

Professional Development Committee (PDC) 2023 Interim Meeting Report

Mr. Paul Floyd, Committee Chair
Louisiana

INTRODUCTION

The PD Committee will address the following items in Table A during the Interim Meeting. Table A identifies the agenda items by reference key, title of item, page number and the appendices by appendix designations. The first four digits of an item's reference key are assigned from the Subject Series List. The acronyms for organizations and technical terms used throughout the agenda are identified in Table B. In some cases, background information will be provided for an item. The fact that an item appears on the agenda does not mean it will be presented to National Conference on Weights and Measures (NCWM) for a vote. The Committee will review its agenda and may withdraw some items, present some items for information meant for additional study, issue interpretations, or make specific recommendations for change to the publications identified which will be presented for a vote at the Annual Meeting. The Committee may also take up routine or miscellaneous items brought to its attention after the preparation of this document. The Committee may decide to accept items for discussion that are not listed in this document, providing they meet the criteria for exceptions as presented in Section H of the introductions to *Handbook 44* and *Handbook 130*. The Committee has not determined whether the items presented will be Voting or Informational in nature; these determinations will result from their deliberations at the Interim Meeting

An "Item Under Consideration" is a statement of proposal and not necessarily a recommendation of the Committee. Suggested revisions are shown in **bold face print** by ~~striking-out~~ information to be deleted and underlining information to be added. Requirements that are proposed to be nonretroactive are printed in ***bold faced italics***.

All sessions are open to registered attendees of the conference. If the Committee must discuss any issue that involves proprietary information or other confidential material; that portion of the session dealing with the special issue may be closed if (1) NCWM Chairman or, in their absence, NCWM Chairman-Elect approves; (2) the Executive Director is notified; and (3) an announcement of the closed meeting is posted on or near the door to the meeting session and at the registration table. If possible, the posting will be done at least a day prior to the planned closed session.

Note: *It is policy to use metric units of measurement in publications; however, recommendations received by NCWM technical committees and regional weights and measures associations have been printed in this publication as submitted. Therefore, the report may contain references to inch-pound units.*

Subject Series List

Education	EDU Series
Program Management	PMT Series
Other Items	OTH Series

Table A
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Table B
Glossary of Acronyms and Terms

Acronym	Term	Acronym	Term
CWMA	Central Weights and Measures Association	OWM	Office of Weights and Measures
NCWM	National Conference on Weights and Measures	PDC	Professional Development Committee
NEWMA	Northeastern Weights and Measures Association	SWMA	Southern Weights and Measures Association
NIST	National Institute of Standards and Technology	WWMA	Western Weights and Measures Association
SETG	Skimmer Education Task Group		

Details of All Items
(In order by Reference Key)

EDU – EDUCATION

EDU-1 I Professional Certification Program

The NCWM offers nine professional certification exams and two basic competency exams. The certification exams include Retail Motor Fuel Dispensers, Vehicle-Tank Meters, Small Capacity Scales, Medium Capacity Scales, Large Capacity Scales, Precision Scales, LPG and Anhydrous Ammonia, Price Verification and Basic Package Checking. Reporting on the Precision Scales exam begins this year. The competency exams include Basic Weighing Devices and Basic Liquid-Measuring Devices. Professional certifications must be renewed every five years and NCWM notifies candidates whose certificates have expired.

Proctoring was initiated as a first step towards accreditation of the certification program. Each organization is required to register the proctors they intended to use. Proctor qualifications are different for basic competency exams and professional certification exams so two lists of proctors are maintained. To eliminate conflicts of interest, proctors for professional certification exams must not be immediate supervisors of the candidate. Virtual proctoring was initiated in May 2021 and offered at no cost to members through the end of December 2021.

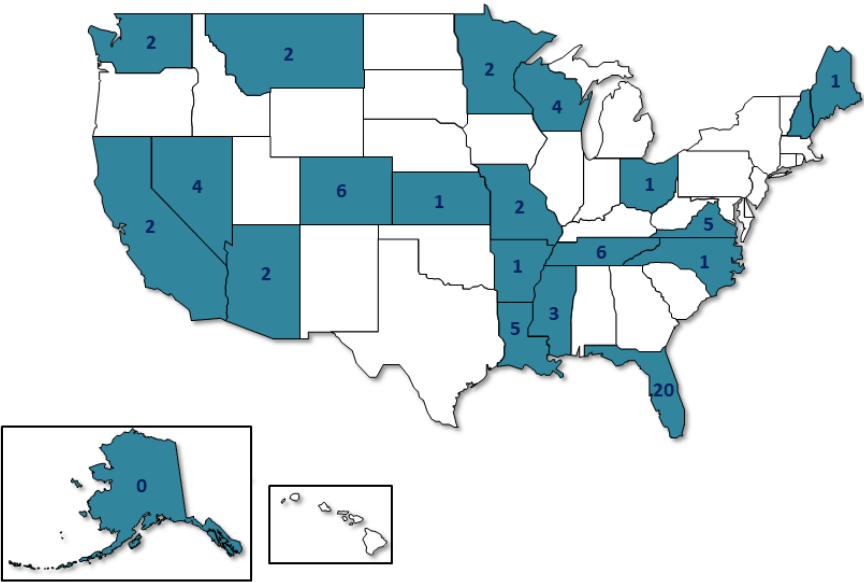
The requirements for proctors are posted on the NCWM website at <https://www.ncwm.com/proctoring>. Guidance for virtual proctoring can be found on the same webpage and more detailed information, including a helpful YouTube video on preparing for proctoring can be found on the ProctorU website at <https://support.proctoru.com/hc/en-us/articles/360043565051-Exam-Day-What-to-Expect->.

Number of States with Proctors and number of Proctors. (As of November 2021)

	Professional Certification		Basic Certification	
	States	Proctors	States	Proctors
FY 17-18	7	17	10	39
FY 18-19	11	28	14	57
FY 19-20	16	37	18	70
FY 20-21	17	41	19	73
FY 21-22	19	44	20	78

1 Proctors per state – Basic Competency Exams:

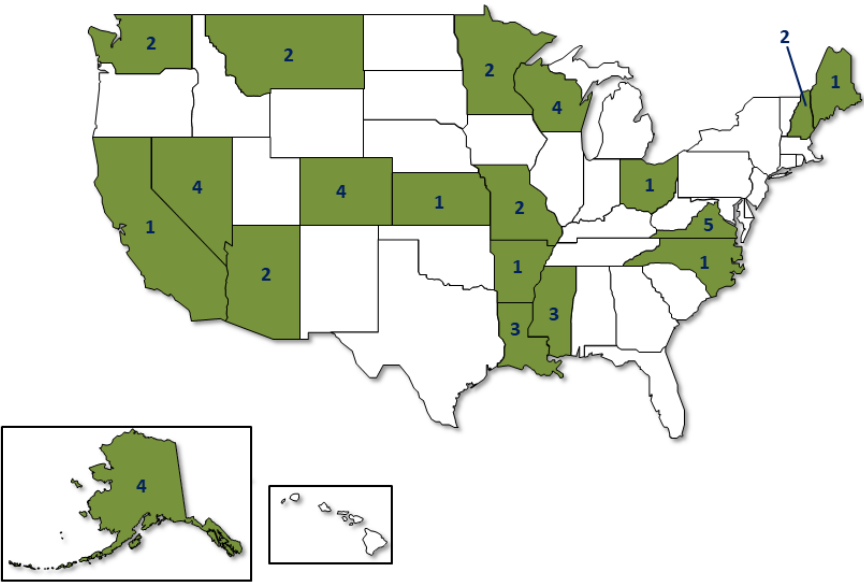
Distribution of Certified Proctors per State: Basic Competency Exams
Updated: November 2022



2

3 Proctors per state – Professional Certification Exams:

Distribution of Certified Proctors per State: Professional Certification Exams
Updated: November 2022



4

The table below shows the number of virtual and in-person proctored tests completed in FY 21-22.

