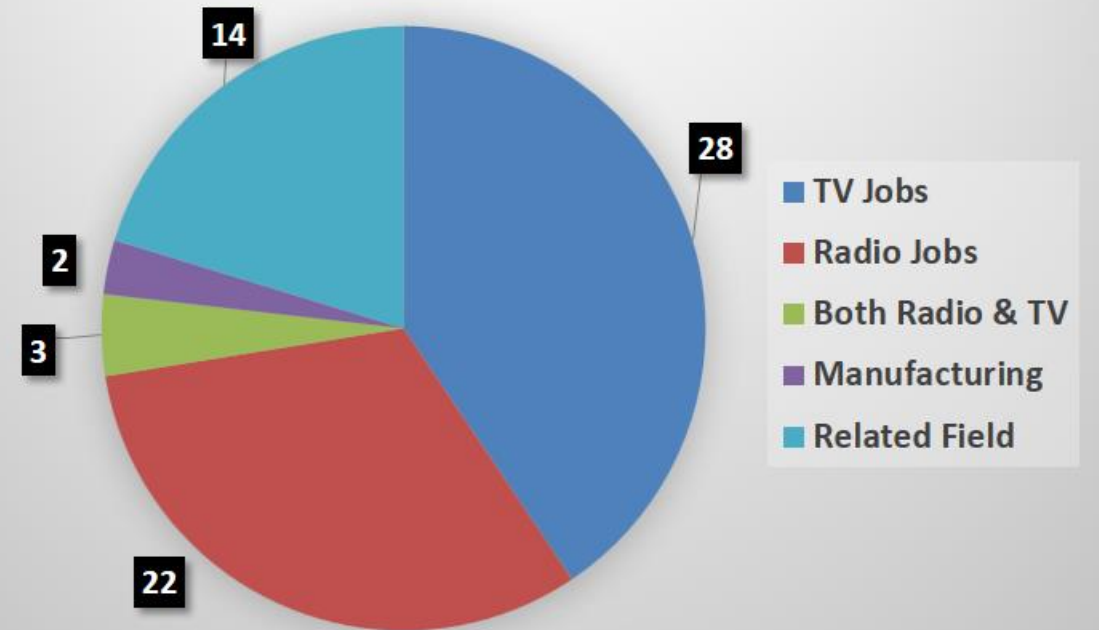


Number of Jobs Available by Broadcast Facility

January 2011



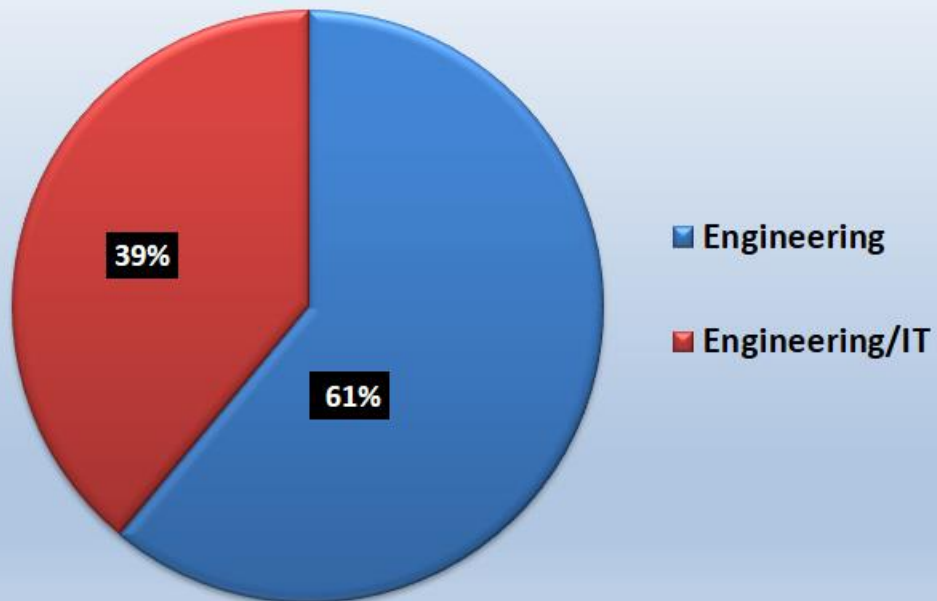
June 2018



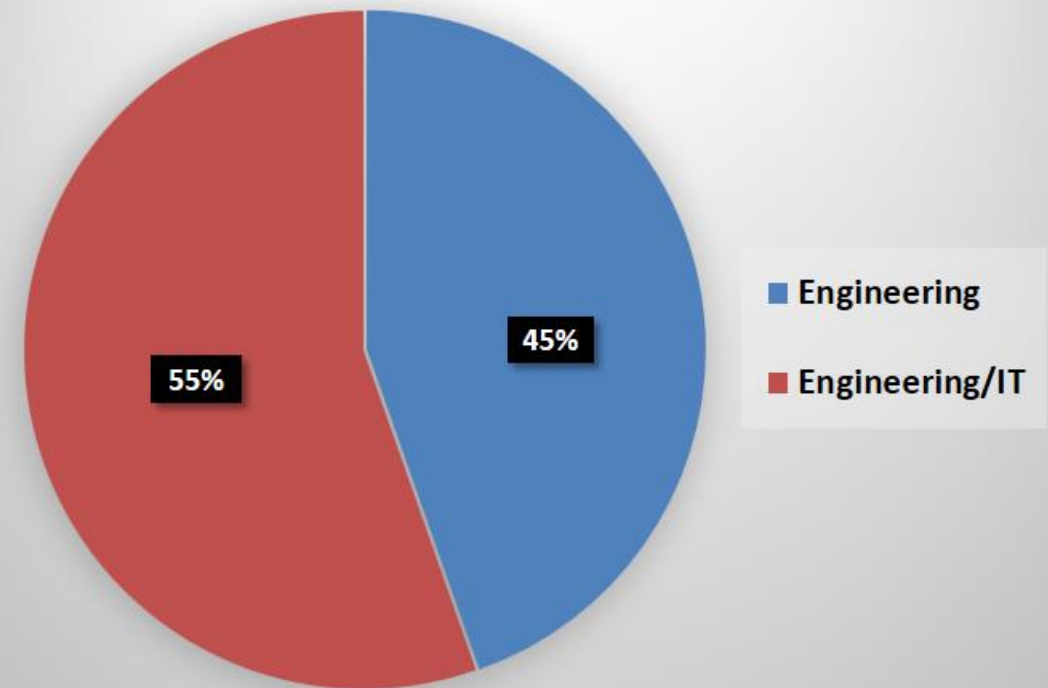


Positions Types Advertised on SBE JOBSONline

