

Tulsa, Oklahoma / July 15-19, 2018

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





NIST 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 Annual 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) have 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.

#### Back to the Basics as We Arrive in the Cloud

James Cassidy, Chairman City of Cambridge, Massachusetts



Dear NCWM Members,

Welcome to Tulsa, the second largest city in Oklahoma and once called the oil capital of the world. The Hyatt Regency Tulsa Hotel will be hosting the first NCWM conference in Oklahoma from July 15th- July 19th.

There are many must-see attractions while you are in Tulsa. If you are an art lover, please visit the Philbrook Museum of Art and the Gilcrease Museum. If you love the outdoors, plan a trip to Woodward Park and the Tulsa Farmers' Market. But if music is your thing, don't miss the Woody Guthrie Center and the Jazz Hall of

Fame at Union Station. Sports lovers will get a chance to visit ONEOK Field, the home of the Tulsa Drillers Double A MILB team.

If this is your first NCWM Annual Meeting and you are new to our process, let me give you a brief overview. We will be reviewing proposed changes to Handbook 44 on Specifications and Tolerance for Weighing and Measuring Devices and Handbook 130 on Model Laws and Regulations, as well as fuels and others. All items that came out of our Interim Meeting were given a status. If there were voting items, they will be voted on at this meeting. We will also be presenting awards during our opening ceremony.

After a great Interim Meeting with the Cannabis Task Group, we now have five focus groups looking at Suitability of Scales, Package and Labeling, Method of Sale, Safety of Inspectors and Moistures Loss. This group will be meeting on Sunday to begin working on these topics, so stop by as we work on our guidance document. This is just a part of the meeting agenda for the week.

Hope to see everyone in Tulsa, safe travels!

Sincerely,

formes P. Cassidy J.

James Cassidy NCWM Chairman

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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. Times of each hearing are not firm; when one committee finishes, the next committee will begin. Committee chairs reserve the right to group items and select their sequence for presentation on voting. There will be no break between committee reports; registrants should plan to attend an entire Voting Session to ensure their presence when items of interest are likely to be under consideration.

Saturday, July 14, 2018		Room
8:30 a.m. – 5:00 p.m.	Board of Directors Meeting	Executive
Sunday, July 15, 2018		
7:30 a.m. – 9:00 a.m.	Coffee Service	Promenade Foyer
7:30 a.m. – 5:00 p.m.	Registration and Exhibits	Promenade Foyer
8:00 a.m. – 11:30 a.m.	Meter Manufacturers Association	Promenade A
9:00 a.m. – 11:30 a.m.	Credit Card Skimmer Task Group	Executive
9:00 a.m. – 11:30 a.m.	Cannabis Task Group	Promenade B
11:30 a.m. – 1:00 p.m.	Lunch on Your Own	
1:00 p.m. – 3:30 p.m.	Packaging and Labeling Subcommittee	Directors Row 3
1:00 p.m. – 3:30 p.m.	Fuels and Lubricants Subcommittee	Promenade A
1:00 p.m. – 3:30 p.m.	Charter Team	Executive
1:00 p.m. – 3:30 p.m.	Safety Task Group	Diplomat
3:30 p.m. – 4:00 p.m.	Joint Committee Meeting	Promenade C & D
4:00 p.m. – 5:00 p.m.	Agenda Review	
	Professional Development Committee	Directors Row 3
	Specifications and Tolerances Committee	Promenade B
	Laws and Regulations Committee	Promenade A
	Board of Directors / NTEP Committee	Executive
5:30 p.m. – 7:00 p.m.	Chairman's Reception	Tulsa South

Monday, July 16, 2018		
7:00 a.m. – 9:00 a.m.	Light Breakfast	Promenade Foyer
7:00 a.m. – 5:00 p.m.	Registration and Exhibits	Promenade Foyer
8:00 a.m. – 8:30 a.m.	New Attendee Orientation	Promenade C & D
	Mr. Chris Guay, Procter and Gamble	
8:30 a.m. – 5:00 p.m.	<b>Official Session – Open Hearings</b> Presiding Officer: Mr. Jack Walsh, Town of Wellesley, Massachusetts	Promenade C & D
	Professional Development Committee	
	Specifications and Tolerances Committee	
	Laws and Regulations Committee	
	NTEP Committee	
	Board of Directors	
12:00 p.m. – 1:30 p.m.	Lunch on Your Own	
1:30 p.m. – 5:00 p.m.	Official Session – Open Hearings Continued	Promenade C & D
1:30 p.m. – 5:00 p.m.	Committee Work Sessions (To be announced)	
	Professional Development Committee	Directors Row 3
	Specifications and Tolerances Committee	Promenade B
	Laws and Regulations Committee	Promenade A
	Board of Directors / NTEP Committee	Executive