	In-person	Virtual
Professional Certification	84	8
Basic Competency Certification	50	5

Status of Current Tests

The NCWM has issued 1267 professional certificates since program inception through September 30, 2021. Of the certificates issued, fifteen have been issued to individuals in the private sector. There has been a significant decline in participation in the program. It appears that the decline coincides with the requirement to proctor exams and the pandemic. Some of the certificates have reached their 5-year expiration and certificate holders will need to seek recertification.

NCWM Professional Certificates

The table below shows the number of certificates awarded over the past ten years and the cumulative total since program inception.

	FY 12-13	FY 13-14	FY 14-15	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21	FY 21-22
Certificates Awarded	105	62	198	140	142	257	53	56	60	56
Cumulative	243	305	503	643	785	1042	1095	1151	1211	1267

The table below shows the states using the professional certification program and the number of certificates earned since program inception and includes expired certificates. The Committee applauds these states and encourages increased use of the certification program.

State	Certificates	State	Certificates	State	Certificates
Minnesota	153	Arizona	28	Wyoming	7
Missouri	143	Nevada	28	Arkansas	6
Louisiana	109	Maine	26	Delaware	4
Wisconsin	96	New Mexico	25	Michigan	3
Maryland	79	New York	19	South Dakota	3
Virginia	70	Colorado	18	Montana	2
Alaska	57	Connecticut	15	Oregon	2

Mississippi	56	Private	15	Tennessee	2
North Carolina	56	Ohio	14	New Hampshire	1
Washington	50	Idaho	11	West Virginia	1
Kansas	46	Massachusetts	11		
California	41	Pennsylvania	8		
Nebraska	33	Vermont	8		

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2 **NCWM Basic Competency Certificates**

3 The table below shows the number of basic competency certificates awarded since program inception.

	FY 17-18	FY 18-19	FY 19-20	FY 20-21	FY 21-22	Cumulative
Basic - Measuring	0	40	14	5	7	66
Basic - Weighing	1	30	11	12	9	63
Total Awarded	1	70	25	17	16	129

4

5 The table below shows those states with individuals holding a basic competency certificate. The Committee applauds
6 these states and encourages increased use of the certification program nationwide

State	Certificates	State	Certificates
Louisiana	59	Nevada	2
Tennessee	42	Nebraska	2
Alaska	7	Arkansas	1
Colorado	5	Kansas	1
Private	1	Montana	1
Florida	3		

7

8 **NCWM Meeting Comments:**

9 NCWM 2022 Interim Meeting: The 2022 Interim Meeting was held in an in-person and online hybrid meeting format.
10 Mr. Jerry Buendel (Certification Coordinator) briefed the members on the results of the FY 21 certification program.
11 He also suggested that the members consider using NCWM to administer their service agent exams. He noted that
12 NCWM has over 1100 questions in the test bank that can be used to build exams and suggested that NCWM could
13 host state specific regulatory questions in their database to use in the exams. Mr. Buendel stated that he has spoken
14 to service companies that would welcome the opportunity to take a licensing exam that was acceptable to several
15 states. He indicated that he is available to discuss the possibilities with interested jurisdictions.

16 No comments were heard during the open hearing.

17 The members reviewed the post exam surveys provided by NCWM during the committee agenda review on January
18 9, 2022.

1
2 NCWM 2022 Annual Meeting: During the 2022 Annual Meeting an updated presentation was provided by Mr. Jerry
3 Buendel, (Exam Coordinator). Mr. Buendel requested volunteers to write questions for two new exams and to begin
4 a process to make use the NCWM certification program resources for service agent examinations. Tim Chesser
5 (Arkansas) inquired on how to require service agents to participate in exams. He asked if language could be added
6 that would require service agents to take exams. Vince Wolpert (Arizona) commented regarding the possibility of
7 states being able to tailor exam questions to fit the needs of individual states. Cheryl Ayer (New Hampshire) noted
8 that service agents are not prepared to take exams furnished by the state. Mrs. Ayer also wanted to know if there is a
9 formula for the percentage of questions on identified topics throughout an exam, and how the questions are distributed
10 in each exam. Several states contacted Mr. Buendel after the hearings and indicated an interest in using NCWM
11 resources for service agent exams. Jay Draper (Washington) suggested that incorrect questions be identified at the
12 conclusion of an exam. Don Onwiler (NCWM) stated that test takers are able to contact NCWM to receive feedback
13 on exam results regarding areas of knowledge need improvement. During the committee meeting after the open
14 hearings there was consensus among the members to provide feedback to the test takers along with their test score.
15 The feedback could be designed to identify areas where the test takers failed. Suggestions included citing the sections
16 of the handbook or indicating the module learning objectives associated with the missed questions.
17

18 NCWM 2023 Interim Meeting: During the 2023 Interim Meeting an updated presentation was provided by Jerry
19 Buendel, (Exam Coordinator). Mahesh Albuquerque (CO) thanked Jerry and the committee for the work done on
20 advancing the certification program and appreciated the extension to the service organizations. He also suggested we
21 consider general industry as a potential source of input for the development of exams. Scott Simmons (CO) echoed
22 Mahesh's comments and feels they have benefitted greatly from the program and having these credentials lends weight
23 to the department. One issue they have encountered is that their proctors aren't typically full-time and may not be
24 fully familiar with NCWM and our processes for testing. Also, the online process via Proctor U resulted in issues due
25 to a required plug-in not being able to be installed on individual's government computers due to departmental IT
26 policy, so a home computer had to be used. Also, the process did not seem particularly user-friendly. Additionally,
27 some of the forms were not compatible with the version of the Office suite on the computer in use. Scott would like
28 to see the limitations on proctoring by individuals in chain-of-command be relaxed to allow proctoring by certified
29 proctors within the organization. David Deroche (LA) testified that the time for taking the test might be too short, and
30 that the expanding handbook makes it difficult to complete the test within the time allotted. He asked how these time
31 limits are being determined. Also, he indicated that the lack of feedback after testing was not particularly helpful
32 especially if the test taker failed. Jerry responded to the test time question by indicating that most of those that pass
33 complete the test well before time expires, and not many timeouts occur. Ivan Hankins (IA) referred the body to the
34 online versions of field training manuals covering various sections of HB44 that could be used in place of a hard copy
35 or at least be used as a training resource for inspectors. Brent Ricks (MT) followed up and thanked Ivan for the training
36 materials mentioned above. Montana is troubled by non-resident personnel coming into service national chain devices
37 etc. and finds the certification program useful to control this. Brent feels we're on the right track with the certification
38 program. Doug Musick (KS) feels like the bar may be being set too high for some of the target audience e.g., service
39 companies. (Not the test itself, the process.) Ray Woolfolk (Alaska) stated Alaska was having difficulty with arranging
40 proctors, and echoed Scott's suggestion of allowing proctors from within the organization. He also indicated that they
41 are pleased with the exam content. Vince Wolpert (AZ) likes the exams however, proctoring is an issue. Long travel
42 times to get to a proctor makes the online option a valuable new approach. Also, cross-certification between states is
43 still something he'd like to see. David Deroche (LA) returned to the microphone to question the content that may not
44 be applicable to their state but is included in the test along with the pertinent material. More resources to prepare or
45 learn HB44 material would be helpful. Greg Vander Platts (MN) echoed that proctoring is a bit of a challenge still.
46 Joe Smith (WI) echoed proctoring is a challenge and it would be better to allow W&M staff to act as proctors even if
47 they are in the same department. Tim Chesser (AR) echoed Scott Simmons suggestion for internal proctoring.