Position Types Advertised – January 2011



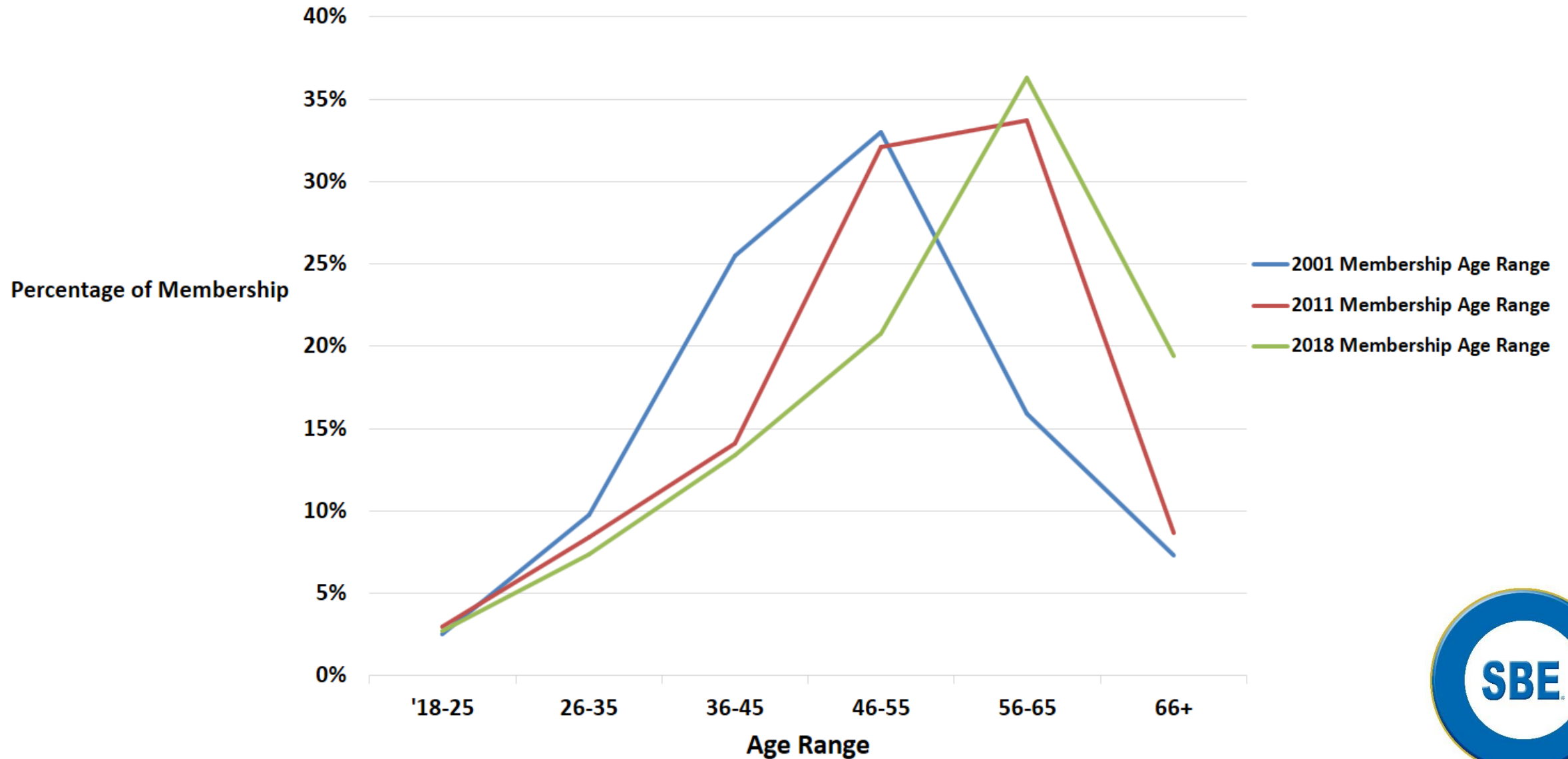
Position Types Advertised – June 2018



SBE Membership Trends

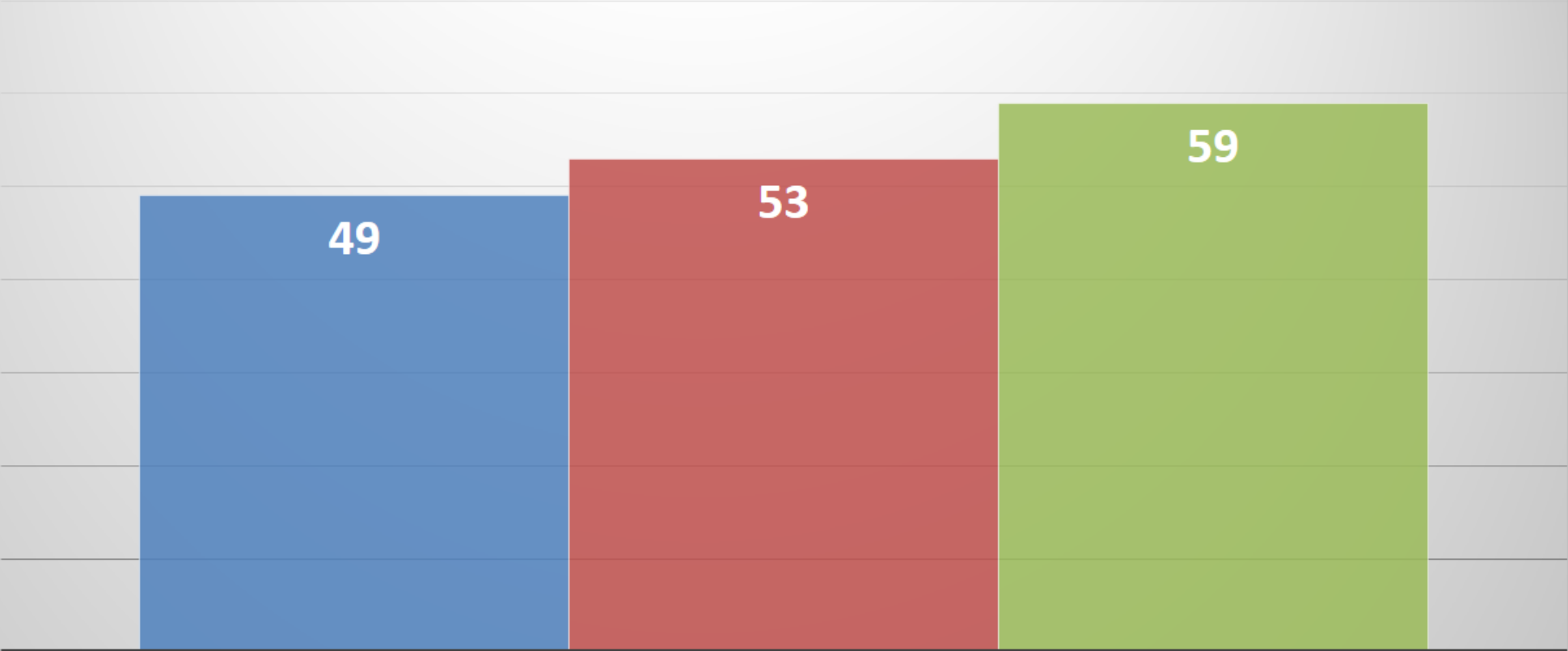