Tuesday, July 17, 2018		
7:00 a.m. – 9:00 a.m.	Light Breakfast	Promenade Foyer
7:00 a.m. – 5:00 p.m.	Registration and Exhibits	Promenade Foyer
8:00 a.m. – 9:45 a.m.	Official Session – Open Hearings (continued as necessary)	Promenade C & D
	Presiding Officer: Mr. Loren Minnich, Kansas	
9:45 a.m. – 10:00 a.m.	Break	
10:00 a.m. – 12:00 p.m.	General Session	
	Pledge of Allegiance and Invocation	
	Chaplain: Mr. Constantine Cotsoradis, Flint Hills Resources	
	Welcome Address	
	Director Kenny Naylor, Oklahoma Food Safety & Consumer Protection Services	
	President's Address	
	Dr. Walter Copan: NIST Director	
	Chairman's Address	
	Mr. James Cassidy, City of Cambridge, Massachusetts	
	Awards Ceremony	
12:00 p.m. – 1:30 p.m.	Lunch on Your Own	
1:30 p.m. – 3:30 p.m.	Field Trip: Magellan Midstream Partners Tour	
	Note: Time is tentative	
1:30 p.m. – 5:00 p.m.	Committee Work Sessions	
	Professional Development Committee	Directors Row 3
	Specifications and Tolerances Committee	Promenade B
	Laws and Regulations Committee	Promenade A
	Board of Directors / NTEP Committee	Executive
4:00 p.m. – 5:00 p.m.	Associate Membership Committee	Promenade C & D
8:00 p.m.	Addendum Sheets Available	Promenade Foyer
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Wednesday, July 18, 20	)18	
7:00 a.m. – 9:00 a.m.	Light Breakfast	Promenade Foyer
7:00 a.m. – 3:00 p.m.	Registration and Exhibits	Promenade Foyer
9:00 a.m. – 12:00 p.m.	Regional Association Meetings	
	Central Weights and Measures Association	Executive
	Northeastern Weights and Measures Association	Oklahoma Ballroon
	Southern Weights and Measures Association	Promenade B
	Western Weights and Measures Association	Promenade A
12:00 p.m. – 1:00 p.m.	Lunch on Your Own	
1:00 p.m. – 4:30 p.m.	Voting Session	Promenade C & D
	Presiding Officer: Mr. Tim Chesser, Arkansas	
	Parliamentarian: Mr. Louis Straub, Fairbanks Scale, Inc.	
	Professional Development Committee	
	Specifications and Tolerances Committee	
	Laws and Regulations Committee	
6:00 p.m. – 9:30 p.m.	Special Event: ONEOK Field Baseball Game	
	An evening of relaxation in an exclusive private venue at ONEOK Field for Tulsa Drillers Baseball! The all-inclusive evening includes transportation, admission, food and drink, dining and stadium seating. Attire is casual. *Meet in lower lobby, 1 <sup>st</sup> floor at 5:50 p.m. for buses. *The first buses will start making trips back to the hotel starting at 8:30 p.m. and will continue until 10:00 p.m.	
Thursday, July 19, 201		
7:00 a.m. – 9:00 a.m.	Light Breakfast	Promenade Foyer
7:00 a.m. – 10:00 a.m.	Registration and Exhibits	Promenade Foyer
9:00 a.m. – 12:00 p.m.	<b>Voting Session</b> (continued as necessary) Presiding Officer: Mr. Kevin Merritt, Idaho Parliamentarian: Mr. Louis Straub, Fairbanks Scale, Inc.	Promenade C & D
	NTEP Committee	
	Board of Directors	
	Nominating Committee	
	Closing Ceremony	Promenade C & D
	Passing of the Gavel	
	New Chairman's Address	
	Benediction and Adjourn	

# Organization Chart

NCWM Board of Directors			
Office	Name	Affiliation	Term Ends
Chairman	James Cassidy	City of Cambridge, Massachusetts	2018
Chairman-Elect	Brett Gurney	Utah	2018
Immediate Past Chair	Kristin Macey	California	2018
Treasurer	Raymond Johnson	New Mexico	2020
Active Membership – Western	Mahesh Albuquerque	Colorado	2022
Active Membership – Southern	Kenneth Ramsburg	Maryland	2018
Active Membership – Northeastern	Jack Walsh	Town of Wellesley, Massachusetts	2019
Active Membership – Central	Craig VanBuren	Michigan	2020
At-Large	Chuck Corr	Archer Daniels Midland Company	2018
At-Large	Julie Quinn	Minnesota	2021
Associate Membership Representative	Christopher Guay	Procter and Gamble, Co.	2019
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	Jim Truex	NCWM	NA
Measurement Canada Advisor	Carl Cotton	Measurement Canada	NA
National Type Evaluation Program Com	nittee (NTEP)		
Office	Name	Affiliation	Term Ends
Committee Chair	Kristin Macey	California	2018
Upcoming Committee Chair	James Cassidy	City of Cambridge, Massachusetts	2019
Upcoming Committee Chair	Brett Gurney	Utah	2020
SWMA Representative	Kenneth Ramsburg	Maryland	2018
CWMA Representative	Craig VanBuren	Michigan	2020
NTEP Administrator	Jim Truex	NCWM	NA
Finance Committee			
Office	Name	Affiliation	Term Ends
Committee Chair	Brett Gurney	Utah	2018
Nominated Chair-Elect	Craig VanBuren	Michigan	2018
Treasurer	Raymond Johnson	New Mexico	2018
Associate Membership Representative	Christopher Guay	Procter and Gamble, Co.	2018
Executive Director	Don Onwiler	NCWM	NA

Office	Name	Affiliation	Term Ends
Committee Chair	Ethan Bogren	Westchester County, New York	2020
Member	John Albert	Missouri	2018
Member	Michelle Wilson	Arizona	2019
Member	Hal Prince	Florida	2021
Member	John McGuire	New Jersey	2022
Associate Membership Representative	Rebecca Richardson	MARC – IV Consulting	2018
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 (F	PDC)		
Office	Name	Affiliation	Term End
Committee Chair	Lori Jacobson	South Dakota	2018
Member	Gene Robertson	Mississippi	2019
Member	Marc Paquette	Vermont	2020
Member	Marco Mares	San Diego County, California	2021
Member	Jean Kliethermes	Missouri	2022
Associate Membership Representative	Richard Shipman	Rice Lake Weighing Systems, Inc.	2018
Safety Liaison	Julie Quinn	Minnesota	NA
NIST Liaison	Tina Butcher	NIST, Office of Weights and Measures	NA
Certification Coordinator	Ross Andersen	Retired	NA
Specifications and Tolerances Committe	ee (S&T)		
Office	Name	Affiliation	Term End
Committee Chair	Ivan Hankins	lowa	2019
Member	Tim Chesser	Arkansas	2018
Member	Rachelle Miller	Wisconsin	2020
Member	Josh Nelson	Oregon	2021
Member	Brad Bachelder	Maine	2022
Canadian Technical Advisor	Luciano Burtini	Measurement Canada	NA
NIST Technical Advisor	TBD	NIST, Office of Weights and Measures	NA
NIST Technical Advisor	Rick Harshman	NIST, Office of Weights and Measures	NA
NTEP Technical Advisor	Darrell Flocken	NCWM	NA
Nominating Committee			
Office	Name	Affiliation	Term End
Committee Chair	Kristin Macey	California	2018
Member	Stephen Benjamin	North Carolina	2018
Member	Mark Coyne	City of Brockton, Massachusetts	2018
Member	Frank Greene	Connecticut	2018
Member	Ivan Hankins	lowa	2018
			0010
Member	Richard Lewis	Georgia	2018