48 In the work session, the Committee discussed allowing employees from within the Weights and Measures authority
49 to qualify as proctors for both the professional certification and the basic competency exams. The PDC recommends
50 the BOD consider allowing this moving forward. Also, the PDC will work to resolve the concerns related to the limited
51 feedback on failed test questions provided by the current process.

Regional Association Comments:

WWMA 2022 Annual Meeting: The committee heard no comments on this item. The committee noted that Jerry Buendel is seeking subject matter experts to assist in the development of the NCWM RSA exams.

The WWMA PD Committee recommends this as an informational item on the NCWM agenda.

SWMA 2022 Annual Meeting: The PDC heard no comments on this item and recommends that the data be updated and that the item remain an informational item.

CWMA 2022 Interim Meeting: Ivan Hankins (IA) commented that CWMA used to have a certification program for service industry and suggested that as a region, we could resume this and include inspectors in the training to have some consistency between the states for service companies. There are some 10 question tests available that some states use currently. Several states agreed they would be interested in resuming this test. Loren Minnich (KS) wondered if any states have utilized the national tests since the proctoring requirement was put into place. Greg VanderPlaats (MN) stated Minnesota used the professional certifications prior to the introduction of proctoring. Since proctoring has taken affect, they have had a hard time finding proctors. He suggests doing away with proctoring. Joe Smith (WI) agreed with ending the proctoring requirement.

The CWMA PD Committee recommend this as an informational item on the NCWM agenda

NEWMA 2022 Interim Meeting: Marc Paquette (Vermont) provided an overview for this item. Cheryl Ayers (New Hampshire) reported that she had attended a meeting with NCWM Executive Director Don Onwiler and Certification Exam Coordinator Jerry Buendel to address specifics of the Registered Service Agent exams. Ms. Ayers commented that the ability to tailor the exams for the needs of individual states would be greatly beneficial. She added that the ability to add state specific questions and how long the certifications are valid for each jurisdiction would be very helpful.

The NEWMA PD Committee recommends this item as informational on the NCWM agenda.

EDU-2 I Training

The purpose of this item is to share best practices and approaches to training in response to the broad training needs of weights and measures jurisdictions and to serve as a link to various training materials on the web.

At the 2023 Interim Meeting, Mrs. Tina Butcher (NIST OWM) provided the following “Summary of NIST OWM Training Conducted in 2022.” Mrs. Butcher also provided an update on plans for OWM training in 2023 and other work underway at NIST to assist weights and measures jurisdictions and industry representatives with legal metrology training.

Summary of NIST OWM Training Conducted in 2022			
Area/Course Name	Start Date	Location	No. of Students
Laboratory Metrology			
Fundamentals of Metrology GAP Interim (at RMAPs)	3/31/22 & 5/19/22	RMAPs	6
Advanced Mass Seminar (Rev 2015)	7/11/22	Gaithersburg, MD	6
Fundamentals of Metrology (3 sessions)	1/31/22, 6/27/22, 8/22/22	Gaithersburg, MD	19
Mass Metrology Seminar (3 sessions)	2/28/22, 4/25/22, 8/1/22	Gaithersburg, MD	15
Volume Metrology Seminars (4 sessions)	2/7/22, 2/14/22, 5/9/22, 8/29/22	Gaithersburg, MD	16
Regional Measurement Assurance Programs (RMAPs)			
SEMAP	03/28/22	Frankfort, KY	25
WRAP	05/16/22	Sparks, NV	21
NEMAP	06/13/22	Avenel, NJ	32
SWAP	09/12/22	Las Cruces, NM	25
MidMAP	09/26/22	Madison, WI	22
Webinars			
Basic Uncertainty Concepts	3/17/22	Web-based	9
Contract Review	6/23/22	Web-based	7
Document Control and Record Keeping	4/14/22	Web-based	13
Fundamentals of Metrology - Overview (2 sessions)	3/15/22 & 5/24/22	Web-based	34
Internal Auditing Best Practices	2/24/22	Web-based	6
Software Verification and Validation	7/28/22	Web-based	7
State Laboratory Annual Submission Process	7/7/22	Web-based	54
Metric			
Info Session – Metric Education Resources (2 sessions)	2/10/22	Web-based	8
	7/21/22	Web-based	6
Info Session – Metric Estimation (2 sessions)	2/17/22	Web-based	4
	7/28/22	Web-based	5
Measurement System Basics – SI and US Customary Units for Regulatory Officials	3/2/22	Webinar	25
Laws and Regulations			
Packaging & Price Verification			
Handbook 130 – Examination Procedure for Price Verification (3 Sessions)	1/4/22; 4/5/22; 9/1/22	Web-based	106
Handbook 130 – Overview of the Uniform Packaging and Labeling Regulation (3 Sessions)	1/20/22; 4/13/22; 8/30/22	Web-based	110
Handbook 133 – How to Test Animal Bedding (3 sessions)	1/5/22; 4/6/22; 8/30/22	Web-based	49
Handbook 133 – Overview of Handbook 133 (3 sessions)	1/27/22; 4/21/22; 8/31/22	Web-based	107
Weights and Measures Inspections – Evidence, Search and Seizure, and Due Process (3 sessions)	1/25/22; 4/20/22; 8/29/22	Web-based	79
LPG (Propane) -Verifying the Net Contents of 20 lb Cylinders (Part 1) (3 sessions)	1/19/22; 4/12/22; 9/7/22	Web-based	155
Legal Metrology Devices			
No training seminars were offered in 2021.	--	--	--

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- 2 The following includes a summary of training-related activities in each NIST OWM Program along with an update

on some of OWM's general work in developing and providing legal metrology training.

Laboratory Metrology and Metric Program

The following summarizes activities in the NIST OWM Laboratory Metrology Program:

General. The Laboratory Metrology Program training classes conducted in 2022 included both virtual and in-person formats, with a total of 28 sessions and 339 students.

Regional Metrology Association Training. All Regional Measurement Assurance Program (RMAP) training was conducted in an in-person format in 2022. The Laboratory Metrology Program found that holding the Regional Measurement Assurance Program (RMAP) training events in person was beneficial and essential in filling training gaps from the last two years of virtual training.

OWM held an abbreviated Fundamentals of Metrology Training at the end of several of the in-person RMAPs in 2022. This training was specially designed for metrologists who took NIST's online Fundamentals Course in 2020 and 2021 and intended to fill the gap between the online course and NIST's regular in-person course.

Laboratory Metrology Program Training in 2022. In-person training events resumed on-campus in 2022 and were very instrumental to many labs being able to have continuity of operations and to continue to serve their State weights and measures programs. All lab metrology in-person seminars and webinars consisted of hands-on application of training material. Class size and other restrictions will continue to be adjusted to comply with local safety conditions and policies, with preference being given to metrologists from state and local weights and measures programs.

