



**National Conference on Weights and Measures**  
*"That Equity May Prevail"*

# 2020 Interim PDC Report



# National Conference on Weights and Measures

*"That Equity May Prevail"*

## Professional Development Committee Members

Office	Name	Affiliation	Term Ends
Committee Chair	Marc Paquette	Vermont	2020
Member	David Aguayo	San Luis Obispo County, California	2021
Member	Brenda Sharkey	South Dakota	2022
Member	Scott Ferguson	Michigan	2023
Member	Paul Floyd	Louisiana	2024
Associate Membership	James Pettinato	TechnipFMC	2023
Safety Liaison	Vacant		NA
NIST Liaison	Tina Butcher	NIST, Office of Weights and Measures	NA
Certification Coordinator	Jerry Buendel	Washington (Retired)	N/A



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## **EDU-1**

### Professional Certification Program



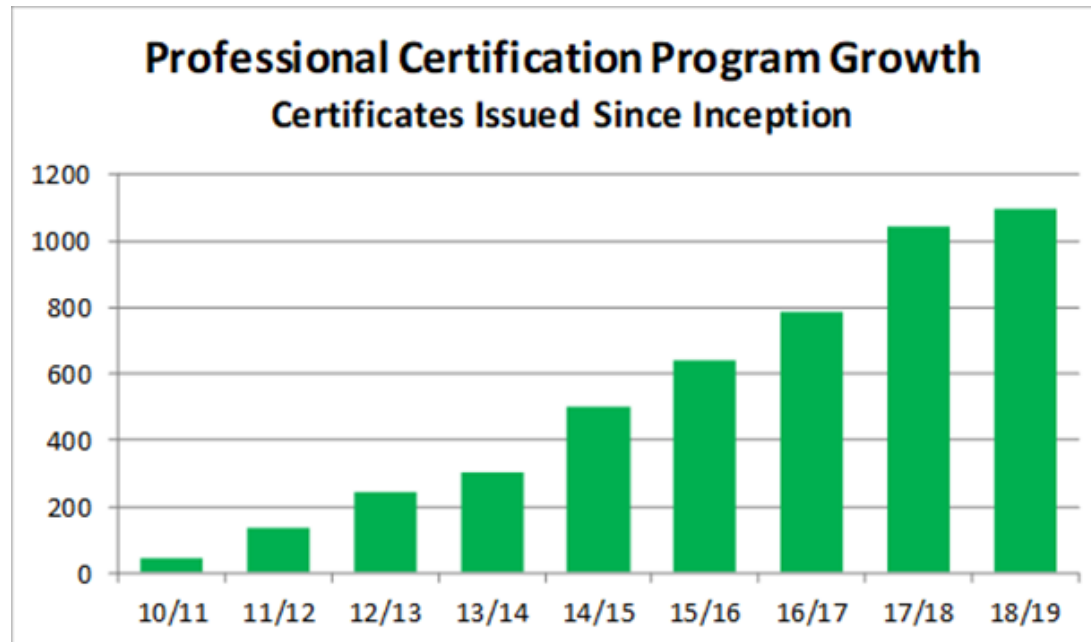
# Certification Coordinator Succession Planning

- Jerry Buendel (Washington, Retired) has replaced Ross Andersen as Certification Coordinator
- Ross did an excellent job establishing the program and provided a smooth transition
- All materials were transferred at the Annual Meeting in July 2019
- Ross has agreed to continue to be a resource



# Professional Certifications

	FY10-11	FY11-12	FY12-13	FY13-14	FY14-15	FY15-16	FY16-17	FY17-18	FY18-19
Exams Pass	47	94	104	62	198	140	142	257	53
Cummulative	47	141	245	307	503	643	785	1042	1095



- The number of professional certifications declined by 79% in FY 18-19.
- Is proctoring a barrier?  
Other causes?



