

Riverside, California / January 26-29, 2020

Prepared in Cooperation with the National Conference on Weights and Measures, National Type Evaluation Program, National Institute of Standards and Technology Office of Weights and Measures, Central Weights and Measures Association, Northeastern Weights and Measures Association, Southern Weights and Measures Association and Western Weights and Measures Association





National Institute of Standards and Technology U.S. Department of Commerce









National Conference on Weights and Measures Overview

National Conference on Weights and Measures (NCWM), Inc. is a standards development organization for weights and measures regulatory agencies of the states, counties, and cities of the United States, as well as for federal agency use. The Interim Meeting brings together government officials and representatives of business, industry, trade associations, and consumer organizations for the purpose of hearing and discussing subjects that relate to the field of weights and measures technology and administration.

The programs of NCWM and its Committees explore the broad area of this economically important segment of governmental regulatory service. NCWM develops and recommends laws and regulations, technical codes for weighing and measuring devices used in commerce, test methods, enforcement procedures, and administrative guidelines for adoption by regulatory agencies in the interest of promoting uniformity of requirements and methods among state and local jurisdictions.

A major objective of NCWM is to foster understanding and cooperation among weights and measures officials and all industrial, business, and consumer interests. NCWM has been cited on numerous occasions for its outstanding success. The National Institute of Standards and Technology (NIST) has statutory responsibility for "cooperation with the states in securing uniformity of weights and measures laws and methods of inspection." Opinions expressed in submitted documents are those of the authors and not necessarily those of NCWM. Contributors are solely responsible for the content and quality of their material.

"Building our Future by Sharing Our Knowledge"

Craig VanBuren, NCWM Chairman Michigan

Dear NCWM Colleagues,



Welcome to Riverside, California, the historic Mission Inn, and the 2020 NCWM Interim Meeting!

As you may be aware and of great interest to everyone, the Board of Directors has set about creating a new strategic plan for NCWM to implement over the coming years. The elements that were targeted included Learning and Growth, Internal Processes, Financial, and Customer perspectives. The strategy in which those areas are to be addressed will be discussed on Wednesday morning. The Board invites everyone to attend this session in

order to share their thoughts and answer any questions the members may have.

In addition to learning about the new direction of NCWM, the Interim Meeting also provides an opportunity to discuss agenda items and network with associates. The Interim meeting provides a forum for regulators, industry representatives and other interested groups to present recommended language, data, reports, and testimony that aid in determining agenda item status for voting or further development. Task groups, steering committees, and other committees meet during the conference to work on issues and attend to conference business and operational tasks. I ask that you take the time to review Publication 15 prior to the meeting and participate in the various meetings and hearings during the week.

As a bonus to the information you receive at the conference itself, we have a great conference site this year! The Mission Inn is not only a hotel but also a living museum with several priceless artifacts featured throughout the hotel. The Mission Inn has played host to U.S. Presidents, celebrities and served as the setting in many Hollywood productions, including 1997's "Man in the Iron Mask". Presidents Roosevelt, Taft, Hoover, Nixon, Reagan and Bush Jr; social leaders such as Booker T. Washington, Susan B. Anthony, Amelia Earhart, Albert Einstein, Helen Keller and John Muir; and entertainers including Judy Garland, Bette Davis, Clark Gable, Tom Hanks, Barbra Streisand and James Brolin have all stayed, dined and relaxed at The Mission Inn throughout its storied, nearly 150-year history. I encourage you to take some time during the week to explore the hotel and its offerings.

Thank you all for the participation and contributions you provide to the conference. I look forward to seeing you in Riverside. Safe travels!

Sincerely,

Craig VanBuren

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Schedule of Events

(The schedule of events is tentative and subject to change.)

*Committee hearings will occur in the order presented below. The times of each hearing are not firm; when one Committee finishes, the next Committee will begin.

Friday, January 24, 202	20	Room
8:30 a.m. – 5:00 p.m.	NCWM Board of Directors Meeting	Santa Barbara
Saturday, January 25, 2	2020	Room
8:30 a.m. – 5:00 p.m.	NCWM Board of Directors Meeting	Santa Barbara
Sunday, January 26, 20	220	
8:00 a.m. – 10:00 a.m.	Coffee Service	Lobby
8:00 a.m. – 5:00 p.m.	Registration and Exhibits	Lobby
8:30 a.m. – 12:00 p.m.	Meter Manufacturer Association	The Renaissance Salon
9:00 a.m. – 11:30 a.m.	Fuels and Lubricants Subcommittee	Grand Parisian Ballroom/Glenwood Tavern
9:00 a.m. – 10:15 a.m.	Safety Subcommittee	Spanish Art Gallery
9:00 a.m. – 10:15 a.m.	Packaging and Labeling Subcommittee	Ho-O-Kan
10:15 a.m. – 11:30 a.m.	Credit Card Skimmer Task Group	Ho-O-Kan
11:30 a.m. – 1:00 p.m.	Lunch on Your Own	
1:00 p.m. – 3:30 p.m.	Fuels and Lubricants Subcommittee	Grand Parisian Ballroom/Glenwood Tavern
1:00 p.m. – 3:30 p.m.	Cannabis Task Group	The Renaissance Salon
3:30 p.m. – 4:00 p.m.	Joint Committee Meeting	Grand Parisian Ballroom/Glenwood Tavern
4:00 p.m. – 5:00 p.m.	Committee Agenda Review	
	Laws and Regulations Committee	Spanish Art Gallery
	Specifications and Tolerances Committee	The Renaissance Salon
	Professional Development Committee	Ho-O-Kan
	Board of Directors / NTEP Committee	Santa Barbara
5:30 p.m. – 7:00 p.m.	Chairman's Reception	Atrio

Monday, January 27, 2020		Room	
7:30 a.m. – 9:00 a.m.	Light Breakfast	Atrio	
7:30 a.m. – 5:00 p.m.	Registration and Exhibits	Lobby	
8:30 a.m. – 12:00 p.m.	Official Session – Open Hearings	Grand Parisian Ballroom/Glenwood Tavern	
	Laws and Regulations Committee	Damooni Glenwood Tavelii	
	Specifications and Tolerances Committee		
	Professional Development Committee		
	Board of Directors / NTEP Committee		
12:00 p.m. – 1:00 p.m.	Lunch on Your Own		
1:00 p.m. – 5:00 p.m.	Official Session – Open Hearings Continued	Grand Parisian Ballroom/Glenwood Tavern	
Tuesday, January 28, 2	020	Room	
7:30 a.m. – 9:00 a.m.	Light Breakfast	Atrio	
7:30 a.m. – 5:00 p.m.	Registration and Exhibits	Lobby	
7:30 a.m. – 8:30 a.m.	Associate Membership Committee	Spanish Art Gallery	
8:30 a.m. – 12:00 p.m.	Official Session – Open Hearings Continued	Grand Parisian Ballroom/Glenwood Tavern	
12:00 p.m. – 1:00 p.m.	Lunch on Your Own		
1:00 p.m. – 5:00 p.m.	Committee Work Sessions		
	Laws and Regulations Committee	Spanish Art Gallery	
	Specifications and Tolerances Committee	The Renaissance Salon	
	Professional Development Committee	Ho-O-Kan	
	Board of Directors / NTEP Committee	Santa Barbara	
Wednesday, January 29	9, 2020	Room	
7:30 a.m. – 9:00 a.m.	Light Breakfast	Atrio	
7:30 a.m. – 12:00 p.m.	Registration and Exhibits	Lobby	
8:00 a.m. – 8:50 a.m.	Board of Directors	Santa Barbara	
9:00 a.m. – 10:45 a.m.	Technical Session: NCWM Strategic Plan	Grand Parisian Ballroom/Glenwood Tavern	
11:00 a.m. – 12:00 p.m.	Joint Committee Meeting	Grand Parisian Ballroom/Glenwood Tavern	

