



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

2019 Annual PDC Report



National Conference on Weights and Measures

"That Equity May Prevail"

Office	Name	Affiliation	Term Ends
Committee Chair	Gene Robertson	Mississippi	2019
Member	Marc Paquette	Vermont	2020
Member	David Aguayo	San Luis Obispo County, California	2021
Member	Brenda Sharkey	South Dakota	2022
Member	Scott Ferguson	Michigan	2023
Associate Membership	James Pettinato	FMC Technologies Measurement Solutions, Inc.	2023
Safety Liaison	Julie Quinn	Minnesota (Retired)	NA
NIST Liaison	Tina Butcher	NIST, Office of Weights and Measures	NA
Certification Coordinator	Ross Andersen	Retired	N/A
Certification Coordinator	Jerry Buendel	Retired	N/A



Certification Coordinator Succession Planning

- Jerry Buendel (Washington, Retired) was contracted in October 2018 to succeed Ross Andersen as Certification Coordinator
- Ross worked with Jerry and HQ to provide a smooth transition on all phases of the operation.
- All NCWM Certification Coordinator materials will transfer to Jerry at the conclusion of this meeting.
- Ross's contract with NCWM will end at the conclusion of the this meeting.



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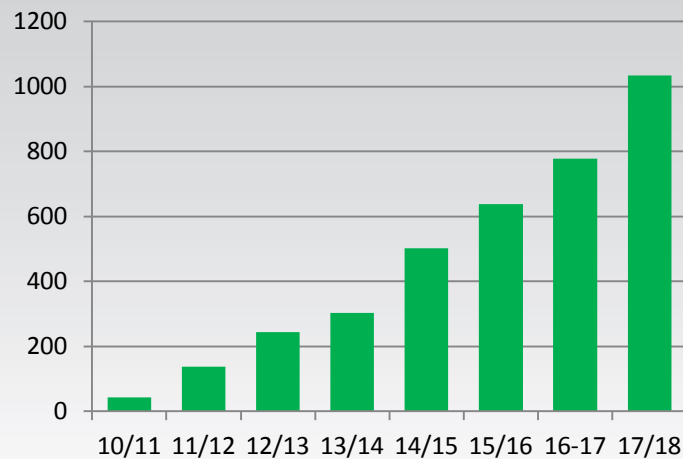
EDU-1 Professional Certification Program



Professional Certifications

	FY10-11	FY11-12	FY12-13	FY13-14	FY14-15	FY15-16	FY16-17	FY17-18
Exams Pass	47	94	104	62	205	140	143	257
Cummulative	47	141	245	307	512	652	795	1052

**Professional Certification
Program Growth
Certificates Issued Since Inception**



Data comes from two databases. Exam statistics indicate 1,052 passed exams. Certification database shows only 1,033 certificates issued. Since Interim meetings, the two databases have been harmonized.



Certifications by Exam

	FY10-11	FY11-12	FY12-13	FY13-14	FY14-15	FY15-16	FY16-17	FY17-18	All
Small Scale		6	58	22	51	22	26	67	252
Medium Scale					30	18	28	36	112
Large Scale					13	20	25	18	76
RMFD	47	83	21	17	65	43	35	56	367
VTM					21	18	14	24	77
Package Chk		5	25	23	25	19	15	56	168
Total	47	94	104	62	205	140	143	257	1052