## Certifications by Exam

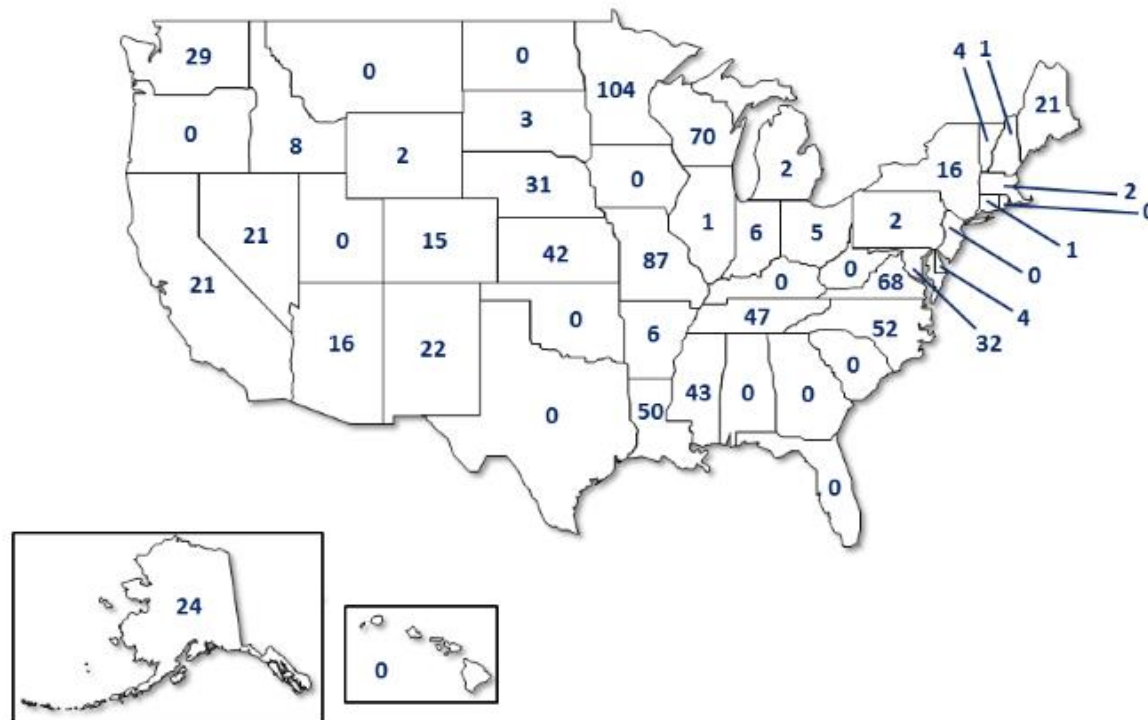
	FY10-11	FY11-12	FY12-13	FY13-14	FY14-15	FY15-16	FY16-17	FY17-18	FY18-19	All
Small Scale		6	58	22	51	22	26	67	11	260
Medium Scale					30	18	28	36	3	115
Large Scale					13	20	25	18	2	76
RMFD	47	83	21	17	65	43	35	56	20	384
VTM					21	18	14	24	7	83
Package Checking		5	25	23	25	19	15	56	10	177
Total	47	94	104	62	205	140	143	257	53	1095

All values based on passed exams



# Persons Holding Certificates by State

Distribution of Certified Professionals per State  
Updated: September 2019





# High Utilization States – Professional Certificates

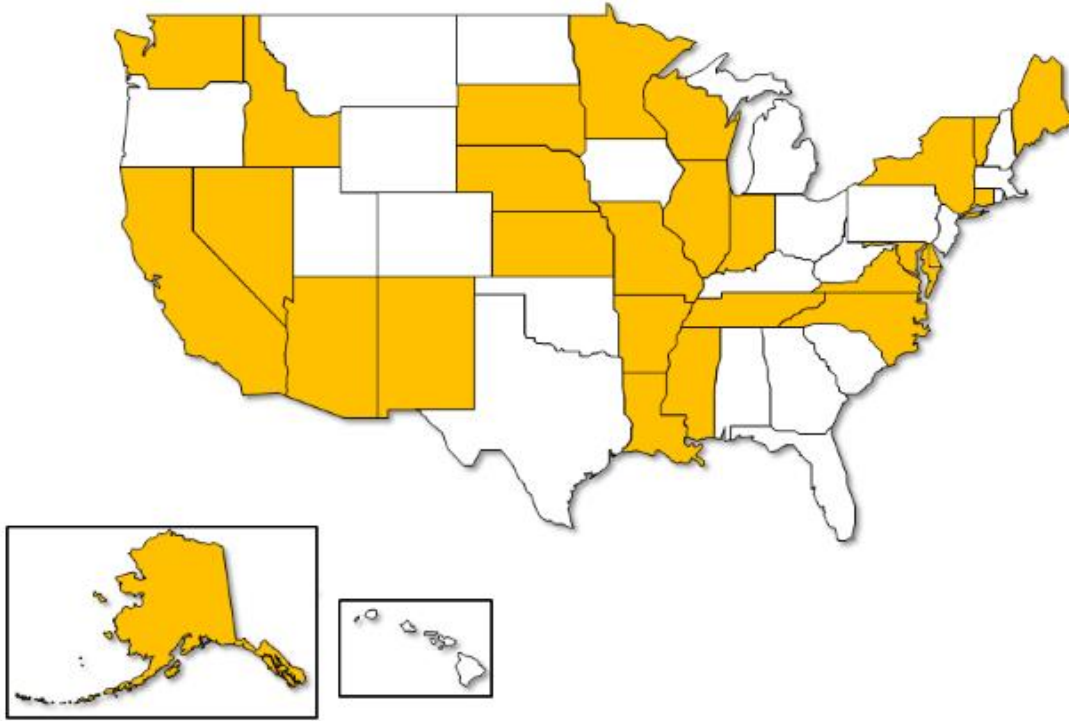
State	Certificates	State	Certificates
Minnesota	152	Alaska	35
Missouri	143	Nebraska	33
Maryland	77	Maine	26
Wisconsin	77	Louisiana	25
Virginia	70	New Mexico	23
Mississippi	56	Nevada	22
North Carolina	52	New York	19
Washington	50	Arizona	16
Kansas	42	Colorado	19
California	41	Private	12