Lab Recognition and Workload. OWM currently recognizes 44 state labs as having "Metrological Traceability" according to NIST Handbook 143 (2019). Twenty of those labs are also Accredited by NVLAP. Forty-five labs are applying for "Recognition" this year.

The bi-annual Workload Survey through NCSLI is getting started with data expected to be provided by March 2023.

Metric Program. The Metric Program, which is now located in the Laboratory Metrology Program, conducted five webinars and web-based sessions in 2022. This training covered three different topic areas presented in five sessions and included 48 students.

Laws and Legal Metrology Devices Program

General. The development and delivery of field inspection training in the areas of laws and regulations and legal metrology devices have slowed due to staff shortages and an increased workload for the technical staff. However, OWM hopes to resume work on some of the projects already in progress and to develop more training products and services moving forward.

Webinars. The Laws Program conducted 18 webinars on topics related to "Laws and Regulations" in 2022, this included 6 different topic areas as outlined in the tables above, with 18 sessions and 606 students. These courses were offered on a frequency based on the level of demand, but no less than once per quarter during the year.

No webinars were presented by the Legal Metrology Devices Program in 2022. Several new webinars/courses are in various stages of development:

- Reference Scale Verification for Gravimetric Testing
- Electric Vehicle Fueling Systems Inspection and Testing
- Retail Motor-Fuel Dispensers Inspection and Testing
- Conducting Witness Tests

Informal Learning Resources. OWM plans to expand available “informal learning” tools targeted toward field inspection topics. This includes adding to existing informal learning resources currently offered by NIST such as study guides, examination procedure outlines, field manuals, and videos as well as exploring the development of new tools such as checklists and frequently asked questions to assist in field inspections.

The Laws and Legal Metrology Devices Program had also planned to implement “information hour” informal educational sessions in 2022, patterned after those used in the past by the Laboratory Metrology Program. These sessions will focus on presenting information on a select topic, followed by a question-and-answer session. Topics will be selected from questions OWM has received from officials and other stakeholders on various field inspection issues and new inspection areas in the marketplace. OWM will also solicit ideas from the community on future topics.

Although this work was delayed in 2022 due to the restrictions noted earlier, Rick Harshman and Lisa Warfield are now working on the development of a format and timeline for these sessions and have identified a number of potential topics to address. They expect to begin scheduling the first of these sessions in the late spring or early summer 2023.

General – OWM Training

Mrs. Butcher summarized the following statistics for OWM’s 2021 training as follows:

- 31 classes presented in-person and virtually on topics related to laboratory metrology, metric, and laws and regulations
- 993 total students
- Training included regulators and industry and an increased interest from international participants

Mrs. Butcher provided an overview of OWM’s training looking forward in 2023. She shared that no “in-person” classes are presently being scheduled for field inspection training. OWM will explore options for future classes, which it expects to include a mixture of in-person, hybrid, and virtual training as staffing and conditions permit.

As shared last year in her 2021 report, Mrs. Butcher stated that OWM has no intention of eliminating, virtual training options. OWM has reached a significantly larger number of students with virtual training and students who have never had the opportunity to attend NIST OWM training in the past have been able to access training because of the virtual format. It is clear that virtual training also offers the advantages of flexibility and reduced costs to learners as well as trainers and makes offering multiple sessions of a given course more practical.

OWM plans to expand virtual training to include additional topics on field inspection, particularly on device-related topics and will actively explore “hybrid” and “blended” learning options. This might include options such as:

- Some students attend virtually and some attend in-person;
- Some portions of class are presented in an in-person format (with smaller size classes) and some portions of class are presented virtually (with larger class sizes); and
- Exploring “synchronous” and “asynchronous” formats enhanced with pre-recorded lecture and/or video.

These options will likely continue even after OWM returns to in-person training.

OWM will also be experimenting with available technology and tools to best incorporate elements of “hands-on” in its field inspection training, recognizing the importance of that “hands-on” or “experiential learning” component for field inspection work.

Mrs. Butcher has previously shared plans at NIST to create a “Virtual Training Studio.” She reported this project is well underway with significant monetary and facility support from OWM’s parent operating unit, the Physical Measurement Laboratory. This will include outfitting a virtual training space in NIST OWM offices for delivering virtual training and hosting web-based meetings such as work groups and standards development sessions. This “studio” will result in a mid-level space for:

- Conducting virtual training;
- Conducting live demonstrations;
- Video recording and editing;
- Enhancing livestream capabilities;
- Hosting and/or participating in virtual meetings as individuals or as a group; and
- Enable high levels of interactivity with off-site participants with capability to concurrently, view remote participants.

OWM has purchased considerable equipment and begun work with a contractor to renovate the space. This studio will also enhance OWM’s virtual training events and its capability to develop training videos.

In early 2022, OWM was pleased to add an Audio-Visual Production Specialist (a position that is shared with another NIST division) to its staff to oversee the activities targeted for development in the Virtual Studio project and to further extend OWM’s ability to provide virtual training events as well as enhance both virtual and in-person training. OWM’s new AV specialist, Rich Montgomery, comes to OWM with extensive experience in video development and production and has already developed several short videos for OWM. Mr. Montgomery attended the 2023 NCWM Interim Meeting where he created a video of a technical panel discussion and interviewed attendees to gather footage for a video highlighting attendees’ experience at the conference. OWM training developers are also beginning to take advantage of Mr. Montgomery’s talents and expertise and have started collaborating with him on the development of a couple of short videos focused on field inspection topics.

Mrs. Butcher reported that OWM trainers are actively participating in their own professional development through participation in a variety of training courses and activities focused on enhancing their abilities in training design, development, and delivery, with particular emphasis on virtual and hybrid training venues.

Mrs. Butcher will continue to provide updates to the Committee and NCWM members at future meetings about available OWM training and future training plans. In the meantime, she reminded those interested in OWM training, to periodically consult the OWM Calendar of Events for upcoming training at the following link on the OWM website:

<https://www.nist.gov/pml/weights-and-measures/about-owm/calendar-events>

NIST OWM looks forward to continued work with the weights and measures community to develop and implement training to assist weights and measures officials and service personnel in their continued professional development.

NCWM Meeting Comments:

NCWM 2023 Interim Meeting: During the 2023 Interim Meeting open hearings, an updated presentation was given by Tina Butcher (NIST OWM) on NIST training activity. The updates will appear in Publication 16. Doug Rathbun (IL) wanted to thank NIST for all they do to advance training among the membership. Mahesh Albuquerque (CO) commended the NIST office of W&M for their efforts and is excited about some of the new materials that are being developed. Mahesh looks forward to continuing to work with NIST on training. Ivan Hankins (IA) expressed appreciation for the online material and virtual options that have become available. Jim Pettinato (PDC AMC representative) reminded the body that there are funds available from the AMC designated for assisting jurisdictions in providing training, and can be used to cover costs such as instructor travel, materials, etc. The application can be found on the NCWM website.

Regional Association Comments:

WWMA 2022 Annual Meeting: The committee heard no comments on this item.

The WWMA PD Committee recommends this as an informational item on the NCWM agenda.

SWMA 2022 Annual Meeting: The PDC heard no comments on this item and recommends that the data be updated and that the item remain an informational item.