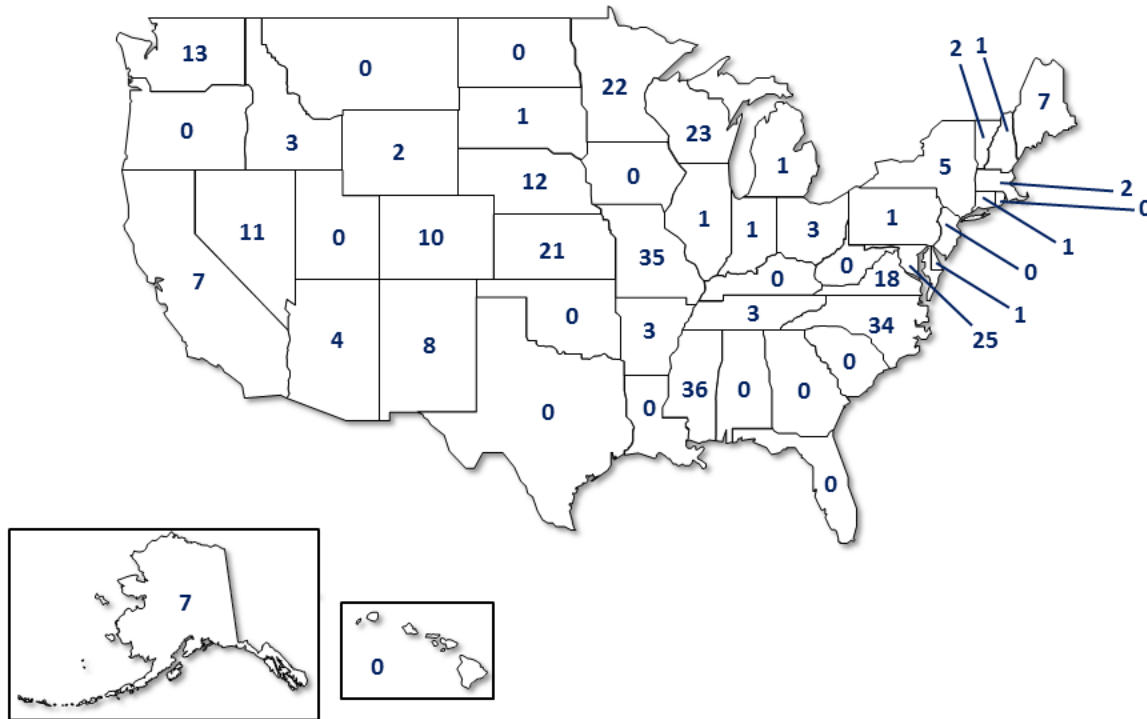
All values based on passed exams



Persons Holding Certificates in each state

Distribution of Certified Professionals per State

Updated: September 2018





High Utilization States

State	Certificates	State	Certificates
Minnesota	151	Maine	25
Missouri	144	New Mexico	25
Maryland	76	Nevada	22
Virginia	66	New York	19
Wisconsin	66	Connecticut	15
Mississippi	51	Colorado	14
North Carolina	49	Indiana	13
Washington	49	Massachusetts	12
California	42	Ohio	12
Kansas	42	Private	12
Alaska	35	Idaho	11
Nebraska	33		



Basic Competency Exams

- No analysis performed because of the limited data for FY 17-18. A full analysis will be conducted for FY 18/19.
- Request received to split Basic Weighing into two exams: one for Class II and III and one for Class III L
 - Review conducted of questions dealing with III L and only 9 general questions out of 62 in the section bank.
 - Committee believes the questions are appropriate to the learning objectives in the Module.
 - Committee would require significant justification to consider creating a second basic competency exam just for III L.



Proctoring

- NCWM Board established the proctoring requirement after the 2018 Annual Meeting.
- All exams are now proctored and login to take a test now requires proctor credentials
- Requirements for Proctors differ for basic competency and for professional certification (see proctor agreement on the NCWM website)
- List of authorized proctors on NCWM website.
Basic - 56 proctors/13 states (5/28)
Professional - 24 proctors/ 10 states (4/16).



Proctoring Continued

- Please read the exam announcement prior to taking the exam as it contains important information, i.e. approved reference materials such as Tables, EPO's and NIST Handbooks
- New policy for reference materials, i.e. electronic versions of authorized materials may be accessed on the computer during the exam.
- Candidates and proctors can download many documents from links on the Exam Announcement. Candidates are encouraged to download and practice navigation prior to taking the exam.