Office	Name	Affiliation	Term Ends
Chairman	Craig VanBuren	Michigan	2020
Chairman-Elect	Hal Prince	Florida	2020
Immediate Past Chair	Stephen Benjamin	North Carolina	2020
Treasurer	Ray Johnson	New Mexico	2020
Active Membership – Central	Ivan Hankins	lowa	2020
Active Membership – Western	Mahesh Albuquerque	Colorado	2022
Active Membership – Southern	Gene Robertson	Mississippi	2023
Active Membership – Northeastern	Jack Walsh	Town of Wellesley, Massachusetts	2024
At-Large	Shelly Miller	Wisconsin	2021
At-Large	Rebecca Richardson	MARC-IV Consulting	2023
AMC Representative	Chris Guay	Procter and Gamble, Co.	2022
Honorary NCWM President	Dr. Walter G. Copan	NIST Director	NA
Executive Director	Don Onwiler	NCWM	NA
Executive Secretary	Dr. Douglas Olson	NIST, Office of Weights and Measures	NA
NTEP Administrator	Darrell Flocken	NCWM	NA
Measurement Canada Advisor	Carl Cotton	Measurement Canada	NA
National Type Evaluation Program Cor	mmittee (NTEP)		
Office	Name	Affiliation	Term Ends
Committee Chair	Stephen Benjamin	North Carolina	2020
Member	Craig VanBuren	Michigan	2021
Member	Hal Prince	Florida	2022
Member	Mahesh Albuquerque	Colorado	2023
Member	Jack Walsh	Town of Wellesley, Massachusetts	2024
NTEP Administrator	Darrell Flocken	NCWM	NA
Finance Committee			
Office	Name	Affiliation	Term Ends
Committee Chair	Hal Prince	Florida	2020
Nominated Chair-Elect	TBD		2021
Treasurer	Ray Johnson	New Mexico	2020
AMC Representative	Chris Guay	Procter and Gamble, Co.	2023
Executive Director	Don Onwiler	NCWM	NA

Office	Name	Affiliation	Term Ends
Committee Chair	Ethan Bogren	Westchester County, New York	2020
Member	Mauricio Mejia	Florida	2021
Member	John McGuire	New Jersey	2022
Member	Doug Rathbun	Illinois	2023
Member	Tim Elliott	Washington	2024
AMC Representative	Prentiss Searles	American Petroleum Institute	2023
Canadian Technical Advisor	Lance Robertson	Measurement Canada	NA
NIST Technical Advisor	David Sefcik	NIST, Office of Weights and Measures	NA
NIST Technical Advisor	Lisa Warfield	NIST, Office of Weights and Measures	NA
Professional Development Committee (I	PDC)		
Office	Name	Affiliation	Term Ends
Committee Chair	Marc Paquette	Vermont	2020
Member	David Aguayo	San Diego County, California	2021
Member	Brenda Sharkey	South Dakota	2022
Member	Scott Ferguson	Michigan	2023
Member	Paul Floyd	Louisiana	2024
AMC Representative	James Pettinato	Technip FMC	2023
Safety Liaison	Vacant		NA
NIST Liaison	Tina Butcher	NIST, Office of Weights and Measures	NA
Professional Certification Coordinator	Jerry Buendel	Retired	NA
Specifications and Tolerances Committee	ee (S&T)		
Office	Name	Affiliation	Term Ends
Committee Chair	Loren Minnich	Kansas	2024
Member	Jason Flint	New Jersey	2020
Member	Josh Nelson	Oregon	2021
Member	Brad Bachelder	Maine	2022
Member	Jason Glass	Kentucky	2023
Canadian Technical Advisor	Luciano Burtini	Measurement Canada	NA
NIST Technical Advisor	John Barton	NIST, Office of Weights and Measures	NA
NIST Technical Advisor	G. Diane Lee	NIST, Office of Weights and Measures	NA
	Mike Manheim	NCWM	NA

Nominating Committee			
Office	Name	Affiliation	Term Ends
Committee Chair	Stephen Benjamin	North Carolina	2020
NEWMA Representative	James Cassidy	Massachusetts	2020
CWMA Representative	Ivan Hankins	lowa	2020
SWMA Representative	Stephen Benjamin	North Carolina	2020
Member	Ron Hayes	Missouri	2020
Member	Hal Prince	Florida	2020
Credentials Committee			
Office	Name	Affiliation	Term Ends
Committee Chair	David Aguayo	County of San Luis Obispo, California	2020
Member	Vanessa Benchea	Florida	2023
Coordinator	Darrell Flocken	NCWM	NA
Appointive Officials			
Office	Name	Affiliation	Term Ends
Chaplain	Gene Robertson	Mississippi	2020
Parliamentarian	Louis Straub	Fairbanks Scale, Inc.	2020
Presiding Officer	Ethan Bogren	Westchester County, New York	2020
Presiding Officer	Tim Chesser	Arkansas	2020
Presiding Officer	Scott Ferguson	Michigan	2020
Presiding Officer	Kevin Schnepp	California	2020
Sergeant-at-Arms	TBD	Washington	2020
Sergeant-at-Arms	TBD	Washington	2020
Associate Membership Committee	e		
Office	Name	Affiliation	Term Ends
Committee Chair	Bob Wiese	Northwest Tank and Environmental Services	2020
Vice-Chair	Ron Gibson	Seraphin Test Measure	2020
Secretary / Treasurer	Vacant		2020
Member	Richard Shipman	Rice Lake Weighing Systems, Inc.	2020
Member	Chris Guay	Procter and Gamble, Co.	2020
Member	Rebecca Richardson	MARC – IV Consulting	2020
Member	Prentiss Searles	American Petroleum Institute	2022
Member	Bob Wiese	Northwest Tank and Environmental Services	2022
Member	David Calix	NCR	2023
Member	Bob Murnane	Seraphin Test Measure	2023

Fuels and Lubricants Subcommittee		
Office	Name	Affiliation
Committee Chair	Bill Striejewske	Nevada
Vice-Chair	Ron Hayes	Missouri
Vice-Chair	Randy Jennings	Tennessee
Secretary	Rebecca Richardson	MARC – IV Consulting
Vice-Secretary	Vanessa Benchea	Florida
NIST Technical Advisor	David Sefcik	NIST, Office of Weights and Measures
NIST Technical Advisor	Lisa Warfield	NIST, Office of Weights and Measures
Advisory Member	Curtis Williams	Retired
Public Sector Member	Mahesh Albuquerque	Colorado
Public Sector Member	David Au	Georgia
Public Sector Member	Vanessa Benchea	Florida
Public Sector Member	Stephen Benjamin	North Carolina
Public Sector Member	Tim Elliott	Washington
Public Sector Member	Mike Harrington	lowa
Public Sector Member	Lori Jacobson	South Dakota
Public Sector Member	Allan Morrison	California
Public Sector Member	Doug Rathbun	Illinois
Public Sector Member	Kevin Schnepp	California
Public Sector Member	Brenda Sharkey	South Dakota
Public Sector Member	Charles Stutesman	Kansas
Public Sector Member	Kevin Upschulte	Missouri
Public Sector Member	Timothy White	Michigan
Public Sector Member	Michelle Wilson	Arizona
Private Sector Member	Kevin Adlaf	ADM
Private Sector Member	Holly Alfano	Independent Lubricant Manufacturers Association
Private Sector Member	Teresa Alleman	National Renewable Energy Laboratory
Private Sector Member	Matt Bjornson	Bjornson Oil Company
Private Sector Member	Joy Black	The Lubrizol Corp.
Private Sector Member	Dale Bohn	Flint Hills Resources, LP
Private Sector Member	Chuck Corr	Retired
Private Sector Member	Davis Cosey	Davis Oil Company
Private Sector Member	Kelly Davis	Renewable Fuels Association
Private Sector Member	Jacki Fee	Cargill
Private Sector Member	Scott Fenwick	National Biodiesel Board
Private Sector Member	Kevin Ferrick	American Petroleum Institute
Private Sector Member	Rick Fragnito	Shell
Private Sector Member	Jennifer Green	CITGO Petroleum Corporation
Private Sector Member	John Harkins	Energy Transfer
Private Sector Member	Marilyn Herman	Herman and Associates
Private Sector Member	Jason Holmes	BASF Corporation