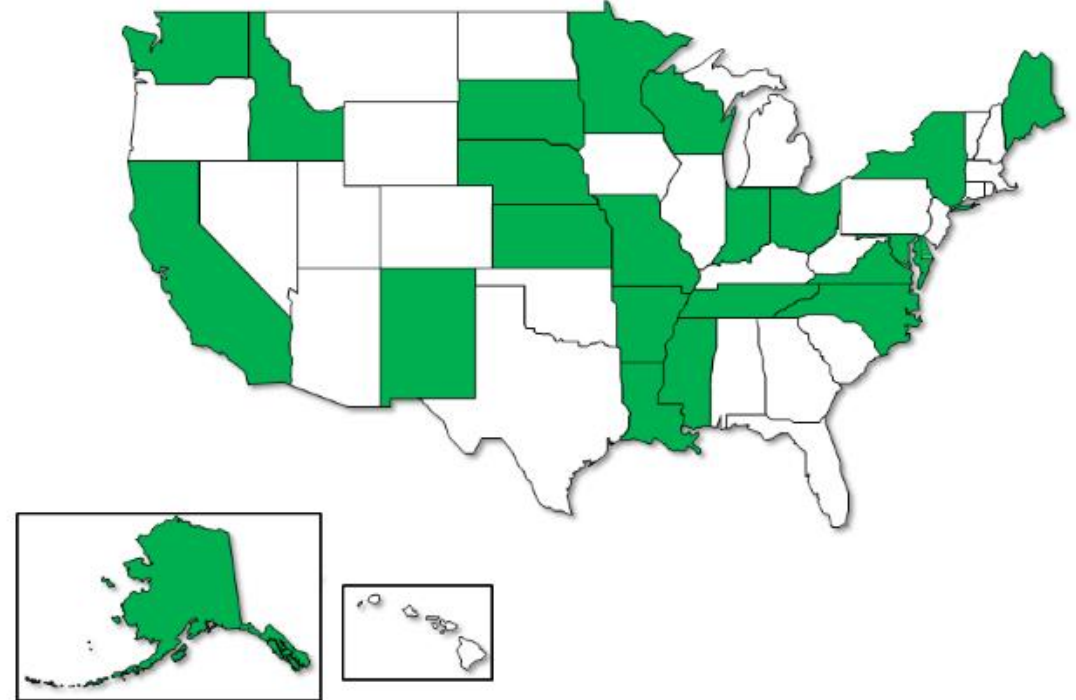


# Small and Medium Scales Certificate Holders

**Distribution of Areas of Certification:** Small Capacity Weighing Systems Class III  
Updated: September 2019



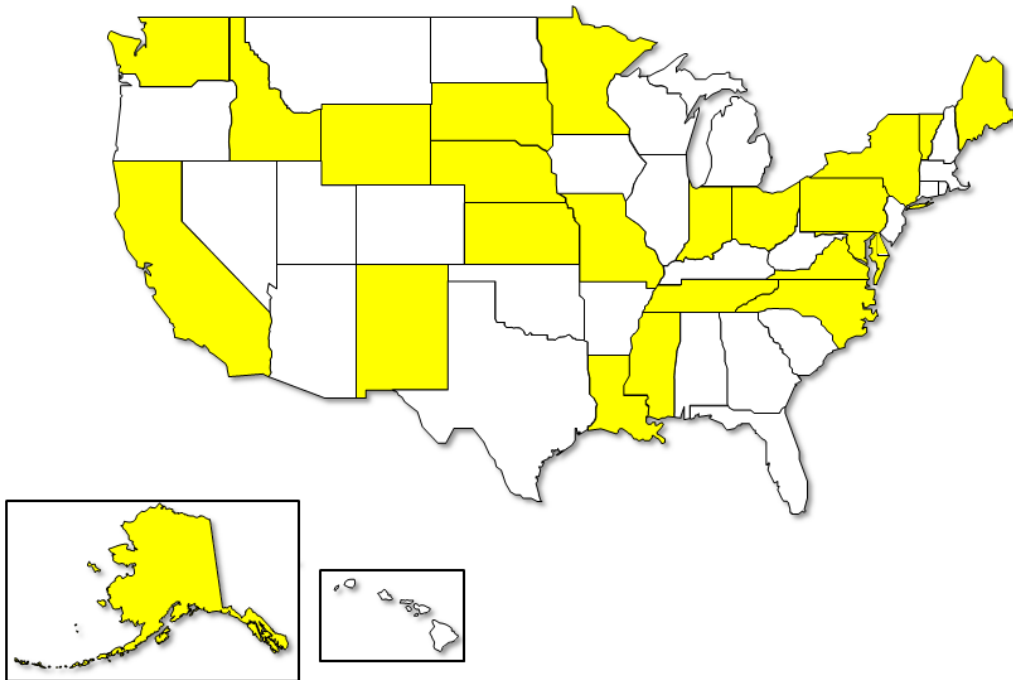
**Distribution of Areas of Certification:** Medium Capacity Weighing  
Updated: September 2019