SBE Membership Age Range Comparison 2001, 2011, 2018



Increase in Average Age of SBE Members

Age

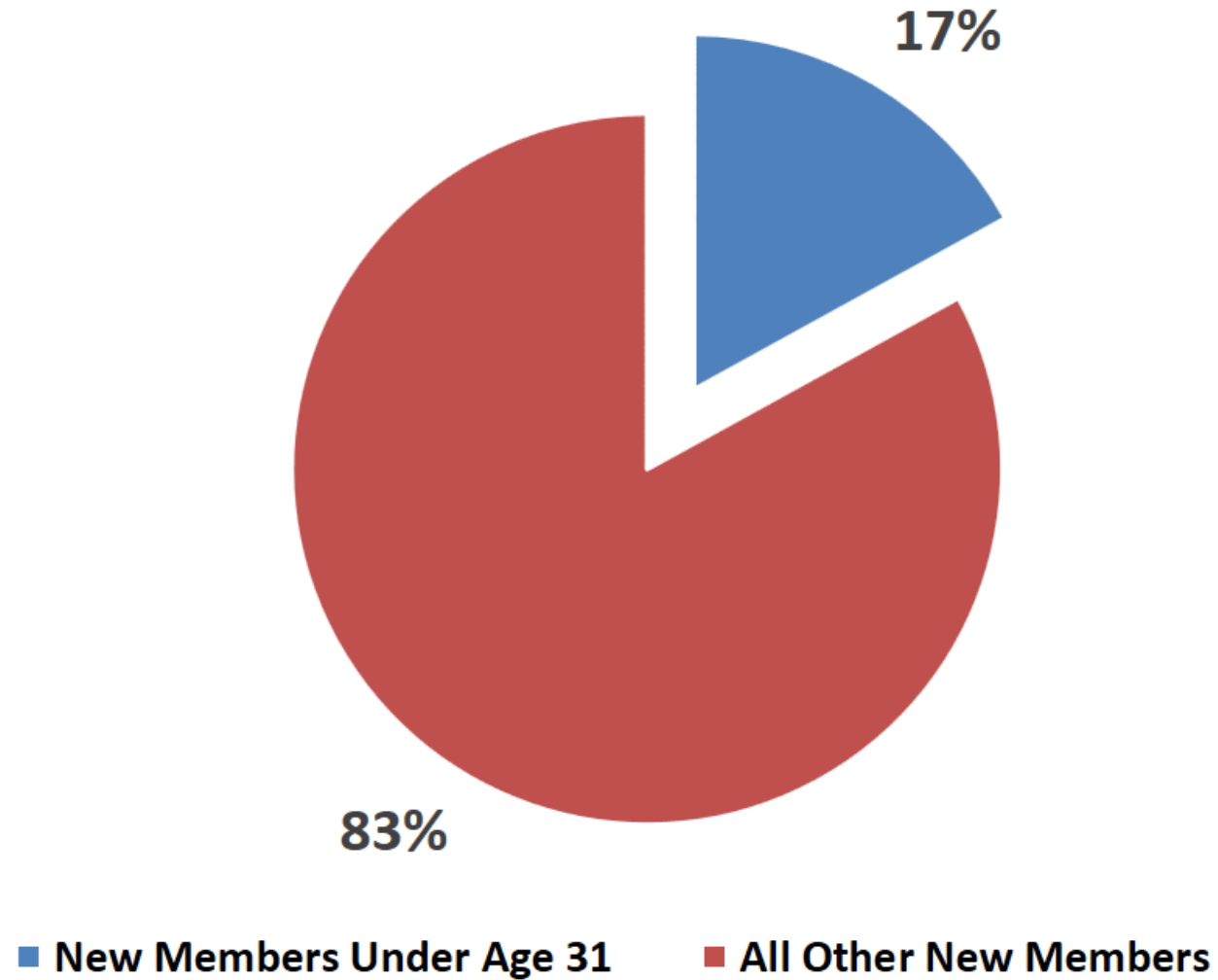


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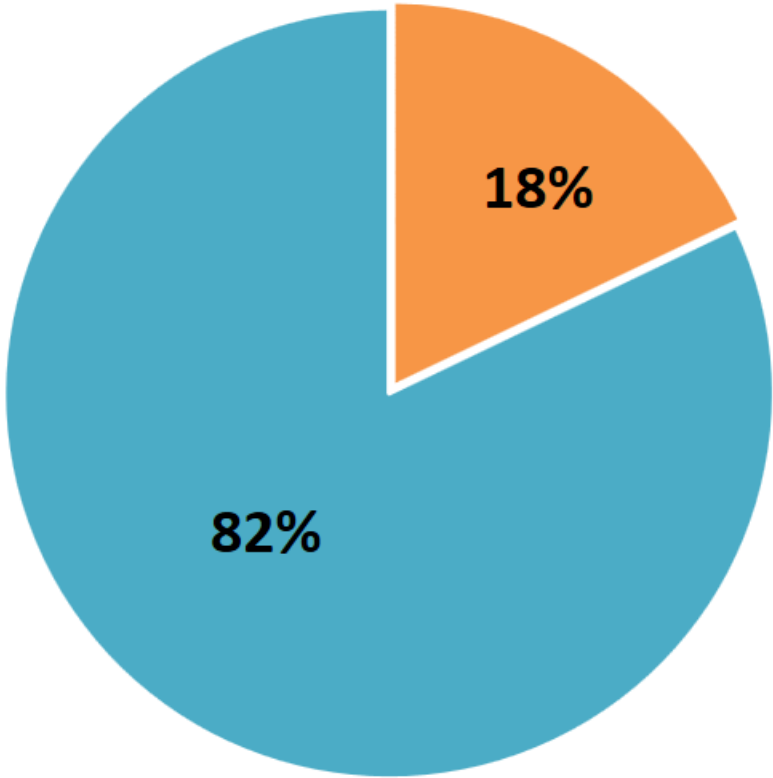
Average Age