Private Sector Member	William Hornbach	Chevron Global Downstream, LLC
Private Sector Member	Joanna Johnson	Automotive Oil Change Association
Private Sector Member	Brian Kernke	Loves Travel Stops
Private Sector Member	Russ Kinzig	Kinder Morgan Products Pipelines
Private Sector Member	Stephen Kirby	General Motors
Private Sector Member	David A. Kovach	BP Products
Private Sector Member	Mike Kunselman	Center for Quality Assurance
Private Sector Member	Jeffrey Leiter	Bassman, Mitchell, Alfano & Leiter Chtd.
Private Sector Member	Russ Lewis	Marathon Petroleum, LLC
Private Sector Member	Scott Mason	Phillips 66
Private Sector Member	Beverly Michels	BP Products
Private Sector Member	Kristi Moore	KMoore Consulting, LLC
Private Sector Member	Keith Penn	Colonial Pipeline Company
Private Sector Member	Derek Regal	Tesoro Companies, Inc.
Private Sector Member	Jim Rocco	Petroleum Marketers Association of America
Private Sector Member	Prentiss Searles	American Petroleum Institute
Private Sector Member	Matthew Sheehan	Chevron USA, Inc.
Private Sector Member	Dr. Prasad Tumati	Haltermann Solutions
Private Sector Member	Marie Valentine	Toyota - TEMA - TTC
Private Sector Member	Steve Vander Griend	ICM, Inc.
Packaging and Labeling Subcommittee		
Packaging and Labeling Subcommittee Office	Name	Affiliation
	Name Chris Guay	Affiliation Procter and Gamble, Co.
Office		
Office Committee Chair	Chris Guay	Procter and Gamble, Co.
Office Committee Chair NIST Technical Advisor	Chris Guay David Sefcik	Procter and Gamble, Co. NIST, Office of Weights and Measures
Office Committee Chair NIST Technical Advisor Public Sector – Central	Chris Guay David Sefcik Nicholas Owens	Procter and Gamble, Co. NIST, Office of Weights and Measures Stark County Weights and Measures, Ohio
Office Committee Chair NIST Technical Advisor Public Sector – Central Public Sector – Northeastern	Chris Guay David Sefcik Nicholas Owens Frank Greene	Procter and Gamble, Co. NIST, Office of Weights and Measures Stark County Weights and Measures, Ohio Connecticut
Office Committee Chair NIST Technical Advisor Public Sector – Central Public Sector – Northeastern Public Sector – Southern	Chris Guay David Sefcik Nicholas Owens Frank Greene Hal Prince	Procter and Gamble, Co. NIST, Office of Weights and Measures Stark County Weights and Measures, Ohio Connecticut Florida
Office Committee Chair NIST Technical Advisor Public Sector – Central Public Sector – Northeastern Public Sector – Southern Public Sector – Western	Chris Guay David Sefcik Nicholas Owens Frank Greene Hal Prince Angela Godwin	Procter and Gamble, Co. NIST, Office of Weights and Measures Stark County Weights and Measures, Ohio Connecticut Florida County of Ventura, California
Office Committee Chair NIST Technical Advisor Public Sector – Central Public Sector – Northeastern Public Sector – Southern Public Sector – Western Private Sector Member	Chris Guay David Sefcik Nicholas Owens Frank Greene Hal Prince Angela Godwin Ann Boeckman	Procter and Gamble, Co. NIST, Office of Weights and Measures Stark County Weights and Measures, Ohio Connecticut Florida County of Ventura, California Kraft Food Group, Inc.
Office Committee Chair NIST Technical Advisor Public Sector – Central Public Sector – Northeastern Public Sector – Southern Public Sector – Western Private Sector Member Private Sector Member	Chris Guay David Sefcik Nicholas Owens Frank Greene Hal Prince Angela Godwin Ann Boeckman Krister Hard af Segerstad	Procter and Gamble, Co. NIST, Office of Weights and Measures Stark County Weights and Measures, Ohio Connecticut Florida County of Ventura, California Kraft Food Group, Inc. IKEA North America Services, LLC
Office Committee Chair NIST Technical Advisor Public Sector – Central Public Sector – Northeastern Public Sector – Southern Public Sector – Western Private Sector Member Private Sector Member Private Sector Member	Chris Guay David Sefcik Nicholas Owens Frank Greene Hal Prince Angela Godwin Ann Boeckman Krister Hard af Segerstad	Procter and Gamble, Co. NIST, Office of Weights and Measures Stark County Weights and Measures, Ohio Connecticut Florida County of Ventura, California Kraft Food Group, Inc. IKEA North America Services, LLC
Office Committee Chair NIST Technical Advisor Public Sector – Central Public Sector – Northeastern Public Sector – Southern Public Sector – Western Private Sector Member Private Sector Member Private Sector Member Promotional Tool Kit Task Group	Chris Guay David Sefcik Nicholas Owens Frank Greene Hal Prince Angela Godwin Ann Boeckman Krister Hard af Segerstad Zina Juroch	Procter and Gamble, Co. NIST, Office of Weights and Measures Stark County Weights and Measures, Ohio Connecticut Florida County of Ventura, California Kraft Food Group, Inc. IKEA North America Services, LLC Pier 1 Imports
Office Committee Chair NIST Technical Advisor Public Sector – Central Public Sector – Northeastern Public Sector – Southern Public Sector – Western Private Sector Member Private Sector Member Private Sector Member Promotional Tool Kit Task Group Office	Chris Guay David Sefcik Nicholas Owens Frank Greene Hal Prince Angela Godwin Ann Boeckman Krister Hard af Segerstad Zina Juroch	Procter and Gamble, Co. NIST, Office of Weights and Measures Stark County Weights and Measures, Ohio Connecticut Florida County of Ventura, California Kraft Food Group, Inc. IKEA North America Services, LLC Pier 1 Imports Affiliation
Office Committee Chair NIST Technical Advisor Public Sector – Central Public Sector – Northeastern Public Sector – Southern Public Sector – Western Private Sector Member Private Sector Member Private Sector Member Promotional Tool Kit Task Group Office Chair	Chris Guay David Sefcik Nicholas Owens Frank Greene Hal Prince Angela Godwin Ann Boeckman Krister Hard af Segerstad Zina Juroch Name Stephen Benjamin	Procter and Gamble, Co. NIST, Office of Weights and Measures Stark County Weights and Measures, Ohio Connecticut Florida County of Ventura, California Kraft Food Group, Inc. IKEA North America Services, LLC Pier 1 Imports Affiliation North Carolina
Office Committee Chair NIST Technical Advisor Public Sector – Central Public Sector – Northeastern Public Sector – Southern Public Sector – Western Private Sector Member Private Sector Member Private Sector Member Promotional Tool Kit Task Group Office Chair Public Sector Member	Chris Guay David Sefcik Nicholas Owens Frank Greene Hal Prince Angela Godwin Ann Boeckman Krister Hard af Segerstad Zina Juroch Name Stephen Benjamin Jerry Buendel	Procter and Gamble, Co. NIST, Office of Weights and Measures Stark County Weights and Measures, Ohio Connecticut Florida County of Ventura, California Kraft Food Group, Inc. IKEA North America Services, LLC Pier 1 Imports Affiliation North Carolina Washington