Credentials Committee			
Office	Name	Affiliation	Term Ends
Committee Chair	Lori Jacobson	South Dakota	2018
Member	Elaine Vieira	Massachusetts	2019
Member	David Aguayo	County of San Luis Obispo, California	2020
Coordinator	Darrell Flocken	NCWM	NA
Appointive Officials			
Office	Name	Affiliation	Term Ends
Chaplain	Constantine Cotsoradis	Flint Hills Resources	2018
Parliamentarian	Louis Straub	Fairbanks Scale, Inc.	2018
Presiding Officer	Tim Chesser	Arkansas	2018
Presiding Officer	Kevin Merritt	Idaho	2018
Presiding Officer	Loren Minnich	Kansas	2018
Presiding Officer	Jack Walsh	Town of Wellesley, Massachusetts	2018
Sergeant-at-Arms	Mike Bookout	Oklahoma	2018
Sergeant-at-Arms	Scott Novak	Oklahoma	2018
Associate Membership Committee			
Office	Name	Affiliation	Term End
Committee Chair	Bill Callaway	Сготрсо	2018
Vice-Chair	Mark Flint	ADM	2018
Secretary / Treasurer	Bob Wiese	Northwest Tank and Environmental Services	2018
Member	David Calix	NCR Corporation	2018
Member	Bill Callaway	Сготрсо	2018
Member	Robert Murnane, Jr.	Seraphin Test Measure	2018
Member	Richard Shipman	Rice Lake Weighing Systems, Inc.	2020
Member	Christopher Guay	Procter and Gamble, Co.	2020
Member	Mark Flint	ADM	2020
Member	Rebecca Richardson	MARC – IV Consulting	2020
Member	Prentiss Searles	American Petroleum Institute	2022
Member	Bob Wiese	Northwest Tank and Environmental Services	2022
Packaging and Labeling Subcomm	nittee		
Office	Name	Affiliation	
Committee Chair	Christopher Guay	Procter and Gamble, Co.	
NIST Technical Advisor	David Sefcik	NIST, Office of Weights and Measures	
Public Sector – Central	Nicholas Owens	Stark County Weights and Measures, Ohio	
Public Sector – Northeastern	Frank Greene	Connecticut	
Public Sector – Southern	Hal Prince	Florida	
Public Sector – Western	Angela Godwin	County of Ventura, California	
Private Sector Member	Ann Boeckman	Kraft Food Group, Inc.	
Private Sector Member	Krister Hard af Segerstad	IKEA North America Services, LLC	
Private Sector Member	Zina Juroch	Pier 1 Imports	

Office	Name	Affiliation
Committee Chair	Bill Striejewske	Nevada
Vice-Chair	Ronald Hayes	Missouri
Vice-Chair	Randy Jennings	Tennessee
Secretary	Kevin Ferrick	American Petroleum Institute
Vice-Secretary	Rebecca Richardson	MARC – IV Consulfing
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	Kristin Macey	California
Public Sector Member	Allan Morrison	California
Public Sector Member	Doug Rathbun	Illinois
Public Sector Member	Karl Scott	Utah
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	Holly Alfano	Independent Lubricant Manufacturers Association
Private Sector Member	Matt Bjornson	Bjornson Oil Company
Private Sector Member	Bill Cannella	Chevron Global Downstream, LLC
Private Sector Member	Chuck Corr	Archer Daniels Midland Company
Private Sector Member	Davis Cosey	Davis Oil Company
Private Sector Member	Kelly Davis	Renewable Fuels Association
Private Sector Member	Ed Dougherty	Sunoco LP
Private Sector Member	Scott Fenwick	National Biodiesel Board
Private Sector Member	David Fialkov	NATSO
Private Sector Member	Rick Fragnito	Shell
Private Sector Member	Philip Guillemette	Flint Hills Resources, LP
Private Sector Member	John Harkins	Sunoco Logistics
Private Sector Member	Marilyn Herman	Herman and Associates
Private Sector Member	Cal Hodge	A 2nd Opinion, Inc.
Private Sector Member	William Hornbach	Chevron Global Downstream, LLC
Private Sector Member	Joanna Johnson	Automotive Oil Exchange Association
Private Sector Member	Brian Kernke	Loves Travel Stops