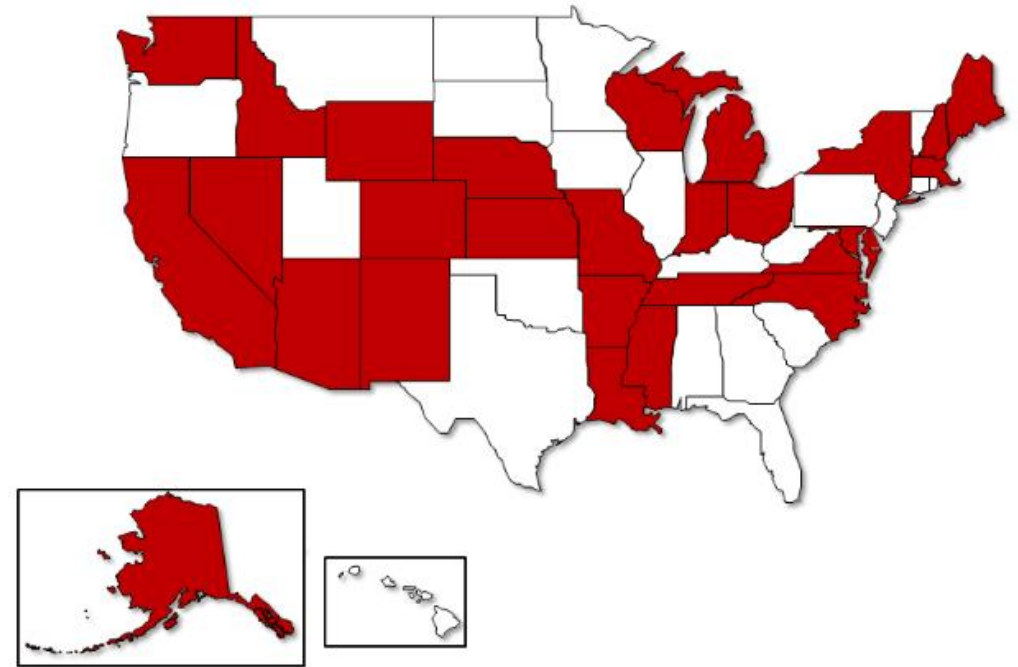


# Large Scale and RMFD Certificate Holders

**Distribution of Areas of Certification: Large Capacity Scales**  
Updated: September 2019



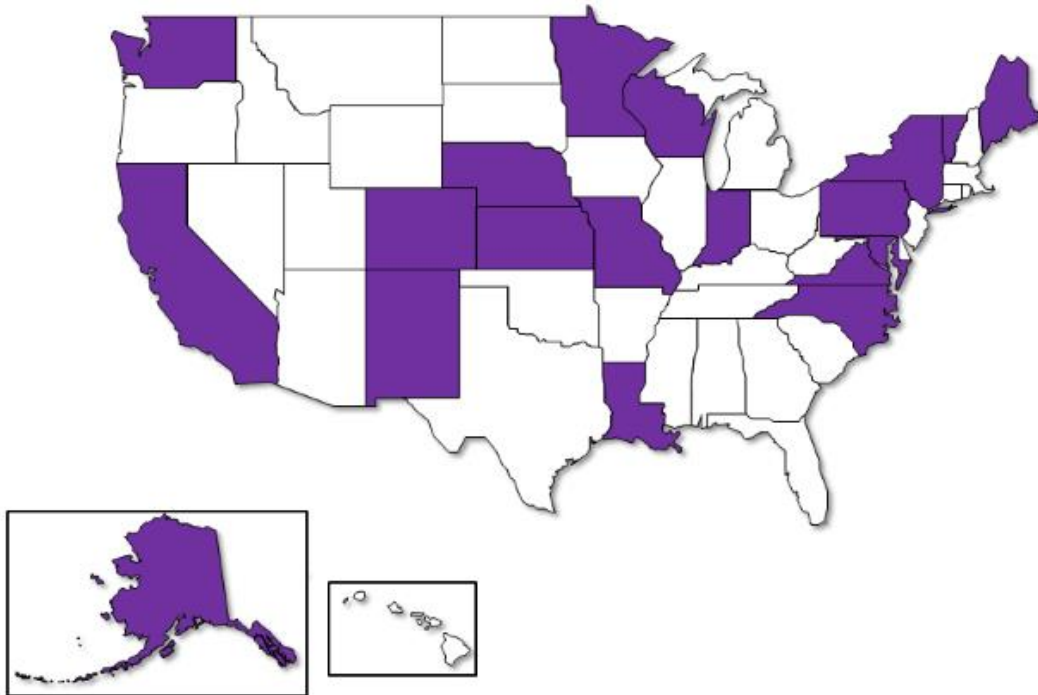
**Distribution of Areas of Certification: Retail Motor Fuel Dispensing Systems**  
Updated: September 2019