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	Crompco
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.
Weigh-In-Motion Task Group		
Office	Name	Affiliation
Co-Chair	Tim Chesser	Arkansas
Co-Chair	Alan Walker	Florida
NTEP Technical Advisor	Darrell Flocken	NCWM
NIST Technical Advisor	Rick Harshman	NIST, Office of Weights and Measures
Public Sector Member	John Barton	NIST, Office of Weights and Measures
Public Sector Member	Jason Flint	New Jersey
Public Sector Member	Greg Gholston	Mississippi
Public Sector Member	Lenny Goebel	Illinois
Public Sector Member	John McGuire	New Jersey
Public Sector Member	Jason Smith	South Dakota
Private Sector Member	Jon Arnold	Intercomp Company
Private Sector Member	James Faas	YRC Freight
Private Sector Member	Brad Fryburger	Southern II Scale
Private Sector Member	Eric Golden	Cardinal Scale Manufacturing, Co.
Private Sector Member	Joe Grell	Rice Lake Weighing Systems, Inc.
Private Sector Member	Randy Hanson	International Road Dynamics
Private Sector Member	John Lawn	Rinstrum, Inc.
Private Sector Member	Louis Straub	Fairbanks Scale, Inc.
	Richard Suiter	Richard Suiter Consulting
Private Sector Member	11101101101	
Private Sector Member Private Sector Member	Brian Taylor	Intelligent Imaging Systems
		Intelligent Imaging Systems Cardinal Scale Manufacturing, Co.

Cannabis Task Group					
Office	Name	Affiliation			
Chair	James Cassidy	Massachusetts			
Public Sector Member	Brad Bachelder	Maine			
Public Sector Member	Loren Kipp Blauer	Nevada			
Public Sector Member	Stacy Carlsen	Marin County, California			
Public Sector Member	Tim Chesser	Arkansas			
Public Sector Member	Mark Ciociolo	City of Worcester, Massachusetts			
Public Sector Member	Fran Elson-Houston	Ohio			
Public Sector Member	Jason Flint	New Jersey			
Public Sector Member	Kurt Floren	Los Angeles County, California			
Public Sector Member	Paul Floyd	Louisiana			
Public Sector Member	Mike Gower	Nevada			
Public Sector Member	Elaine Grillo	City of Boston, Massachusetts			
Public Sector Member	Ivan Hankins	lowa			
Public Sector Member	Mike Harrington	lowa			
Public Sector Member	Steven Harrington	Oregon			
Public Sector Member	Ryanne Hartman	Michigan			
Public Sector Member	Kristin Macey	California			
Public Sector Member	Mike Mann	Washington			
Public Sector Member	Mauricio Mejia	Florida			
Public Sector Member	Randall Morrison	Erie County, New York			
Public Sector Member	Doug Musick	Kansas			
Public Sector Member	Angel Nazario	City of Boston, Massachusetts			
Public Sector Member	Josh Nelson	Oregon			
Public Sector Member	Laurence Nolan	Los Angeles County, California (Retired)			
Public Sector Member	Ken Ramsburg	Maryland			
Public Sector Member	William Rigby	Utah			
Public Sector Member	Kate Smetana	Colorado			
Public Sector Member	Dedrick Stephens	City of Cleveland, Ohio			
Public Sector Member	Ron Valinski	City of Worcester, Massachusetts			
Public Sector Member	James Willis	New York			
Public Sector Member	Michelle Wilson	Arizona			
Public Sector Member	John Young	Yolo County, California			
Private Sector Member	David Calix	NCR			
Private Sector Member	Brian Duncan	ECRS			
Private Sector Member	Eric Golden	Cardinal Scale Manufacturing, Co.			
Private Sector Member	Chris Guay	Procter and Gamble, Co.			
Private Sector Member	Richard Guild	The Scale People, Inc.			
Private Sector Member	George Hatziemanuel	Ohaus Corporation			
Private Sector Member	Joanna Johnson	Johnson Policy Associates, Inc.			
Private Sector Member	Charles Rutherford	CPR Squared, Inc.			