Post Exam Survey

- The Committee responded to issues raised by the Board at the Annual Meeting 2018. A revised survey was provided to the Board for its approval.
- Discussion is ongoing on the narrative responses to the exam survey
- Update from Don Onwiler



New Exams in the Pipeline

- Nearing completion of LPG Liquid Measuring. Awaiting release of new tables by NIST OWM.
- Work progressing on Precision Scales (primarily Class II prescription, jewelers and cannabis scales).
- These two will be specialty exams with fewer questions and shorter time limits, e.g. LPG is 30 questions and 80 minute time limit.
- Jerry Buendel will take over Price Verification Exam, also a specialty exam.
- Jerry will also be assisting with the LPG and Precision Scales exams to learn the process.



New Exam Priorities

- Exams in pipeline:
 - LPG Liquid
 - Precision Scales
 - Price Verification
- Future Work Priorities
 - Mass Flow Meters
 - Packaging and Labeling
- Are these still high in priority or should we consider other exam topics?



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EDU-2 Training

Professional Development Committee Report



EDU-2 Training NIST OWM Update Laboratory Metrology - 2018

Area/Course Name	Start Date	Location	# Students
Advanced Mass Seminar	08/13/18	Gaithersburg, MD	6
Balance & Scale Calibration Uncertainties	01/09/18	Gaithersburg, MD	10
Fundamentals of Metrology	02/05/18	Gaithersburg, MD	12
	02/12/18	Gaithersburg, MD	12
	04/16/18	Gaithersburg, MD	11
	06/11/18	Gaithersburg, MD	11
	05/14/18	Gaithersburg, MD	9
	10/29/18	Gaithersburg, MD	8
Mass Metrology Seminar	10/15/18	Gaithersburg, MD	9
Selecting Field Standards and Hoisting, General Safety	05/08/18	Saratoga Springs, NY	16
	05/22/18	Springfield, IL	42
Volume Metrology Seminar	06/04/18	Gaithersburg, MD	7
Regional Measurement Assurance Programs			
MidAmerica Measurement Assurance Program	10/01/18	St. Paul, MN	32
Northeastern Measurement Assurance Program	09/10/18	Montpelier, VT	17
Southeastern Measurement Assurance Program	04/30/18	Biloxi, MS	24
Southwestern Assurance Program	09/17/18	Oklahoma City, OK	17
Western Regional Assurance Program	05/07/18	Salt Lake City, UT	16
Info Hours (See PDC report for topics)	6 Sessions	Web-based	
Webinars (See PDC report for topics)	10 Sessions	Webinars	150



EDU-2 Training NIST OWM Update Packaging & Price Verification - 2018

Area/Course Name	Start Date	Location	# Students
NIST HB 133 – Checking the Net Contents of Packaged Goods, Volumetric Measurement	02/02/18	San Diego, CA	12
NIST Handbook 130 – Uniform Packaging and Labeling Regulations	3/12/18	Orange County, CA	22
	06/05/18	Cleveland, OH	16
NIST HB 133 – Checking the Net Contents of Packaged Goods, Basic	3/26/18	Lebanon, MO	19
	04/16/18	Montgomery, AL	16
	05/14/18	Plantation, FL	18
	10/22/18	Baton Rouge, LA	16
	11/05/18	Needham Heights, MA	11
NIST Handbook 130 – Price Verification	02/09/18	San Diego, CA	15
	05/18/18	Plantation, FL	21
	10/26/18	Baton Rouge, LA	23



EDU-2 Training NIST OWM Update Weighing/Measuring Devices - 2018

Area/Course Name	Start Date	Location	# Students
Compressed Natural Gas Retail Motor-Fuel Dispensers	04/16/18	Sacramento, CA	16
Liquefied Petroleum Gas Liquid-Measuring Systems	05/14/18	Sacramento, CA	24
	06/11/18	Reynoldsburg, OH	19
Livestock and Animal Scales	04/10/18	Harrisonburg, VA	14