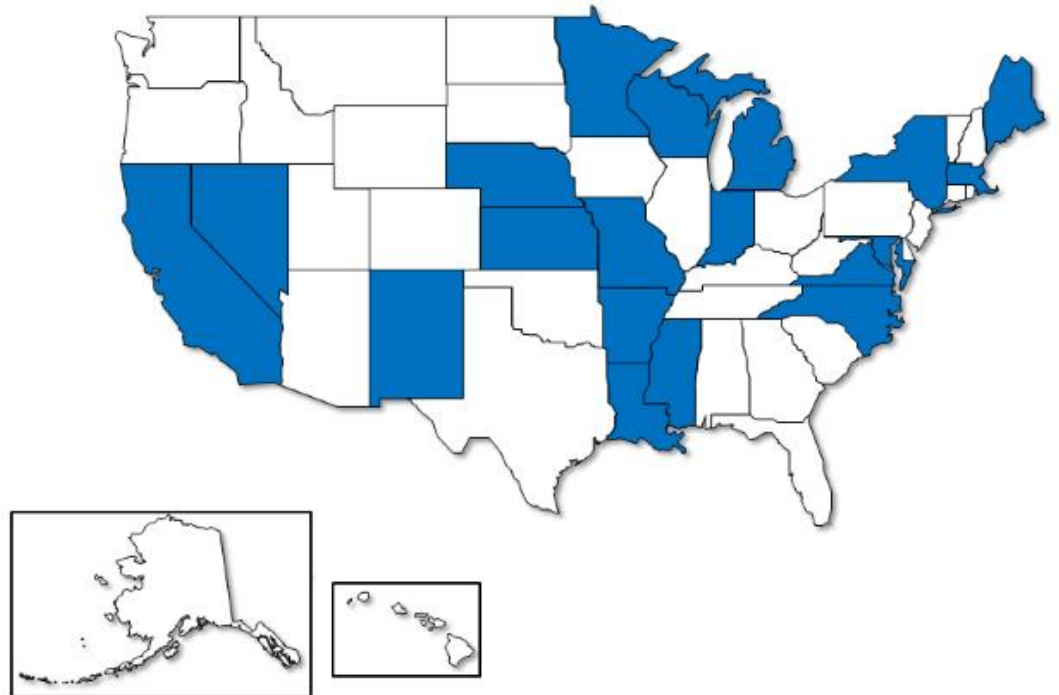


# VTM and Package Checking Certificate Holders

**Distribution of Areas of Certification: Vehicle Tank Meters**  
Updated: September 2019



**Distribution of Areas of Certification: Package Checking Basic**  
Updated: September 2019





# Basic Competency Certifications

- Three persons took Basic Exams in FY 17-18
- The following states participated in FY 18-19:

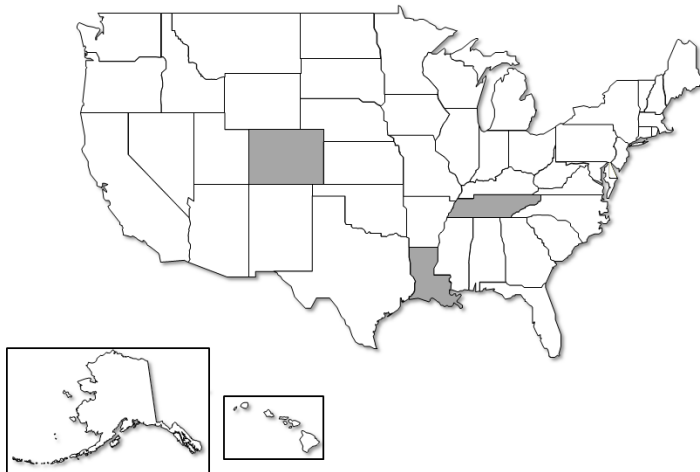
FY 18-19	Tennessee	Louisiana	Colorado
Basic Measuring	19	17	2
Basic Weighing	22	5	0