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	Michael Lynch	ExxonMobil Corporation
Private Sector Member	Scott Mason	Phillips 66
Private Sector Member	John Maynes	PMCI
Private Sector Member	Beverly Michels	BP Products
Private Sector Member	Kristi Moore	KMoore Consulting, LLC
Private Sector Member	Manuch Nikanjam	Chevron Global Downstream, LLC
Private Sector Member	Brian Parnell	Mapco Express
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	Jenny Sigelko	Volkswagen Group of America
Private Sector Member	Dr. Prasad Tumati	Haltermann Solutions
Private Sector Member	Marie Valentine	Toyota - TEMA - TTC
Private Sector Member	Steve Vander Griend	ICM, Inc.
Promotional Tool Kit Task Group		
Promotional Tool Kit Task Group Office	Name	Affiliation
	Name Stephen Benjamin	Affiliation North Carolina
Office		
Office Chair	Stephen Benjamin	North Carolina
Office Chair Public Sector Member	Stephen Benjamin Jerry Buendel	North Carolina Washington
Office Chair Public Sector Member Public Sector Member	Stephen Benjamin Jerry Buendel Kurt Floren	North Carolina Washington Los Angeles County, California
Office Chair Public Sector Member Public Sector Member Private Sector Member	Stephen Benjamin   Jerry Buendel   Kurt Floren   Bill Callaway   John Hughes	North Carolina Washington Los Angeles County, California Crompco
Office Chair Public Sector Member Public Sector Member Private Sector Member Private Sector Member	Stephen Benjamin   Jerry Buendel   Kurt Floren   Bill Callaway   John Hughes	North Carolina Washington Los Angeles County, California Crompco
Office Chair Public Sector Member Public Sector Member Private Sector Member Private Sector Member Credit Card Skimmer Task Group	Stephen Benjamin   Jerry Buendel   Kurt Floren   Bill Callaway   John Hughes	North Carolina   Washington   Los Angeles County, California   Crompco   Rice Lake Weighing Systems, Inc.
Office Chair Public Sector Member Public Sector Member Private Sector Member Private Sector Member Credit Card Skimmer Task Group Office	Stephen Benjamin   Jerry Buendel   Kurt Floren   Bill Callaway   John Hughes	North Carolina   Washington   Los Angeles County, California   Crompco   Rice Lake Weighing Systems, Inc.
Office Chair Public Sector Member Public Sector Member Private Sector Member Private Sector Member Credit Card Skimmer Task Group Office	Stephen Benjamin   Jerry Buendel   Kurt Floren   Bill Callaway   John Hughes   Name   Hal Prince	North Carolina   Washington   Los Angeles County, California   Crompco   Rice Lake Weighing Systems, Inc.   Affiliation   Florida
Office Chair Public Sector Member Public Sector Member Private Sector Member Private Sector Member Credit Card Skimmer Task Group Office Chair	Stephen Benjamin   Jerry Buendel   Kurt Floren   Bill Callaway   John Hughes   Name   Hal Prince   Mike Harrington	North Carolina   Washington   Los Angeles County, California   Crompco   Rice Lake Weighing Systems, Inc.   Affiliation   Florida   Iowa
Office Chair Public Sector Member Public Sector Member Private Sector Member Credit Card Skimmer Task Group Office Chair Public Sector Member	Stephen Benjamin   Jerry Buendel   Kurt Floren   Bill Callaway   John Hughes   Hal Prince   Mike Harrington   Joel Maddux	North Carolina   Washington   Los Angeles County, California   Crompco   Rice Lake Weighing Systems, Inc.   Florida   Iowa   Virginia
Office Chair Public Sector Member Public Sector Member Private Sector Member Credit Card Skimmer Task Group Office Chair Public Sector Member Public Sector Member	Stephen Benjamin   Jerry Buendel   Kurt Floren   Bill Callaway   John Hughes   Hal Prince   Mike Harrington   Joel Maddux   Scott Wagner	North Carolina   Washington   Los Angeles County, California   Crompco   Rice Lake Weighing Systems, Inc.   Affiliation   Florida   Iowa   Virginia   Colorado
Office Chair Public Sector Member Public Sector Member Private Sector Member Private Sector Member Credit Card Skimmer Task Group Office Office Public Sector Member Public Sector Member Public Sector Member	Stephen Benjamin   Jerry Buendel   Kurt Floren   Bill Callaway   John Hughes   Hal Prince   Mike Harrington   Joel Maddux   Scott Wagner   Mike Sikula	North Carolina   Washington   Los Angeles County, California   Crompco   Rice Lake Weighing Systems, Inc.   Florida   Iowa   Virginia   Colorado   New York
Office Chair Public Sector Member Public Sector Member Private Sector Member Private Sector Member Credit Card Skimmer Task Group Office Office Public Sector Member Public Sector Member Public Sector Member Public Sector Member	Stephen Benjamin   Jerry Buendel   Kurt Floren   Bill Callaway   John Hughes   Hal Prince   Mike Harrington   Joel Maddux   Scott Wagner   Mike Sikula   Paige Anderson	North Carolina   Washington   Los Angeles County, California   Crompco   Rice Lake Weighing Systems, Inc.   Horida   Iowa   Virginia   Colorado   New York   National Association of Convenience Stores

## Organization Chart

Safety Task Group		
Office	Name	Affiliation
Chair	Julie Quinn	Minnesota
Public Sector Member	Jason Flint	New Jersey
Public Sector Member	Georgia Harris	NIST, Office of Weights and Measures
Public Sector Member	Elizabeth Koncki	Maryland
Public Sector Member	Matt Maiten	Santa Barbara County, California
Public Sector Member	Brenda Sharkey	South Dakota
Public Sector Member	Mike Sikula	New York
Private Sector Member	Tisha Arriaga	Marathon Petroleum, LLC
Private Sector Member	Bill Callaway	Crompco
Private Sector Member	Remy Cano	Northwest Tank and Environmental Services, Inc.
Private Sector Member	Brad Fryburger	Rinstrum, Inc.
Private Sector Member	Robert LaGasse	Mulch and Soil Council
Private Sector Member	John Lawn	Rinstrum, Inc.
Private Sector Member	Richard Shipman	Rice Lake Weighing Systems, Inc.

Cannabis Task Group		
Office	Name	Affiliation
Chair	James Cassidy	City of Cambridge, Massachusetts
Public Sector Member	Brad Bachelder	Maine
Public Sector Member	Loren Kipp Blauer	Nevada
Public Sector Member	Jerry Buendel	Washington
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	Gabriel Gowman	Riverside County, California
Public Sector Member	Kevin Grosskreutz	City of Appleton, Wisconsin
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	Maria del Carmen Kern	San Francisco County, California
Public Sector Member	Kristin Macey	California
Public Sector Member	Mike Mann	Washington
Public Sector Member	Mauricio Mejia	Florida
Public Sector Member	Cree Morgan	San Francisco, California
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	Kenneth Ramsburg	Maryland
Public Sector Member	William Rigby	Utah
Public Sector Member	Hugo Soto	Riverside County, California
Public Sector Member	Dedrick Stephens	City of Cleveland, Ohio
Public Sector Member	Ron Valinski	City of Worcester, Massachusetts
Public Sector Member	Elaine Vieira	City of Boston, Massachusetts
Public Sector Member	John Young	Yolo County, California
Private Sector Member	Andy Brassington	Evergreen Herbal
Private Sector Member	Eric Golden	Cardinal Scale Manufacturing, Co.
Private Sector Member	Richard Guild	The Scale People, Inc.
Private Sector Member	George Hatziemanuel	Ohaus Corporation
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	Cary Ainsworth	Tufner Weighing and Automation Systems	
Private Sector Member	Jon Arnold	Intercomp Company	
Private Sector Member	Tim Broemmer	Rice Lake Weighing Systems, Inc.	
Private Sector Member	Scott Davidson	Mettler-Toledo, LLC	
Private Sector Member	James Faas	YRC Freight	
Private Sector Member	Brad Fryburger	Rinstrum, Inc.	
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	Joe Rickey	Rinstrum, Inc.	
Private Sector Member	Louis Straub	Fairbanks Scale, Inc.	
Private Sector Member	Richard Suiter	Richard Suiter Consulting	
Private Sector Member	Brian Taylor	Intelligent Imaging Systems	
Private Sector Member	Russ Vires	Mettler-Toledo, LLC	
Private Sector Member	Sam Wimsett	Cardinal Scale Manufacturing, Co.	
Private Sector Member	Matt Young	Intercomp Company	
NTEP EVSE Work Group			
Office	Name	Affiliation	
Chair	Andrei Moldoveanu	NEMA	
NTEP Administrator	Jim Truex	NCWM	
Technical Advisor	Juana Williams	NIST, Office of Weights and Measures	
Public Sector Member	Andrei Brezoica	California	
Public Sector Member	Tom Buck	Ohio	
Public Sector Member	Joseph Eccleston	Maryland	
Public Sector Member	Allen Katalinic	North Carolina	
Private Sector Member	Ted Bohn	ANL	
Private Sector Member	Harry Haas	Siemens Industry, Inc.	
Private Sector Member	Bill Hardy	Power Measurements, LLC	
Private Sector Member	Dave Parmelee	Control Module, Inc.	