CWMA 2022 Interim Meeting: Doug Musick (KS) suggested scheduling training for an upcoming CWMA meeting. Loren Minnich (KS) agreed and mentioned that prior to the pandemic there was a precision scales training scheduled for the 2020 Annual meeting that had to be moved to a virtual meeting and the training was never rescheduled.

The CWMA PD Committee recommended this as an informational item on the NCWM agenda.

NEWMA 2022 Interim Meeting: Ms. Tina Butcher – (NIST Office of Weights & Measures) gave an update on the training status and opportunities being offered by NIST. NIST is currently holding in-person training with small classes on campus. NIST will continue to offer both in-person and virtual training. The virtual trainings have the capability to reach many more people than in person only. They are also exploring hybrid training which would be both in-person and virtual. NIST is addressing staffing shortages with the loss of three long-term employees. Robert Murnane – Seraphin Test Measure – stated concerns over the lack of NIST staffing and supports having full-time staff hired to meet needs and to not rely on annuitant positions to fill gaps. Dr. Katrice Lippa – NIST Chief Office of Weights & Measures stated that there are challenges in recruiting metrology experts into NIST as it takes years for individuals to gain the needed subject matter expertise to qualify for these positions however they are making progress in filling slots.

The NEWMA PD Committee recommends this as an informational item on the NCWM agenda.

EDU-3 I Instructor Improvement

The Committee has reiterated multiple times in the past that the responsibility for the training employee rests with individual organizations (weights and measures jurisdictions and industry alike). While NIST and other training providers offer excellent sources of training and training materials, organizations must develop and manage their own training programs, including developing trainers; establishing individual development plans for employees; and identifying strategies for continually assessing and responding to training needs. The Committee recognizes that NIST OWM cannot possibly train all weights and measures inspectors in the country. The state and municipal jurisdictions have ultimate responsibility for training and qualifying their personnel. To fulfill this responsibility, jurisdictions should be making individual plans to maintain or bolster their training efforts. NIST OWM should be viewed as one vital resource to support that effort. The Professional Development Committee is another resource. The Committee has created and posted on its website, the “Body of Knowledge” to establish uniform learning objectives for weights and measures professionals. In addition, the Committee has posted a Model Field Training Program document on its website. This program outlines methods to evaluate and document training and offers guidance on training new inspectors and taking steps to ensure their ongoing development.

NIST OWM has also provided ongoing contributions to assist the community in the development of instructors. OWM has provided legal metrology training for weights and measures jurisdictions and industry for many years but does not have the resources to respond to the numerous training requests it receives. OWM has long recognized that there are many individuals with extensive legal metrology experience who have the skills needed to provide this type of training. OWM hopes to continue to draw from this pool to develop trainers who can present schools with NIST, thus leveraging NIST resources; providing more timely classes; and providing a way to more broadly share the valuable expertise these individuals possess. In the past ten years, NIST OWM has taken on more field inspection classes than it would otherwise be able to do because of the co-instructors drawn from its current pool of trainers.

Mrs. Tina Butcher (NIST OWM) has regularly updated the Committee on instructor development work by NIST OWM.

See the Committee's past reports for background information on this item along with other details on available tools for trainer development and NIST OWM's efforts and partnership with the NCWM to continue this work.

NCWM Meeting Comments:

NCWM 2023 Interim Meeting: No comments were heard from the floor. Mrs. Tina Butcher, NIST OWM, reported that OWM has not undertaken any new work in this area in 2022. As reported in the past few years, Mrs. Butcher emphasized that OWM sincerely appreciates the time and resources committed by these trainers and their organizations in support of this important partnership and the expertise that these trainers bring to NIST training events and looks forward to continued collaboration. OWM will continue to provide the Committee with updates on its progress as well as continue to collaborate with and support the Committee in its work.

Regional Association Comments:

WWMA 2022 Annual Meeting: The committee heard no comments on this item.

The WWMA PD Committee recommends this as an informational item on the NCWM agenda.

SWMA 2022 Annual Meeting: The PDC heard no comments on this item and recommends that the item remain an informational item.

CWMA 2022 Interim Meeting: No comments were heard on this item.

The CWMA PD Committee recommends this as an informational item on the NCWM agenda.

NEWMA 2022 Interim Meeting: No comments were heard.

The NEWMA PD Committee recommends this item as informational for the NCWM agenda.

EDU-4 I Recommended Topics for Conference Training

The Board of Directors has charged the Committee with recommending appropriate topics for the technical sessions at future annual meetings. The Board of Directors asks the PDC to review and prioritize possible presentation topics and to submit those to the NCWM Chairman. The Chairman will coordinate with NCWM staff to secure presenters.

The following is a list of technical presentations made at the NCWM since 2009. Presentations given since 2010 are available at www.ncwm.com/annual-archive.

- Planning and Coordinating a National Market Place Survey (Ms. Rachelle Miller, WI, 2017)
- The Life Cycle of Petroleum from Well to Retail (Mr. Prentiss Searles, API 2017)
- The United States Mint at Denver – Gold, Coins and Embezzlement (Mr. Thomas Fesing, 2016)
- Understanding Transportation Network Systems (Ms. Andrea Ambrose Lobato, Lyft and Mr. Bob O' Leary, Uber 2016)
- Regulatory Consideration for Legalized Marijuana (Ms. Julie Quinn, MN, and Mr. Nick Brechun, CO, 2016)
- Motor Oil Quality Violations (Mr. Tom Glenn, Petroleum Quality Institute of America, 2014)
- Making Sense of Electronic Receipts (Mr. Justin Hotard, Vice President and General Manager, NCR Corporation, 2014)
- LNG & CNG Motor Fuel – A Technical Briefing from Industry (Mr. Doug Horne, President CVEF, Mr. Zack Wester, Blu, Mr. Jeff Clarke, NGVA, 2014)
- Taximeter Technology Advancements (Mr. Matt Daus, International Association of Transportation Regulators, 2013)
- Advanced Vehicles and Fuel Quality (Mr. John M Cabaniss, Jr., Association of Global Automakers, 2013)
- Economic Justification and Demonstrating Value of Weights and Measures (Mr. Tim Chesser, Arkansas)

Bureau of Standards, 2012)

- Conducting Effective Marketplace Surveys and Investigations (Ms. Judy Cardin, Wisconsin Weights and Measures, 2012)
- Public Relations and Customer Service as Regulators (Mr. Doug Deiman, Alaska Division of Measurement Standards/CVE, 2012)
- An Overview of Unit Pricing in the United States (Mr. David Sefcik, NIST OWM, 2011)
- Grocery Unit Pricing in Australia (Mr. Ian Jarratt, Queensland Consumers Association, 2011)
- Grocery Unit Pricing in Canada (Mr. Ian Jarratt, Queensland Consumers Association, 2011)
- The U.S. Hydrogen Measuring System: The Turning Point? (Ms. Kristin Macey, California Division of Measurement Standards, 2011)
- Corrosion in Ultra Low Sulfur Diesel Underground Storage Systems (Mr. Prentiss Searles and Ms. Lorri Gainawi, American Petroleum Institute, 2010)
- Risk-Based Inspection Schemes (Mr. Henry Oppermann, Weights and Measures Consulting, LLC, 2010)
- Diesel Exhaust Fluid (DEF) (Mr. Gordon Johnson, Gilbarco, Inc., and Mr. Randy Moses, Wayne, 2009)
- Fuel Volatility and Ethanol Blending (Mr. Jim McGetrick, BP Products, 2009)
- Investigative Techniques (Mr. Michael Cleary, Retired, 2009)

At the Interim Meeting 2019 the following suggestions from the floor for additional topics were received:

- Investigative reporting
- D.E.F. Testing requirements, special considerations (handling, safety, equipment)
- Differentiation between weight classifier and normal rounding scales
- Organizing/publishing existing training materials

NCWM Meeting Comments:

NCWM 2022 Interim Meeting: The 2022 Interim Meeting was held in an in-person and online hybrid meeting format. Mr. Ethan Bogren (Westchester Co., NY) gave a presentation on EDU-4. An overview of recommended topics for conference training was provided to members. Previous training topics were discussed and recommendations were solicited for future training topics.