Private Sector Member	Richard Shipman	Rice Lake Weighing Systems, Inc.		
	Menara shipman	Nee Earle Weighting Systems, the		
Credit Card Skimmer Task Group				
Office	Name	Affiliation		
Chair	Hal Prince	Florida		
Public Sector Member	James Cassidy	Massachusetts		
Public Sector Member	Mike Harrington	lowa		
Public Sector Member	Eric Janke	South Dakota		
Public Sector Member	Joel Maddux	Virginia		
Public Sector Member	John McGuire	New Jersey		
Public Sector Member	Mike Sikula	New York		
Public Sector Member	Craig VanBuren	Michigan		
Public Sector Member	Scott Wagner	Colorado		
Public Sector Member	Michelle Wilson	Arizona		
Private Sector Member	Owen DeWitt	FlintLoc Technologies, LLC		
Private Sector Member	Randy Moses	Wayne Fueling Systems		
Private Sector Member	Brent Price	Gilbarco, Inc.		
Field Standards Task Group				
Office	Name	Affiliation		
Chair & SWMA Representative	Jason Glass	Kentucky		
NIST Technical Advisor	Val Miller	NIST, Office of Weights and Measures		
NEWMA Representative	Brad Bachelder	Maine		
WWMA Representative	Josh Nelson	Oregon		
CWMA Representative	Greg Vander Platts	Minnesota		
	Randy Burns	Arkansas		
Public Sector Member	Kariay borris			
Public Sector Member Public Sector Member	Kyle Pierson	New Jersey		
		New Jersey Endress + Hauser Flowtec AG, USA		
Public Sector Member	Kyle Pierson	,		
Public Sector Member Private Sector Member Private Sector Member	Kyle Pierson Michael Keilty Henry Oppermann	Endress + Hauser Flowtec AG, USA		
Public Sector Member Private Sector Member Private Sector Member Multiple Dimension Measuring Device W	Kyle Pierson Michael Keilty Henry Oppermann Vork Group	Endress + Hauser Flowtec AG, USA Weights and Measures Consulting, LLC		
Public Sector Member Private Sector Member Private Sector Member Multiple Dimension Measuring Device W	Kyle Pierson Michael Keilty Henry Oppermann Vork Group Name	Endress + Hauser Flowtec AG, USA Weights and Measures Consulting, LLC Affiliation		
Public Sector Member Private Sector Member Private Sector Member Multiple Dimension Measuring Device W Office Chair	Kyle Pierson Michael Keilty Henry Oppermann York Group Name Chris Senneff	Endress + Hauser Flowtec AG, USA Weights and Measures Consulting, LLC Affiliation Rice Lake Weighing Systems, Inc.		
Public Sector Member Private Sector Member Private Sector Member Multiple Dimension Measuring Device W Office Chair NTEP Technical Advisor	Kyle Pierson Michael Keilty Henry Oppermann Vork Group Name Chris Senneff Darrell Flocken	Endress + Hauser Flowtec AG, USA Weights and Measures Consulting, LLC Affiliation Rice Lake Weighing Systems, Inc. NCWM		
Public Sector Member Private Sector Member Private Sector Member Multiple Dimension Measuring Device W Office Chair NTEP Technical Advisor NIST Technical Advisor	Kyle Pierson Michael Keilty Henry Oppermann York Group Name Chris Senneff Darrell Flocken Rick Harshman	Endress + Hauser Flowtec AG, USA Weights and Measures Consulting, LLC Affiliation Rice Lake Weighing Systems, Inc. NCWM NIST, Office of Weights and Measures		
Public Sector Member Private Sector Member Private Sector Member Multiple Dimension Measuring Device W Office Chair NTEP Technical Advisor NIST Technical Advisor Public Sector Member	Kyle Pierson Michael Keilty Henry Oppermann Vork Group Name Chris Senneff Darrell Flocken Rick Harshman Tom Buck	Endress + Hauser Flowtec AG, USA Weights and Measures Consulting, LLC Affiliation Rice Lake Weighing Systems, Inc. NCWM NIST, Office of Weights and Measures Ohio		
Public Sector Member Private Sector Member Private Sector Member Multiple Dimension Measuring Device W Office Chair NTEP Technical Advisor NIST Technical Advisor Public Sector Member Public Sector Member	Kyle Pierson Michael Keilty Henry Oppermann Vork Group Name Chris Senneff Darrell Flocken Rick Harshman Tom Buck Fran Elson-Houston	Endress + Hauser Flowtec AG, USA Weights and Measures Consulting, LLC Affiliation Rice Lake Weighing Systems, Inc. NCWM NIST, Office of Weights and Measures Ohio Ohio		
Public Sector Member Private Sector Member Private Sector Member Multiple Dimension Measuring Device W Office Chair NTEP Technical Advisor NIST Technical Advisor Public Sector Member Public Sector Member Public Sector Member	Kyle Pierson Michael Keilty Henry Oppermann Name Chris Senneff Darrell Flocken Rick Harshman Tom Buck Fran Elson-Houston Jeff Fantozzi	Endress + Hauser Flowtec AG, USA Weights and Measures Consulting, LLC Affiliation Rice Lake Weighing Systems, Inc. NCWM NIST, Office of Weights and Measures Ohio Ohio Ohio		
Public Sector Member Private Sector Member Private Sector Member Multiple Dimension Measuring Device W Office Chair NTEP Technical Advisor NIST Technical Advisor Public Sector Member	Kyle Pierson Michael Keilty Henry Oppermann Vork Group Name Chris Senneff Darrell Flocken Rick Harshman Tom Buck Fran Elson-Houston Jeff Fantozzi Jeff Gibson	Endress + Hauser Flowtec AG, USA Weights and Measures Consulting, LLC Affiliation Rice Lake Weighing Systems, Inc. NCWM NIST, Office of Weights and Measures Ohio Ohio Ohio Ohio Ohio		
Public Sector Member Private Sector Member Private Sector Member Multiple Dimension Measuring Device W Office Chair NTEP Technical Advisor NIST Technical Advisor Public Sector Member	Kyle Pierson Michael Keilty Henry Oppermann Name Chris Senneff Darrell Flocken Rick Harshman Tom Buck Fran Elson-Houston Jeff Fantozzi Jeff Gibson Mike Kelley	Endress + Hauser Flowtec AG, USA Weights and Measures Consulting, LLC Affiliation Rice Lake Weighing Systems, Inc. NCWM NIST, Office of Weights and Measures Ohio Ohio Ohio Ohio Ohio Ohio Ohio		
Public Sector Member Private Sector Member Private Sector Member Multiple Dimension Measuring Device W Office Chair NTEP Technical Advisor NIST Technical Advisor Public Sector Member	Kyle Pierson Michael Keilty Henry Oppermann Name Chris Senneff Darrell Flocken Rick Harshman Tom Buck Fran Elson-Houston Jeff Fantozzi Jeff Gibson Mike Kelley Pascal Turgeon	Endress + Hauser Flowtec AG, USA Weights and Measures Consulting, LLC Affiliation Rice Lake Weighing Systems, Inc. NCWM NIST, Office of Weights and Measures Ohio Ohio Ohio Ohio Ohio Ohio Ohio Measurement Canada, Policy/Regulations Group		
Public Sector Member Private Sector Member Private Sector Member Multiple Dimension Measuring Device W Office Chair NTEP Technical Advisor NIST Technical Advisor Public Sector Member Public Sector Member	Kyle Pierson Michael Keilty Henry Oppermann Vork Group Name Chris Senneff Darrell Flocken Rick Harshman Tom Buck Fran Elson-Houston Jeff Fantozzi Jeff Gibson Mike Kelley Pascal Turgeon Paige Vinten	Endress + Hauser Flowtec AG, USA Weights and Measures Consulting, LLC Affiliation Rice Lake Weighing Systems, Inc. NCWM NIST, Office of Weights and Measures Ohio Ohio Ohio Ohio Ohio Ohio Measurement Canada, Policy/Regulations Group Measurement Canada		
Public Sector Member Private Sector Member Private Sector Member Multiple Dimension Measuring Device W Office Chair NTEP Technical Advisor NIST Technical Advisor Public Sector Member	Kyle Pierson Michael Keilty Henry Oppermann Name Chris Senneff Darrell Flocken Rick Harshman Tom Buck Fran Elson-Houston Jeff Fantozzi Jeff Gibson Mike Kelley Pascal Turgeon	Endress + Hauser Flowtec AG, USA Weights and Measures Consulting, LLC Affiliation Rice Lake Weighing Systems, Inc. NCWM NIST, Office of Weights and Measures Ohio Ohio Ohio Ohio Ohio Ohio Ohio Measurement Canada, Policy/Regulations Group		

Advisory Member Public Sector Member	Cassie Eigenmann Randy Burns	Retired Arkansas		
Advisory Member				
NIST Technical Advisor	G. Diane Lee	NIST, Office of Weights and Measures		
NTEP Technical Advisor	Darrell Flocken	NCWM		
Chair	Karl Cunningham	Illinois		
Office	Name	Affiliation		
NTEP Grain Analyzer Sector				
Public Sector Member	Zacharias Tripoulas	Maryland		
Public Sector Member		NIST, Office of Weights and Measures		
	John Barton Tina Butcher	NIST, Office of Weights and Measures		
NTEP Technical Advisor NIST Technical Advisor	Darrell Flocken	NCWM NIST Office of Weights and Measures		
Chair NIEP Tochnical Advisor	Peter Sirrico	Thayer Scale / Hyer Industries		
Office	Name Datar Sirrian	Affiliation The year Seeds / Uner lead until seeds		
NTEP Belt-Conveyor Scale Sector	······································			
Private Sector Member	Wolfram Teppan	LEM Intellectual Property SA		
Private Sector Member	Dave Parmelee	Control Module, Inc.		
Public Sector Member	John Roach	California		
Public Sector Member	Tom Buck	Ohio		
NIST Technical Advisor	Juana Williams	NIST, Office of Weights and Measures		
NTEP Technical Advisor	Darrell Flocken	NCWM		
Chair	Andrei Moldoveanu	NEMA		
Office	Name	Affiliation		
NTEP EVSE Work Group				
Private Sector Member	Scott Wigginton	United Parcel Service		
Private Sector Member	Xin Wang	Amazon		
Private Sector Member	Russ Vires	Mettler-Toledo, LLC		
Private Sector Member	Richard Suiter	Richard Suiter Consulting		
Private Sector Member	Mike Stutler	United Parcel Service		
Private Sector Member	Richard Shipman	Rice Lake Weighing Systems, Inc.		
Private Sector Member	Tony Romeo	Datalogic		
Private Sector Member	Drew Parrett	Cognex		
Private Sector Member	Sameer Parmar	SICK, Inc.		
Private Sector Member	Don Newell	Newell Enterprises, LLC		
Private Sector Member Private Sector Member	Robert Kennington Scott Murchison	Zebra Technologies		
Private Sector Member Private Sector Member	Scott Henry Robert Konnington	Zebra Technologies Cubiscan		
Private Sector Member		YRC Freight		
Private Sector Member	Michael Eichenberg James Faas	FreightSnap, LLC		
Private Sector Member	Scott Davidson	Mettler-Toledo, LLC		
Private Sector Member	Bill Danderand	FedEx		