Multiple Dimension Measuring Device Work Group					
Office	Name	Affiliation			
Chair	Robert Kennington	Quantronix, Inc.			
NTEP Administrator	Jim Truex	NCWM			
NTEP Specialist	Darrell Flocken	NCWM			
Technical Advisor	Rick Harshman	NIST, Office of Weights and Measures			
Public Sector Member	Tom Buck	Ohio			
Public Sector Member	Fran Elson-Houston	Ohio			
Public Sector Member	Jeff Fantozzi	Ohio			
Public Sector Member	Pascal Turgeon	Measurement Canada, Policy/Regulations Group			
Private Sector Member	Sprague Ackley	Honeywell			
Private Sector Member	Bruce Budinger	Northrop Grumman / AOA Xinetics			
Private Sector Member	Bill Danderand	FedEx Freight			
Private Sector Member	Scott Davidson	Mettler-Toledo, LLC			
Private Sector Member	Michael Eichenberg	FreightSnap, LLC			
Private Sector Member	Matthew Erim	National Motor Freight Traffic Association			
Private Sector Member	Barry Gebler	Parcel Tools			
Private Sector Member	Scott Henry	Zebra Technologies			
Private Sector Member	Uwe Mohr	Vitronic			
Private Sector Member	Scott Murchison	Zebra Technologies			
Private Sector Member	Don Newell	National Motor Freight Traffic Association			
Private Sector Member	Sameer Parmar	SICK, Inc.			
Private Sector Member	Weston Privett	XPO LTL			
Private Sector Member	Tony Romeo	Datalogic			
Private Sector Member	Christopher Senneff	Rice Lake Weighing Systems, Inc.			
Private Sector Member	Richard Shipman	Rice Lake Weighing Systems, Inc.			
Private Sector Member	Mike Stutler	United Parcel Service			
Private Sector Member	Richard Suiter	Richard Suiter Consulting			
Private Sector Member	Russ Vires	Mettler-Toledo, LLC			
Private Sector Member	Xin Wang	Amazon			
Private Sector Member	Scott Wigginton	United Parcel Service			
NTEP Belt-Conveyor Scale Sector					
Office	Name	Affiliation			
Chair	Peter Sirrico	Thayer Scale / Hyer Industries			
NTEP Administrator	Jim Truex	NCWM			
NTEP Specialist	Darrell Flocken	NCWM			
Technical Advisor	John Barton	NIST, Office of Weights and Measures			
Public Sector Member	Tina Butcher	NIST, Office of Weights and Measures			
Public Sector Member	Zacharias Tripoulas	Maryland			
Private Sector Member	Jason Kukachka	Thermo Fisher Scientific			