2001 2011 2018

New SBE Member Age Range in 2018



Members Renewing with SBE MemberPlus Option

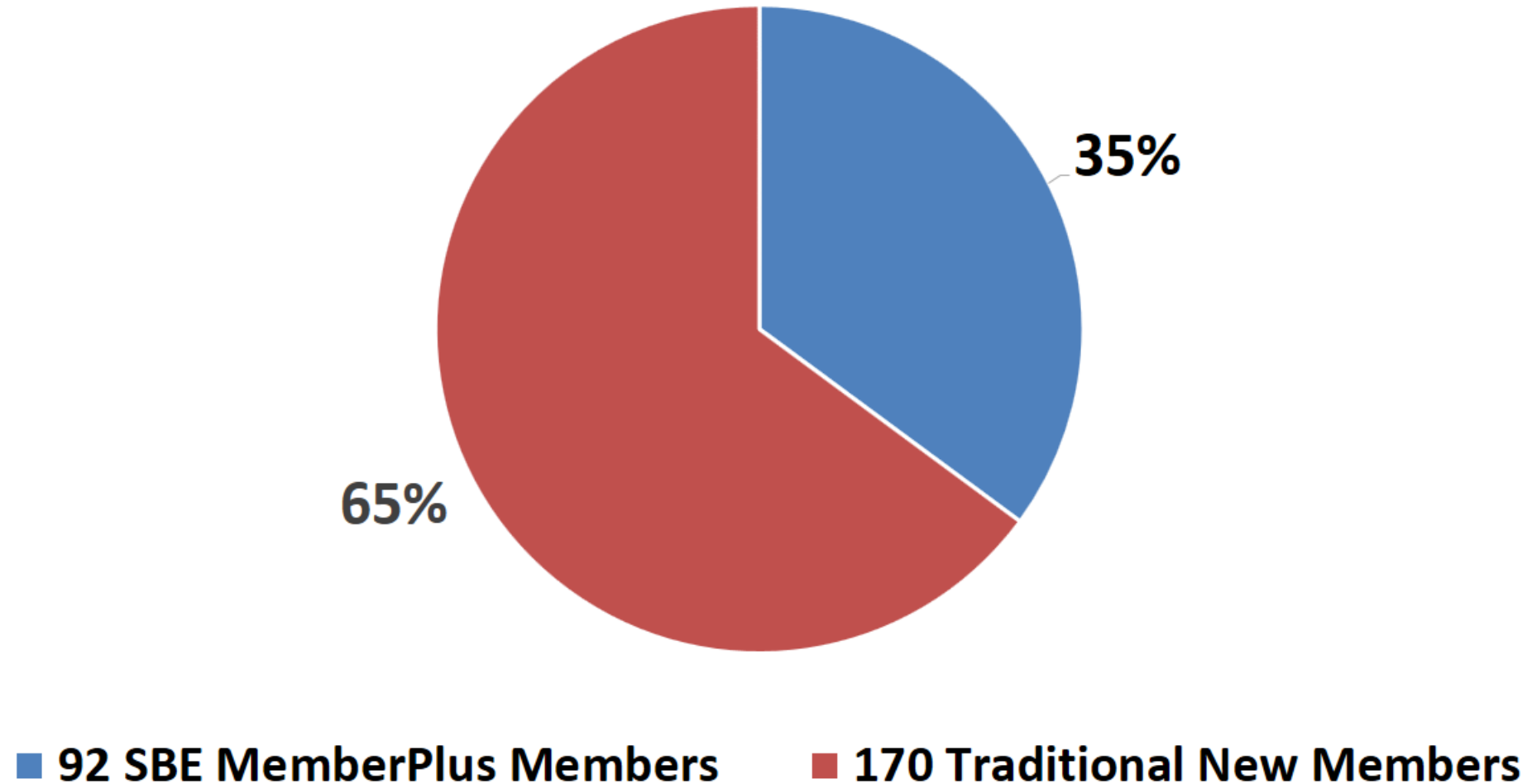


■ 637 MemberPlus Members ■ 2923 Renewal Members





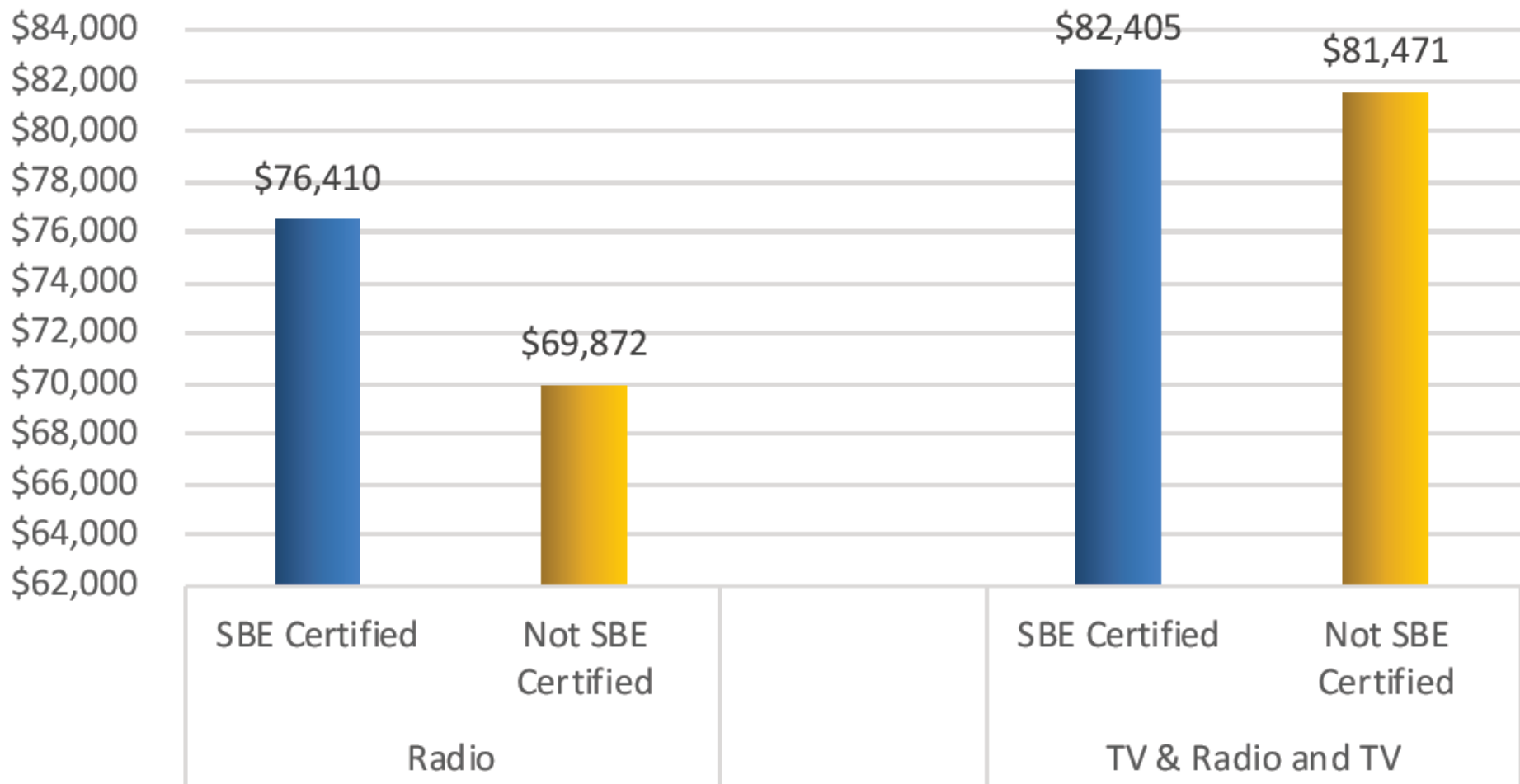
New SBE MemberPlus Members



Certification Shown to Impact the Paycheck



Salary With and Without SBE Certification



SBE Cornerstone Programs

- Education
 - Webinars
 - SBE University
 - In-Person Tutorials