Public Sector Member	Ivan Hankins	lowa	
Public Sector Member	Thomas Hughes	Missouri	
Public Sector Member	Jason Jordan	USDA, FGIS, Technical Services Division	
Public Sector Member	April Lee	North Carolina	
Public Sector Member	Loren Minnich	Kansas	
Private Sector Member	Jeffrey Adkisson	Grain and Feed Association of Illinois	
Private Sector Member	Rachel Beiswenger	TSI Incorporated	
Private Sector Member	Martin Clements	The Steinlite Corporation	
Private Sector Member	Andrew Gell	Foss North America	
Private Sector Member	Charles Hurburgh, Jr.	Iowa State University	
Private Sector Member	Jess McCluer	National Grain and Feed Association	
Private Sector Member	Thomas Runyon	Seedburo Equipment Co.	
NTEP Measuring Sector			
Office	Name	Affiliation	
Chair	Michael Keilty	Endress + Hauser Flowtec AG, USA	
NTEP Technical Advisor	Darrell Flocken	NCWM	
NIST Technical Advisor	Tina Butcher	NIST, Office of Weights and Measures	
Public Sector Member	Luciano Burtini	Measurement Canada	
Public Sector Member	Tina Butcher	NIST, Office of Weights and Measures	
Public Sector Member	John Roach	California	
Private Sector Member	Steve Bar	Bennett Pump Company	
Private Sector Member	Marc Buttler	Emerson Process Management / Micro Motion	
Private Sector Member	Craig Cavanaugh	Tuthill Transfer Systems	
Private Sector Member	Rodney Cooper	Brodie International	
Private Sector Member	Constantine Cotsoradis	Flint Hills Resources	
Private Sector Member	Ronnell Gallon	Zenner Performance Meters, Inc.	
Private Sector Member	John Hathaway	Murray Equipment	
Private Sector Member	Dmitri Karimov	Liquid Controls, LLC	
Private Sector Member	Douglas Long	RDM Industrial Electronics	
Private Sector Member	Richard Miller	FMC Technologies Measurement Solutions, Inc.	
Private Sector Member	Randy Moses	Wayne Fueling Systems	
Private Sector Member	Andre Noel	Neptune Technology Group, Inc.	
Private Sector Member	Adam Oldham	Insite360	
Private Sector Member	Robin Parsons	Parafour Innovations, LLC	
Private Sector Member	Brent Price	Gilbarco, Inc.	

NTEP Software Sector					
Office	Name	Affiliation			
Chair	James Pettinato	Technip FMC			
NTEP Technical Advisor	Darrell Flocken	NCWM			
Technical Advisor	Vere Miller	Mettler-Toledo, LLC			
Secretary	Teri Gulke	Liquid Controls, LLC			
Public Sector Member	Andrei Brezoica	California			
Public Sector Member	Tom Buck	Ohio			
Public Sector Member	Luciano Burtini	Measurement Canada			
Public Sector Member	Katya Delak	NIST, Office of Weights and Measures			
Public Sector Member	Jeff Gibson	Ohio			
Public Sector Member	Eric Morabito	New York			
Public Sector Member	John Roach	California			
Public Sector Member	Zacharias Tripoulas	Maryland			
Private Sector Member	Mary Abens	Emerson Process Management			
Private Sector Member	John Atwood	Tyson Foods			
Private Sector Member	Gary Benjamin	NCR Corporation			
Private Sector Member	Kevin Detert	Avery Weigh-Tronix			
Private Sector Member	Brian Duncan	ECRS			
Private Sector Member	Andrew Gell	Foss North America			
Private Sector Member	Keith Harper	Gencor Industries, Inc.			
Private Sector Member	Jan Konijnenburg	Rice Lake Weighing Systems, Inc.			
Private Sector Member	Dominic Meyer	KSi Conveyors, Inc.			
Private Sector Member	Richard Miller	FMC Technologies Measurement Solutions, Inc.			
Private Sector Member	Adam Oldham	Insite360			
Private Sector Member	Mike Roach	VeriFone			
Private Sector Member	David Vande Berg	Vande Berg Scales			
Private Sector Member	John Wind	Ossid LLC			
Private Sector Member	Kraig Wooddell	Hobart			
NTEP Weighing Sector					
Office	Name	Affiliation			
Chair	Rob Upright	VPG Transducers			
NTEP Technical Advisor	Darrell Flocken	NCWM			
NIST Technical Advisor	Rick Harshman	NIST, Office of Weights and Measures			
Advisory Member	Robert Feezor	Retired			
Public Sector Member	Tom Buck	Ohio			
Public Sector Member	Tina Butcher	NIST, Office of Weights and Measures			
Public Sector Member	Kevin Chesnutwood	NIST, Office of Weights and Measures			
Public Sector Member	Fran Elson-Houston	Ohio			
Public Sector Member	Nathan Gardner	Oregon			
Public Sector Member	Marcus Harwitz	USDA, GIPSA, FGIS			
Public Sector Member	Robert Meadows	Kansas			

Public Sector Member	Loren Minnich	Kansas	
Public Sector Member	Eric Morabito	New York	
Public Sector Member	Zacharias Tripoulas	Maryland	
Public Sector Member	Pascal Turgeon	Measurement Canada	
Public Sector Member	Juana Williams	NIST, Office of Weights and Measures	
Private Sector Member	Steven Beitzel	Systems Associates, Inc.	
Private Sector Member	Neil Copley	Thurman Scale Co.	
Private Sector Member	Bill Danderand	FedEx	
Private Sector Member	Brian Duncan	ECRS	
Private Sector Member	Mitchell Eyles	Flintec, Inc.	
Private Sector Member	Eric Golden	Cardinal Scale Manufacturing, Co.	
Private Sector Member	Jon Heinlein	Transcell Technology, Inc.	
Private Sector Member	Scott Henry	Zebra Technologies	
Private Sector Member	Sam Jalahej	Totalcomp, Inc.	
Private Sector Member	Jan Konijnenburg	Rice Lake Weighing Systems, Inc.	
Private Sector Member	John Lawn	Rinstrum, Inc.	
Private Sector Member	Edward Luthy	Schenck Process Transport N.A.	
Private Sector Member	Thomas Rice	Mettler-Toledo, LLC	
Private Sector Member	Kyle Schaffer	Tufner Weighing Systems	
Private Sector Member	Louis Straub	Fairbanks Scale, Inc.	
Private Sector Member	Russ Vires	Mettler-Toledo, LLC	
Private Sector Member	Jerry Wang	A&D Engineering, Inc.	
Private Sector Member	John Wind	Ossid LLC	