NTEP Grain Analyzer Sector			
Office	Name	Affiliation	
Chair	Karl Cunningham	Illinois	
NTEP Administrator	Jim Truex	NCWM	
NTEP Specialist	Darrell Flocken	NCWM	
Technical Advisor	G. Diane Lee	NIST, Office of Weights and Measures	
Advisory Member	Cassie Eigenmann	Retired	
Public Sector Member	Randy Burns	Arkansas	
Public Sector Member	Tina Butcher	NIST, Office of Weights and Measures	
Public Sector Member	Ivan Hankins	lowa	
Public Sector Member	Thomas Hughes	Missouri	
Public Sector Member	Jason Jordan	USDA, GIPSA, Technical Services Division	
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	Kathy Conover	DICKEY-john 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 Administrator	Jim Truex	NCWM	
NTEP Specialist	Darrell Flocken	NCWM	
Technical Advisor	Clark Cooney	California Division of Measurement Standards	
Technical Advisor Public Sector Member	Clark Cooney Luciano Burtini	California Division of Measurement Standards Measurement Canada	
	,		
Public Sector Member	Luciano Burtini	Measurement Canada	
Public Sector Member Public Sector Member	Luciano Burtini Tina Butcher	Measurement Canada NIST, Office of Weights and Measures	
Public Sector Member Public Sector Member Public Sector Member	Luciano Burtini Tina Butcher Joe Eccleston	Measurement Canada NIST, Office of Weights and Measures Maryland	
Public Sector Member Public Sector Member Public Sector Member Public Sector Member	Luciano Burtini Tina Butcher Joe Eccleston Allen Katalinic	Measurement Canada   NIST, Office of Weights and Measures   Maryland   North Carolina	
Public Sector Member Public Sector Member Public Sector Member Public Sector Member Public Sector Member	Luciano Burtini Tina Butcher Joe Eccleston Allen Katalinic John Roach	Measurement Canada   NIST, Office of Weights and Measures   Maryland   North Carolina   California	
Public Sector Member Public Sector Member Public Sector Member Public Sector Member Public Sector Member Private Sector Member	Luciano Burtini Tina Butcher Joe Eccleston Allen Katalinic John Roach Steve Bar	Measurement Canada   NIST, Office of Weights and Measures   Maryland   North Carolina   California   Bennett Pump Company	
Public Sector MemberPublic Sector MemberPublic Sector MemberPublic Sector MemberPublic Sector MemberPrivate Sector MemberPrivate Sector Member	Luciano Burtini Tina Butcher Joe Eccleston Allen Katalinic John Roach Steve Bar Marc Buttler	Measurement Canada   NIST, Office of Weights and Measures   Maryland   North Carolina   California   Bennett Pump Company   Emerson Process Management / Micro Motion	
Public Sector MemberPublic Sector MemberPublic Sector MemberPublic Sector MemberPublic Sector MemberPrivate Sector MemberPrivate Sector MemberPrivate Sector MemberPrivate Sector MemberPrivate Sector Member	Luciano Burtini Tina Butcher Joe Eccleston Allen Katalinic John Roach Steve Bar Marc Buttler Craig Cavanaugh	Measurement Canada   NIST, Office of Weights and Measures   Maryland   North Carolina   California   Bennett Pump Company   Emerson Process Management / Micro Motion   Tuthill Transfer Systems	
Public Sector MemberPublic Sector MemberPublic Sector MemberPublic Sector MemberPublic Sector MemberPrivate Sector Member	Luciano Burtini Tina Butcher Joe Eccleston Allen Katalinic John Roach Steve Bar Marc Buttler Craig Cavanaugh Rodney Cooper	Measurement Canada   NIST, Office of Weights and Measures   Maryland   North Carolina   California   Bennett Pump Company   Emerson Process Management / Micro Motion   Tuthill Transfer Systems   Brodie International	
Public Sector Member   Private Sector Member	Luciano BurtiniTina ButcherJoe EcclestonAllen KatalinicJohn RoachSteve BarMarc ButtlerCraig CavanaughRodney CooperConstantine Cotsoradis	Measurement Canada   NIST, Office of Weights and Measures   Maryland   North Carolina   California   Bennett Pump Company   Emerson Process Management / Micro Motion   Tuthill Transfer Systems   Brodie International   Flint Hills Resources	
Public Sector Member   Private Sector Member	Luciano BurtiniTina ButcherJoe EcclestonAllen KatalinicJohn RoachSteve BarMarc ButtlerCraig CavanaughRodney CooperConstantine CotsoradisRonnell Gallon	Measurement Canada   NIST, Office of Weights and Measures   Maryland   North Carolina   California   Bennett Pump Company   Emerson Process Management / Micro Motion   Tuthill Transfer Systems   Brodie International   Flint Hills Resources   Zenner Performance Meters, Inc.	
Public Sector Member   Private Sector Member	Luciano BurtiniTina ButcherJoe EcclestonAllen KatalinicJohn RoachSteve BarMarc ButtlerCraig CavanaughRodney CooperConstantine CotsoradisRonnell GallonGordon Johnson	Measurement Canada   NIST, Office of Weights and Measures   Maryland   North Carolina   California   Bennett Pump Company   Emerson Process Management / Micro Motion   Tuthill Transfer Systems   Brodie International   Flint Hills Resources   Zenner Performance Meters, Inc.   Gilbarco, Inc.	
Public Sector Member   Private Sector Member	Luciano Burtini Tina Butcher Joe Eccleston Allen Katalinic John Roach Steve Bar Marc Buttler Craig Cavanaugh Rodney Cooper Constantine Cotsoradis Ronnell Gallon Gordon Johnson Dmitri Karimov	Measurement Canada   NIST, Office of Weights and Measures   Maryland   North Carolina   California   Bennett Pump Company   Emerson Process Management / Micro Motion   Tuthill Transfer Systems   Brodie International   Flint Hills Resources   Zenner Performance Meters, Inc.   Gilbarco, Inc.   Liquid Controls, LLC	
Public Sector Member   Private Sector Member	Luciano BurtiniTina ButcherJoe EcclestonAllen KatalinicJohn RoachSteve BarMarc ButtlerCraig CavanaughRodney CooperConstantine CotsoradisRonnell GallonGordon JohnsonDmitri KarimovDouglas Long	Measurement Canada   NIST, Office of Weights and Measures   Maryland   North Carolina   California   Bennett Pump Company   Emerson Process Management / Micro Motion   Tuthill Transfer Systems   Brodie International   Flint Hills Resources   Zenner Performance Meters, Inc.   Gilbarco, Inc.   Liquid Controls, LLC   RDM Industrial Electronics	

Private Sector Member	Andre Noel	Neptune Technology Group, Inc.	
Private Sector Member	Christopher (Adam) Oldham	Gilbarco, Inc.	
Private Sector Member	Robin Parsons	Parafour Innovations, LLC	
Private Sector Member Richard Tucker		RL Tucker Consulting, LLC	

NTEP Software Sector			
Office	Name	Affiliation	
Chair	James Pettinato	FMC Technologies Measurement Solutions, Inc.	
NTEP Administrator	Jim Truex	NCWM	
NTEP Specialist	Darrell Flocken	NCWM	
Secretary	Teri Gulke	Liquid Controls, LLC	
Technical Advisor	Doug Bliss	Mettler-Toledo, LLC	
Public Sector Member	Andrei Brezoica	California	
Public Sector Member	Tom Buck	Ohio	
Public Sector Member	Luciano Burtini	Measurement Canada	
Public Sector Member	Joe Eccleston	Maryland	
Public Sector Member	Eric Morabito	New York	
Public Sector Member	John Roach	California	
Public Sector Member	Ambler Thompson	NIST, Office of Weights and Measures	
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	Benjamin Bertz	Red Seal Measurement	
Private Sector Member	Chris Corbett	Cardinal Scale Manufacturing, Co.	
Private Sector Member	Kevin Detert	Avery Weigh-Tronix	
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	Christopher (Adam) Oldham	Gilbarco, Inc.	
Private Sector Member	Mike Roach	VeriFone	
Private Sector Member	Robin Sax	CompuWeigh Corporation	
Private Sector Member	David Vande Berg	Vande Berg Scales	
Private Sector Member	John Wind	Bizerba USA, Inc.	
Private Sector Member	Kraig Wooddell	Hobart	

NTEP Weighing Sector					
Office	Name	Affiliation			
Chair	Rob Upright	Vishay Transducers			
NTEP Administrator	Jim Truex	NCWM			
NTEP Specialist	Darrell Flocken	NCWM			
Technical Advisor	Rick Harshman	NIST, Office of Weights and Measures			
Advisory Member	Robert Feezor	Retired			
Public Sector Member	L. Cary Ainsworth	USDA, GIPSA			
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	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 Freight			
Private Sector Member	Mitchell Eyles	Flintec, Inc.			
Private Sector Member	Brad Fryburger	Rinstrum, 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	L. Edward Luthy	Schenck Process Transport N.A.			
Private Sector Member	Weston Privett	XPO LTL			
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.			