EDU-2 Training NIST OWM Update Laboratory Metrology – 2019 & 2020

Course Name	Start Date	Location
Advanced Mass Seminar	04/29/19 – 04/09/19	Gaithersburg, MD
	06/01/20 – 06/11/20	Gaithersburg, MD
Fundamentals of Metrology	03/04/19 - 03/15/19	Gaithersburg, MD
	03/11/19 - 03/15/19	Gaithersburg, MD
	08/05/19 - 08/09/19	Gaithersburg, MD
Fundamentals of Metrology – IAEO Participants Only	08/19/19 – 08/23/19	Gaithersburg, MD
Fundamentals of Metrology – SIM Participants Only	03/18/19 – 03/22/19	Gaithersburg, MD
Mass Metrology Seminar	08/19/19 – 08/23/19	Gaithersburg, MD
	04/08/19 – 04/18/19	Gaithersburg, MD
	10/21/19 – 11/01/19	Gaithersburg, MD
Volume Metrology Seminar	03/09/20 – 03/20/20	Gaithersburg, MD
	08/12/19 - 08/16/19	Gaithersburg, MD
Regional Measurement Assurance Programs		
Combined Regional Measurement Assurance Program	06/02/19 – 06/06/19	Lake Mary, FL
CRMAT-Tutorial-Certified Calibration Technician Prep	5/31/19 – 06/02/19	Lake Mary, FL
CRMAT-Tutorial-Assessing & Reporting Measurement Uncertainty	5/31/19 – 06/02/19	Lake Mary, FL
CRMAT-Tutorial- Selection, Cal, Use of Thermometers	5/31/19 – 06/02/19	Lake Mary, FL
CRMAT-Balance and Scale Calibration Uncertainties	5/31/19 – 06/02/19	Lake Mary, FL
Webinars – Upcoming Topics		
Basic Uncertainty Concepts; Calibration Certificate Evaluation; Conducting an Effective Management Review; Contract Review; Doc Control & Record Keeping; Internal Auditing Best Practices; Measurement Systems for Legal Metrology; Software Verification & Validation; State Laboratory Annual Submission Process	(See OWM Calendar of Events)	



EDU-2 Training NIST OWM Update Packaging & Price Verification – 2019 & 2020

Course Name	Start Date	Location
NIST HB 130 – Uniform Packaging/Labeling Regs	10/28/19 - 10/31/19	Avenel, NJ
	05/18/20 - 05/20/19	Santa Rosa, CA
NIST HB 133 – Checking Net Contents of Packaged Goods, Basic	04/01/19 - 04/04/19	Gaithersburg, MD
	04/15/19 - 04/18/19	Glendale, AZ
	10/16/19 - 10/17/19	Richmond, VA
	11/05/19 - 11/08/19	Sacramento, CA
Webinars		
NIST Handbook 130 – Price Verification	06/18/19	Webinar
NIST HB 130 – Overview Packaging\Labeling Reg	06/19/19	Webinar



EDU-2 Training NIST OWM Update Weighing/Measuring Devices - 2019 & 2020

Course Name	Start Date	Location
Audit Trails (WWMA)	09/11/19	Park City (UT)
Liquefied Petroleum Gas Liquid-Measuring Systems	06/24/19	Nashville, TN
Retail Motor-Fuel Dispensers, 3-Day Course (CWMA)	05/06/19	Canton, OH
Retail Motor-Fuel Dispensers, 3-Day Course (WWMA)	09/09/19	Park City, UT
Vehicle-Tank Meters & Loading-Rack Meters	06/10/19	Lawrence, KS
Vehicle-Tank Meters	Spring 2020	Sacramento, CA
Webinars		
Audit Trails (NJW&MA)	09/05/19	Webinar



EDU-2 Training – NIST OWM

- Regional Weights and Measures Association Training
 - Requests from regionals for concurrent or consecutive training for past several years
 - OWM requesting input on topics for FY 2020
- Requesting input on ideas for future training topics for development
 - From Regionals
 - From Others



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EDU-3 Instructor Improvement

Professional Development Committee Report



EDU-3

Instructor Improvement

- NIST-OWM continues to use external trainers as co-instructors whenever possible
 - Funds from NIST-NCWM grant nearly exhausted
 - Travel expenses for external trainers invited to assist in NIST training to 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

Professional Development Committee Report



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PMT-1 Safety Awareness

Professional Development Committee Report



2019 Safety Survey (Covering 2018)

Participation about the same as 2018 survey

- 15 states
- 9 counties or municipalities

Days Away/Restricted Time (DART) slightly higher but better than 2016(5.6) and 2017 (5.4)

- 1.7 on 2019 survey compared to 1.2 on 2018 survey
- Range from 0.0 to 6.1
- 16 jurisdictions reported no DART injuries last year



Hazards Causing Injuries

No slips, trips or falls reported this year.
Lifting/bending/twisting still top cause of injuries.