- Certification
 - Entry Level
 - Mid-Career Levels
 - Professional Levels



SBE Professional Development Focus



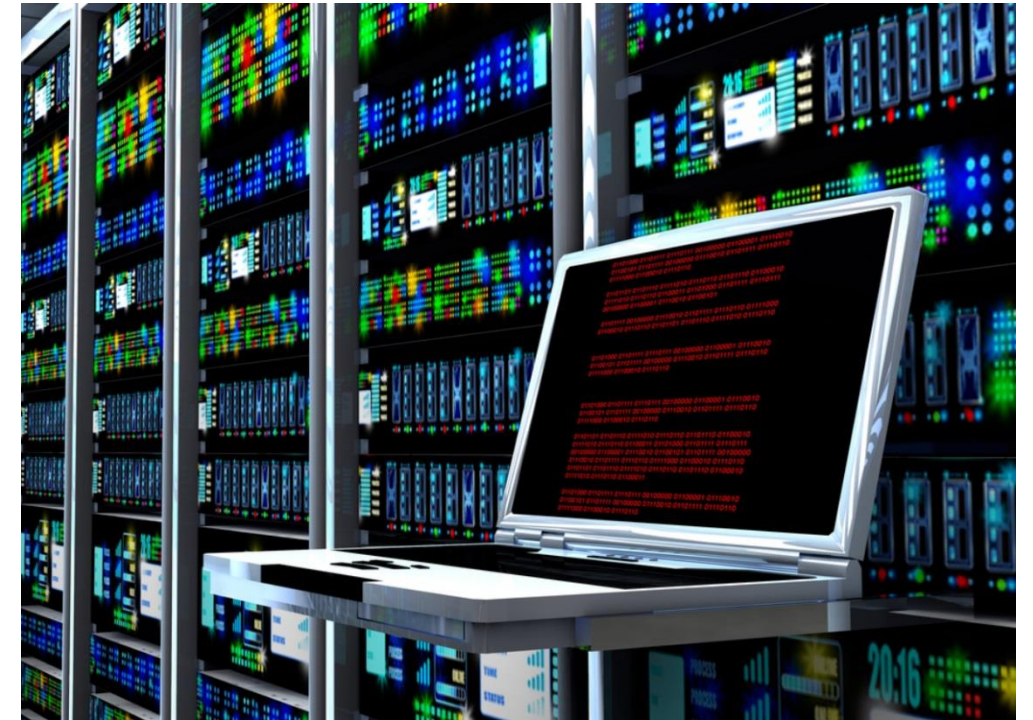
- 5 Years Ago:
 - Helping the “Traditional” Broadcast Engineer Learn “IT”
 - Focus Upon “IP Networking” as a Foundation
- 1 Year Ago:
 - Helping the “Traditional” IT Professional Learn “Broadcast Engineering”
 - Focus Upon “RF Technology” as a Foundation

SBE Professional Development Focus



Today:

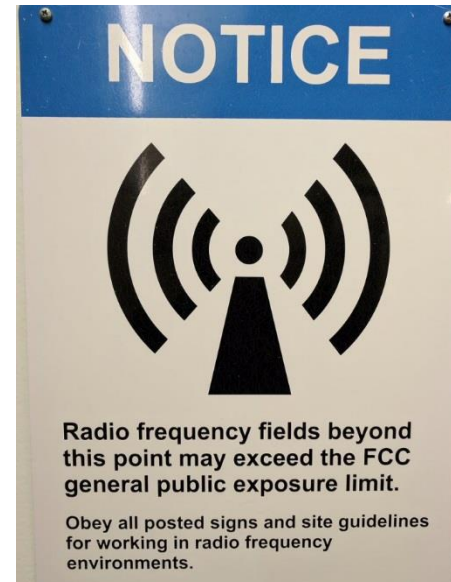
- Focus Upon the Broadcast Engineer “IT” Skill Development
- Focus Upon the IT Professional “Broadcast Engineering” Skill Development
- Address Changing Technology Areas:
 - Cloud Technology
 - ATSC 3.0
 - Cybersecurity
 - Fundamentals (audio, video, RF)



The Next Generation



- The Traditional Broadcast Engineer Career Path No Longer Exists!
- IT Skill Set in Demand
 - Skill Set Similar – Understand Differences
- Military Background
 - Good IT & RF Background
 - Lacking:
 - High Power Broadcast
 - FCC Rules & Regulations

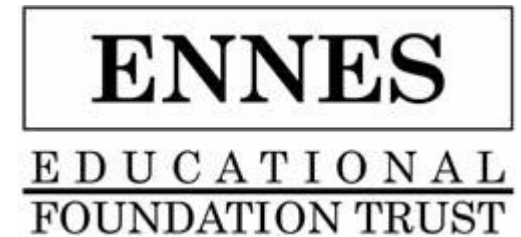


The Industry Debate



- Is It Easier to Train the Broadcast Engineer in IT?
- Is It Easier to Train the IT Professional in BE?
- Often Overlooked (more than technology):
 - The BE Grew-Up in the Broadcasting Business
 - The IT Guru Must Understand the Broadcasting Business

SBE Professional Development



SBE Mentorship Program



The SBE Mentor Program is designed to help broadcast engineers who are new to the field. The program partners a new engineer with a more-seasoned professional. This allows the more-experienced person to share his or her gained knowledge, both empirical and practical, with someone new to the field. The SBE Mentor Program provides a means for SBE members to share knowledge and experience. For the seasoned mentor, it's a chance to give something back. For the freshman mentee, it's an ideal way to gain inside knowledge and understanding that can sometime take years to accumulate.

Upcoming SBE Webinars

- Advanced RF Series:
 - Transmitter Site Safety – June 14 (Tomorrow)
 - FM Transmitter Systems – June 28
 - FM Antenna Systems – July 26
- Coming Soon:
 - More Advanced RF Series Webinars
 - Cybersecurity
 - ATSC 3.0



Upcoming SBE Regional Ennes Workshops

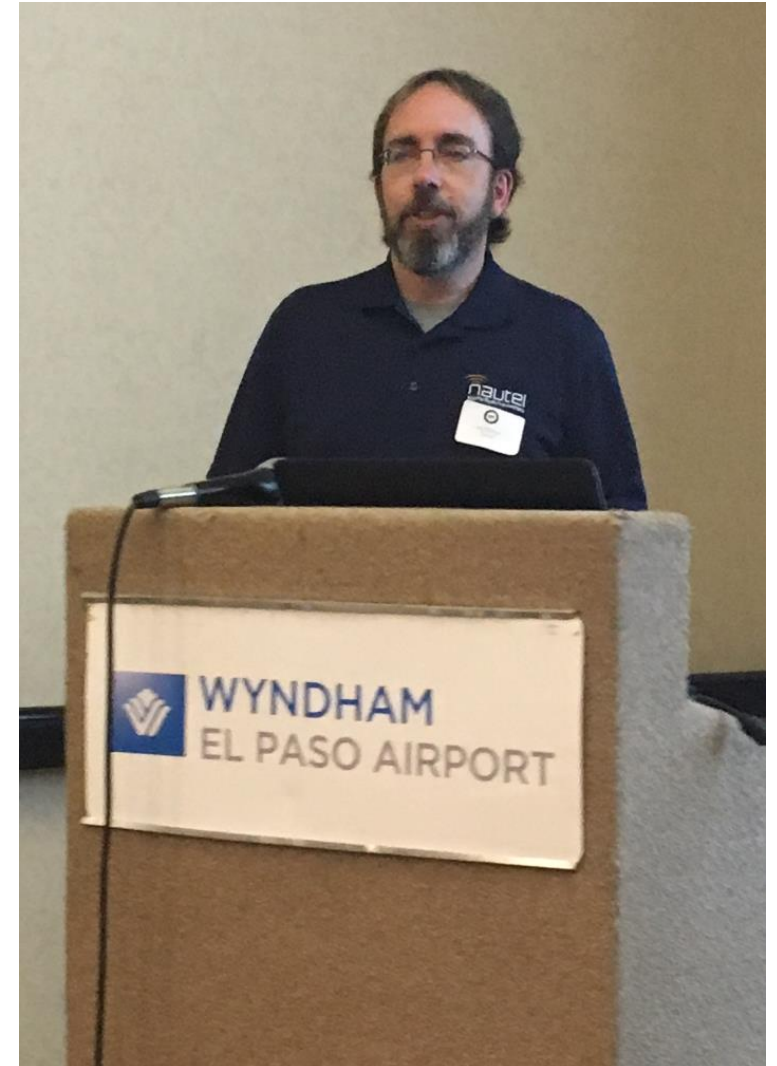
- Lincoln, NE – August 15, 2018
- Kansas City, KS – August 21, 2018

Resulting Safety Concerns

I have been getting calls from IT people who are struggling with transmitters that are beyond their level of education or understanding. Those people often do not have the Ohm's Law basic knowledge to help them think through component level troubleshooting problems. Any upcoming radio broadcast engineer needs to recognize this and train accordingly to be equipped mentally to deal with this when it occurs.