Central Weights and	Measures Associat	ion (CWMA) www.c	:wma.net				
	Illinois	Kansas	Missouri	(	Dhio		
States	Indiana	Michigan	Nebraska		South Dakota		
	lowa	Minnesota	North Dakota		Visconsin		
Combrid	Sherry Turvey				(785) 564-6682		
Contact	Kansas Departr	nent of Agriculture			sherry.turvey@	<u>ks.gov</u>	
Interim Meeting	October 15 – 17	7, 2018			St. Charles, Mis	souri	
Annual Meeting	May 6 – 9, 2019				Canton, Ohio		
Northeastern Weights	and Measures Ass	ociation (NEWMA)	www.newma.us				
	Connecticut	New Hampshire	Pennsylvania	\	/ermont		
States	Maine	New Jersey	Puerto Rico				
	Massachusetts	New York	Rhode Island				
Contact	James Cassidy				(617) 349-6133		
connact	City of Cambridge Weights and Measures Department			jcassidy@cambridgema.gov			
Annual Meeting	2019, TBD	2019, TBD			TBD		
Interim Meeting	October 2 – 4, 2018			Norwich, Connecticut			
Southern Weights and	d Measures Associa	ation (SWMA) www.	swma.org				
	Alabama	District of Columbia	a Kentucky	Ν	<i>A</i> ississippi	South Carolina	US Virgin Islands
States	Arkansas	Florida	Louisiana	١	North Carolina	Tennessee	Virginia
	Delaware	Georgia	Maryland	(	Oklahoma	Texas	West Virginia
Contact	Hal Prince				(850) 921-1570		
connact	Florida Dept. of	Agriculture and Con	nsumer Services		harold.prince@freshfromflorida.com		
Annual Meeting	October 7 – 10,	2018			Jacksonville, Fl	orida	
Western Weights and	Measures Associa	tion (WWMA) www.	westernwma.org				
	Alaska	Colorado	Montana	(	Dregon	Wyoming	
States	Arizona	Hawaii	Nevada		Jtah		
	California	Idaho	New Mexico	٧	Vashington		
Contact	Bob Weidler				(307) 777-7556		
	Wyoming Depc	rtment of Agriculture	<u>,</u>		robert.weidler@	@wyo.gov	
Annual Meeting	September 16 -	- 20, 2018			Cheyenne, Wy	oming	

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

	Past Chairmen						
Conference	Year	Location	Chairman	Affiliation			
41 <sup>st</sup>	1956	Washington, D.C.	Dr. A.V. Astin	National Bureau of Standards			
42 <sup>nd</sup>	1957	Washington, D.C.	Dr. A.V. Astin	National Bureau of Standards			
43 <sup>rd</sup>	1958	Washington, D.C.	J.P. McBride	Massachusetts			
44 <sup>th</sup>	1959	Washington, D.C.	C.M. Fuller	California			
45 <sup>th</sup>	1960	Washington, D.C.	H.E. Crawford	Florida			
46 <sup>th</sup>	1961	Washington, D.C.	R.E. Meek	Indiana			
47 <sup>th</sup>	1962	Washington, D.C.	Robert Williams	New York			
48 <sup>th</sup>	1963	Washington, D.C.	C.H. Stender	South Carolina			
49 <sup>th</sup>	1964	Washington, D.C.	D.M. Turnbull	Washington			
50 <sup>th</sup>	1965	Washington, D.C	V.D. Campbell	Ohio			
51 <sup>st</sup>	1966	Denver, CO	J.F. True	Kansas			
52 <sup>nd</sup>	1967	Washington, D.C.	J.E. Bowen	Massachusetts			
53 <sup>rd</sup>	1968	Washington, D.C.	C.C. Morgan	Indiana			
54 <sup>th</sup>	1969	Washington, D.C.	S.H. Christie	New Jersey			
55 <sup>th</sup>	1970	Salt Lake City, UT	R.W. Searles	Ohio			
56 <sup>th</sup>	1971	Washington, D.C.	M. Jenning	Tennessee			
57 <sup>th</sup>	1972	Washington, D.C.	E.H. Black	California			
58 <sup>th</sup>	1973	Minneapolis, MN	George Johnson	Kentucky			
59 <sup>th</sup>	1974	Washington, D.C.	John Lewis	Washington			
60 <sup>th</sup>	1975	San Diego, CA	Sydney Andrews	Florida			
61 <sup>st</sup>	1976	Washington, D.C.	Richard Thompson	Maryland			
62 <sup>nd</sup>	1970	Dallas, TX	Earl Prideaux	Colorado			
63 <sup>rd</sup>	1977	Washington, D.C.	James Lyles	Virginia			
64 <sup>th</sup>	1978	Portland, OR	Kendrick Simila	Oregon			
65 <sup>th</sup>	1979	Washington, D.C.	Charles Vincent	Texas			
66 <sup>th</sup>	1980	St. Louis, MO	Edward Stadolnik	Massachusetts			
67 <sup>th</sup>	1981	Atlanta, GA	Edward Stadollik Edward Heffron	Michigan			
68 <sup>th</sup>	1982	Sacramento, CA	Charles Greene	New Mexico			
69 <sup>th</sup>	1985	Boston, MA	Sam Hindsman	Arkansas			
70 <sup>th</sup>	1984	Washington, D.C.	Ezio Delfino	California			
70 <sup>m</sup> 71 <sup>st</sup>		Albuquerque, NM	George Mattimoe				
72 <sup>nd</sup>	1986	Little Rock, AR	2	Hawaii			
72 <sup>rd</sup>	1987	1	Frank Nagele	Michigan			
	1988	Grand Rapids, MI	Darrell Guensler	California			
74 <sup>th</sup>	1989	Seattle, WA	John Bartfai	New York			
75 <sup>th</sup>	1990	Washington, D.C.	Fred Gerk	New Mexico			
76 <sup>th</sup>	1991	Philadelphia, PA	N. David Smith	North Carolina			
77 <sup>th</sup>	1992	Nashville, TN	Sidney Colbrook	Illinois			
78 <sup>th</sup>	1993	Kansas City, MO	Allan Nelson	Connecticut			
79 <sup>th</sup>	1994	San Diego, CA	Thomas Geiler	Massachusetts			
80 <sup>th</sup>	1995	Portland, ME	James Truex	Ohio			
81 <sup>st</sup>	1996	New Orleans, LA	Charles Gardne	New York			
82 <sup>nd</sup>	1997	Chicago, IL	Barbara Bloch	California			
83 <sup>rd</sup>	1998	Portland, OR	Steven Malone	Nebraska			
84 <sup>th</sup>	1999	Burlington, VT	Aves Thompson	Alaska			
85 <sup>th</sup>	2000	Richmond, VA	Wes Diggs	Virginia			
86 <sup>th</sup>	2001	Washington, DC	Louis Straub	Maryland			
87 <sup>th</sup>	2002	Cincinnati, OH	Ronald Murdock	North Carolina			
88 <sup>th</sup>	2003	Sparks, NV	Ross Andersen	New York			
89 <sup>th</sup>	2004	Pittsburgh, PA	Dennis Ehrhart	Arizona			
90 <sup>th</sup>	2005	Orlando, FL	Wes Diggs	Virginia			
91 <sup>st</sup>	2006	Chicago, IL	Don Onwiler	Nebraska			