Central Weights and M	leasures Associati	on (CWMA) www.cv	vma.net				
	Illinois	Kansas	Missouri	Ohio			
States	Indiana	Michigan	Nebraska	Sou	uth Dakota		
	Iowa	Minnesota	North Dakota	Wis	consin		
Contact	Sherry Turvey				(785) 564-66	82	
	Kansas Departm	nent of Agriculture		sherry.turvey@ks.gov			
Annual Meeting	May 18 – 21, 202	20			Wisconsin De	ells, Wisconsin	
Interim Meeting	TBD, 2020				TBD		
Northeastern Weights	and Measures Ass	ociation (NEWMA) w	/ww.newma.us				
	Connecticut	New Hampshire	Pennsylvania	Ve	rmont		
States	Maine	New Jersey	Puerto Rico				
	Massachusetts	New York	Rhode Island				
Contact	James Cassidy			(617) 727-3480			
Collida	Commonwealth	n of Massachusetts			james.cassic	<u>dy@mass.gov</u>	
Annual Meeting	May 4 – 7, 2020				Saratoga Sp	rings, New York	
Interim Meeting	TBD, 2020 TBD						
Southern Weights and	Measures Associa	tion (SWMA) www.s	wma.org				
	Alabama	District of	Kentucky	Mis	ssissippi	South Carolina	US Virgin Islands
States	Arkansas	Columbia	Louisiana	No	rth Carolina	Tennessee	Virginia
oranes	Delaware	Florida Georgia	Maryland	Ok	lahoma	Texas	West Virginia
Contact	Ed Coleman				(615) 837-15	44	
Comaci	Tennessee Depo	artment of Agricultu	re		<u>ed.coleman</u>	<u>@tn.gov</u>	
Annual Meeting	October 4 - 7, 2	020			Washington,	D.C.	
Western Weights and A	Aeasures Associat	ion (WWMA) www.w	esternwma.org				
	Alaska	Colorado	Montana	Ore	egon	Wyoming	
States	Arizona	Hawaii	Nevada	Uto	ah		
orares	California	Idaho	New Mexico	Wo	shington		
Contact	Mahesh Albuqu	erque			(303) 318-8502		
Comuci	Colorado Division of Oil and Public Safety			mahesh.albuquerque@state.co.us			
Annual Meeting	Sept. 27 – Oct. 1	, 2020			Golden, Col	orado	

	Past Chairmen					
Conference	Year	Location	Chairman	Affiliation		
1 st	1905	Washington, D.C.	Dr. S.W. Stratton	National Bureau of Standards		
2 nd	1906	Washington, D.C.	Dr. S.W. Stratton	National Bureau of Standards		
3 rd	1907	Washington, D.C.	Dr. S.W. Stratton	National Bureau of Standards		
4 th	1908	Washington, D.C.	Dr. S.W. Stratton	National Bureau of Standards		
	1909	Conference Was Not Held				
5 th	1910	Washington, D.C.	Dr. S.W. Stratton	National Bureau of Standards		
6 th	1911	Washington, D.C.	Dr. S.W. Stratton	National Bureau of Standards		
7^{th}	1912	Washington, D.C.	Dr. S.W. Stratton	National Bureau of Standards		
8 th	1913	Washington, D.C.	Dr. S.W. Stratton	National Bureau of Standards		
9 th	1914	Washington, D.C.	Dr. S.W. Stratton	National Bureau of Standards		
10 th	1915	Washington, D.C.	Dr. S.W. Stratton	National Bureau of Standards		
11 th	1916	Washington, D.C.	Dr. S.W. Stratton	National Bureau of Standards		
	1917	Conference Was Not Held				
	1918	Conference Was Not Held				
12 th	1919	Washington, D.C.	Dr. S.W. Stratton	National Bureau of Standards		
13 th	1920	Washington, D.C.	Dr. S.W. Stratton	National Bureau of Standards		
14 th	1921	Washington, D.C.	Dr. S.W. Stratton	National Bureau of Standards		
15 th	1922	Washington, D.C.	Dr. S.W. Stratton	National Bureau of Standards		
16 th	1923	Washington, D.C.	Dr. George Burgess	National Bureau of Standards		
17 th	1924	Washington, D.C.	Dr. George Burgess	National Bureau of Standards		
18 th	1925	Washington, D.C.	Dr. George Burgess	National Bureau of Standards		
19 th	1926	Washington, D.C.	Dr. George Burgess	National Bureau of Standards		
20 th	1927	Washington, D.C.	Dr. George Burgess	National Bureau of Standards		
21 st	1928	Washington, D.C.	Dr. George Burgess	National Bureau of Standards		
22 nd	1929	Washington, D.C.	Dr. George Burgess	National Bureau of Standards		
23 rd	1930	Washington, D.C.	Dr. George Burgess	National Bureau of Standards		
24 th	1931	Washington, D.C.	Dr. George Burgess	National Bureau of Standards		
	1932	Conference Was Not Held				
	1933	Conference Was Not Held				
	1934	Conference Was Not Held				
25 th	1935	Washington, D.C.	Dr. Lyman Briggs	National Bureau of Standards		
26 th	1936	Washington, D.C.	Dr. Lyman Briggs	National Bureau of Standards		
27 th	1937	Washington, D.C.	Dr. Lyman Briggs	National Bureau of Standards		
28 th	1938	Washington, D.C.	Dr. Lyman Briggs	National Bureau of Standards		
29 th	1939	Washington, D.C.	Dr. Lyman Briggs	National Bureau of Standards		
30 th	1940	Washington, D.C.	Dr. Lyman Briggs	National Bureau of Standards		
31 st	1941	Washington, D.C.	Dr. Lyman Briggs	National Bureau of Standards		
	1942	Conference Was Not Held				
	1943	Conference Was Not Held				
	1944	Conference Was Not Held				
22nd	1945	Conference Was Not Held	D. EU.C. 1	Nuthanal D. Co. 1.1		
32 nd	1946	Washington, D.C.	Dr. E.U. Condon	National Bureau of Standards		
33 rd	1947	Washington, D.C.	Dr. E.U. Condon	National Bureau of Standards		
2.4th	1948	Conference Was Not Held	D. E.H. C 1	Matieral Daws - CG - 1 1		
34 th	1949	Washington, D.C.	Dr. E.U. Condon	National Bureau of Standards		
35 th	1950	Washington, D.C.	Dr. E.U. Condon	National Bureau of Standards		
36 th	1951	Washington, D.C.	Dr. E.U. Condon	National Bureau of Standards		
37 th	1952	Washington, D.C.	Dr. A.V. Astin	National Bureau of Standards		
38 th	1953	Washington, D.C.	Dr. A.V. Astin	National Bureau of Standards		
39 th	1954	Washington, D.C.	Dr. A.V. Astin	National Bureau of Standards		
40 th	1955	Washington, D.C.	Dr. A.V. Astin	National Bureau of Standards		