Mark Persons, "Where Have All the Engineers Gone?", Radio World, 16 May 2012

- More and more, the person tasked in maintaining the station may have a solid IT background, but have much less training and experience related to dealing with high voltage situations.
 - Power Supplies
 - Tube cavities
 - RF Filters, Phasors, Antenna Tuning Networks



Upcoming SBE Leadership Development Course

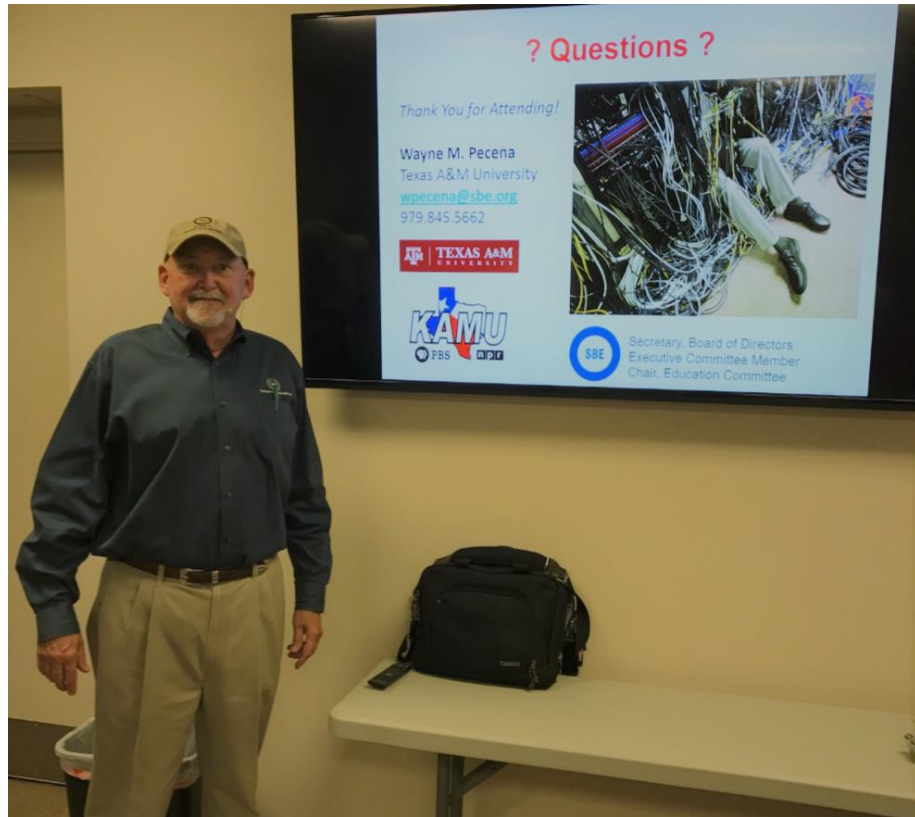
Atlanta, GA – August 7-9, 2018



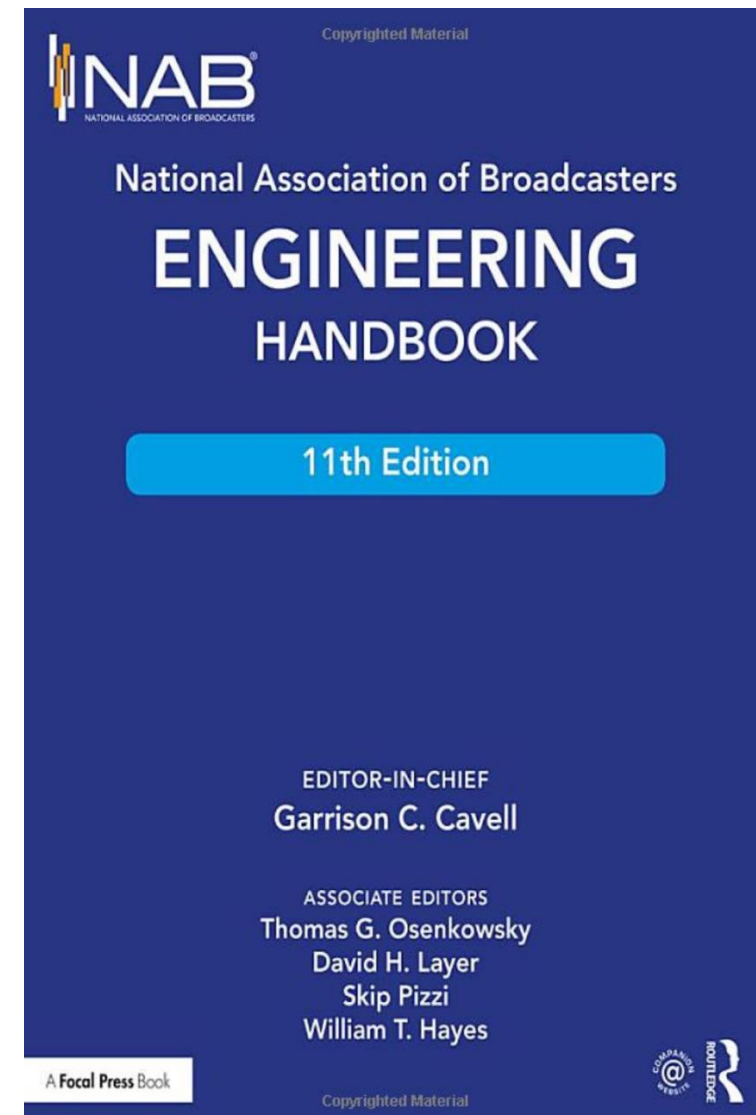
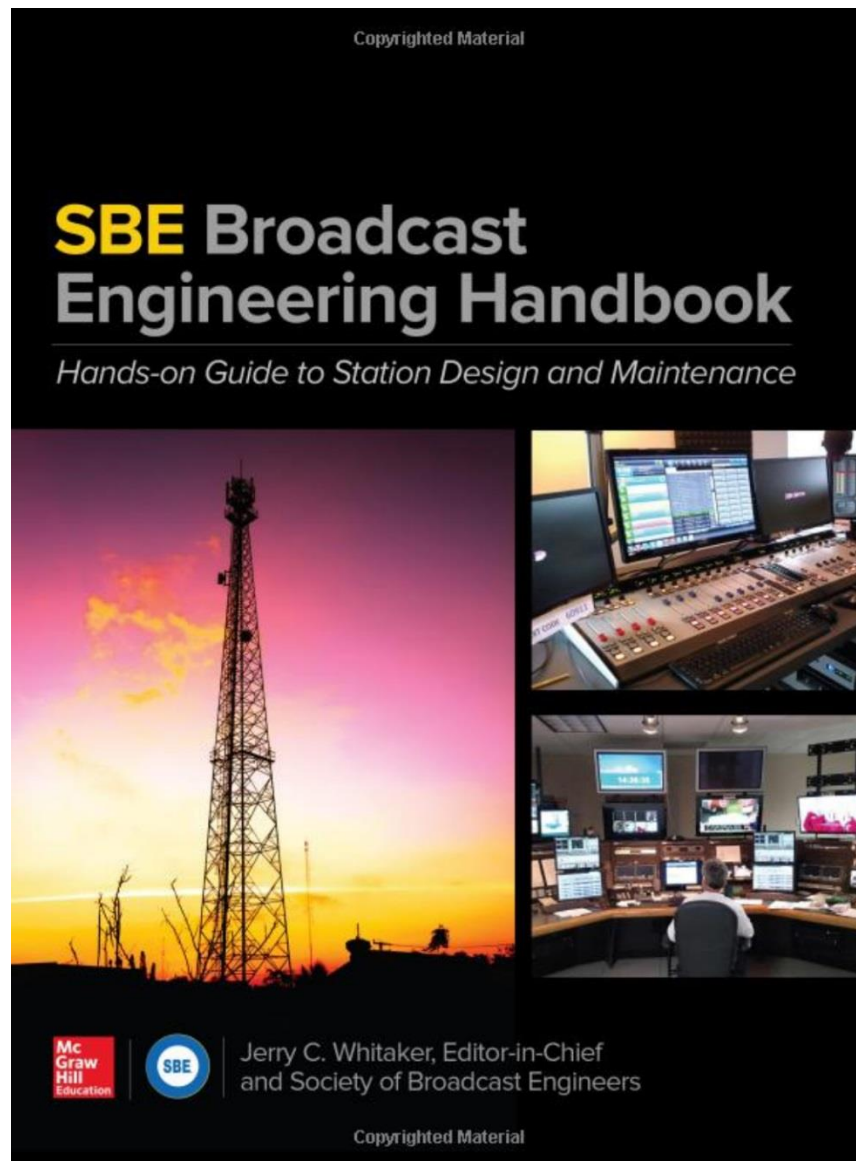
ABA Engineering Academy