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

Past Chairmen

# **General Information**

#### **PURPOSE**

NCWM meetings are held throughout the year to develop the national standards that are adopted by NCWM and published in *NIST Handbooks 44*, *130*, and *133*. At the Annual Meeting, committees will conduct Open Hearings where all attendees can offer comments to the committees on items printed in the Committee Interim Reports. Following Open Hearings, the committees will convene in work sessions to prepare addendum sheets that modify their reports. Items given voting status by the committees will be presented during the Voting Sessions on Wednesday and Thursday. Active members in attendance may vote on committee recommendations to amend the national standards.

#### **SUPPORTING DOCUMENTS**

Additional letters, presentations and data may have been part of the committee's consideration. Please refer to <u>www.ncwm.net/meetings/annual/publication-16</u> to review these documents.

### **ITEMS GROUPED INTO BLOCKS**

The Committee may group related items into blocks to be considered as a group. This provides for more efficient open hearings and voting sessions since each item within a block is not presented individually.

## **DESIGNATION OF ITEM STATUS**

The Committee Interim Reports contain recommendations and information on items discussed at the 2018 NCWM Interim Meeting held January 21-24, 2018, in St. Pete Beach, Florida. These reports form the basis for conduct of the committee meetings. Each committee will address the items in its report during Open Hearings.

The status of each item contained in the Committee Interim Reports is designated as one of the following:

- Voting Item: The item is designated with a "V" to indicate the committee is making recommendations requiring a vote by the active members of NCWM. The recommended language to be voted on is in **bold** face type.
- Informational Item: The item is designated with an "I" to indicate the item is under consideration by the committee but not proposed for Voting.
- Assigned Item: The item is designated with an "A" to indicate the item has merit; however, the item was assigned to a task group or subcommittee of for further development and the committee will wait for a recommendation from that group before taking any further action on the item.
- **Developing Item:** The item is designated with a "**D**" to indicate an item has merit; however, the item was returned to the submitter or other designated party for further development before any action can be taken at the national level.
- Withdrawn Item: The item is designated with a "W" to indicate the item has been removed from consideration by the committee.

Some Voting Items are considered individually; others may be grouped in a consent calendar. Consent calendar items are Voting Items that the committee has assembled as a single Voting Item during their deliberation after the Open Hearings on the assumption that the items are without opposition and will not require discussion. The Voting Items that have been grouped into consent calendar items will be listed on the addendum sheets which are published during the week. Prior to adoption of the consent calendar, the committee will entertain any requests from the floor to remove specific items from the consent calendar to be discussed and voted upon individually.

Committees may change the status designation of agenda items (Developing, Informational, Voting, and Withdrawn) up until the report is adopted, except that items which are marked Developing, Informational or Withdrawn cannot be changed to Voting Status. Any change from the Committee Interim Report (as contained in this publication) or from what appears on the addendum sheets will be explained to the attendees prior to a motion and will be acted upon by the active members of NCWM prior to calling for the vote.

#### **ADDENDUM SHEETS**

Modifications to the Committee Interim Reports will be documented in the form of addendum sheets prepared by the committees following the Open Hearings. The addendum sheets will be made available to attendees no later than 8:00 p.m. on Tuesday, July 17, 2018, in the Promenade Foyer of the Hyatt Regency Tulsa Hotel. Committee Interim Reports may be further modified as a result of actions taken by the committee or membership during the Voting Sessions on July 18-19, 2018.

#### **VOTING SYSTEM**

All registered attendees may speak to the issues on the floor, both business and technical items. However, the adoption of final reports of committees on technical issues, as well as other technical issues, is to be decided by a formal vote of the active members in accordance with the following voting structures and procedures. Please see NCWM Bylaws at <u>www.ncwm.net/about/bylaws</u> for a complete description of the voting system.

#### House of State Representatives:

This body is comprised of one active member from each state who is officially designated as its representative and is present and registered at the Annual Meeting. They shall vote on:

- all business issues relating to NCWM, Inc.
- technical questions before the Corporation, including reports and recommendations of all Standing Committees
- technical issues relating to weights and measures; technical handbooks; and legal metrology.

Members of this house are identified by a maroon name tag ribbon with the word "Representative."

#### House of Delegates:

This body is comprised of all other active members who are registered and present at the Annual Meeting and those not seated in the House of State Representatives. They shall vote on:

- all business issues relating to NCWM, Inc.
- technical questions before the Corporation, including reports and recommendations of all Standing Committees
- technical issues relating to weights and measures; technical handbooks; and legal metrology.

Members of this house are identified by a blue name tag ribbon with the word "Delegate."

#### House of General Membership:

This body is comprised of associate and advisory members who are present and registered at the Annual Meeting. They shall vote on all business issues relating to NCWM, Inc.

#### 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. The process to request permission to give a presentation is available at:

www.ncwm.net/meetings/annual/meeting-process. 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.net

#### 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 if:

- 1. the 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 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 the Annual Meeting. Each committee will prepare its annual report containing its recommendations based upon the presentations, discussions, and deliberations on all matters in its interim report that were addressed during the Annual Meeting. These reports will be published in the *Report of the 103<sup>rd</sup> Annual Meeting of the National Conference on Weights and Measures*, to be posted to NCWM website at <u>www.ncwm.net</u>. Electronic copies of the *Report of the 103<sup>rd</sup> Annual Meeting of the National Conference on Weights and Measures* will be distributed to all members of NCWM. Other interested parties may request a copy of the publication from the Executive Secretary.

National Institute of Standards and Technology Attn: Dr. Douglas Olson, Chief 100 Bureau Drive Gaithersburg, MD 20899-2600 (301) 975-2956 douglas.olson@nist.gov

#### **INTERIM MEETING**

NCWM Interim Meeting will be held at the Francis Marion Hotel, Charleston, South Carolina, January  $13^{th} - 16^{th}$ , 2019.

### 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.