No comments were received during the open hearings.

NCWM 2022 Annual Meeting: Mr. Ethan Bogren (Westchester Co., NY) gave a presentation on EDU-4. An overview of recommended topics for conference training was provided to members. Previous training topics were discussed and recommendations were solicited for future training topics

No comments were heard from the floor.

NCWM 2023 Interim Meeting: No comments were heard from the floor.

Regional Association Comments:

WWMA 2022 Annual Meeting: Ms. Cadence Matijevich (NV) is proud to host the WWMA Annual meeting next year and welcomes training topic ideas for that conference. Mr. Mahesh Albuquerque (CO) would like to consider development of specific training for RSAs to take the national exam.

The WWMA PD Committee recommends this as an informational item on the NCWM agenda.

SWMA 2022 Annual Meeting: Dr. Matt Curran (FL) proposed the development of a new committee member orientation and mentorship program for the SWMA and volunteered to lead the effort. Dr. Curran mentioned that this idea has been discussed in other regions and at the national level, but the organizations had differing opinions. Mr. Stephen Benjamin (NC) commented that he supports the idea. Mr. Robert Murnane (Seraphin) encouraged training for all regions. The PDC will explore options for the development of this training.

The SWMA PD Committee recommends this item as informational on the NCWM agenda.

CWMA 2022 Interim Meeting: Loren Minnich (KS) recommended precision scales as well as retail computing, medium capacity scales, large capacity scales, and point of sale systems for upcoming conference training topics. Mr. Minnich mentioned that NIST will continue some trainings as web based. He also indicated he would like to see some trainings done outside of meetings. Such trainings could rotate through the central states to help with training inspectors within the central region.

Doug Rathbun (IL) stated Illinois will be having a “fuel school” in mid-October to provide inspectors with a deeper and broader knowledge of the fuel industry. There will be approximately 60 spots for the two-day school. The trainers for the training include Christy Moore, Scott Fenwick, Russ Lewis, and other industry experts.

Ivan Hankins (IA) mentioned there is a field training manual for inspectors, which includes sections from Handbook 130 Uniform Weights & Measures Law and Uniform fuel and Automotive and Lubricants. Regulations ; Handbook 44 LMD code, General Code, and Fundamental considerations. The manual explains how to do the inspections, general code, in order to be consistent with other inspectors within each state. Mr. Hankins would like to see a training on Retail Motor Fuel Dispensers utilizing the manual. Doug Rathbun (IL) expressed concern that some experienced inspectors may not be interested in attending such a training. Mr. Rathbun would like to have some trainings for those more experienced inspectors.

Bob Murnane (Seraphin) suggested extending conference week and have training at either the front or the end of the conference meetings. Michael Keilty (Endress + Hauser) echoed Mr. Murnane’s comments. He mentioned the Western conference adds a day specifically for training sandwiched within the conference. The schedule then allows the committee to hold their work sessions during the day on the second day, which relieves some of the burden on the committee members.

Doug Musick (KS) stated we have relied on NIST for so long for trainings and suggested we should start leaning on more trainings within our region. He commented there may be some industry interest in supporting training using funds from the associate membership fund.

Chris Guay (CGGC) provided that NCWM doesn’t know what an individual state’s interests are and who the stake holders are for each state. Mr. Guay suggested state directors should think about what trainings would be important for their programs and send those suggestions to our NCWM representative, Loren Minnich.

Brenda Geist (KS) stated as an experienced inspector she would appreciate trainings on new technology and updated methods

The CWMA PD Committee recommends this as an informational item on the NCWM agenda.

NEWMA 2022 Interim Meeting: No comments were heard.

The NEWMA PD Committee recommends this as an informational item on the NCWM agenda.

PMT – PROGRAM MANAGEMENT

PMT-1 I Safety Awareness

One of the goals of the PDC is to educate jurisdictions on safety issues and to provide resources to help them implement effective safety and health management programs. The Committee intends to use the safety page at www.ncwm.com/safety as a place for states to share information and resources to help them address each of the major steps in creating and maintaining an effective safety program.

In July 2017, the Board of Directors created the Safety Task Group to create a safety tool kit to help weights and

measures organizations create or improve their own safety programs. The toolkit is complete and is posted on the NCWM website at www.ncwm.com/safety.

At the 2018 Annual Meeting, the NCWM BOD decided to make the task group a permanent subcommittee associated with the PDC. The newly formed Safety Subcommittee will assume responsibility for:

- Maintaining and updating the safety toolkit.
- Writing and deploying the NCWM annual safety survey, as well as reporting on the results each year.
- Finding resources and/or developing weights-and-measures-focused materials relating to the top hazards identified through the safety survey or through developing the toolkit.
- Building a safety culture and developing safety leadership within the NCWM through participation on the Safety Subcommittee

The Safety Subcommittee is currently working to improve the annual safety survey by:

- Including questions about near-miss incidents and about incidents resulting in lost or restricted time over multiple years.
- Contacting counties and associate members to increase participation.
- Writing an instruction guide to help participants gather information they need before completing the survey.

The Committee expresses appreciation to the members of the Safety Subcommittee for their willingness to volunteer for this important work.

Safety Subcommittee Members		
Chair	John Bell	Missouri
Public Sector	Jason Flint	New Jersey
Public Sector	Mike Sikula	New York
Private Sector	Tisha Arriaga	Marathon Petroleum, LLC
Private Sector	Bill Callaway	Crompco
Private Sector	Remy Cano	Northwest Tank & Environmental Services
Private Sector	Robert LaGasse	Mulch and Soil Council

The NCWM safety page houses the list of regional safety liaisons and an archive of past safety articles.

Regional Safety Liaisons:

Central Weights and Measures Association (CWMA)

Mr. John Bell, Missouri Department of Agriculture

Northeastern Weights and Measures Association (NEWMA)

Mr. Michael Peeler, New Jersey Weights and Measures

Southern Weights and Measures Association (SWMA)

Mr. Robert Huff, Delaware Department of Agriculture

Western Weights and Measures Association (WWMA)

Mr. Remy Cano, Northwest Tank & Environmental Services

Each region is responsible for providing a safety article for the NCWM newsletter according to the following schedule:

Safety Article Schedule		
Issue Date	Source	Article Deadline
Issue 2 (May 2023)	NEWMA	April 15, 2023
Issue 3 (September 2023)	CWMA	August 13, 2023
Issue 1 (February 2024)	WWMA	January 15, 2024
Issue 2 (May 2024)	SWMA	April 15, 2024

The Committee would like to thank the following individuals for their contributions since the 2020 Annual Meeting:

- *The Psychology of Safety* – Mr. Ron Armstrong (NWTES)
- *Back to Your Health* – Ms. Elizabeth Koncki (MD)
- *Engineering Controls* – Mr. Mike Sikula (NY)
- *Avoid Hostile Encounters in the Field* – Mr. Mike Sikula (NY)
- *Who's Got Your Back?* – Mr. Ron Armstrong (NWTES)
- *Cannabis Facility Safety Awareness* – Mr. John Bell (MO)

NCWM Meeting Comments:

NCWM 2022 Interim Meeting: The 2022 Interim Meeting was held in an in-person and online hybrid meeting format. Subcommittee Chair, Mr. John Bell (MO) briefed the members on activities of the Safety subcommittee. The Subcommittee may meet between the annual and interim meetings to discuss issue and topics relating to safety. Mr. Bell stated the Annual Safety Awareness survey is being revised and will be sent out to state directors once finalized. Once comments are received, these will be consolidated for presentation at the 2022 Annual Meeting. A similar survey may be developed and sent to industry giving them an opportunity to share their concerns anonymously. Mr. Bell requested for himself or any member of the subcommittee to be contacted with any information, which may be added to the webpage. Mr. Bell encouraged everyone to read the safety articles published on the NCWM website.