September 24 – 28: Basic Radio Engineering

October 15 – 19: Basic Television Engineering



Self Study



In-person Training

- Ennes Workshops: http://www.sbe.org/sections/ennes_workshops.php
- SBE Leadership Development Course: <http://www.sbe.org/sections/SBELeadershipCourse.php>
- NAB BE&IT Conference:
- <https://www.nabshow.com/education/conference/broadcast-engineering-information-technology-conference>
- Other regional conferences:
- http://www.sbe.org/sections/edu_conferences.php
- Nautel Post-NAB: <http://www.nautel.com/nab/post-nab-training/>
- Nautel NUG: <http://www.nautel.com/support/nug/the-nug-what-is-it-why-join/>
- Nautel paid training: <http://www.nautel.com/support/training/>

On-Line Training from SBE and Nautel

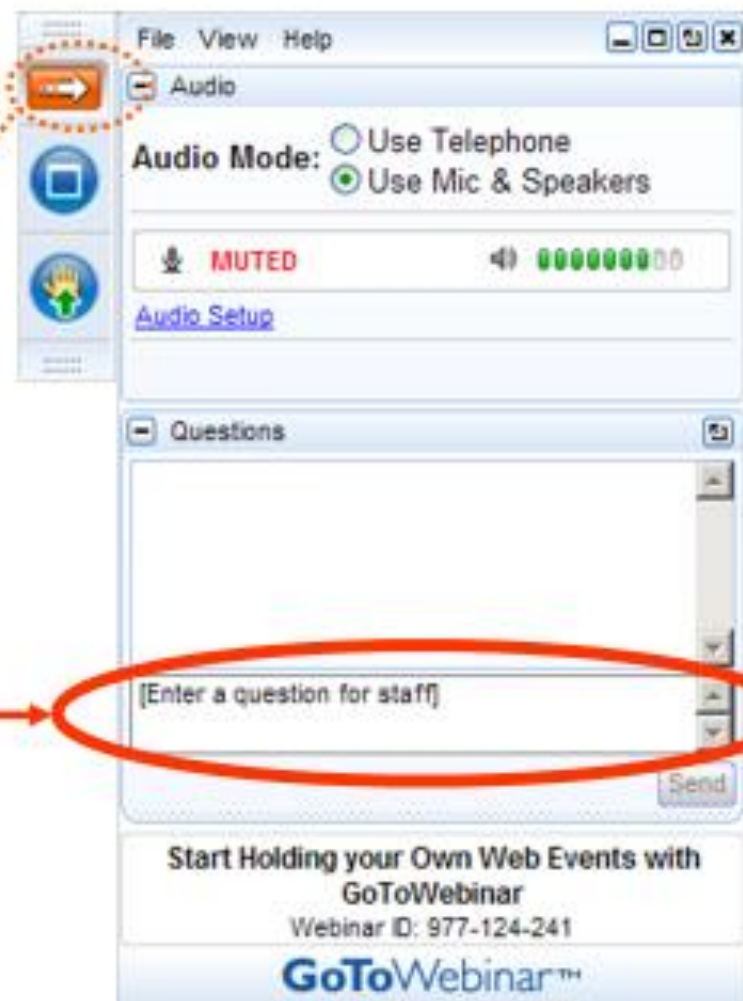
- SBE University:
<http://www.sbe.org/sections/SBEUniversity.php>
- SBE Webinars:
<http://www.sbe.org/sections/WebinarsbySBE.php>
- Nautel Webinars: <http://www.nautel.com/webinars/>

Other online sources of Educational Information

- This week in Radio Tech: <http://thisweekinradiotech.com/podcasts/>
- GatesAir: <http://www.gatesair.com/media-center/webinars>
- Wheatstone: <http://wheatstone.com/news-press-video-events/2016-11-28-12-36-9/how-to-videos-2>
- RadioWorld: <https://www.radioworld.com/resource-center>
- TVTechnology: <https://www.tvtechnology.com/resources>
- Facebook: <https://www.facebook.com/groups/transmittersites/> and <https://www.facebook.com/groups/thebroadcastingclub/>
- BDR: <https://www.thebdr.net/articles/thisweek.html>

Questions?

Click on  to
open/close webinar panel



Enter questions here
...then press **Send**

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Thank you!