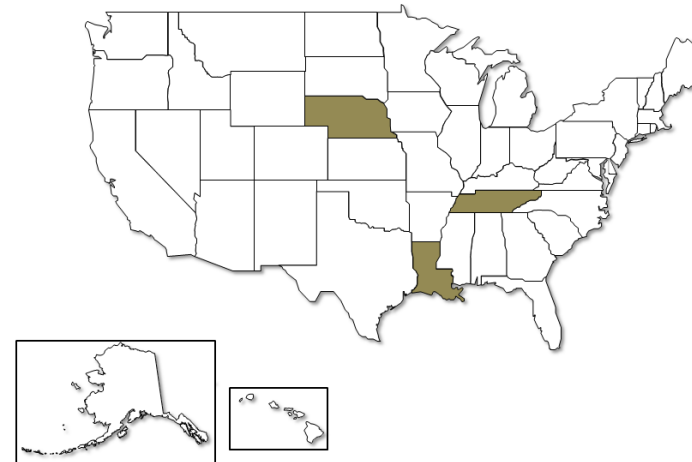
# Basic Competency Certifications

	FY 17-18	FY 18-19	All FYs
Basic Measuring	1	30	31
Basic Weighing	0	44	44
Total	1	74	75

Distribution of Areas of Competency Exam: Basic – Measuring  
Updated: December 2019



Distribution of Areas of Competency Exam: Basic – Weighing  
Updated: December 2019





# Proctoring

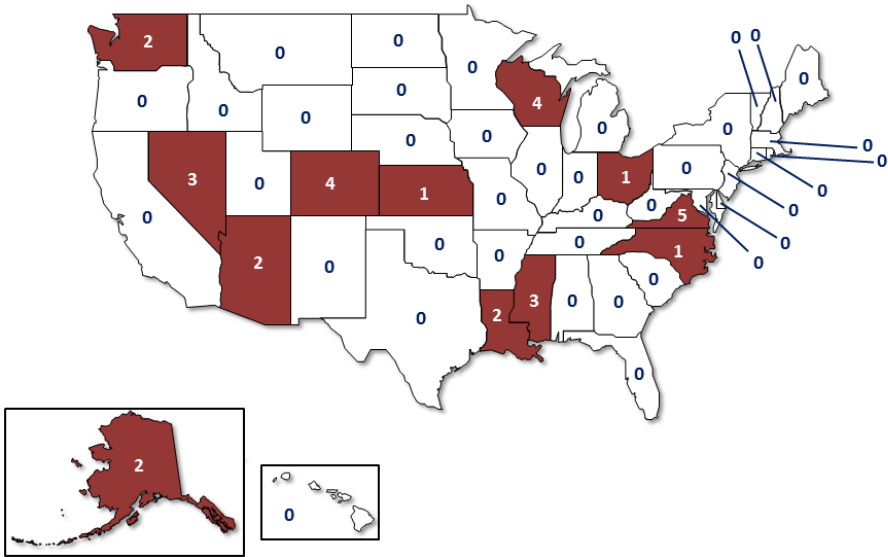
- Proctoring of all exams required after July 2018
- Login for testing also requires proctor credentials
- List of authorized proctors on NCWM website
  - Proctors must be authorized for one of two levels
    - – either basic or professional
- Read and download exam info on NCWM website
  - Examinees are encouraged to practice
- Hard copy or electronic versions of approved materials may be used during exam



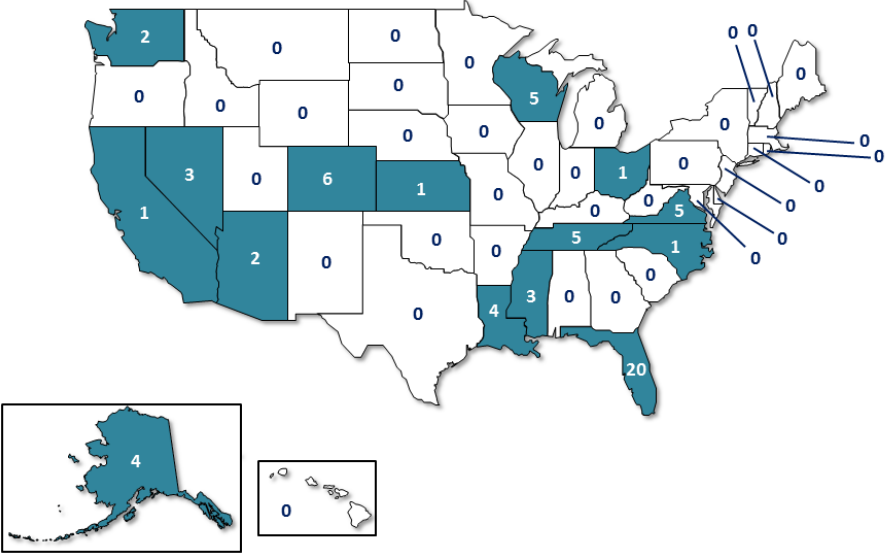
# States with Proctors

	FY 17-18	FY 18-19
Professional Certification	17	28
Basic Competency	39	57

Distribution of Certified Proctors per State – Professional Certification Exams  
Updated: July 2019



Distribution of Certified Proctors per State – Basic Competency Exams  
Updated: July 2019