No comments were heard during the open hearing.

NCWM 2022 Annual Meeting: Mr. David Fraser (Montana) provided a presentation on behalf of the Safety Subcommittee. The presentation reviewed the replies submitted in response to the NCWM Safety Survey sent out January 2022. The survey received 47 responses from OWM Officials.

Ivan Hankins (Iowa) commented on the exceptional quality of work done by the Safety Subcommittee. Jim Willis (New York) echoed the sentiment provided by Mr. Hankins. Mr. Willis noted that more scrutiny was put on the safety aspect of equipment being certified at the state's metrology lab, particularly with VTM provers. The lab staff was able to document flaws in equipment once scrutinized. It was noted that this aided municipalities in the justification to replace aging equipment. Cheryl Ayer (New Hampshire) noted that financial support from the state is often not easily obtained for investments in safety.

NCWM 2023 Interim Meeting: No comments were heard from the floor.

Regional Association Comments:

WWMA 2022 Annual Meeting: The committee heard no comments on this item.

The WWMA PD Committee recommends this as an informational item on the NCWM agenda.

SWMA 2022 Annual Meeting: The PDC heard no comments on this item and recommends that the item remain an informational item.

CWMA 2022 Interim Meeting: Elizabeth Lambert (MO) read a text message comment from Johnny Bell, Safety Liaison. Although he is currently at NIST campus for training, he hopes to attend the 2023 CWMA Annual Meeting.

He would like for anyone with safety concerns they would like disseminated to other states and anyone with ideas for articles for the newsletter to contact him.

The CWMA PD Committee recommends this as an informational item on the NCWM agenda.

NEWMA 2022 Interim Meeting: Mr. James Willis (New York) gave information on an accident that occurred at a VTM fueling location in New York. An explosion occurred adjacent to inspection activity. While inspection staff were not directly involved in the accident they were nearby, and the incident highlights the importance of safety issues.

The NEWMA PD Committee recommends this item as informational for the NCWM agenda.

PMT-2 I Skimmer Education Task Group

This is a new agenda item added to the report by the PDC after the Publication 15 printing deadline.

The Skimmer Education Task Group (SETG) held its first meeting during the 2021 Annual Meeting. The SETG is made up of industry members, regulatory officials, and interested parties for the purpose of continuing work identified by the S&T Committee's Credit Card Skimmer Task Group. Under the guidance of the Professional Development Committee (PDC), the task group will develop education and outreach strategies and gather or produce materials to educate regulatory officials, fuel retailers, industry members and consumers on payment card information theft via skimming devices. The SETG will provide information and organize education sessions to share recommendations for safety procedures and technologies to better protect consumer payment information and reduce the risk of skimmer installation at fuel dispensers. The SETG will continue in force until the task group Chair and the PDC Chair agree the work has been completed. The task group may also be disbanded by vote of the NCWM Board of Directors. The task group will meet via electronic media, teleconferences, face-to-face meetings, or other means available.

Co-Chair, Ms. Paige Anderson (NACS) provided a report of their meeting held on January 10, 2021 during the open hearing. Following is a summary of her remarks.

The SETG expressed their appreciation for the leadership and assistance of Mr. Hal Prince (FL), the NCWM board and staff, Mr. David Aguayo (San Luis Obispo Co., CA) and the PDC in helping to create the Task Group. Many of the Task Group members worked on the policy item before the Specifications and Tolerances (S&T) Committee to establish user requirements on fuel dispensers to prevent skimming, and during that time recognized the importance of education and training.

The SETG's mission to educate the membership and bring together all stakeholders in sharing information on skimming. The SETG recognizes that technology changes include the devices used to steal debit and credit card information, the technology to prevent these thefts, and the criminals become more organized and sophisticated. NCWM provides a powerful platform to bring together all stakeholders – state officials, law enforcement, manufacturers, service companies, retailers, security providers and consumers.

In organizing the SETG, it was decided that having co-chairs representing both regulatory officials and the private sector demonstrates partnership in combatting skimming and the criminal organizations.

The SETG held their first meeting on Sunday, January 10th, 2021 via web conference. The number of attendees who attended the meeting was remarkable. It clearly demonstrated that there is a significant need for knowledge on this issue. The SETG discussed and finalized their 2021 goals. The two goals are to:

1. Establish a library of resources for the public on the NCWM website. The resources will consist of videos, articles, reports, checklists, contact information, best practices, and other information. The SETG recognized that there may be some sensitive or proprietary data that should not be put on the public-facing website but may be shared with the membership or a targeted group of the membership. Alternative distribution methods would be determined and used in these cases. Communicating the availability and location of these resources to the membership and beyond is an important element of the strategy and project.

2. Host presentations and briefings from subject matter experts at future NCWM meetings. The SETG is planning to provide such a briefing at the Annual meeting in July 2021. The SETG is looking at 3 key constituencies to provide presentations:

- Law enforcement - overview of the landscape of activity on skimming (e.g., U.S. Secret Service)
- Private sector security experts - to share what they are seeing and describe the types of technology being used by the criminals and methods used to combat skimming
- Retail/industry - updates on the transition to EMV card readers, etc.

The SETG is also working to identify other key stakeholders to either present or to join the SETG. These key stakeholders included financial institutions such as banks, credit card providers, and credit unions.

The SETG welcomes volunteers and encourages participation from all members. If you or your staff are interested, contact Ms. Paige Anderson (NACS), Mr. John McGuire (NJ), members of the PDC, or the NCWM staff.

Skimmer Education Task Group Members		
Co-Chair	Paige Anderson	NACS
Co-Chair	John McGuire	New Jersey
Public Sector	Bobby Fletcher	Louisiana
Public Sector	John Larkin	California
Public Sector	Mike Harrington	Iowa
Public Sector	Vince Wolpert	Arizona
Public Sector	Scott Borse	PEI
Public Sector	Owen Dewitt	FlintLoc Technologies, LLC
Public Sector	Brent Price	Gilbarco, Inc.
Public Sector	Mike Roach	Invenco Payment Systems
Public Sector	Scott Schober	Berkley Varitronics Systems

NCWM Meeting Comments:

NCWM 2022 Interim Meeting: The 2022 Interim Meeting was held in an in-person and online hybrid meeting format. Co-Chair of the SETG, Mr. John McGuire (NJ) reported the SETG continues to educate, promote awareness and share information regarding payment card skimming and theft. To accomplish this, the Skimming Education Task Group has focused on inviting subject matter experts to provide informative presentations and discussions on payment card security, creating a library of resources to help reduce the threat of payment card skimming and other forms of payment card theft and creating a template or standard form to capturing key information on skimming incidents. The SETG has identified a potential speaker specializing in security for either the annual meeting in July 2022 or the interim meeting next January.