	Past Chairmen					
Conference	Year	Location	Chairman	Affiliation		
41 st	1956	Washington, D.C.	Dr. A.V. Astin	National Bureau of Standards		
42 nd	1957	Washington, D.C.	Dr. A.V. Astin	National Bureau of Standards		
43 rd	1958	Washington, D.C.	J.P. McBride	Massachusetts		
44 th	1959	Washington, D.C.	C.M. Fuller	California		
45 th	1960	Washington, D.C.	H.E. Crawford	Florida		
46 th	1961	Washington, D.C.	R.E. Meek	Indiana		
47 th	1962	Washington, D.C.	Robert Williams	New York		
48 th	1963	Washington, D.C.	C.H. Stender	South Carolina		
49 th	1964	Washington, D.C.	D.M. Turnbull	Washington		
50 th	1965	Washington, D.C	V.D. Campbell	Ohio		
51st	1966	Denver, CO	J.F. True	Kansas		
52 nd	1967	Washington, D.C.	J.E. Bowen	Massachusetts		
53 rd	1968	Washington, D.C.	C.C. Morgan	Indiana		
54 th	1969	Washington, D.C.	S.H. Christie	New Jersey		
55 th	1970	Salt Lake City, UT	R.W. Searles	Ohio		
56 th	1971	Washington, D.C.	M. Jenning	Tennessee		
57 th	1972	Washington, D.C.	E.H. Black	California		
58 th	1973	Minneapolis, MN	George Johnson	Kentucky		
59 th	1974	Washington, D.C.	John Lewis	Washington		
60 th	1975	San Diego, CA	Sydney Andrews	Florida		
61 st	1976	Washington, D.C.	Richard Thompson	Maryland		
62 nd	1977	Dallas, TX	Earl Prideaux	Colorado		
63 rd	1978	Washington, D.C.	James Lyles	Virginia		
64 th	1979	Portland, OR	Kendrick Simila	Oregon		
65 th	1980	Washington, D.C.	Charles Vincent	Texas		
66 th	1981	St. Louis, MO	Edward Stadolnik	Massachusetts		
67 th	1982	Atlanta, GA	Edward Heffron	Michigan		
68 th	1983	Sacramento, CA	Charles Greene	New Mexico		
69 th	1984	Boston, MA	Sam Hindsman	Arkansas		
70 th	1985	Washington, D.C.	Ezio Delfino	California		
71 st	1986	Albuquerque, NM	George Mattimoe	Hawaii		
72 nd	1987	Little Rock, AR	Frank Nagele	Michigan		
73 rd	1988	Grand Rapids, MI	Darrell Guensler	California		
74 th	1989	Seattle, WA	John Bartfai	New York		
75 th	1990	Washington, D.C.	Fred Gerk	New Mexico		
76 th	1991	Philadelphia, PA	N. David Smith	North Carolina		
77 th	1992		Sidney Colbrook	Illinois		
78 th	1992	Nashville, TN Kansas City, MO	Allan Nelson	Connecticut		
79 th	1993	San Diego, CA	Thomas Geiler	Massachusetts		
80 th	1994	Portland, ME	James Truex	Ohio		
80 ^{ss}	1995	New Orleans, LA	Charles Gardner	New York		
81 nd	1996	Chicago, IL	Barbara Bloch	California		
83 rd	1997	Portland, OR	Steven Malone	Nebraska		
84 th						
85 th	1999 2000	Burlington, VT	Aves Thompson Was Diggs	Alaska		
85 th		Richmond, VA	Wes Diggs	Virginia Maryland		
86 th	2001	Washington, DC	Louis Straub	Maryland		
	2002	Cincinnati, OH	Ronald Murdock	North Carolina		
88 th	2003	Sparks, NV	Ross Andersen	New York		
89 th	2004	Pittsburgh, PA	Dennis Ehrhart	Arizona		
90 th	2005	Orlando, FL	Wes Diggs	Virginia		
91 st	2006	Chicago, IL	Don Onwiler	Nebraska		

Past Chairmen					
Conference	Year	Location	Chairman	Affiliation	
92 nd	2007	Salt Lake City, UT	Michael Cleary	California	
93 rd	2008	Burlington, VT	Judy Cardin	Wisconsin	
94 th	2009	San Antonio, TX	Jack Kane	Montana	
95 th	2010	St. Paul, MN	Randy Jennings	Tennessee	
96 th	2011	Missoula, MT	Tim Tyson	Kansas	
97 th	2012	Portland, ME	Kurt Floren	California	
98 th	2013	Louisville, KY	Stephen Benjamin	North Carolina	
99 th	2014	Detroit, MI	John Gaccione	New York	
100 th	2015	Philadelphia, PA	Ronald Hayes	Missouri	
101st	2016	Denver, CO	Jerry Buendel	Washington	
102 nd	2017	Pittsburgh, PA	Kristin Macey	California	
103 rd	2018	Tulsa, OK	James Cassidy	Massachusetts	
104 th	2019	Milwaukee, WI	Brett Gurney	Utah	

General Information

PURPOSE

NCWM meetings are held throughout the year to develop the national standards that are adopted by NCWM and published in *Handbooks 44*, 130, and 133. At the NCWM Interim Meeting, Committees will conduct Open Hearings where all attendees have a direct impact on the national standards through their testimony. Following Open Hearings, the Committees will convene in work sessions to consider testimony and all other information at their disposal to further develop agenda items and determine the status of each for the Annual Meeting in July. Committees will report these decisions at the Joint Committee Meeting on Wednesday. Items given voting status by the Committees will be presented at the NCWM Annual Meeting in July.

FIRST TIME ATTENDEES

All attendees who are participating for the first time are encouraged to ask NCWM staff, Chairman, Board members and/or Committee member's questions.

AGENDA

The subject matter listed on each Standing Committee's agenda will be open for discussion as noted. 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 NCWM Policy 3.2.2. *Procedures to Modify Handbooks*, Part E, *Exceptions to Policy for Submission of Items to the NCWM Committee Agenda; Submission of Priority Items*. The Committees have not determined whether the items presented will be Voting or Informational, Developing or Withdrawn in status for the Annual Meeting in July; these determinations will be made in their deliberations at the Interim Meeting.

The agendas:

- 1. Shall include items brought to the attention of the Standing Committees prior to the submission deadline of September 1, 2018, and approved for inclusion in their agendas by the Committees; and
- 2. Shall serve as the basis for the Standing Committee Interim Reports; to be printed in the program and Committee reports of NCWM Publication 16, Committee Reports for the 105th Annual Meeting to be held July 12-16, 2020 at the Hyatt Murano in Tacoma, Washington. The final reports of the Committees will be published following the 105th NCWM Annual Meeting in the NIST Special Publication, Annual Report of the 105th National Conference on Weights and Measures.

WRITTEN COMMENTS OR ORAL STATEMENTS

Any person or organization wanting to provide a formal presentation during a Committee session should make the request in writing to the Executive Director. Reasonable limitations on time allotted for presentations will be imposed. *Note: Only registered attendees may make presentations.*

National Conference on Weights and Measures Attn: Don Onwiler, Executive Director 1135 M Street, Suite 110 Lincoln, NE 68508 (402) 434-4880 don.onwiler@ncwm.com

JOINT MEETINGS FOR ALL COMMITTEES

A Joint Meeting for all Committees will be held on Sunday, January 25, and Wednesday, January 29, 2020. On Wednesday, each Standing Committee will highlight the major decisions made during the week, and the Nominating Committee will present its report.

PARTICIPATION

All sessions are open to registered attendees of the conference. If a 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 provided that:

- 1. NCWM Chairman or, in his absence, the 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 desk.

If possible, the posting will be done at least a day prior to the planned closed session. Please note that a one-day notice will not be possible if a closed meeting is called on Sunday. Since participants may make their travel reservations in order to attend technical meetings scheduled for Sunday, every effort will be made to limit any required closed meetings to only part of Sunday.

REPORTS

There will not be a transcript made of the proceedings of NCWM Interim Meetings. Each Committee will prepare its report containing its recommendations based upon the presentations, discussions, and deliberations on all matters on its agenda that were addressed during the Interim Meeting. These reports will be published in *NCWM Publication 16*, *Committee Reports for the 105th Annual Meeting*, to be posted to the NCWM website at www.ncwm.com in early April. Printed copies of NCWM Publication 16 will be distributed to meeting attendees at the NCWM Annual Meeting in July.

ANNUAL MEETING

105th NCWM Annual Meeting Hotel Murano Tacoma, Washington July 12-16, 2020

UNITS OF MEASUREMENT

In keeping with the provisions of the Omnibus Trade and Competitiveness Act of 1988, which establishes the metric system as the preferred system of measurement for commerce and trade, units of the metric system have been used in this document, except where industry has not yet converted from the inch-pound system. In some instances, submitted proposals quoted in the Committee agendas may appear in inch-pound units only.