## Updates and Plans

- Two exams released in 2019
  - LPG and Anhydrous Ammonia Liquid Meters
  - Price Verification
  - Post exam survey initiated in 2019
- Projects in progress
  - Precision Scales Exam - Estimated completion Summer 2019
  - Mass Flow Meter Body of Knowledge – estimated completion Summer 2019
  - Package and Labeling Body of Knowledge - TBD
- Exam Accreditation – Board of Directors initiative





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## EDU-2

## Training



# EDU-2 Training NIST OWM Update Laboratory Metrology - 2019

Area/Course Name	Start Date	Location	# Students
Advanced Mass Seminar	4/29/19	Gaithersburg, MD	9
Balance & Scale Proficiency Testing	6/3/19	Lake Mary, FL	8
Fundamentals of Metrology	3/4/19	Gaithersburg, MD	7
	3/11/19	Gaithersburg, MD	9
	3/18/19	Gaithersburg, MD	10
	8/5/19	Gaithersburg, MD	9
	8/19/19	Gaithersburg, MD	8
Mass Metrology Seminar	4/8/19	Gaithersburg, MD	9
	10/21/19	Gaithersburg, MD	10
Volume Metrology Seminar	8/12/19	Gaithersburg, MD	12
Regional Measurement Assurance Programs			
Combined Regional Measurement Assurance Program	5/31/19	Lake Mary, FL	107
CRMAP Tutorial 1 – Balance & Scale Calibration Uncertainties	5/31/19	Lake Mary, FL	20
CRMAP Tutorial 2 – Calibration & Use of Thermometers	5/31/19	Lake Mary, FL	16
CRMAP Tutorial 3 – Workshop on Assessing & Reporting Uncertainties	5/31/19	Lake Mary, FL	16
Info Hour – Annual Submission Process	8/20/19	Web-based	53
Webinars (See PDC report for topics)	10	Webinars	228



## EDU-2 Training NIST OWM Update Packaging & Price Verification - 2019

Area/Course Name	Start Date	Location	# Students
NIST Handbook 130 – Uniform Packaging and Labeling Regulations	10/28/19	Avenel, NJ	16
NIST HB 133 – Checking the Net Contents of Packaged Goods, Basic	4/1/19	Gaithersburg, MD	10
	4/15/19	Glendale, AZ	18
	11/5/19	Santa Rosa, CA	16
NIST HB 133 – Checking the Net Contents of Packaged Goods – Overview	10/16/19	Richmond, VA	27
Webinars:			
NIST Handbook 130 – Price Verification	6/18/19	Web-based	17
NIST Handbook 130 – Uniform Pkg & Labeling Reg	6/19/19	Web-based	10
NIST Handbook 133 – Packaging & Labeling – Overview (NJ W&M Assn Meeting)	9/3/19	Web-based	75



## EDU-2 Training NIST OWM Update Weighing/Measuring Devices - 2019

Area/Course Name	Start Date	Location	# Students
<b>Audit Trails – Overview</b>	9/11/19	Park City, UT (WWMA)	75
<b>Retail Motor-Fuel Dispensers – Short (3-day) Course</b>	5/6/19	Canton, OH (CWMA)	24
	9/9/19	Park City, UT (WWMA)	13
<b>Liquefied Petroleum Gas Liquid-Measuring Systems</b>	6/24/19	Nashville, TN	16
<b>Vehicle-Tank Meters &amp; Loading-Rack Meters</b>	6/10/19	Lawrence, KS	26
<b>Webinar – Audit Trails Overview (NJ W&amp;M Association)</b>	9/4/19	Web-based	75



## EDU-2 Training NIST OWM Update Laboratory Metrology – Upcoming in 2020

Course Name	Start Date	Location
Advanced Mass Seminar	6/1/20	Gaithersburg, MD
Balance and Scale Calibration Uncertainties	1/27/20	Gaithersburg, MD
Balance and Scale Calibration Uncertainties – IAOO Participants Only	7/13/20	Gaithersburg, MD
Fundamentals of Metrology	2/3/20	Gaithersburg, MD
	2/10/20	Gaithersburg, MD
Fundamentals of Metrology – IAOO Participants Only	7/20/20	Gaithersburg, MD
Mass Metrology Seminar	3/2/20	Gaithersburg, MD
Volume Metrology Seminar	4/20/20	Gaithersburg, MD
Regional Measurement Assurance Programs		
Southeast Measurement Assurance Program	3/23/20	Frankfort, KY
Western Regional Assurance Program	5/4/20	Sparks, NV
Northeast Measurement Assurance Program	9/14/20	Hartford, CT
Southwest Assurance Program	9/28/20	Las Cruces, NM
Webinars – Upcoming Topics		
Calibration Certificate Evaluation	1/23/20	Web-based
Conducting and Effective Management Review	2/13/20	Web-based
Software Verification and Validation	2/20/20	Web-based
Internal Auditing – Best Practices	2/27/20	Web-based
Basic Uncertainty Concepts	3/5/20	Web-based
Measurement Systems for Legal Metrology	8/12/20	Web-based