Recordable Non-DART Injuries

Hazard/injury type/location	Incidents	Percent
lifting/bending/twisting	4	40.0%
other	2	20.0%
chemical agents	1	10.0%
crushing/pinching	1	10.0%
infectious agents	1	10.0%
vehicle accident	1	10.0%
inspections	7	70.0%
office	2	20.0%
other	1	10.0%

Reportable DART Injuries

Hazard/injury type/location	Incidents	Percent
Lifting/bending/twisting	5	38.5%
hazard type not reported	4	30.8%
struck-by hazard	2	15.4%
chemical agents	1	7.7%
other	1	7.7%
inspections	8	61.5%
other/not specified	5	38.5%



Costs of Property Damage (Near-Misses)

VEHICLE			EQUIPMENT			OTHER		
incidents	insurance cost	deductible	incidents	insurance cost	deductible	incidents	insurance cost	deductible
33	\$18,907	\$61,750	9	1000	\$5,000	3	\$463	500
Total Cost	\$80,657			\$6,000			\$963	
Average	\$2,444.17			\$666.67			\$137.53	



Disconnect between Events & Programs

- 10 jurisdictions with DART injuries or property damage or both
- Only 4 made any changes in response (and a 5th indicated intention to do something but hadn't done anything yet)
- 8 jurisdictions reported new safety programs but did not link them to incidents or property damage
- No correlation between number of programs offered and whether jurisdictions observed incidents



TRAINING PROVIDED

On average, jurisdictions reported offering 7 types of safety training.

Fifty percent or more offered the courses below:

Course	Responses	Percent
initial safety	21	87.5%
task specific	18	75.0%
fire extinguisher	15	62.5%
initial erlk	13	54.2%
initial and annual drivers	13	54.2%
first aid	12	50.0%
overhead hoists & cranes	12	50.0%



Training Needs – 6 Top Choices

	Number of Responses		weighted total
	badly needed (2)	somewhat needed (1)	
task specific	5	7	17
initial safety	4	8	16
overhead hoists/cranes	3	8	14
annual erTk	1	11	13
initial erTk	0	11	11
static electricity	1	9	11



Address Lifting/Bending/Twisting

- Add link to MN DOT stretching program to safety toolbox
- Ask NCWM about Susan G. Hardwood Grant to develop Safe Lifting program
- Do preliminary work to determine funding needs for safe lifting program
 - What message(s)
 - What media
 - What resources needed and cost



Safety Awareness Subcommittee Will Plan Next Steps Under Next Chair

Safety Awareness SubCommittee

Office	Name	Affiliation
Chair	Julie Quinn	Minnesota (retired)
Public Sector Member	Jason Flint	New Jersey
Public Sector Member	Georgia Harris/Doug Olson	NIST, Office of Weights and Measures
Public Sector Member	Elizabeth Koncki	Maryland
Public Sector Member	Matt Maiten	Santa Barbara County, California
Public Sector Member	Brenda Sharkey	South Dakota
Public Sector Member	Mike Sikula	New York
Private Sector Member	Tisha Arriaga	Marathon Petroleum, LLC
Private Sector Member	Bill Callaway	Crompco
Private Sector Member	Remy Cano	Northwest Tank and Environmental Services, Inc.
Private Sector Member	Brad Fryburger	Rinstrum, 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.
Private Sector Member	H. Sprague Ackley	Honeywell Safety and Productivity Solutions



Safety Articles for Newsletter

Safety Article Schedule

Issue 3 September 2019	CWMA	August 15, 2019
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):

Mr. Brett Gurney, Utah Department of Agriculture and Food



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Thank You!