No comments were heard during the open hearing.

NCWM 2022 Annual Meeting: During the 2022 Annual Meeting open hearings an update was provided by Mr. John McGuire (NJ), co-chair of the Skimmer Education Task Group. Mr. McGuire presented a Credit Card Skimmer Inspection Report PDF form developed by the SETG.

No comments were heard from the floor.

NCWM 2023 Interim Meeting: No comments were heard from the floor.

Regional Association Comments:

WWMA 2022 Annual Meeting: The committee heard no comments on this item. The committee would like to note that new security requirements for retail motor fuel devices took effect in the 2022 edition of HB44 in section UR.4.2. Security for Retail Motor Fuel Devices (RMFD) of the Liquid Measuring Devices Code.

2023 PDC Interim Meeting Report

The WWMA PD Committee recommends this as an informational item on the NCWM agenda.

SWMA 2022 Annual Meeting: The PDC heard no comments on this item and recommend that the item remain an informational item.

CWMA 2022 Interim Meeting: Mike Harrington (IA), member of the SETG, provided there have been no additional updates from the task group since the NCWM Annual meeting in July.

The CWMA PD Committee recommends this as an informational item on the NCWM agenda.

NEWMA 2022 Interim Meeting: No comments were heard.

The NEWMA PD Committee recommends this item as informational on the NCWM agenda.

Mr. Paul Floyd, Louisiana | Committee Chair

Mr. Ethan Bogren, Westchester Co., New York | Member

Mr. Scott Simmons, Colorado | Member

Mr. Daniel Walker, Ohio | Member

Mr. Jim Pettinato, TechnipFMC | AMC Representative

Mr. John Bell, Missouri | Safety Liaison

Ms. Tina Butcher, NIST, OWM | NIST Liaison

Mr. Jerry Buendel, Retired | Certification Coordinator

Mr. John McGuire, New Jersey | Co-Chair Skimmer Education Task Group

Ms. Paige Anderson, NACS | Co-Chair Skimmer Education Task Group

Professional Development Committee

Appendix A

Summary of NIST OWM Training Conducted in 2021

(PDC Agenda Item EDU-2)

Summary of NIST OWM Training Conducted in 2021			
Area/Course Name	Start Date	Location	No. of Students
Laboratory Metrology			
Fundamentals of Metrology & LAP Problems Preparation	1/12/21 & 5/11/21	Web-based	6
Regional Measurement Assurance Programs			
MidMAP	10/24/21	Web-based	25
NEMAP	08/02/21	Web-based	21
SEMAP	03/22/21	Web-based	32
SWAP	08/30/21	Web-based	25
WRAP	05/03/21	Web-based	22
Webinars			
Basic Uncertainty Concepts	05/20/21	Web-based	8
Contract Review	03/11/21	Web-based	8
Contract Review	07/29/21	Web-based	5
Document Control and Record Keeping	03/04/21	Web-based	10
Document Control and Record Keeping	07/22/21	Web-based	6
Info Hour – Assessing Field Standards for Calibration & Use (3 sessions: 6/22/21; 9/21/21; & 11/9/21)	06/22/21	Web-based	172
Software Verification & Validation	06/10/21	Web-based	9
State Laboratory Annual Submission Process	07/01/21	Web-based	58
Laws and Metric Program			
Packaging & Price Verification			
Handbook 130 – Examination Procedure for Price Verification <i>5 Sessions:</i> 1/21/2021; 2/16/2021; 4/14/2021; 7/14/2021; 10/1/2021	5 Sessions Jan to Oct 2021	Web-based	Total 178
Handbook 130 – Overview of the Uniform Packaging and Labeling Regulation <i>4 Sessions:</i> 2/17/2021; 4/15/2021; 7/15/2021; 10/7/2021	4 Sessions Feb to Oct 2021	Web-based	Total 156
Handbook 133 – How to Test Animal Bedding <i>4 Sessions:</i> 2/24/2021; 4/28/2021; 7/13/2021; 10/20/2021	4 Sessions Feb to Oct 2021	Web-based	Total 71
Handbook 133 – Overview of Handbook 133 <i>5 Sessions:</i> 2/18/2021; 4/19/2021; 7/27/2021; 8/26/2021; 10/14/2021	5 Sessions Feb to Oct 2021	Web-based	195
Weights and Measures Inspections – Evidence, Search and Seizure, and Due Process <i>5 Sessions:</i> 1/26/2021; 2/23/2021; 4/22/2021; 7/1/2021; 10/26/2021	5 Sessions Jan to Oct 2021	Web-based	Total 183
LPG (Propane) -Verifying the Net Contents of 20 lb Cylinders (Part 1) - NEW <i>4 Sessions:</i> 6/30/2021; 7/26/2021; 8/24/2021; 10/21/2021	4 Sessions Jun to Oct 2021	Web-based	Total 338
Metric Education			
Info Session – Metric Education Resources	05/22/21	Web-based	5

PDC 2022 Interim Meeting Report
Appendix A – Summary of NIST OWM Training Conducted in 2021

	09/11/21	Web-based	4
	09/29/21	Web-based	6
Info Session – Metric Estimation	08/14/21	Web-based	6
	09/15/21	Web-based	3
Measurement System Basics – SI and US Customary Units for Regulatory Officials	08/26/21	Webinar	23
Legal Metrology Devices			
No training seminars were offered in 2021.	--	--	--

Appendix B

NIST OWM Training: Future Plans – Updated Information (PDC Agenda Item EDU-2)

No current commitments to in-person training for 2021

- All in person field inspection classes postponed until further notice

Training in FY 2022

- Travel restrictions may lift later this summer
- Continuing to assess as the situation unfolds
 - Local pandemic restrictions
 - Travel restrictions for training staff and students
- Unclear how pandemic related restrictions will affect NIST OWM’s future in-person training for all programs
 - Impact of social distancing requirements on classroom size, configuration, and ability to present to groups of students
- Lab Metrology Program closely watching NIST OWM policies regarding hosting events in-person

Training Going Forward

- Will continue to offer virtual training
- Plan to expand available virtual training topics
- Experimenting with available technology and tools to best incorporate elements of “hands on” in-field inspection training

Virtual Training Space

- Significant progress on outfitting a virtual training space at NIST for OWM’s use in delivering virtual training
 - Small group within OWM has been working with their NIST staff to plan this effort
 - Space has been allocated and equipment purchases are in progress
 - Significant support from the Physical Measurement Laboratory (OWM’s larger operating unit)
 - Looking forward to beginning work on this space

OWM Trainers

- Participating in a variety of training courses as part of their professional development
 - Virtual training design, development, and delivery

Considering Development of Hybrid Courses

- For uses during and after pandemic
- Virtual sessions coupled with hands-on sessions using virtual technology and/or local on-site trainers to help facilitate

See OWM Calendar of Events for Upcoming Training

- www.nist.gov/newsevents/upcomingevents/org/6436
- Note: A series of three new webinars planned on the topic of LPG Cylinder Refilling
 - LPG (Propane) – Verifying the Net Contents of 20 lb Cylinders (Part 1)” already in progress with several upcoming sessions