## EDU-2 Training NIST OWM Update Packaging & Price Verification – Upcoming in 2020

Course Name	Start Date	Location
NIST HB 130 – Uniform Packaging/Labeling Regs	5/18/20	Sacramento, CA
NIST HB 133 – Checking Net Contents of Packaged Goods, Basic	5/4/20	Saratoga Springs, NY (NEWMA)
Webinars		
NIST Handbook 130 – Price Verification	3/5/20	Webinar
	7/22/20	Webinar
NIST HB 130 – Overview Packaging\Labeling Reg	3/26/20	Webinar
	7/23/20	Webinar
NIST HB 133 – Checking Net Contents of Packaged Goods - Overview	8/5/20	Webinar



## EDU-2 Training NIST OWM Update Weighing/Measuring Devices – Upcoming in 2020

Course Name	Start Date	Location
High-Precision Scales	5/19/20	Wisconsin Dells, WI (CWMA)
Liquefied Petroleum Gas Liquid-Measuring Systems	Spring/Summer 2020	SD
Retail Motor-Fuel Dispensers, 3-Day Course	Spring/Summer 2020	LA
Vehicle and Axle-Load Scales	Fall 2020	Harrisonburg, VA
Vehicle-Tank Meters	Spring/Summer 2020	Sacramento, CA
Webinars		
Reading Test Measures & Provers	Spring 2020	Web-based



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## **EDU-3**

### Instructor Improvement





## EDU-3 Instructor Improvement

- NIST-OWM continues to use external trainers as co-instructors whenever possible
  - Travel expenses for external trainers invited to assist in NIST training will be drawn from OWM travel budget
- No major changes in program since last NCWM meeting



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## EDU-4

Recommended Topics for Conference Training



## EDU-4 Recommended Topics

The Professional Development Committee is charged with recommending training topics to the Board of Directors:

- Formal technical presentations
- Presentations on administrative processes
- Field trip type trainings
- Combination: Technical presentation with a field trip



## EDU-4 Recommended Topics

- Recommended Topics from previous NCWM Meetings:
  - Review of NTEP Organization, Processes, and Certificate system
  - Exploration of new areas of metrology and new technology in weighing and measuring systems
  - Emerging Fuels: EV, Hydrogen, LNG/CNG
  - Case study of a successful W&M program
  - Best practices for finding candidates for metrology



## EDU-4 Recommended Topics

- Share your Successes!
  - Previous Trainings at Regional Groups
  - Trainings offered in your jurisdiction or industry
- Suggestions
- Recommendations
- Feedback



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## **PMT-1**

### Safety Awareness



## PMT-1 Safety Awareness

- Julie Quinn has retired after many years of service
- NCWM is searching for a Safety Awareness Subcommittee Liaison to the PDC
  - Outstanding opportunity for professional development & a leadership role
  - Contact Don Onwiler if interested



# PMT-1 Safety Awareness

## Safety Awareness Subcommittee

- Encourages a culture of safety
- Administers the annual Safety Survey
  - Survey becomes a tool to highlight safety trends & needs
- Maintains & updates the Safety Toolbox
  - Toolbox contains resources for safety programs
- Solicits feedback from W&M jurisdictions





# Safety Awareness Subcommittee Will Plan Next Steps Under Next Chair

## Safety Subcommittee

Office	Name	Affiliation
Chair	Vacant	
Public Sector Member	Jason Flint	New Jersey
Public Sector Member	Elizabeth Koncki	Maryland
Public Sector Member	Brenda Sharkey	South Dakota
Public Sector Member	Mike Sikula	New York
Private Sector Member	Sprague Ackley	Honeywell
Private Sector Member	Tisha Arriaga	Marathon Petroleum, LLC
Private Sector Member	Bill Callaway	Cromptco
Private Sector Member	Remy Cano	Northwest Tank and Environmental Services, Inc.
Private Sector Member	Robert LaGasse	Mulch and Soil Council
Private Sector Member	John Lawn	Rinstrum, Inc.
Private Sector member	Richard Shipman	Rice Lake Weighing Systems, Inc.



# Safety Articles for Newsletter

## Safety Article Schedule

Issue 1 February 2020	NEWMA	January 15, 2020
Issue 2 May 2020	SWMA	April 15, 2020
Issue 3 September 2020	WWMA	August 15, 2020
Issue 1 February 2021	CWMA	January 15, 2021



# Thanks Regional Safety Liaisons

## **Central Weights and Measures Association (CWMA):**

Ms. Brenda Sharkey, South Dakota Weights & Measures

## **Northeastern Weights and Measures Association (NEWMA):**

Mr. Michael Sikula, New York Bureau of Weights and Measures

## **Southern Weights and Measures Association (SWMA):**

Ms. Elizabeth Koncki, Maryland Department of Agriculture

## **Western Weights and Measures Association (WWMA):**

Remy Cano, Northwest Tank & Environmental Services



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**Thank You!**